PROJECT REPORT

ON

ONLINE FIRE REPORTING SYSTEM

Submitted in partial fulfillment of the requirements for the award of degree of

M.Sc (Computer Science)

TO

SHANTI DEVI ARYA MAHILA COLLEGE

DINANAGAR

Submitted To:-

Mrs. Shivali Saini

Assistant Professor

Deptt. Of Computer Science

Submitted By:

Jiya Kumari

(20672225402)

Tanu Manhas

(20672225406)

POST GRADUATE DEPARTMENT OF COMPUTER SCIENCE

GURU NANAK DEV UNIVERSITY, AMRITSAR

Acknowledgement

With deep sense of gratitude we express our sincere thanks and obligation to our esteemed guide Mrs. Shivali saini (Assistant Professor). It is because of her able and mature guidance and co-operation without which it would not have been possible for us to complete our project. We would also like to thank Dr. Deepak Jyoti, HOD, Post Graduate Deptt. of Computer Science, Shanti Devi Arya Mahila College, Dinanagar for providing the institute with an environment where one can use her intellect and creativity to develop something fruitful and also for allowing us the opportunity to experience dynamic professional environment during our Training. This environment facilitated us in pursuing this project. It is our pleasant duty to thank all the staff members of the Computer Department for their time to time suggestions. Finally, we would like to thank the almighty and our parents for their moral support and our friends with whom we shared our day-to-day experience and received lots of suggestions that improved our quality of work.

Jiya Kumari **Tanu Manhas**

20672225402 **20672225406**

CERTIFICATE OF APPROVAL

This is certify that the project report entitled **Online Fire Reporting System** submitted to Shanti Devi Arya Mahila College, Dinanagar in partial fulfillment of the requirement for the award of Degree of M.Sc (Computer Science) , is an authentic and original work carried out by Jiya Kumari (20672225402) Tanu Manhas (20672225406) under our guidance and supervision. The Post Graduate deptt. of Computer Science has accepted the report as the fulfillment of the requirements for the Degree of Master of Computer Science.No part of this report has been submitted to any other College/University for the reward of any Degree to the best of our knowledge.

Mrs. Shivali Saini

Assistant Professor (Computer Science)

(Project Supervisor)

Shanti Devi Arya Mahila College

Dinanagar

Dr.Deepak Jyoti

Head of Department

PG Department of Computer Science

Shanti Devi Arya Mahila College

Dinanagar

DECLARATION

We hereby declare that this project report on " **Online Fire Reporting System**"which is being submitted in partial fulfillment of the Training Programme of M.Sc(Computer Science) to Shanti Devi Arya Mahila College, Dinanagar is the result of the work carried out by us, under the guidance of Mrs. Shivali Saini (Assistant Professor),Shanti Devi Arya Mahila College , Dinanagar.

Jiya Kumari

20672225402

Tanu Manhas

20672225406

Abstract

"Online Fire Reporting System" is web based application which manages the fire reporting incidents and sends the team accordingly. The main purpose of OFRS is to systematically record, store and update the fire team information and fire incidents.

The information from OFRS is used report fire incidents online. With the help of this software person can report fire accidents online and get fire reliefs immediately. An OFRS is a web based platform that allows users to report fires to relevant authorities in a real time using the internet. This system can be used by the general public or emergency services to provide fast and accurate information about the location, intensity, and other relevant details of a fire.

An online fire reporting system can significantly improve the response time and accuracy of fire incident management, helping to save lives and prevent property damage.

Introduction

Introduction:-

Online Fire Reporting System is a web-based application. This application is used to report fire incidents immediately.

In Online Fire Reporting System, we use PHP and MySQL database. This is the project which keeps records of Teachers. Online Fire Reporting System has two modules i.e., admin and users.

User Module
Users can visit the website and report any fire incidents.
Users can also track the fire incident reporting Status.

Admin Module
Admin will be the user of this project who can control the whole website.

- **Dashboard:** In this section, the admin can briefly view information about fire incidents.
- **Teams:** In this section, admin can manage Teams (Add/Update/Delete).
- **Reports:** In this section, the admin can view fire incidents in a particular period and also search the fire reporting/incidents.
- **Website Setting:** In this section, the admin changes the setting of a website like logos contents, etc.
- Admin can also manage own profile.
- Admin can also recover their own password.

Purpose:-

The purpose of developing Online Fire Reporting System is to report fire incidents online without wasting a time. Another purpose for developing this application is to generate the report automatically.

Scope:-

Online Fire Reporting System project is developed as a web application and it will work over web to report fire incidents online.

Requirement Specification

Hardware Configuration :

Client Side:

RAM	512 MB
Hard disk	10 GB
Processor	1.0 GHz

Server side:

RAM	**1 GB**
Hard disk	**20 GB**
Processor	**2.0 GHz**

Software Requirement:

Client Side:

Web Browser	Google Chrome or any compatible browser
Operating System	Windows or any equivalent OS

Server Side:

Web Server	APACHE
Server side Language	PHP5.6 or above version
Database Server	MYSQL
Web Browser	Google Chrome or any compatible browser
Operating System	Windows or any equivalent OS

APACHE

The Apache HTTP Server Project is an effort to develop and maintain an open-source HTTP server for modern operating systems including UNIX and Windows. The goal of this project is to provide a secure, efficient and extensible server that provides HTTP services in sync with the current HTTP standards.

The Apache HTTP Server ("httpd") was launched in 1995 and it has been the most popular web server on the Internet since April 1996. It has celebrated its 20th birthday as a project in February 2015.

PHP

- PHP stands for PHP: Hypertext Preprocessor.
- PHP is a server-side scripting language, like ASP.

- PHP scripts are executed on the server.
- PHP supports many databases (MYSQL, Informix, Oracle, Sybase, Solid, Generic ODBC, etc.).
- PHP is an open source software.
- PHP is free to download and use.

MYSQL

- MYSQL is a database server
- MYSQL is ideal for both small and large applications
- MYSQL supports standard SQL
- MYSQL compiles on a number of platforms
- MYSQL is free to download and use
- How to access MySQL:

  http://localhost/phpmyadmin

Analysis and Design

Analysis:

In present all fire incidents record work done on the paper. We can't generate reports as per our requirements because its take more time to calculate the fire incidents record report.

Disadvantage of present system:

- **Not user friendly:** The present system not user friendly because data is not stored in structure and proper format.
- **Manual Control:** All report calculation is done manually so there is a chance of error.
- **Lots of paper work:** Fire incidents record maintain in the register so lots of paper require storing details.
- **Time consuming**

Design Introduction:

Design is the first step in the development phase for any techniques and principles for the purpose of defining a device, a process or system in sufficient detail to permit its physical realization.

Once the software requirements have been analyzed and specified the software design involves three technical activities - design, coding, implementation and testing that are required to build and verify the software.

The design activities are of main importance in this phase, because in this activity, decisions ultimately affecting the success of the software implementation and its ease of maintenance are made. These decisions have the final bearing upon reliability and maintainability of the system. Design is the only way to accurately translate the customer's requirements into finished software or a system.

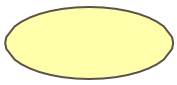
Design is the place where quality is fostered in development. Software design is a process through which requirements are translated into a representation of software. Software design is conducted in two steps. Preliminary design is concerned with the transformation of requirements into data

UML Diagrams:

Actor:

A coherent set of roles that users of use cases play when interacting with the use `cases.

Use case: A description of sequence of actions, including variants, that a system performs that yields an observable result of value of an actor.



UML stands for Unified Modeling Language. UML is a language for specifying, visualizing and documenting the system. This is the step while developing any product after analysis. The goal from this is to produce a model of the entities involved in the project which later need to be built. The representation of the entities that are to be used in the product being developed need to be designed.

USECASE DIAGRAMS:

Use case diagrams model behavior within a system and helps the developers understand of what the user require. The stick man represents what's called an actor.

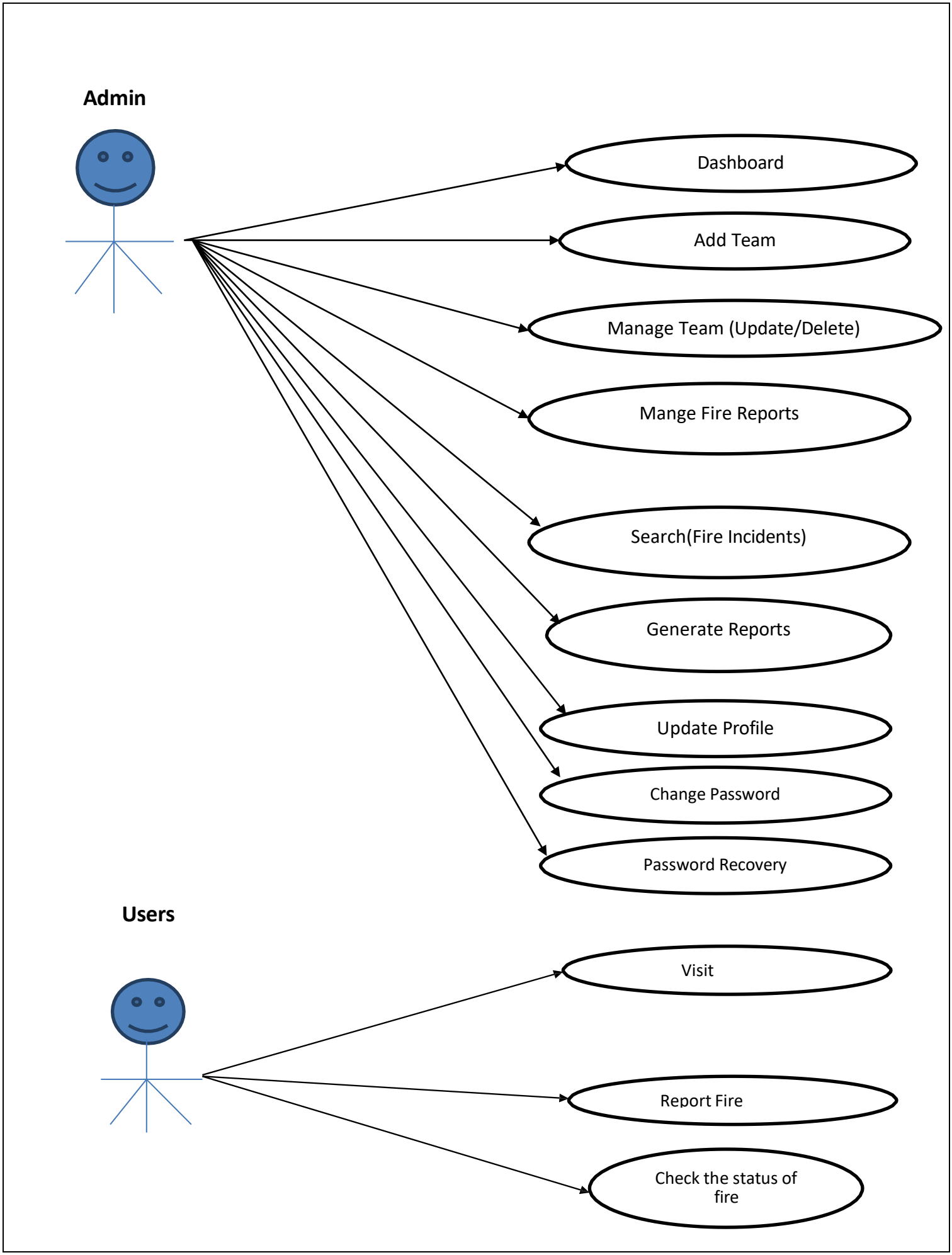
Use case diagram can be useful for getting an overall view of the system and clarifying who can do and more importantly what they can't do.

Use case diagram consists of use cases and actors and shows the interaction between the use case and actors.

- The purpose is to show the interactions between the use case and actor.
- To represent the system requirements from user's perspective.
- An actor could be the end-user of the system or an external system.

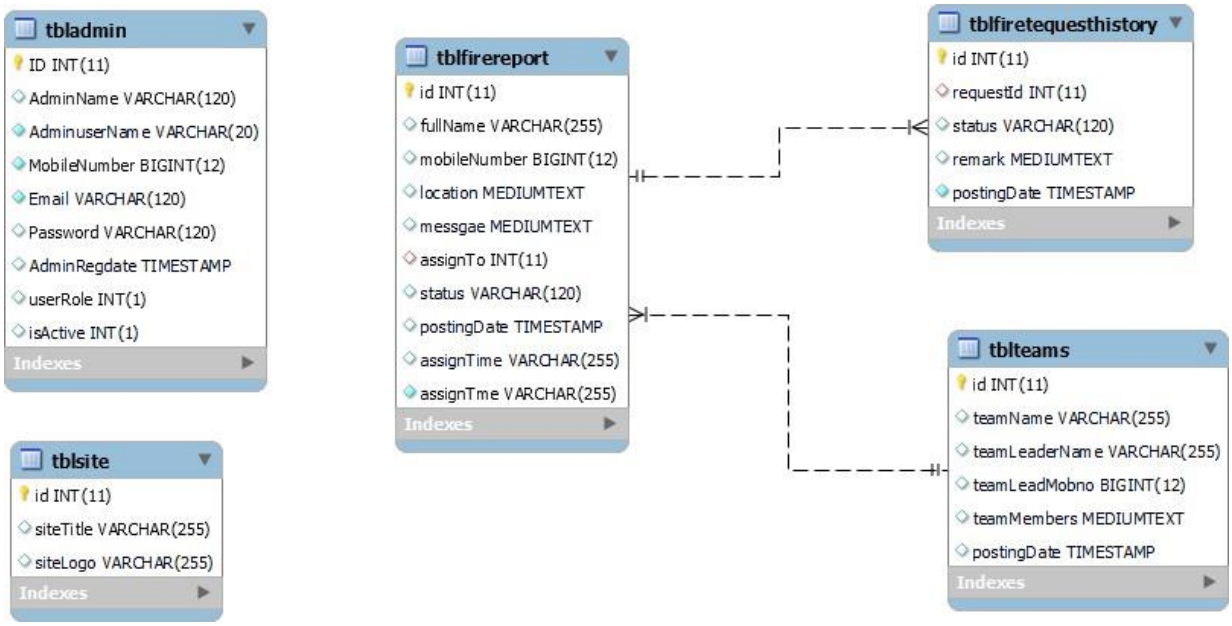
USECASE DIAGRAM: A Use case is a description of set of sequence of actions. Graphically it is rendered as an ellipse with solid line including only its name. Use case diagram is a behavioral diagram that shows a set of use cases and actors and their relationship. It is an association between the use cases and actors. An actor represents a real-world object. Primary Actor – Sender, Secondary Actor Receiver.

Use Case Diagrams:


Admin
Dashboard
Add Team
Manage Team (Update/Delete)
Mange Fire Reports
Search(Fire Incidents)
Generate Reports
Update Profile
Change Password
Password Recovery
Users
Visit
Report Fire
Check the status of fire

Class Diagram:

A description of set of objects that share the same attributes operations, relationships, and semantics



ER Diagram:

The Entity-Relationship (ER) model was originally proposed by Peter in 1976 [Chen76] as a way to unify the network and relational database views. Simply stated the ER model is a conceptual data model that views the real world as entities and relationships. A basic component of the model is the Entity-Relationship diagram which is used to visually represent data objects. Since Chen wrote his paper the model has been extended and today it is commonly used for database design for the database designer, the utility of the ER model is:

- It maps well to the relational model. The constructs used in the ER model can easily be transformed into relational tables.

- It is simple and easy to understand with a minimum of training. Therefore, the model can be used by the database designer to communicate the design to the end user.
- In addition, the model can be used as a design plan by the database developer to implement a data model in specific database management software.

ER Notation

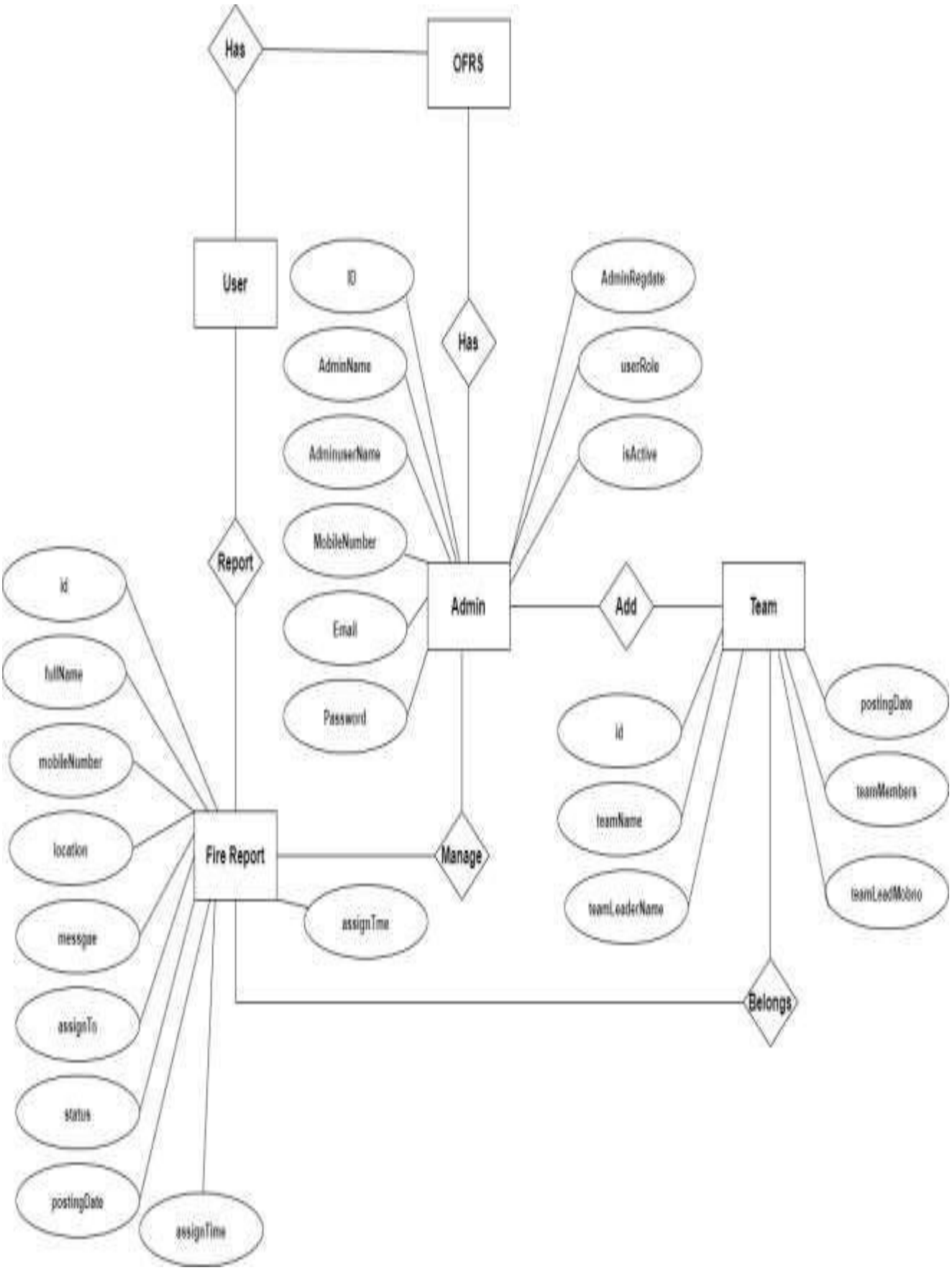
There is no standard for representing data objects in ER diagrams. Each modeling methodology uses its own notation. The original notation used by Chen is widely used in academics texts and journals but rarely seen in either CASE tools or publications by non-academics. Today, there are a number of notations used; among the more common are Bachman, crow's foot, and IDEFIX.

All notational styles represent entities as rectangular boxes and relationships as lines connecting boxes. Each style uses a special set of symbols to represent the cardinality of a connection. The notation used in this document is from Martin. The symbols used for the basic ER constructs are:

- **Entities** are represented by labeled rectangles. The label is the name of the entity. Entity names should be singular nouns.
- **Relationships** are represented by a solid line connecting two entities. The name of the relationship is written above the line. Relationship names should be verbs

- **Attributes**, when included, are listed inside the entity rectangle. Attributes which are identifiers are underlined. Attribute names should be singular nouns.
- **Cardinality** of many is represented by a line ending in a crow's foot. If the crow's foot is omitted, the cardinality is one.

Existence is represented by placing a circle or a perpendicular bar on the line. Mandatory existence is shown by the bar (looks like a 1) next to the entity for an instance is required. Optional existence is shown by placing a circle next to the entity that is optional.

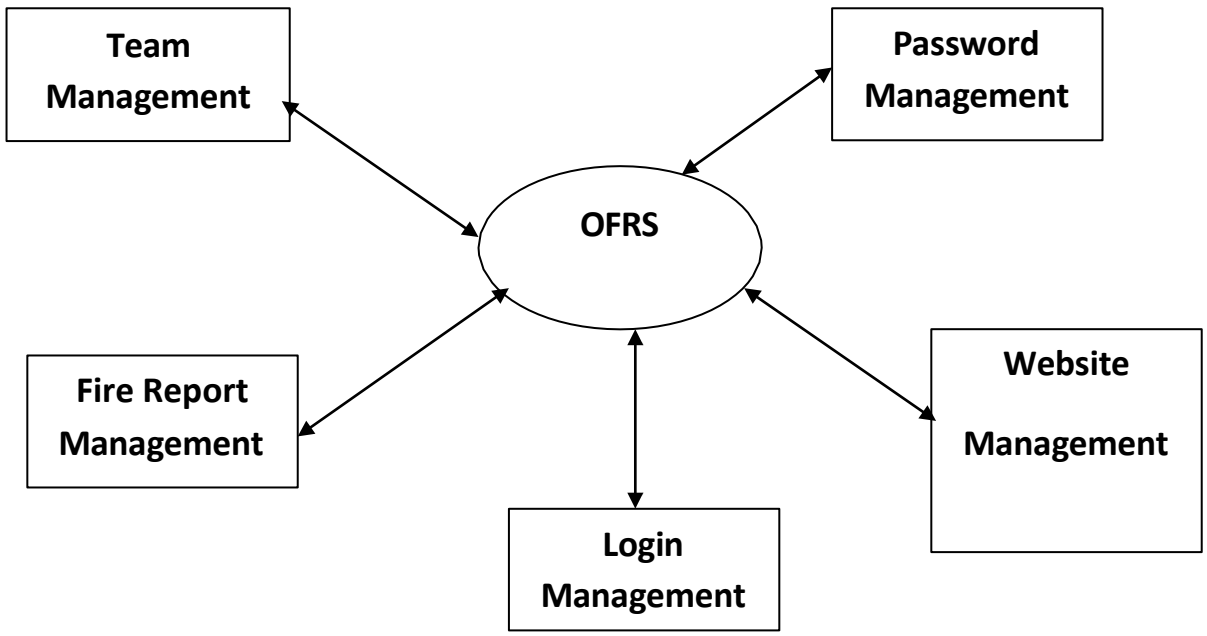

Has
OFRS
User
ID
AdminRegdate
Has
AdminName
userRole
AdminuserName
isActive
MobileNumber
Report
Id
Admin
Add
Team
Email
fullName
Password
postingDate
id
mobileNumber
teamMembers
teamName
location
Fire Report
Manage
teamLeadMobno
teamLeaderName
messgae
assignTime
Belongs
assignTo
status
postingDate
assignTime

Data Flow Diagram

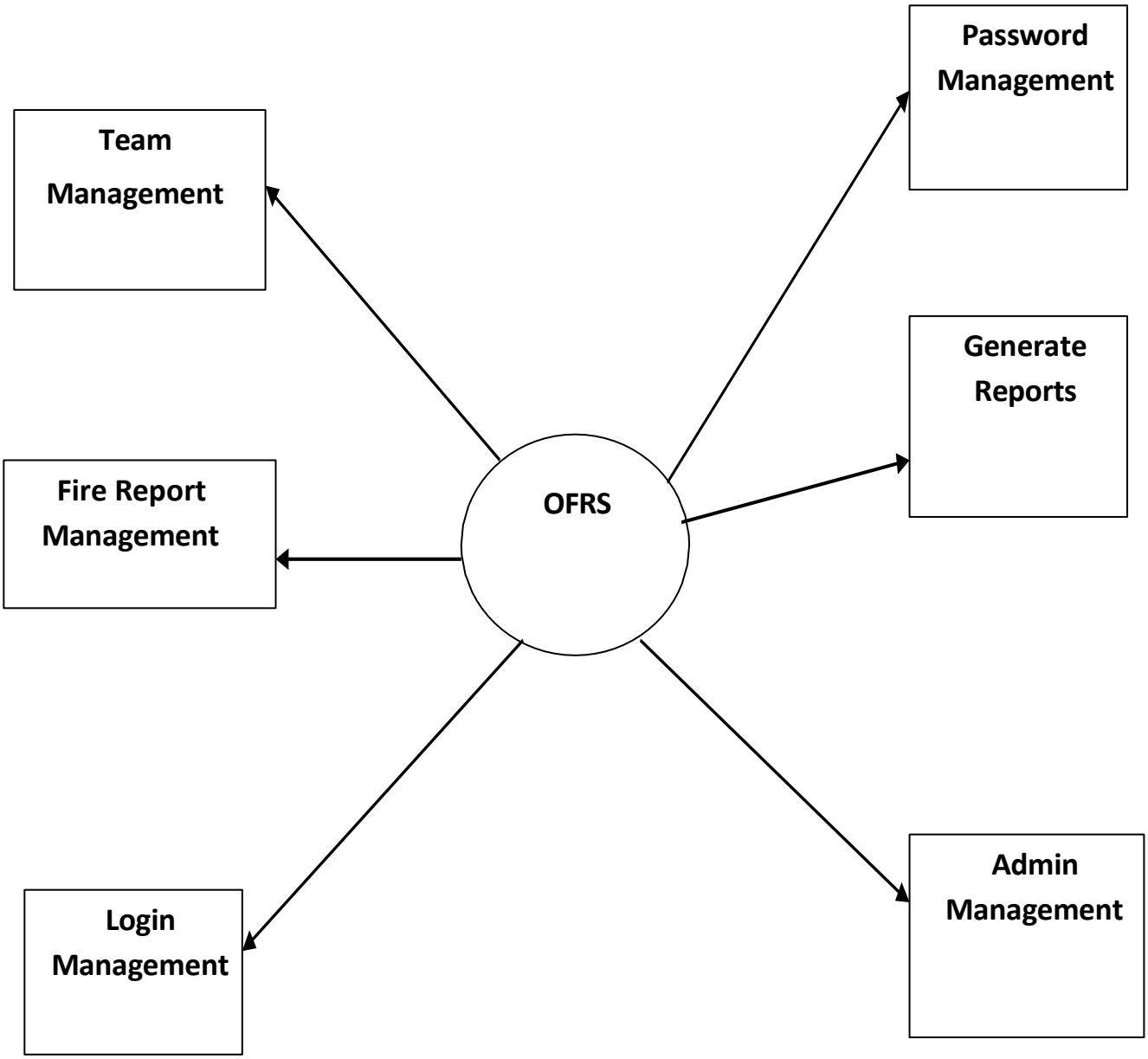
DFD graphically representing the functions, or processes, which capture, manipulate, store, and distribute data between a system and its environment and between components of a system. The visual representation makes it a good communication tool between User and System designer. Structure of DFD allows starting from a broad overview and expand it to a hierarchy of detailed diagrams. DFD has often been used due to the following reasons:

- Logical information flow of the system
- Determination of physical system construction requirements
- Simplicity of notation
- Establishment of manual and automated systems requirements

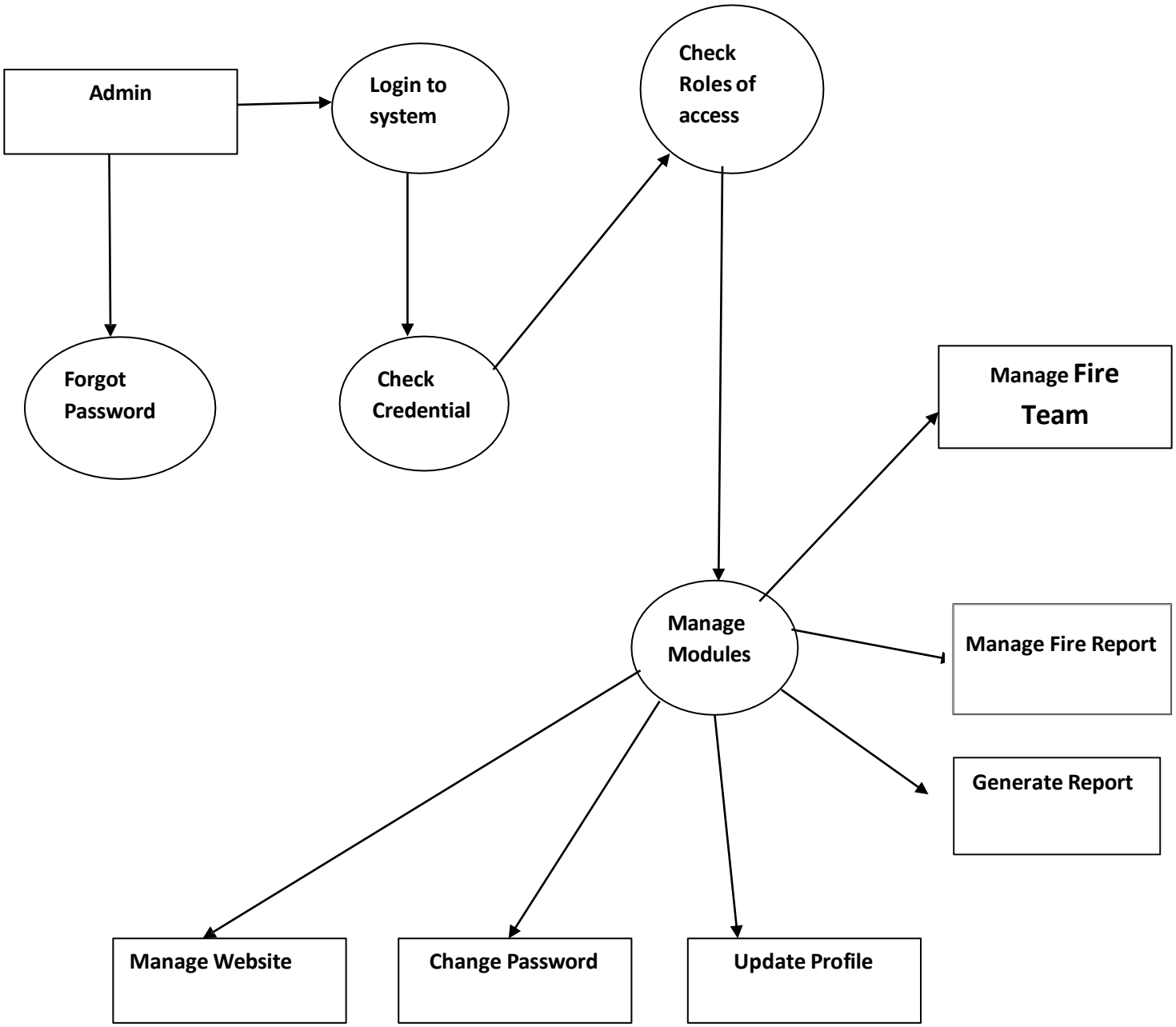
Zero Level DFD

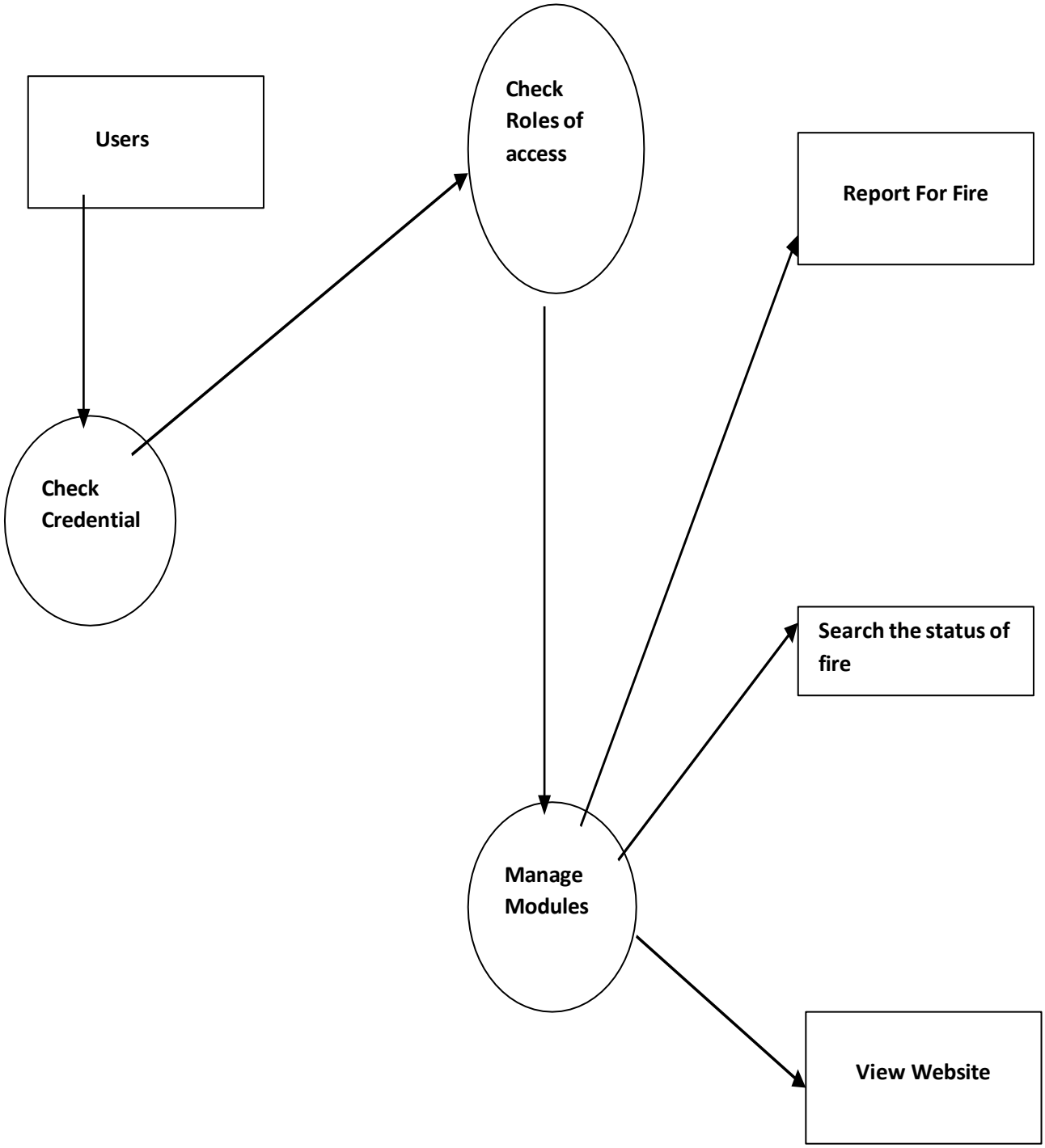


First Level DFD



Second Level DFD




Users
Check Roles of access
Report For Fire
Check Credential
Search the status of fire
Manage Modules
View Website

MySQL Data Tables:

Admin Table :(Table name is tbladmin)

This store admin personal and login details.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(11)			No	*None*		AUTO_INCREMENT
2	AdminName	varchar(120)	latin1_swedish_ci		Yes	*NULL*		
3	AdminuserName	varchar(20)	latin1_swedish_ci		No	*None*		
4	MobileNumber	bigint(12)			No	*None*		
5	Email	varchar(120)	latin1_swedish_ci		No	*None*		
6	Password	varchar(120)	latin1_swedish_ci		Yes	*NULL*		
7	AdminRegdate	timestamp			Yes	current_timestamp()		
8	userRole	int(1)			Yes	*NULL*		
9	isActive	int(1)			Yes	*NULL*		

Fire Report Table: (Table name is tblfirereport)

This table store tee details of fire report by users

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	id	int(11)			No	*None*		AUTO_INCREMENT
2	fullName	varchar(255)	latin1_swedish_ci		Yes	*NULL*		
3	mobileNumber	bigint(12)			Yes	*NULL*		
4	location	mediumtext	latin1_swedish_ci		Yes	*NULL*		
5	messgae	mediumtext	latin1_swedish_ci		Yes	*NULL*		
6	assignTo	int(11)			Yes	*NULL*		
7	status	varchar(120)	latin1_swedish_ci		Yes	*NULL*		
8	postingDate	timestamp			Yes	current_timestamp()		
9	assignTime	varchar(255)	latin1_swedish_ci		Yes	*NULL*		
10	assignTme	varchar(255)	latin1_swedish_ci		No	*None*		

Request History Table: (Table name is tblfiretequesthistory)

This table store the details of request history of fire reporting.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	id	int(11)			No	*None*		AUTO_INCREMENT
2	requestId	int(11)			Yes	*NULL*		
3	status	varchar(120)	utf8mb4_general_ci		Yes	*NULL*		
4	remark	mediumtext	utf8mb4_general_ci		Yes	*NULL*		
5	postingDate	timestamp			No	current_timestamp()		

Website Table: (Table name is tblsite)

This table store the details of website.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	id	int(11)			No	*None*		AUTO_INCREMENT
2	siteTitle	varchar(255)	utf8mb4_general_ci		Yes	*NULL*		
3	siteLogo	varchar(255)	utf8mb4_general_ci		Yes	*NULL*		

Fire Team Table: (Table name is tblsite)

This table store the details of fire team who handling fire incidents.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	id	int(11)			No	*None*		AUTO_INCREMENT
2	teamName	varchar(255)	utf8mb4_general_ci		Yes	*NULL*		
3	teamLeaderName	varchar(255)	utf8mb4_general_ci		Yes	*NULL*		
4	teamLeadMobno	bigint(12)			Yes	*NULL*		
5	teamMembers	mediumtext	utf8mb4_general_ci		Yes	*NULL*		
6	postingDate	timestamp			Yes	current_timestamp()		

Implementation and System Testing

After all phase have been perfectly done, the system will be implemented to the server and the system can be used.

System Testing

The goal of the system testing process was to determine all faults in our project .The program was subjected to a set of test inputs and many explanations were made and based on these explanations it will be decided whether the program behaves as expected or not. Our Project went through two levels of testing

1. Unit testing
2. Integration testing

UNIT TESTING

Unit testing is commenced when a unit has been created and effectively reviewed .In order to test a single module we need to provide a complete environment i.e. besides the section we would require

- The procedures belonging to other units that the unit under test calls
- Non local data structures that module accesses
- A procedure to call the functions of the unit under test with appropriate parameters

1. Test for the admin module

- **Testing admin login form-**This form is used for log in of administrator of the system. In this form we enter the username and password if both are correct administration page will open otherwise if any of data is wrong it will get redirected back to the login page and again ask the details.

- **Report Generation:** admin can generate report from the main database.

INTEGRATION TESTING

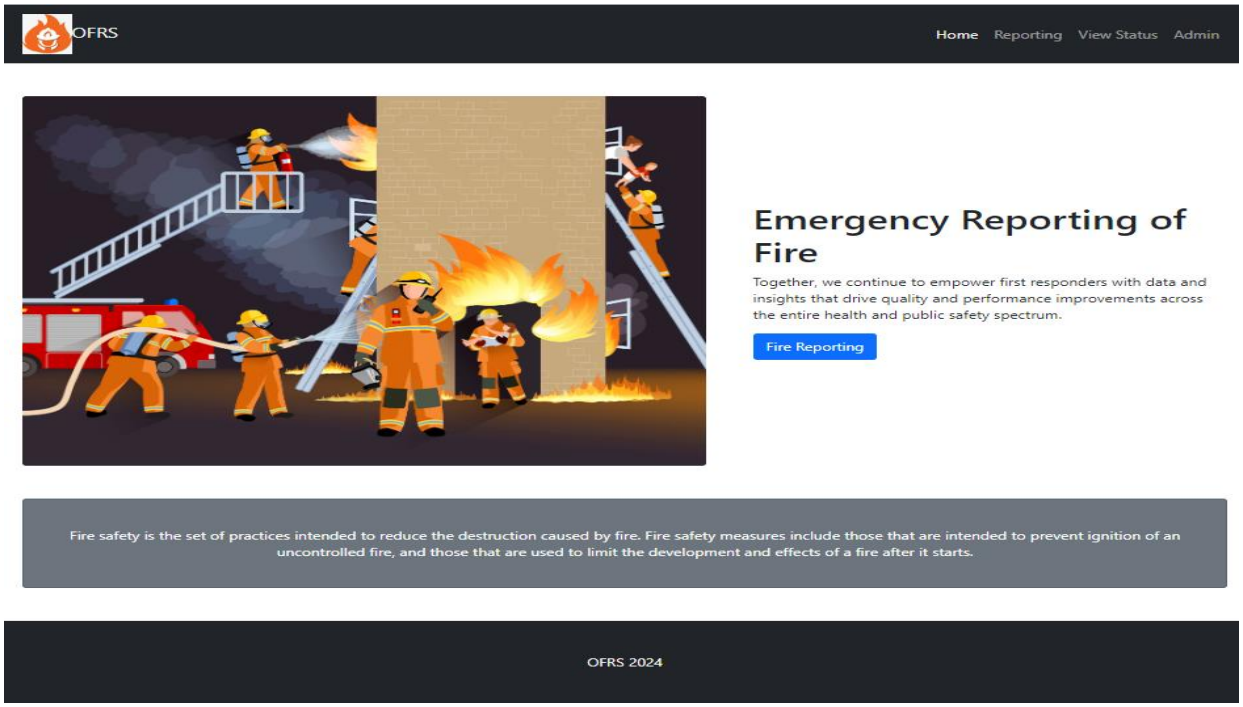
In the Integration testing we test various combination of the project module by providing the input.

The primary objective is to test the module interfaces in order to confirm that no errors are occurring when one module invokes the other module.

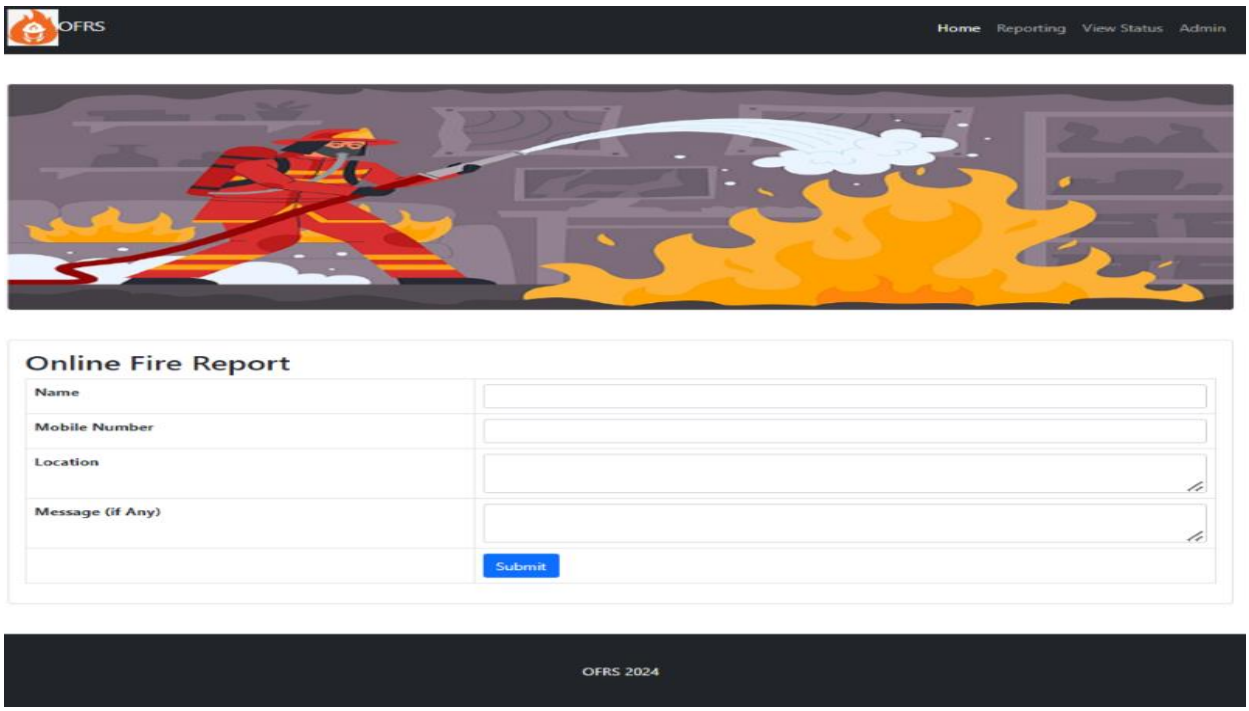
Evaluation

Project URL: http://localhost/ofrs

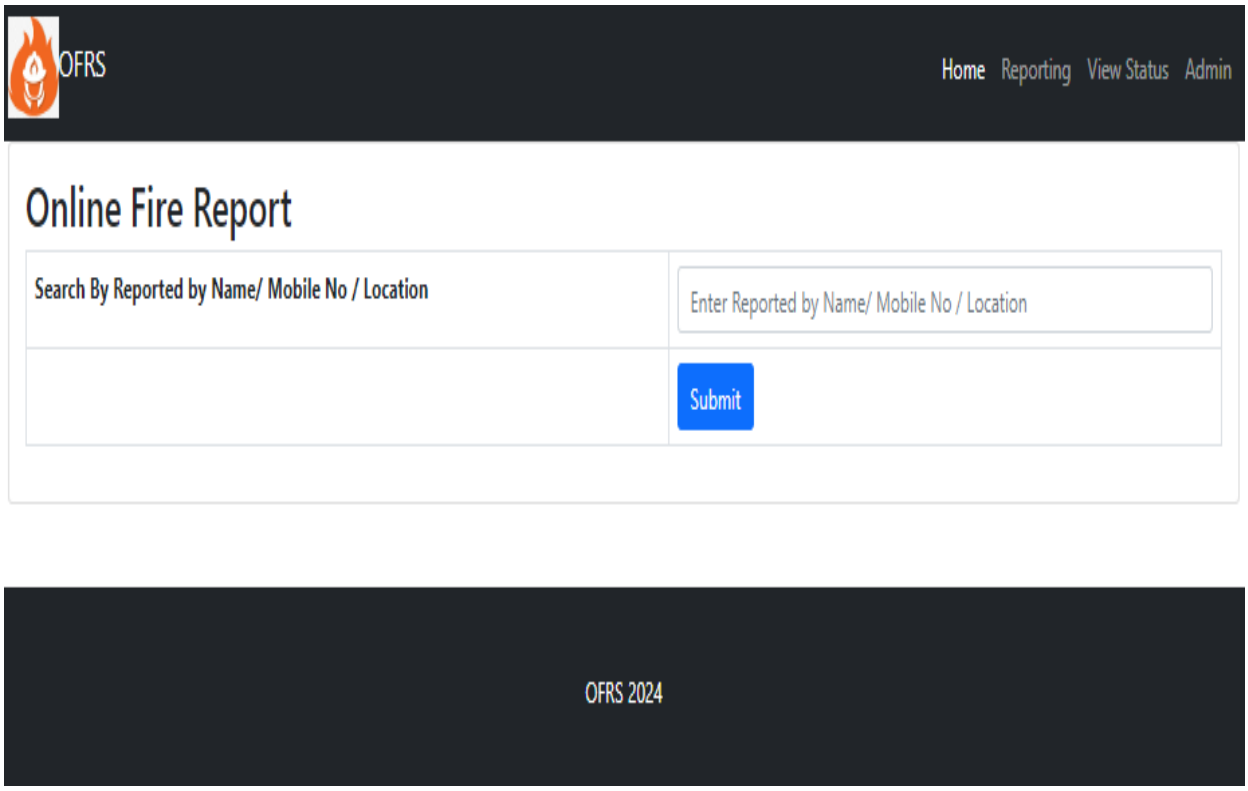
Home Page



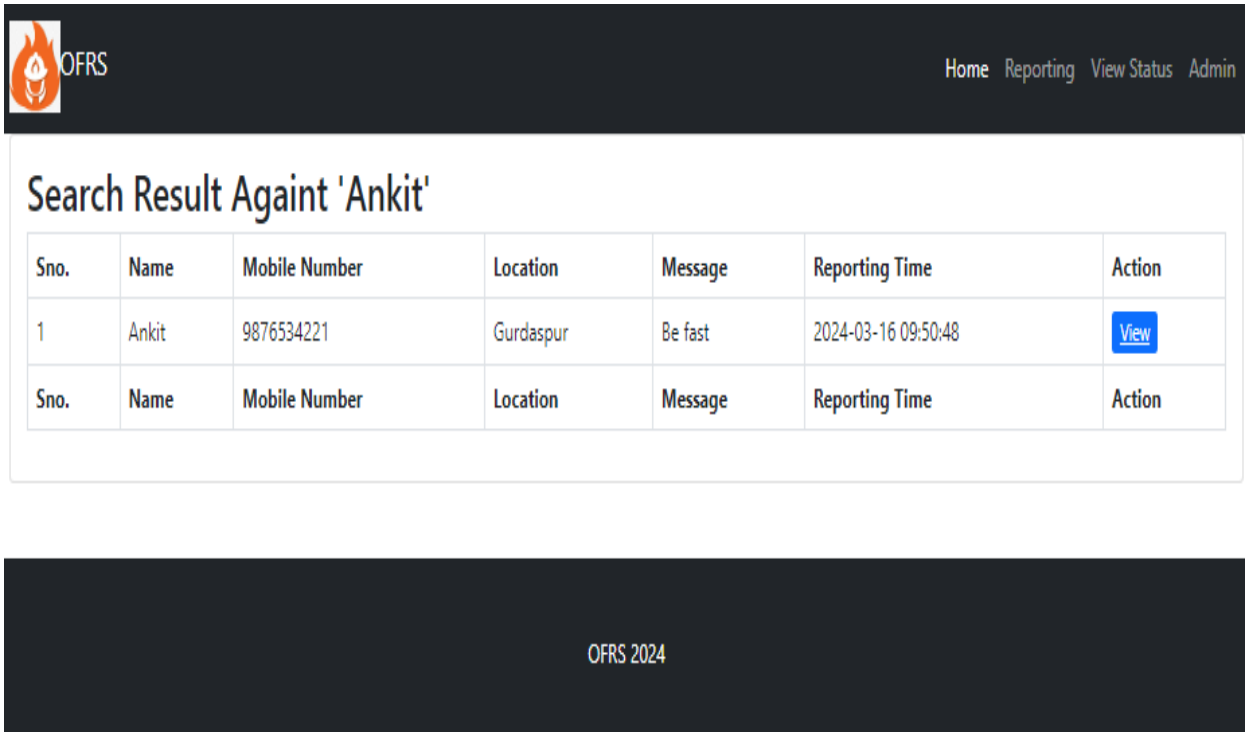
Fire Reporting



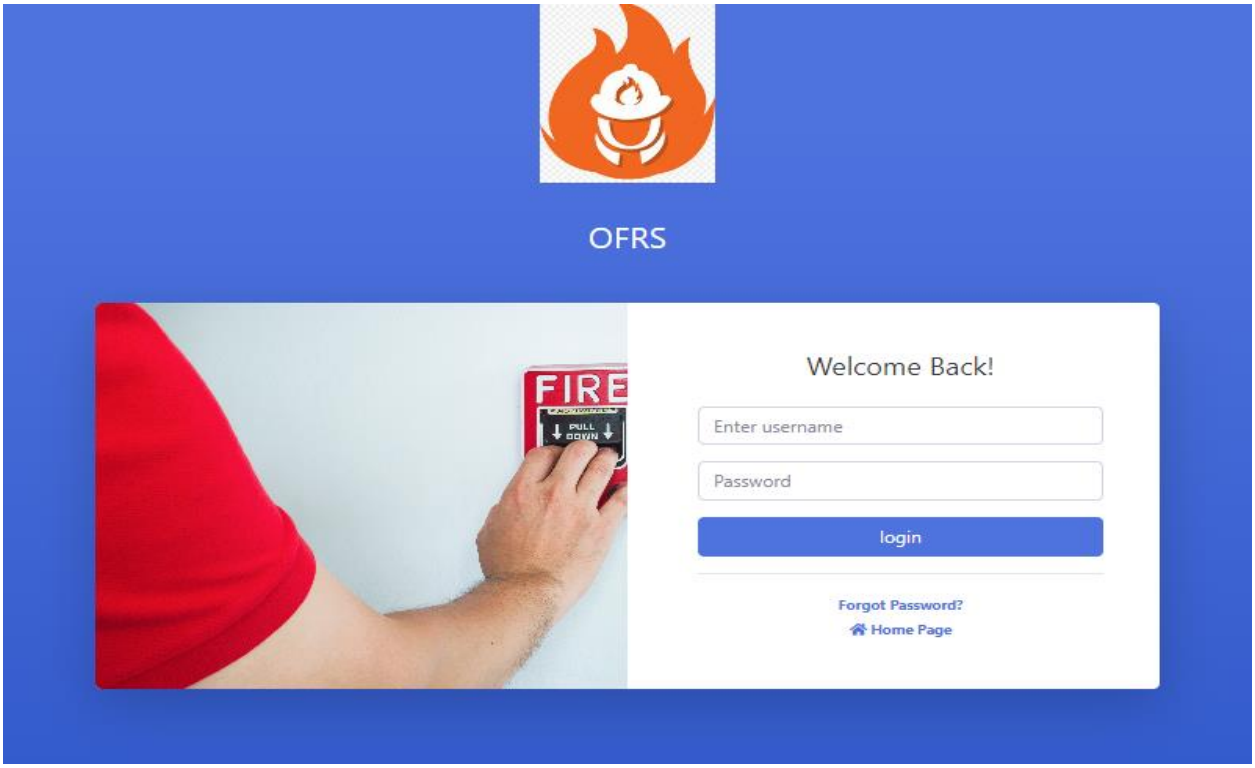
Search Status



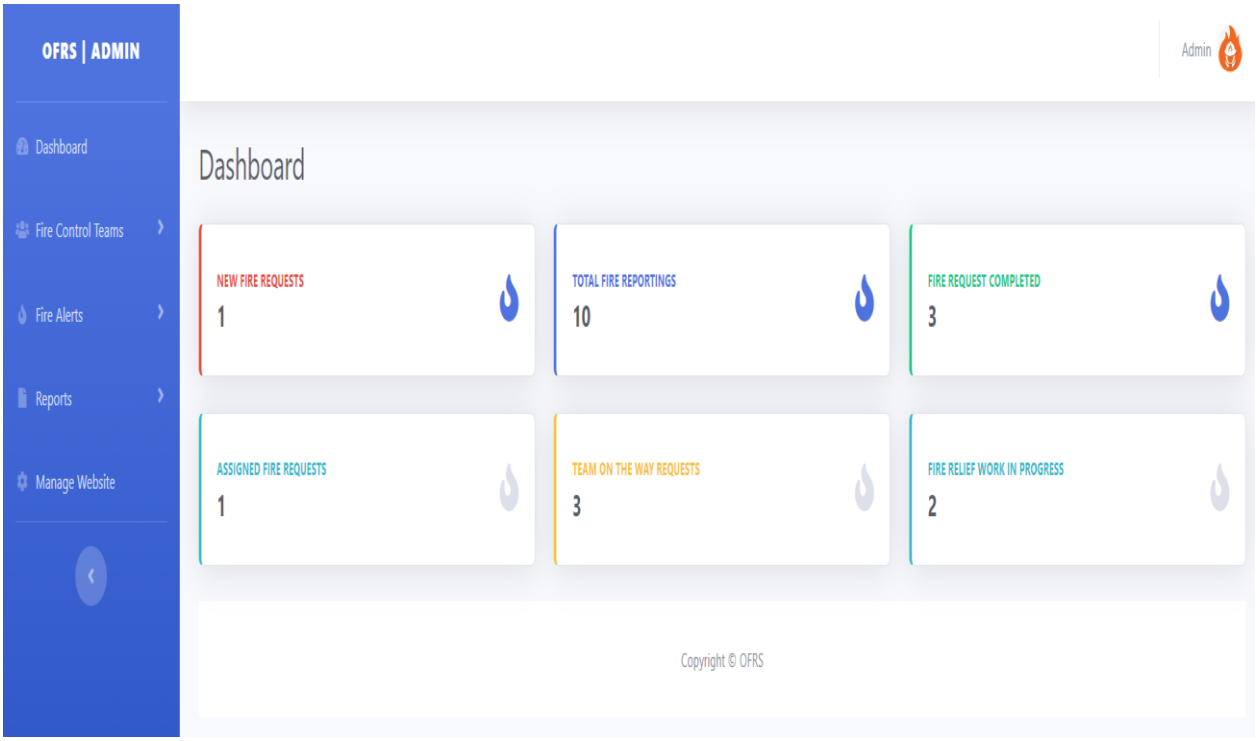
View Search Status



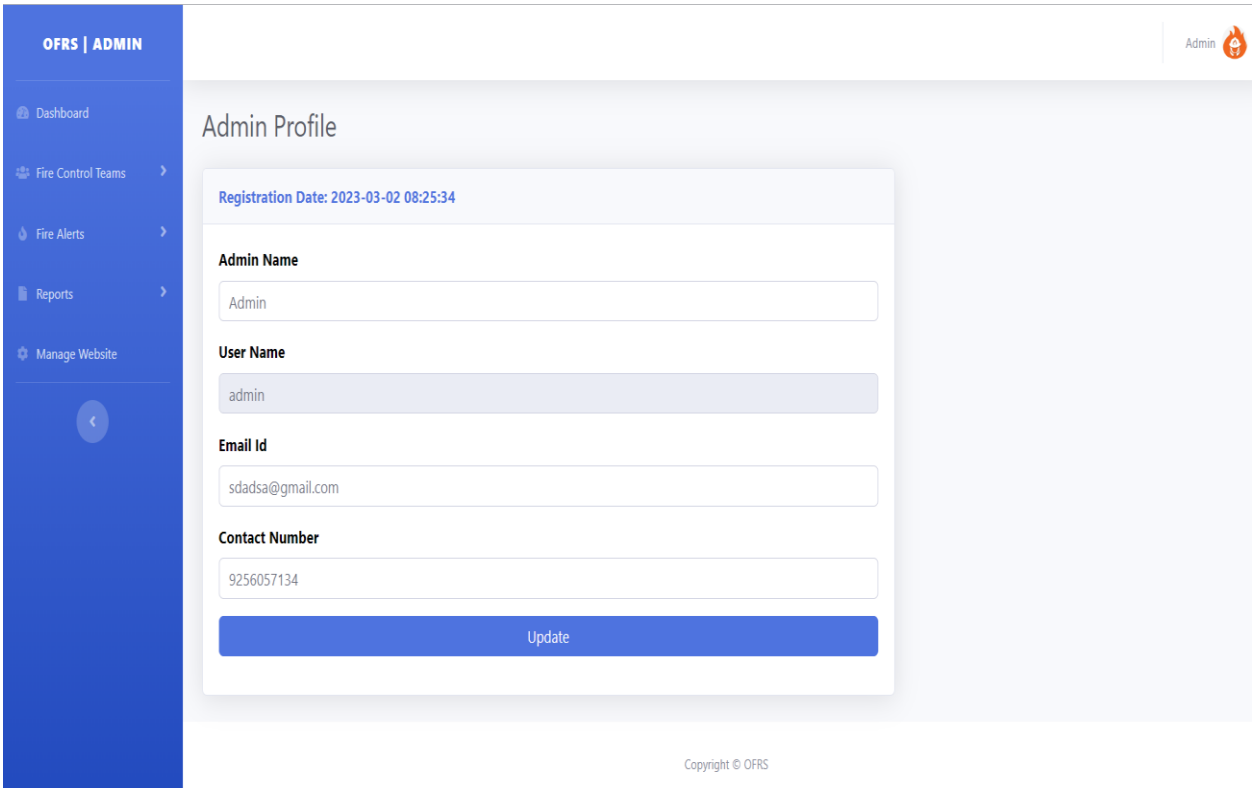
Admin Login



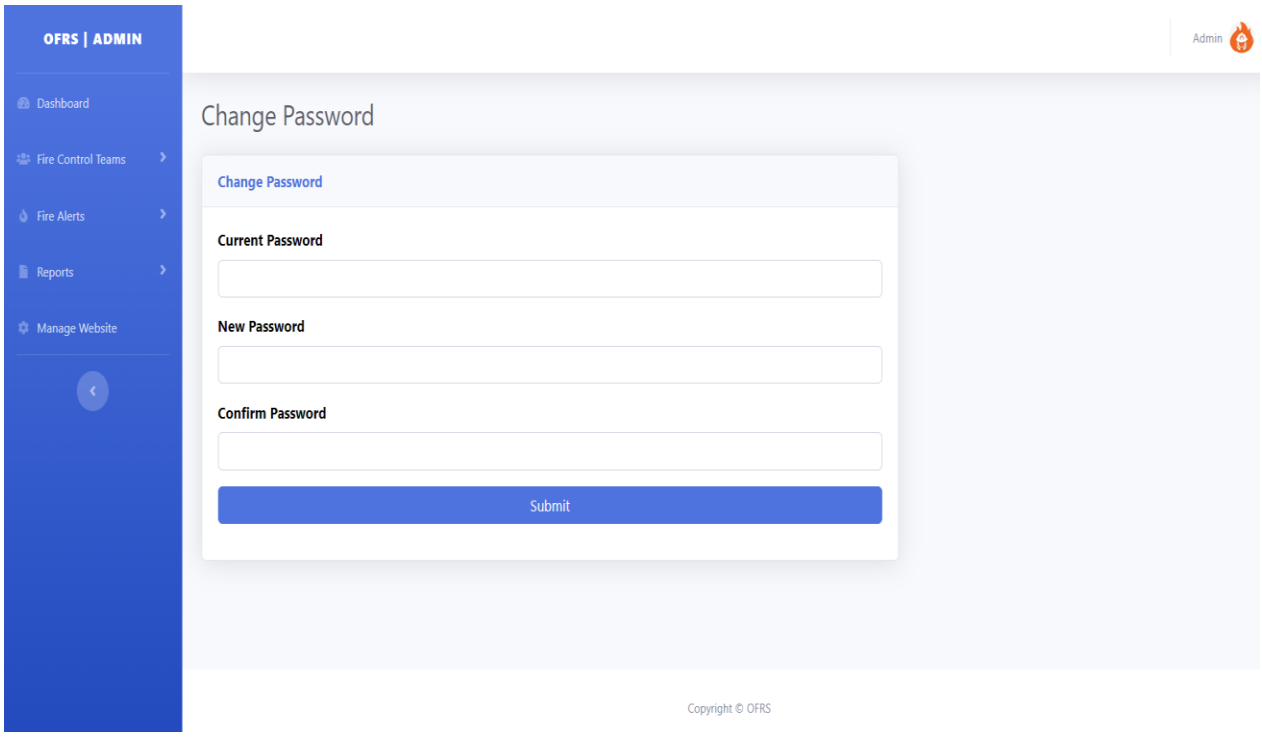
Dashboard



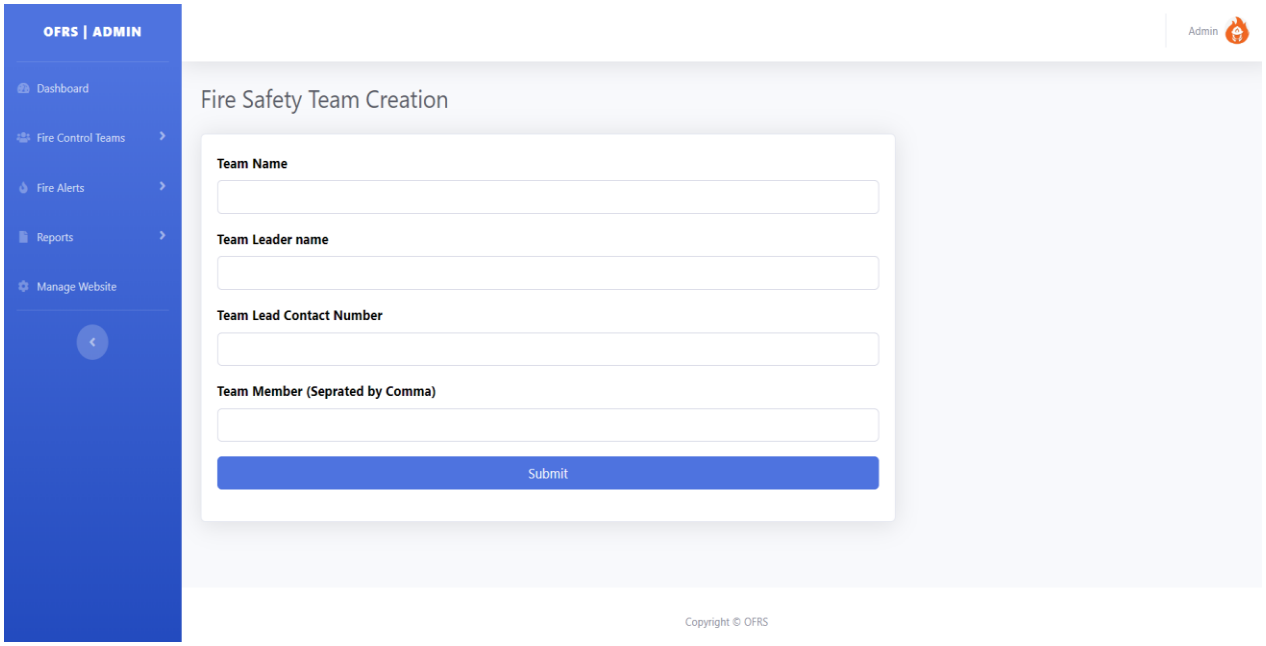
Profile



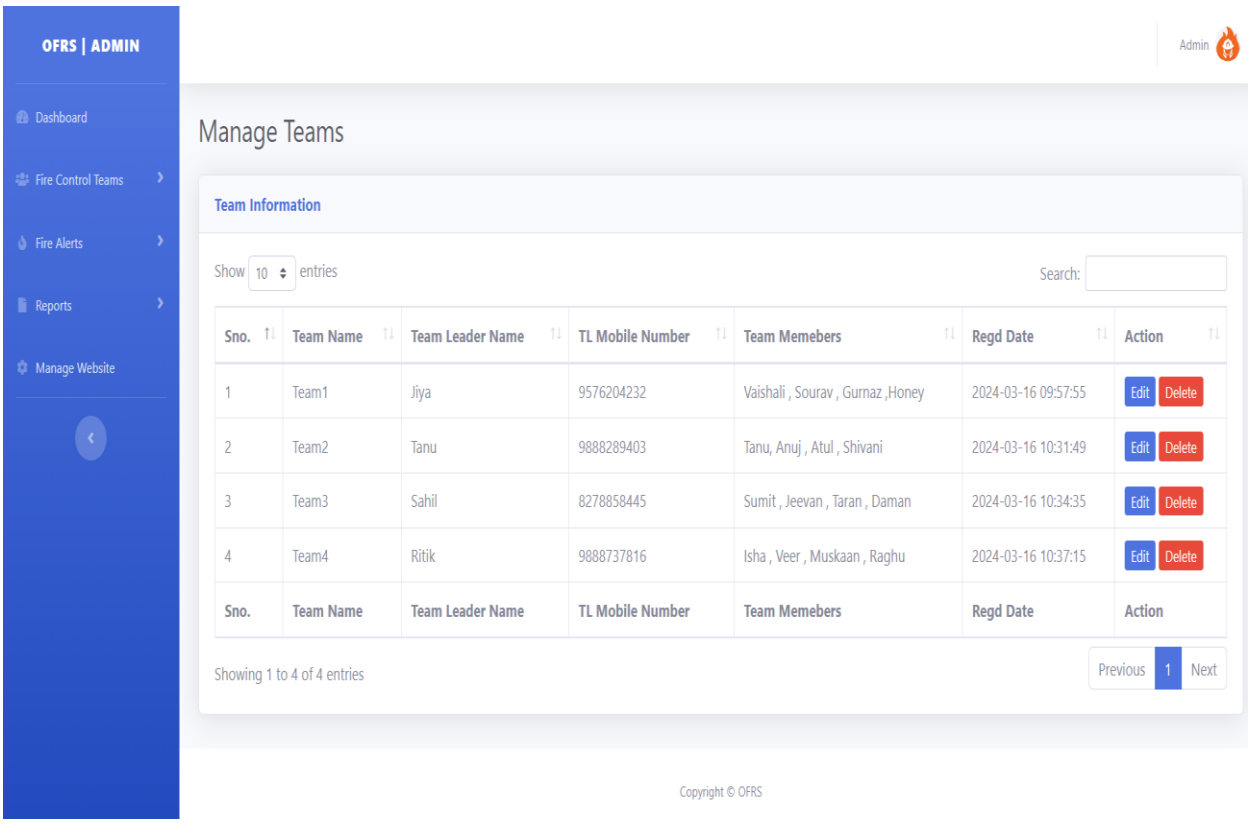
Change Password



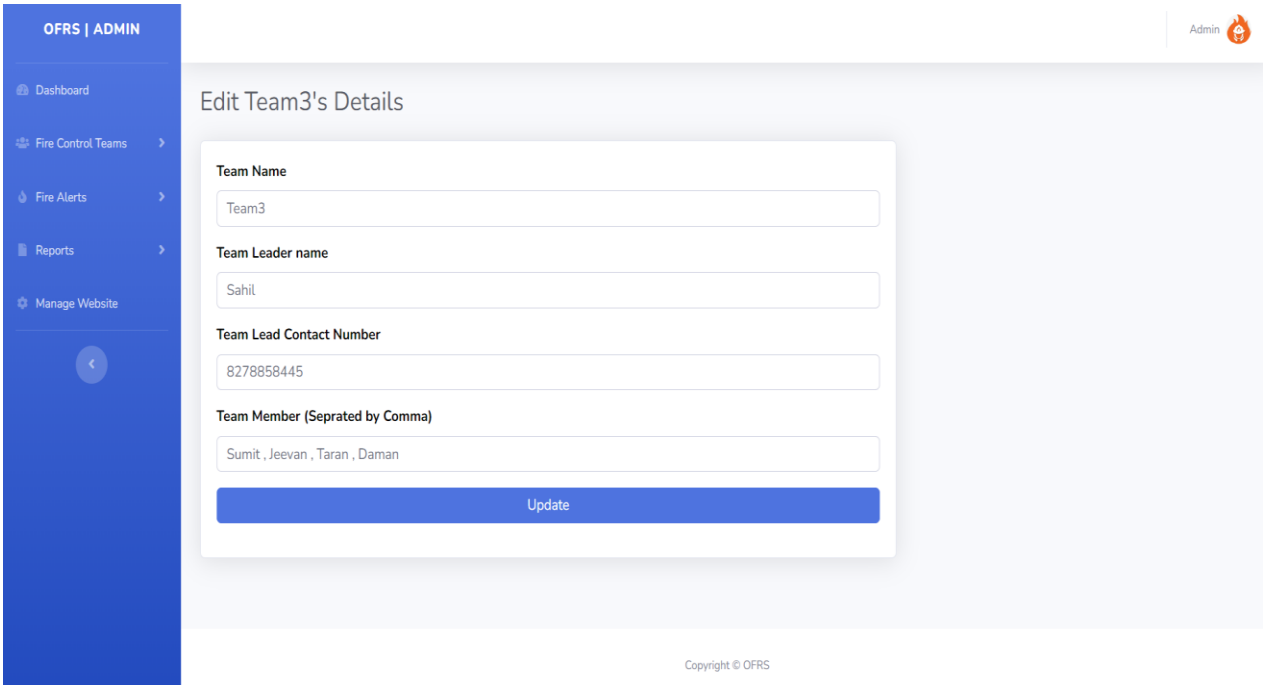
Add Team



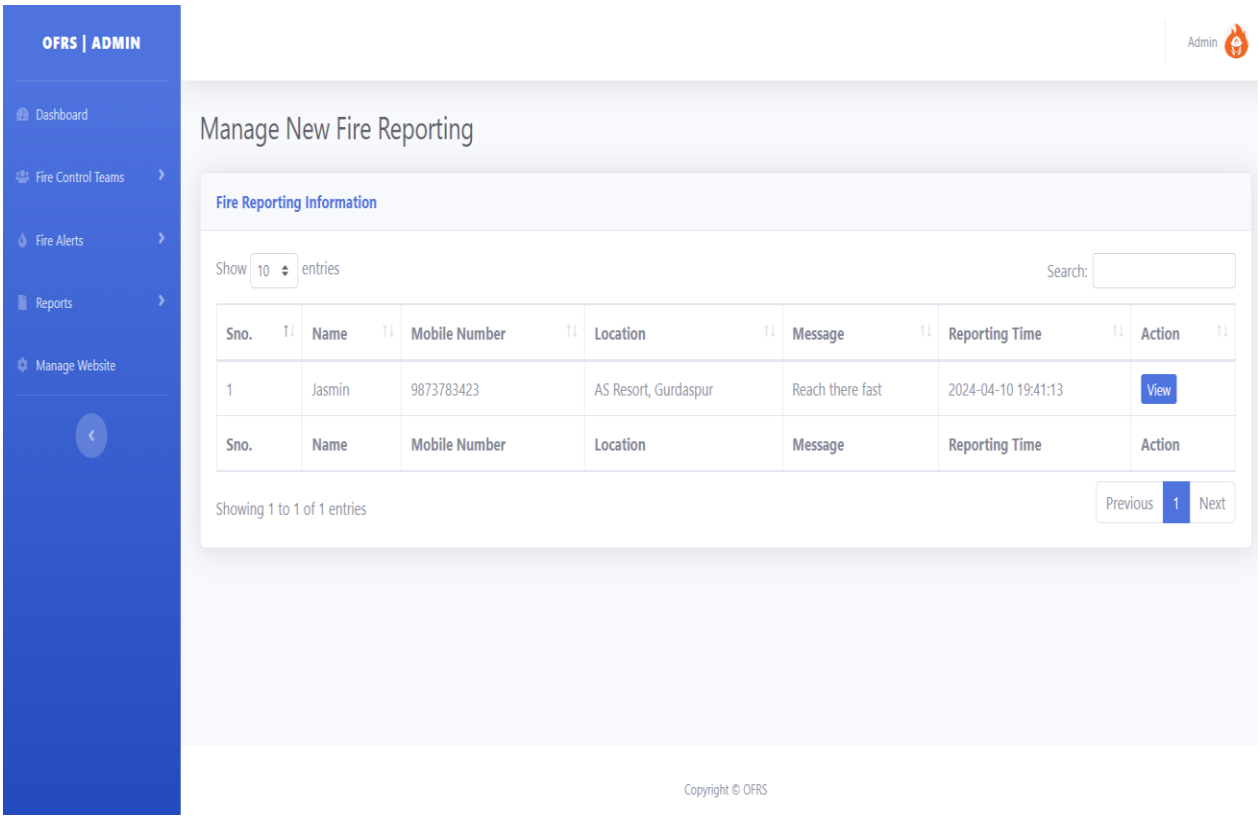
Manage Team



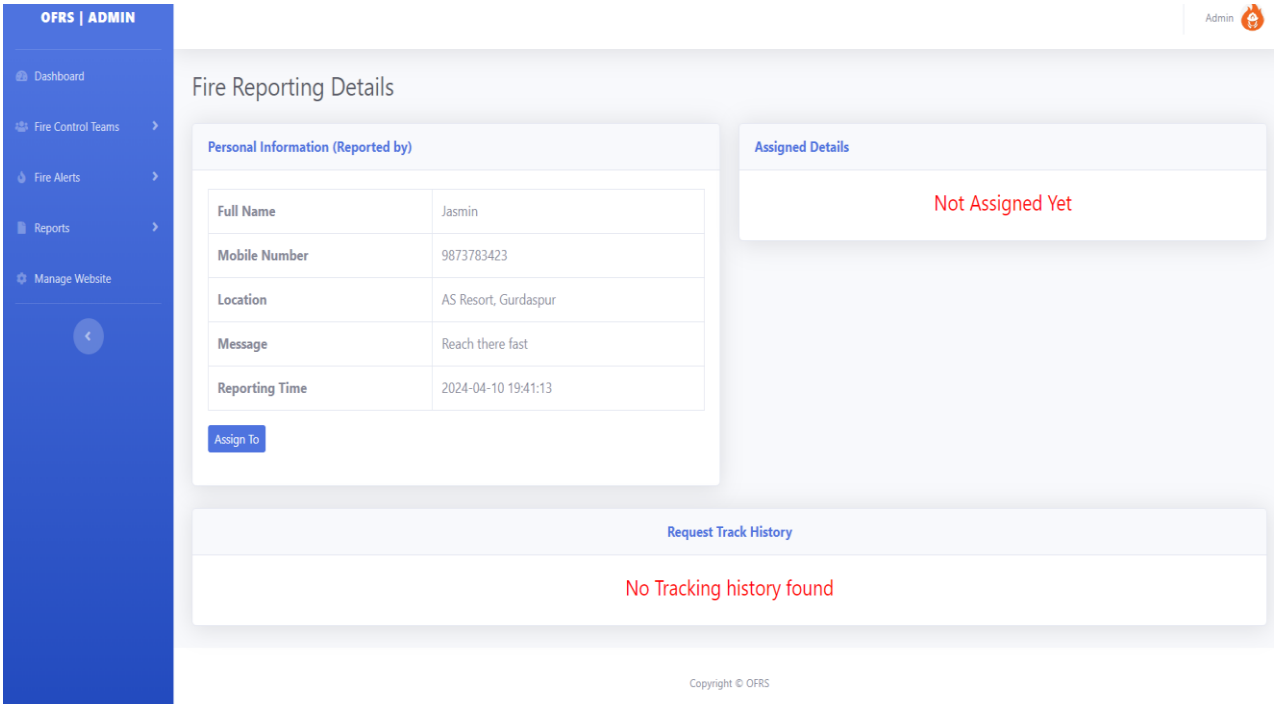
Update Team details



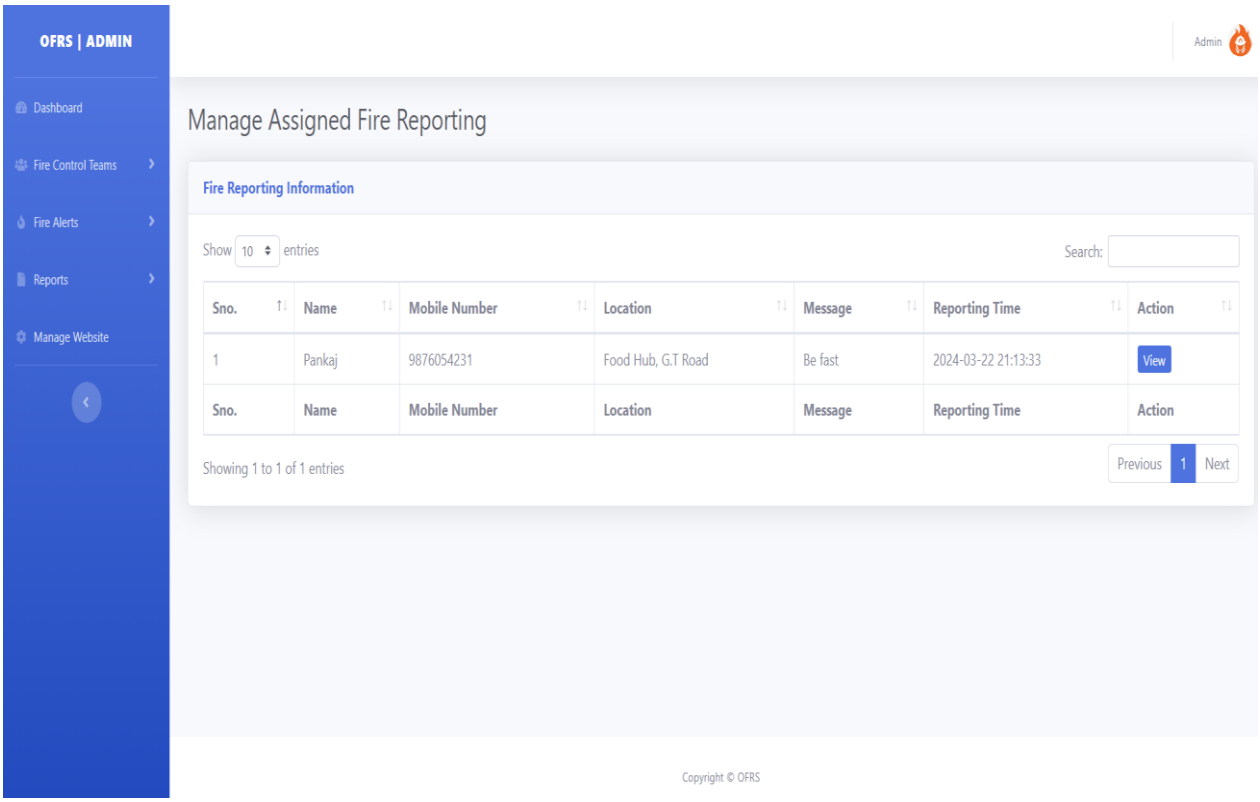
New Fire Alerts



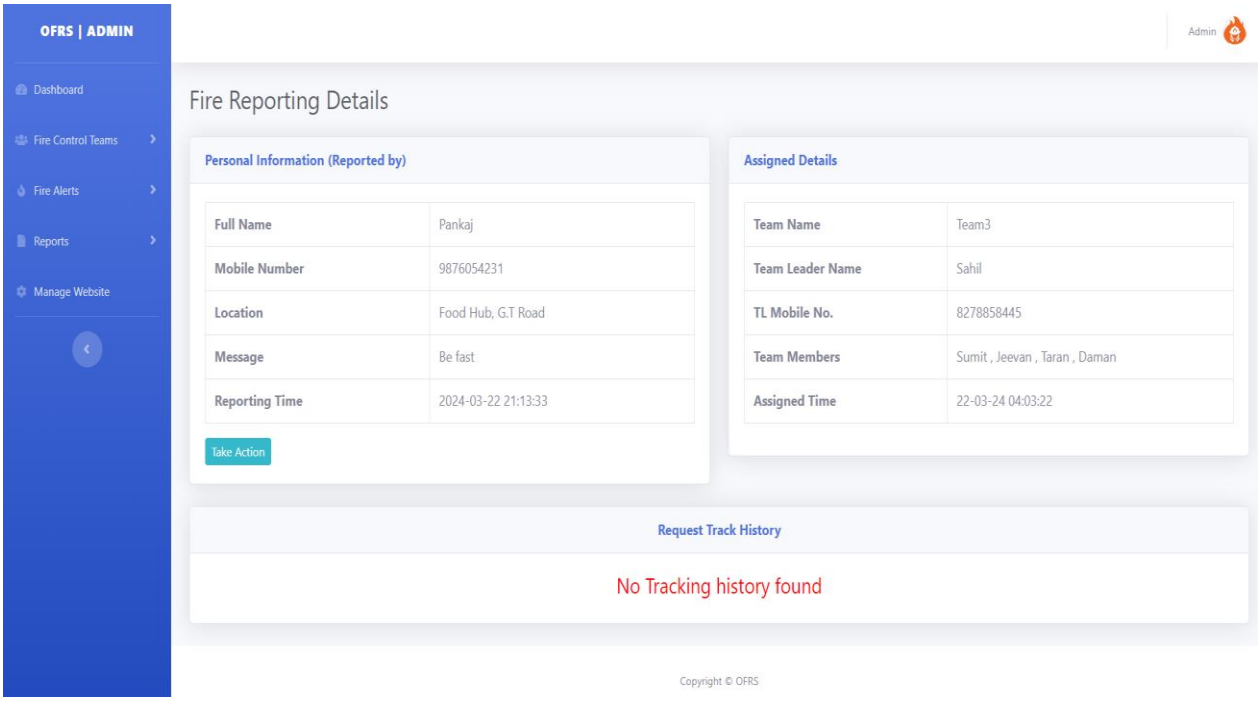
View New Fire Alerts



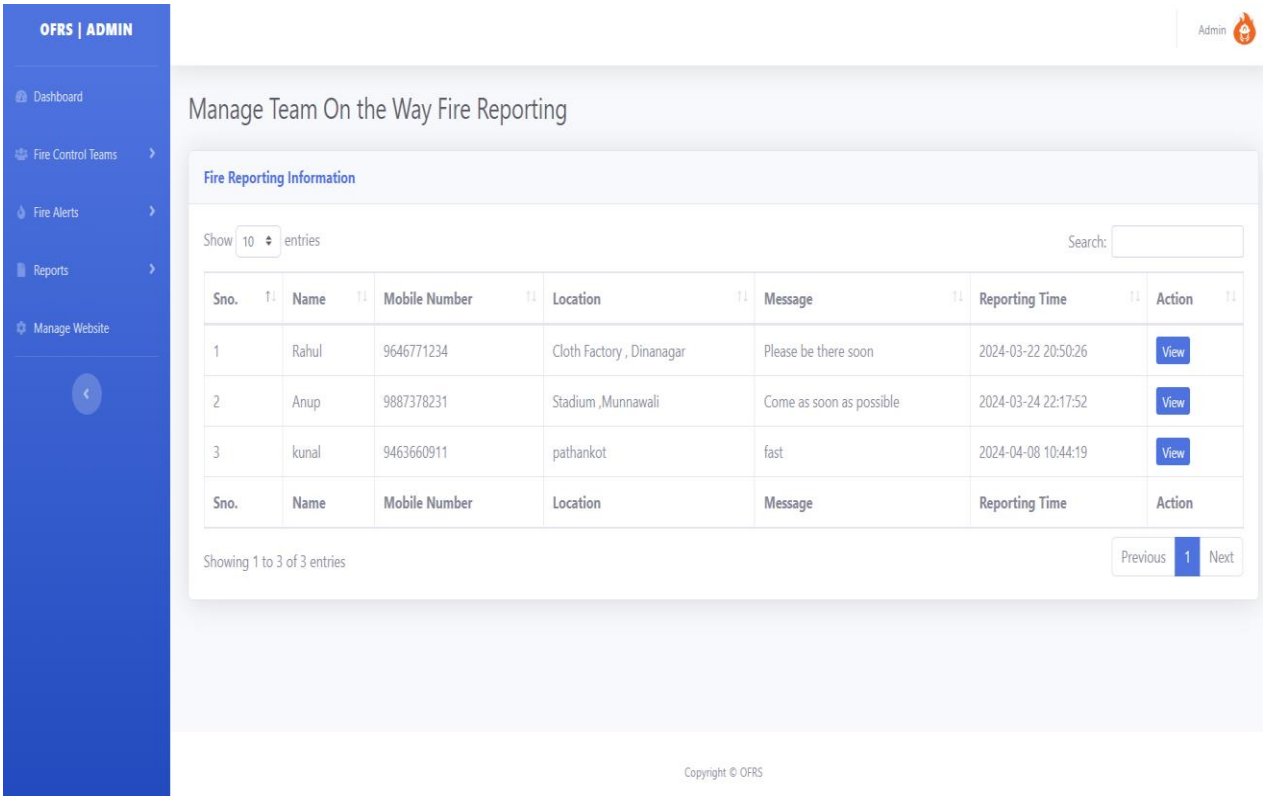
Assigned Fire Request



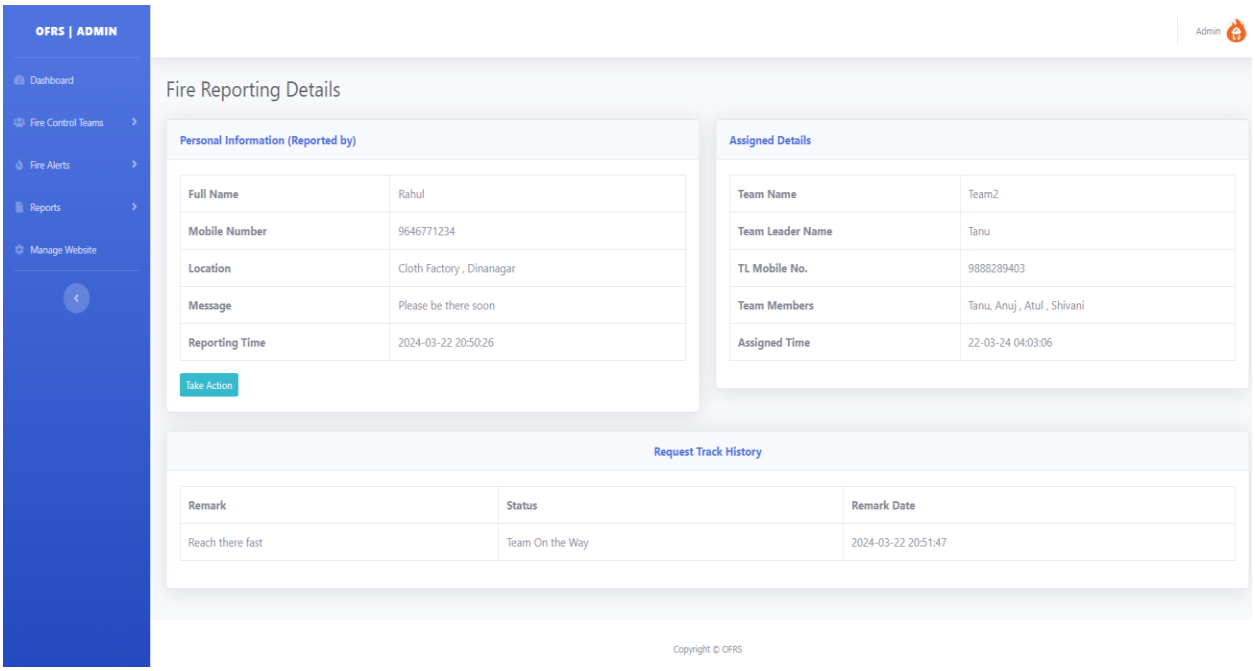
View Assigned Fire Request



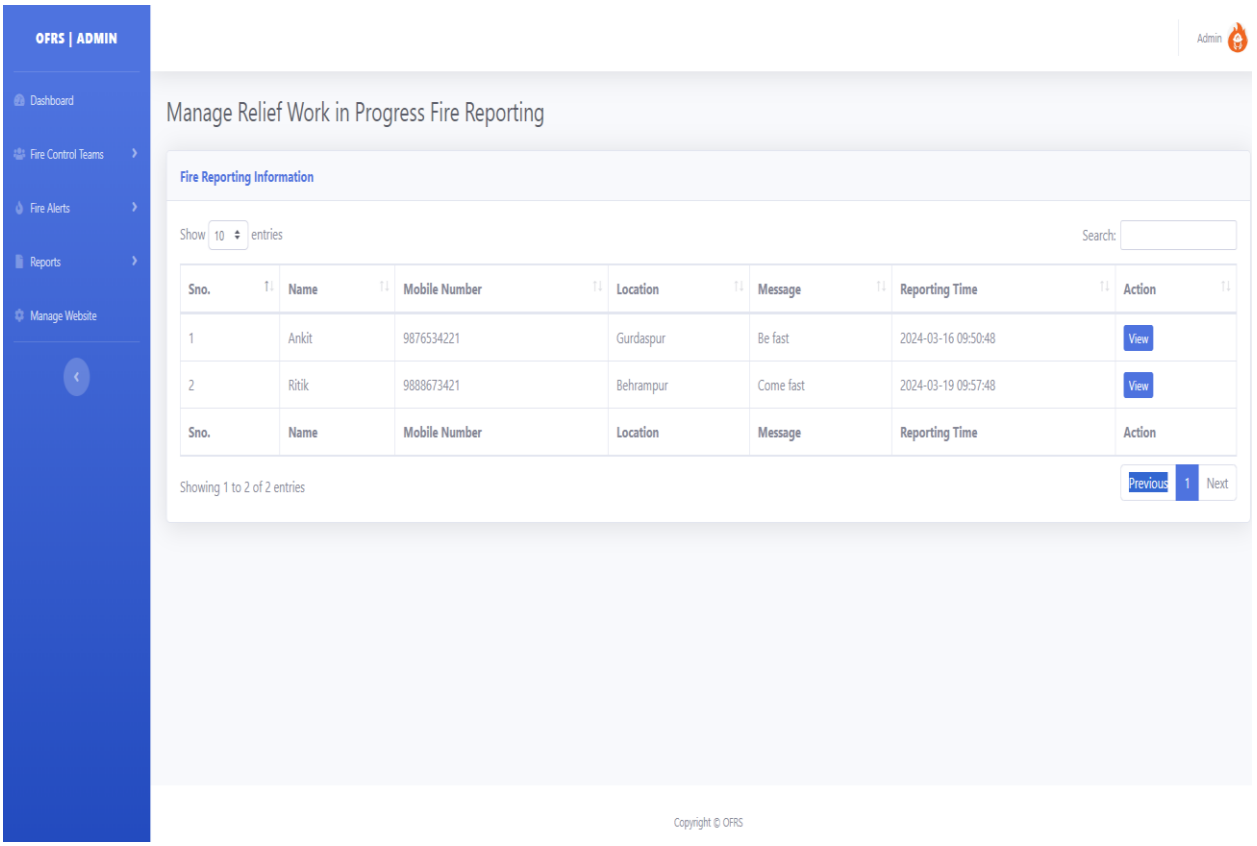
Team On The Way Fire Reporting



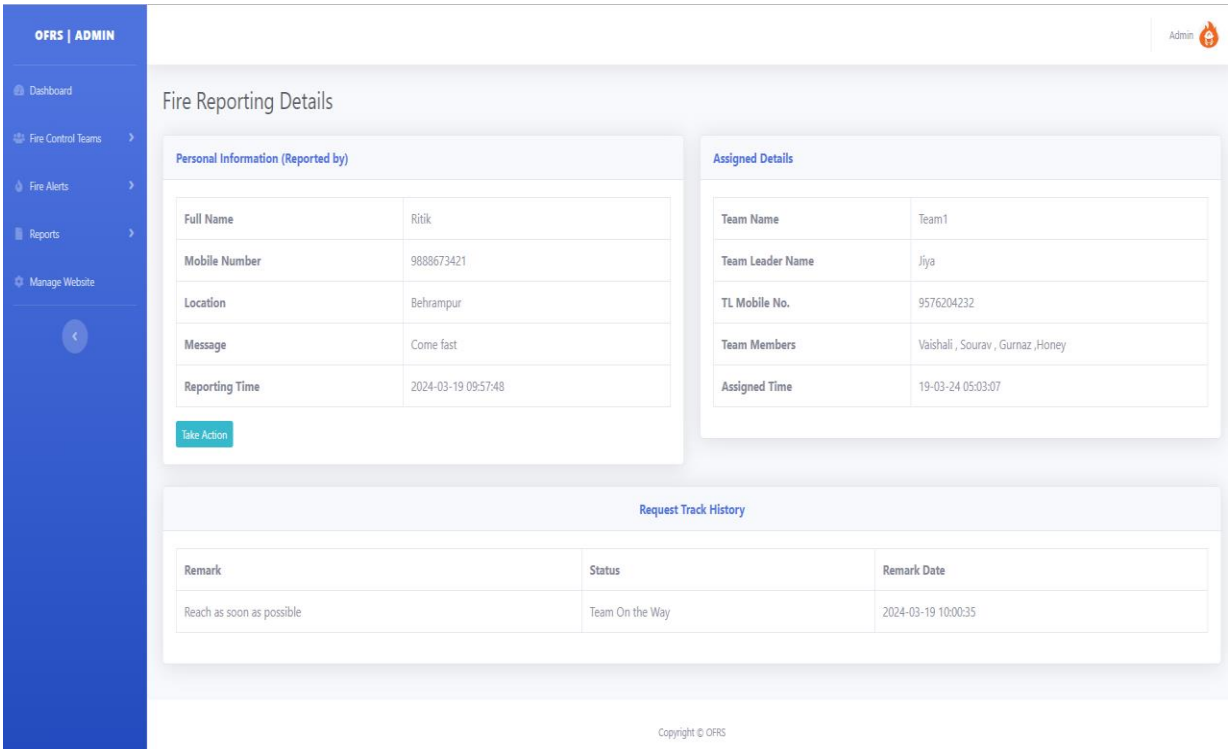
View Team On the Way Fire Reporting



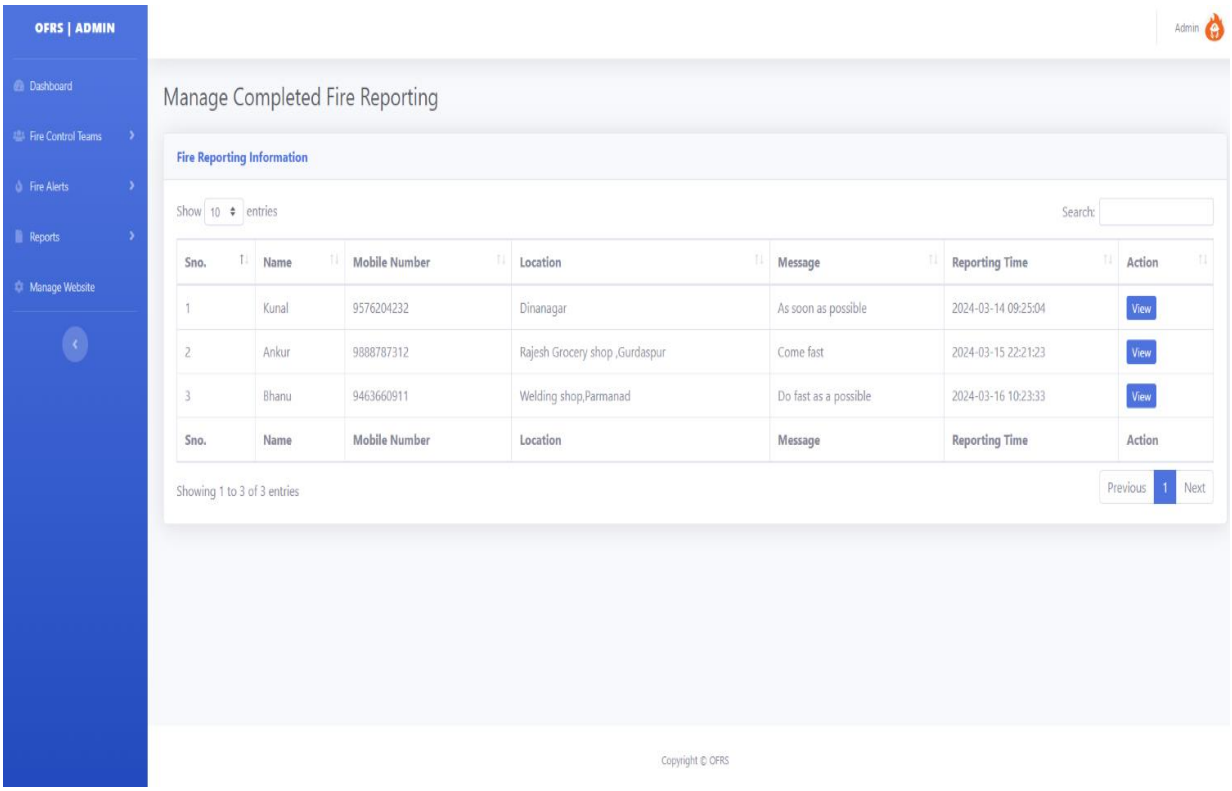
Relief Work in Progress Fire Reporting



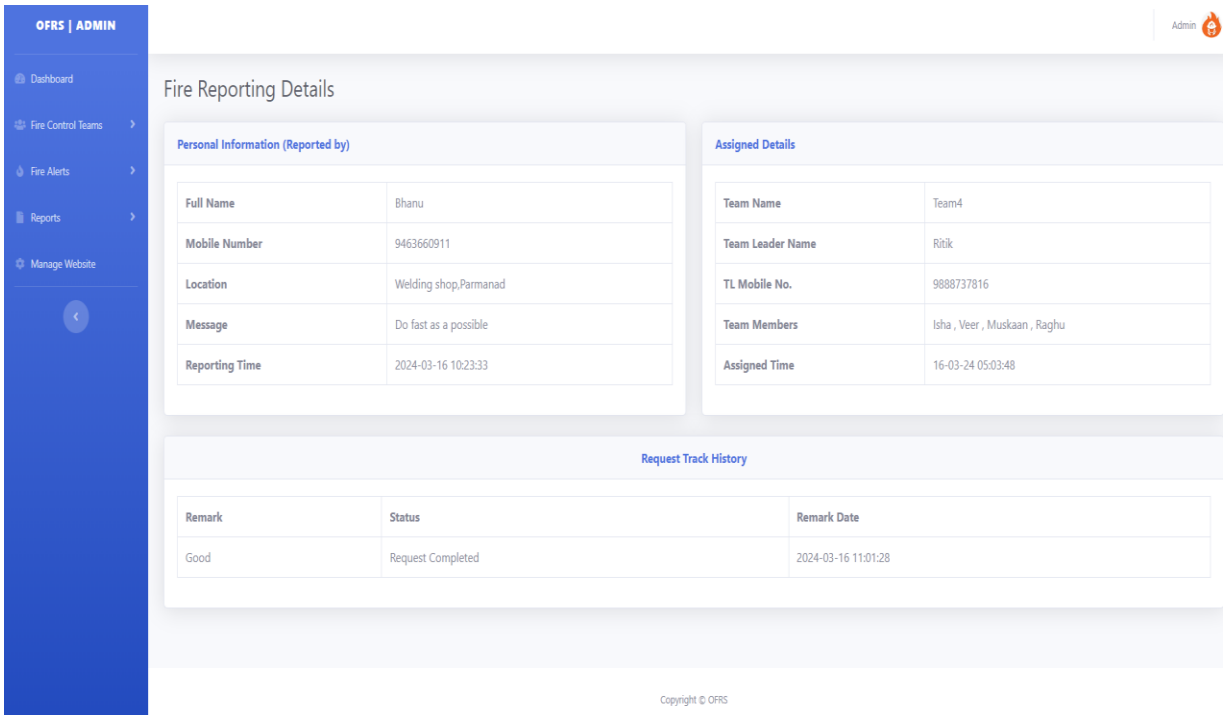
View Relief Work in Progress Fire Reporting



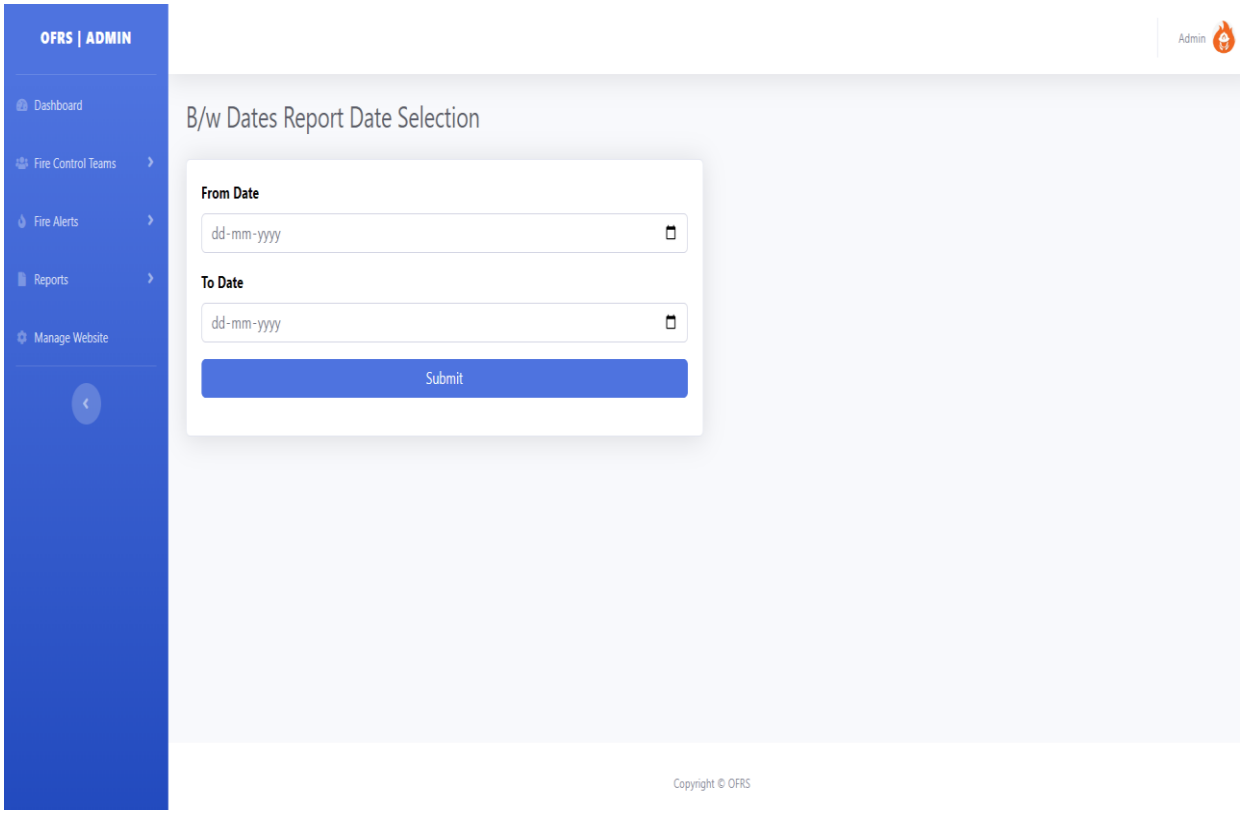
Completed Fire Reporting Request



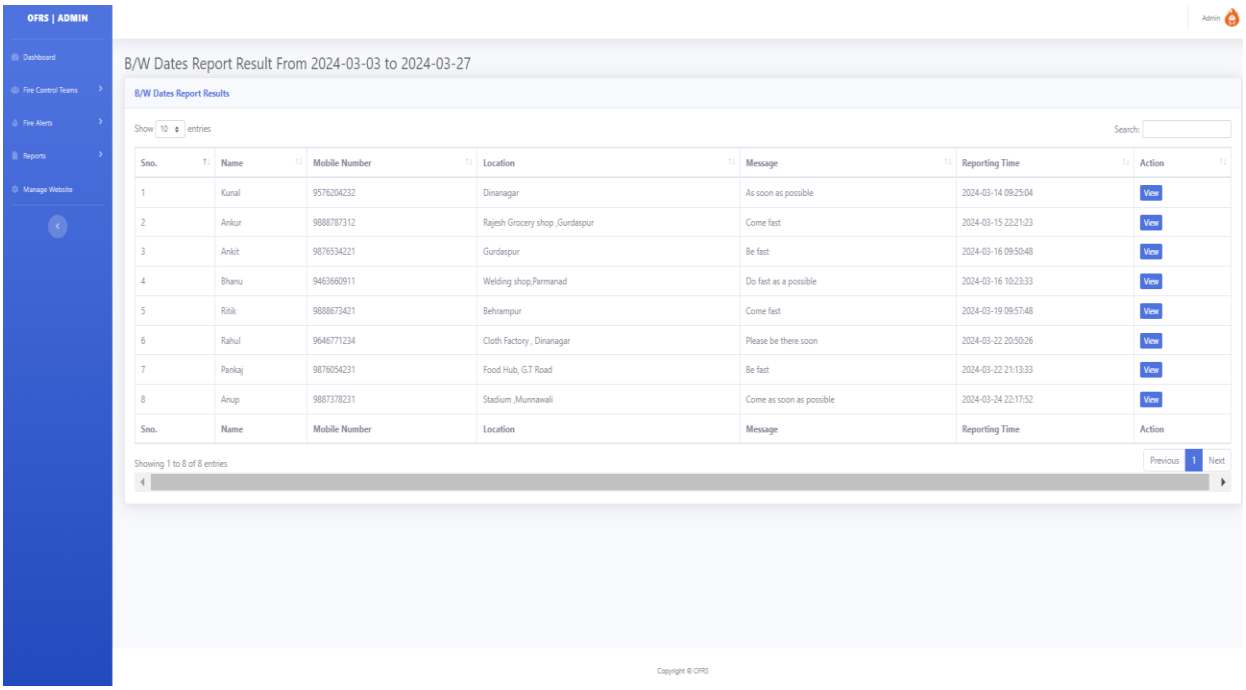
View Completed Fire Reporting Request



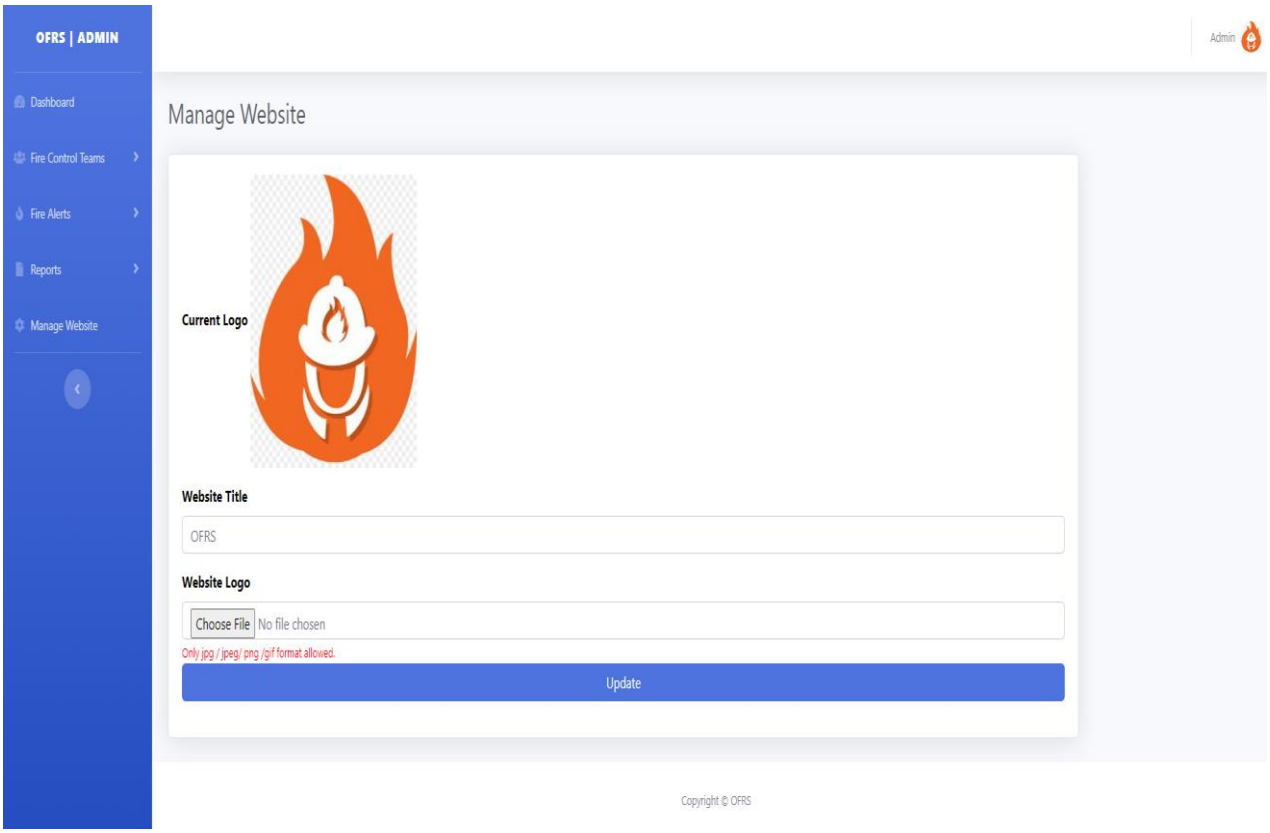
Between dates reports



View between dates reports



Manage Website



Conclusion

This Application provides an online version of Online Fire Reporting System which will benefit the fire handling team to maintain fire incidents details and fire team details.

It makes entire process online and can generate reports.

The Application was designed in such a way that future changes can be done easily. The following conclusions can be deduced from the development of the project.

- Automation of the entire system improves the productivity.
- It provides a friendly graphical user interface which proves to be better when compared to the existing system.
- It gives appropriate access to the authorized users depending on their permissions.
- It effectively overcomes the delay in communications.
- Updating of information becomes so easier.
- System security, data security and reliability are the striking features.
- The System has adequate scope for modification in future if it is necessary.

References

For PHP

- https://www.w3schools.com/php/default.asp
- https://www.sitepoint.com/php/
- https://www.php.net/

For MySQL

- https://www.mysql.com/
- http://www.mysqltutorial.org

For XAMPP

- https://www.apachefriends.org/download.html

Project Report

On

Online Security Guard Hiring System

Submitted in partial fulfillment of the requirements for the award of degree of

M.Sc (COMPUTER SCIENCE)

TO

SHANTI DEVI ARYA MAHILA COLLEGE

DINANAGAR

Submitted By:

Lisha

(20672225403)

Amandeep Kaur

(20672225404)

Submitted To:-

Mrs. Amita

Department Of Computer Science & IT

POST GRADUATE DEPARTMENT OF COMPUTER SCIENCE & IT

GURU NANAK DEV UNIVERSITY, AMRITSAR

Acknowledgement

We are using this opportunity to express my gratitude to everyone who supported me throughout the course of this project. We are thankful for their aspiring guidance and friendly advice during the project work. We are sincerely grateful to them for sharing their truthful and illuminating views on a number of issues related to the project. There are many who helped us with this project and we want to thank them all from the core of our heart.

We express our warm thanks to our respected head of the division Dr. Deepak Jyoti, for allowing us to use the facilities available and also help us to coordinate us project

Furthermore, we would also like to acknowledge with much appreciation the crucial role of faculty members on this occasion.

Last but not least, we would like to thank friends who help us to assemble the parts and gave a suggestion about the project.

Lisha

(20672225403)

Amandeep Kaur

(20672225404)

CERTIFICATE OF APPROVAL

This is certify that the project report entitled "**Online Security Guard Hiring System"** submitted to Shanti Devi Arya Mahila College, Dina Nagar in partial fulfillment of the requirement for the award of degree of M.sc (Computer Science), is an authentic and original work carried out by Lisha (20672225403), Amandeep Kaur (20672225404) under my guidance and supervision. The Post Graduate Department. of Computer Science has accepted the report as the fulfillment of the requirements for the degree of Master of Computer Science. No part of this report has been submitted to any other College/University for the reward of any Degree to the best of our knowledge.

Mrs. Amita
Assistant Professor (Comp Sc.)

Dr. Deepak Jyoti
Head, PG Department of Computer Sc.

DECLARATION

We hereby declare that this project report on "**Online Security Guard Hiring System"**which is being submitted in partial fulfillment of the Training Program of M.Sc (CS) to Shanti Devi Arya Mahila College, Dina Nagar is the result of the work carried out by us, under the guidance of Mrs. Amita (Assistant Professor),Shanti Devi Arya Mahila College, Dinanagar.

Lisha
20672225403

Amandeep Kaur
20672225404

Abstract

This project manages the details of security guards and provide job to them it is also beneficial for those who search security guards online.

Introduction

"Online Security Guard Hiring System" is a web-based technology which manages security guard details. In this project it is easy to get security guards for any farm or individual only by filling one form and get response quickly by admin. When user fill the security guard required form they get booking number by which they search what is status of their security booking. This web application provides a way to effectively control record & track the booking application and security guard details.

An "Online Security Guard Hiring System" effectively manages and handles all the functioning of a security hiring farms. The software system can store the data of security guard and booking application.

Online Security Guards Hiring System is developed using PHP with MySQL extension. It's a web-based application used to hire security guards.

Advantages:

- It helps the security farms to handle and manage guard details and booking details of guards.
- Reduce time consumption.
- Reduce error scope.

- All system managements are automated.
- Centralized database management.
- Easy operations for operator of the system.
- No paper work requirement.

Disadvantages:

- The system can only handle Single security farms.

Applications:

- To be used in security farms.

Feasibility study

Whenever we design a new system, normally the management will ask for a feasibility report of the new system. The management wants to know the technicalities and cost involved in creation of new system.

- Technical feasibility
- Economic feasibility
- Physical feasibility

Technical feasibility:

Technical feasibility involves study to establish the technical capability of the system being created to accomplish all requirements to the user. The system should be capable of handling the proposed volume of data and provide users and operating environment to increase their efficiency.
For example, system should be capable of handling the proposed volume of data and provide users.

Economic feasibility:

Economic feasibility involves study to establish the cost benefit analysis. Money spent on the system must be recorded in the form of benefit from the system. The benefits are of two types:

Tangible benefits:

- Saving man labor to do tedious tasks saves time.

Intangible benefits:

- Improves the quality of organization.

Physical feasibility:

It involves study to establish the time responses of the new system being created. For e.g., if the new system takes more than one day to prepare crucial finance statement for the management, wherever it was required in an hour, the system fails to provide the same.

It should be clearly establish that the new system requirements in the form of time responses would be completely met with. It may call for increase in cost. If the required cost is sacrificed then the purpose of the new system may not be achieved even if it was found to be technically feasible.

Scope of the Project

The proposed system will affect or interface with the security guards and user who search security guards.

The system works and fulfills all the functionalities as per the proposed system.

It will provide reduced response time against the queries made by different users.

This project is based on PHP language with MYSQL database manages the details of security guards and provide job to them it is also beneficial for those who search security guards online.

All possible features such as verification, validation, security, user friendliness etc. have been considered.

This project has two modules i.e. admin and user.

User Module
Hiring Form: In this section, users can fill out the form to fire the guards.
Request Status: In this section, users can check the status of guard requests.
Admin Module
Secure Admin Login

Admin Setting: In this section, Admin can update the profile details, and change their password.
Dashboard: In this section, Admin briefly views the listed security guards, Total hiring requests, New requests, Accepted requests, and Rejected requests.

Security Guards: In this Section, Admin can Add security guards, edit the added guard info, and also delete the guard record.
Hiring Booking Requests: In this Section, Admin can view all, new, rejected, and accepted requests and take the appropriate action.
Hiring Report: In this section, the admin can view the hiring request in a particular period.
Search Request: In this section, Admin can search the request by booking no, name, and mobile number also.
Admin can also recover their password.

Software & Hardware requirements

- ✓ Any Version of browser after Mozilla Firefox 4.0, Internet Explorer 6.0, chrome

Hardware requirements:

- ✓ Processor: 12th Gen Intel(R) Core ™ i5-1235U .
- ✓ Version: 21H2.
- ✓ Processor speed: 1.30 GHz
- ✓ RAM: 8GB
- ✓ Hard disk: 512GB

Software requirements:

- ✓ Database : MySQL
- ✓ Server : Apache
- ✓ Frontend : HTML
- ✓ Scripting Language : JavaScript
- ✓ IDE : Sublime
- ✓ Technology : PHP

System Design

Design is the first step in the development phase for any techniques and principles for the purpose of defining a device, a process or system in sufficient detail to permit its physical realization.

Once the software requirements have been analyzed and specified the software design involves three technical activities - design, coding, implementation and testing that are required to build and verify the software.

The design activities are of main importance in this phase, because in this activity, decisions ultimately affecting the success of the software implementation and its ease of maintenance are made. These decisions have the final bearing upon reliability and maintainability of the system. Design is the only way to accurately translate the customer's requirements into finished software or a system.

Design is the place where quality is fostered in development. Software design is a process through which requirements are translated into a representation of software. Software design is conducted in two steps. Preliminary design is concerned with the transformation of requirements into data

Unified Modelling Language Diagrams (UML):

- The unified modelling language allows the software engineer to express an analysis model using the modelling notation that is governed by a set of syntactic semantic and pragmatic rules.
- A UML system is represented using five different views that describe the system from distinctly different perspective. Each view is defined by a set of diagram, which is as follows.

User Model View

i. This view represents the system from the users perspective.

ii. The analysis representation describes a usage scenario from the end-users perspective**.**

Structural model view

- ◆ In this model the data and functionality are arrived from inside the system.
- ◆ This model view models the static structures.

Behavioural Model View

- ◆ It represents the dynamic of behavioural as parts of the system, depicting the interactions of collection between various structural elements described in the user model and structural model view.

Implementation Model View

- In this the structural and behavioural as parts of the system are represented as they are to be built.

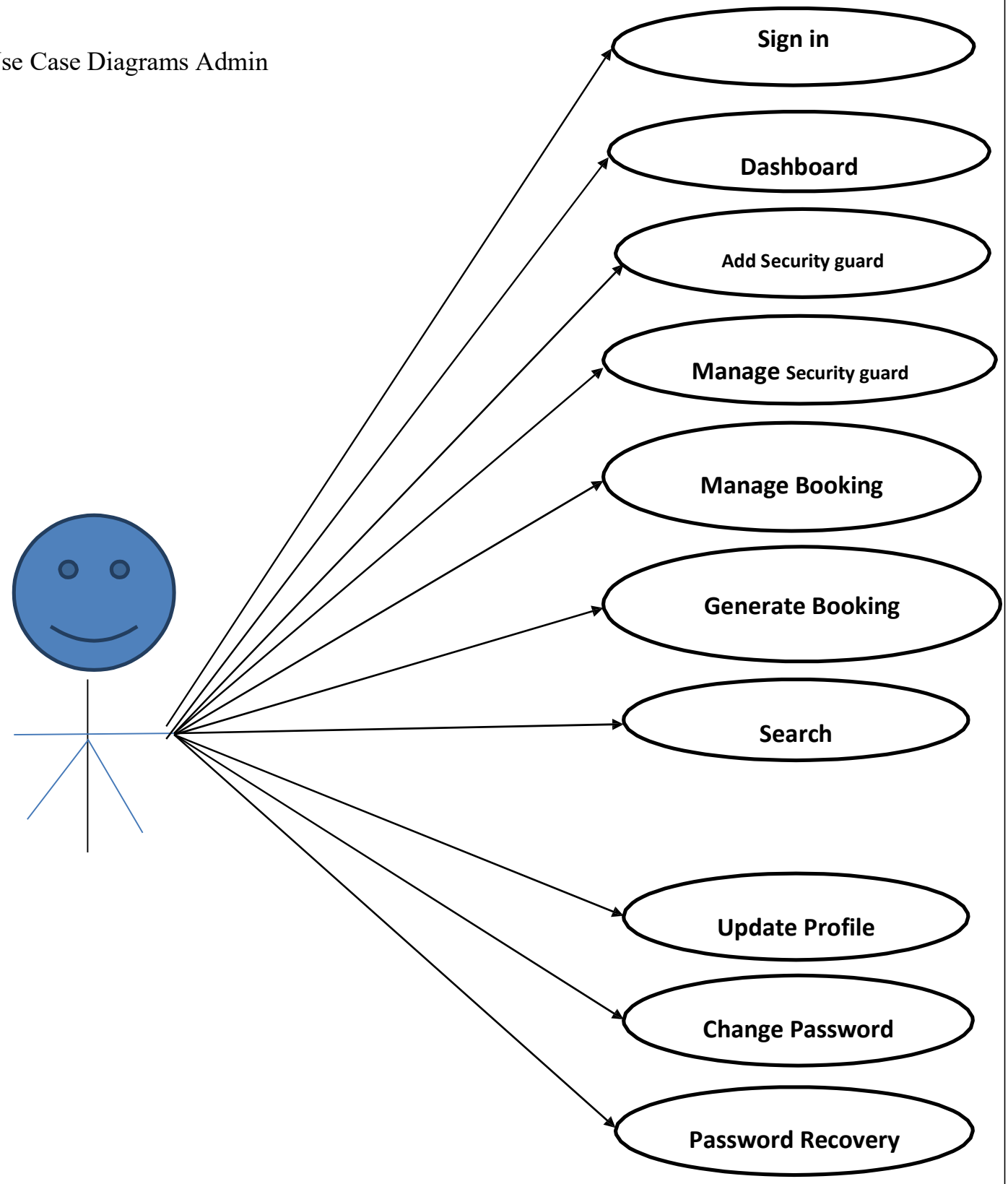
Environmental Model View

In this the structural and behavioural aspects of the environment in which the system is to be implemented are represented.

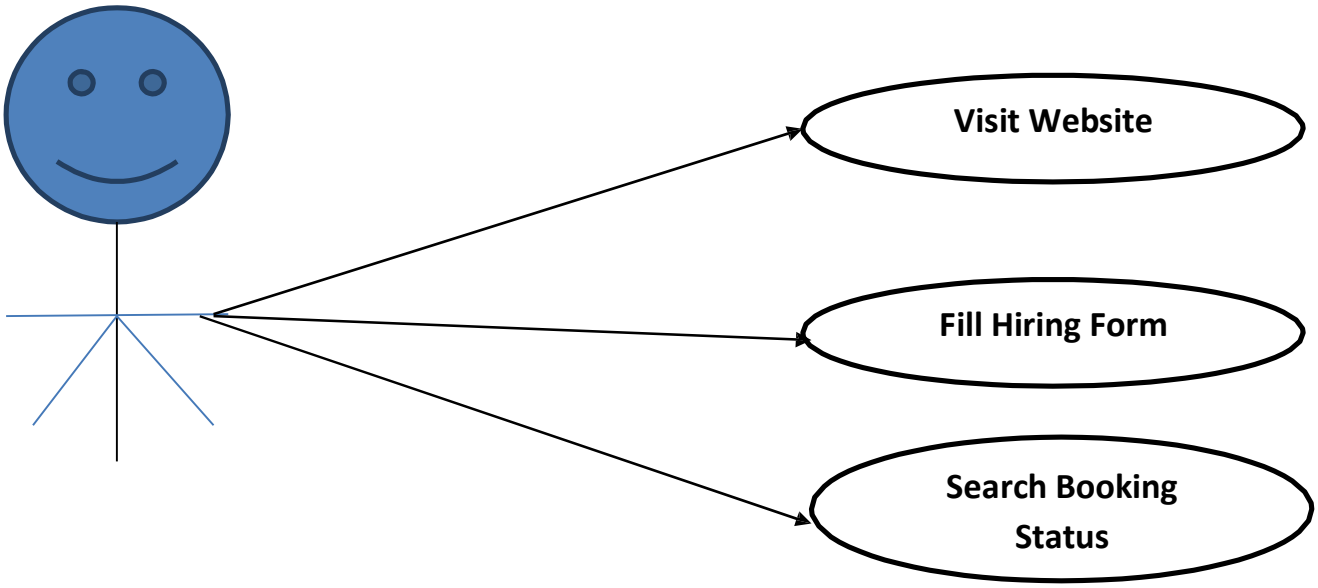
UML is specifically constructed through two different domains they are

- UML Analysis modelling, which focuses on the user model and structural model views of the system?
- UML design modelling, which focuses on the behavioural modelling, implementation modelling and environmental model views**.**

Use Case Diagrams Admin



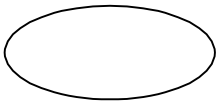
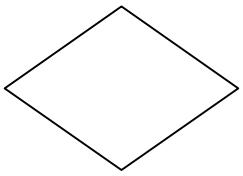
Use Case Diagrams User



ENTITY-RELATIONSHIP Diagrams

E-R (Entity-Relationship) Diagram is used to represents the relationship between entities in the table.

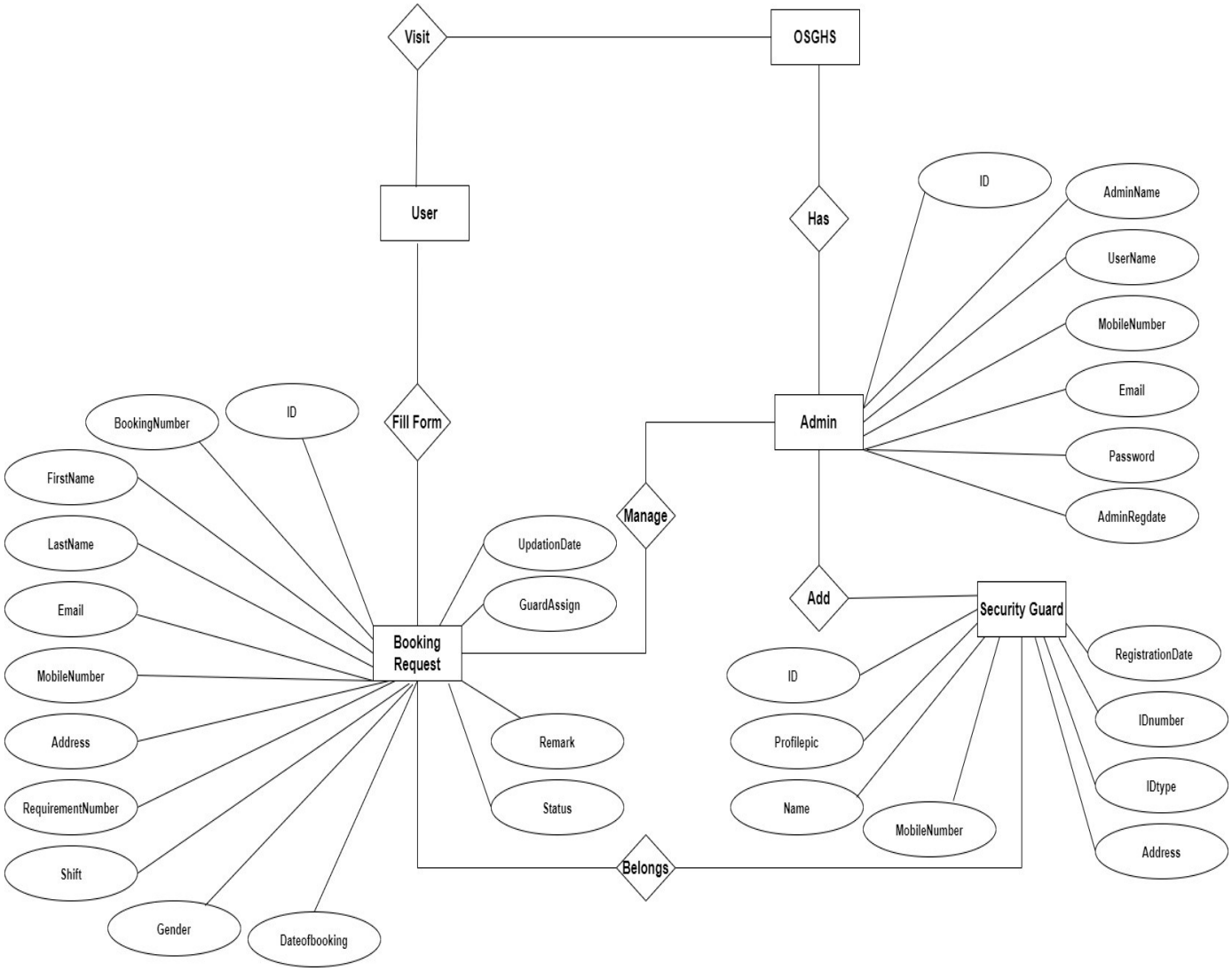
The symbols used in E-R diagrams are:

SYMBOL	PURPOSE
	Represents Entity sets.
	Represent attributes.
	Represent Relationship Sets.
	Line represents flow

Structured analysis is a set of tools and techniques that the analyst.

To develop a new kind of a system:

The traditional approach focuses on the cost benefit and feasibility analysis, Project management, and hardware and software selection a personal considerations.


Visit
OSGHS
User
Has
ID
AdminName
UserName
MobileNumber
Email
Password
AdminRegdate
Admin
Fill Form
BookingNumber
ID
FirstName
LastName
Email
MobileNumber
Address
RequirementNumber
Shift
Gender
Dateofbooking
Manage
UpdationDate
GuardAssign
Booking Request
Remark
Status
Add
Security Guard
ID
Profilepic
Name
MobileNumber
RegistrationDate
IDnumber
IDtype
Address
Belongs

Data Flow Diagrams

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It can be manual, automated, or a combination of both.

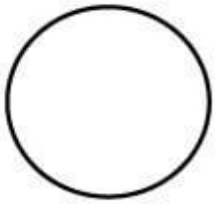
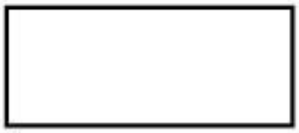
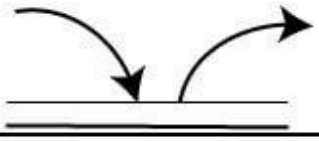
It shows how data enters and leaves the system, what changes the information, and where data is stored.

The objective of a DFD is to show the scope and boundaries of a system as a whole. It may be used as a communication tool between a system analyst and any person who plays a part in the order that acts as a starting point for redesigning a system. The DFD is also called as a data flow graph or bubble chart.

The following observations about DFDs are essential:

1. All names should be unique. This makes it easier to refer to elements in the DFD.
2. Remember that DFD is not a flow chart. Arrows is a flow chart that represents the order of events; arrows in DFD represents flowing data. A DFD does not involve any order of events.
3. Suppress logical decisions. If we ever have the urge to draw a diamond-shaped box in a DFD, suppress that urge! A diamond-shaped box is used in flow charts to represents decision points with multiple exists paths of which the only one is taken. This implies an ordering of events, which makes no sense in a DFD.
4. Do not become bogged down with details. Defer error conditions and error handling until the end of the analysis.

Standard symbols for DFDs are derived from the electric circuit diagram analysis and are shown in fig:

Symbol	Name	Function
	Data flow	Used to Connect Processes to each , other , to sources or Sinks; te arrow head indicates direction of data flow.
	Process	Perfroms Some transformation of Input data to yield output data.
	Source of Sink (External Entity)	A Source of System inputs or Sink of System outputs.
	Data Store	A repository of data; the arrow heads indicate net inputs and net outputs to store.

Symbols for Data Flow Diagrams

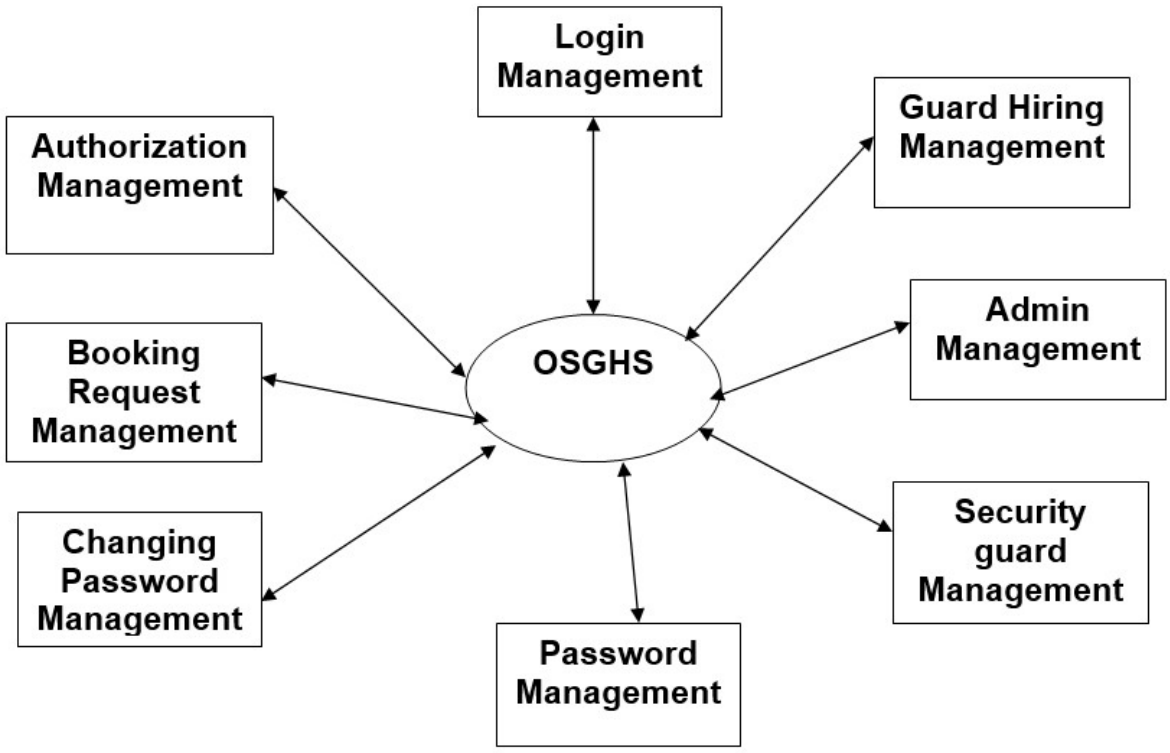
Circle: A circle (bubble) shows a process that transforms data inputs into data outputs.

Data Flow: A curved line shows the flow of data into or out of a process or data store.

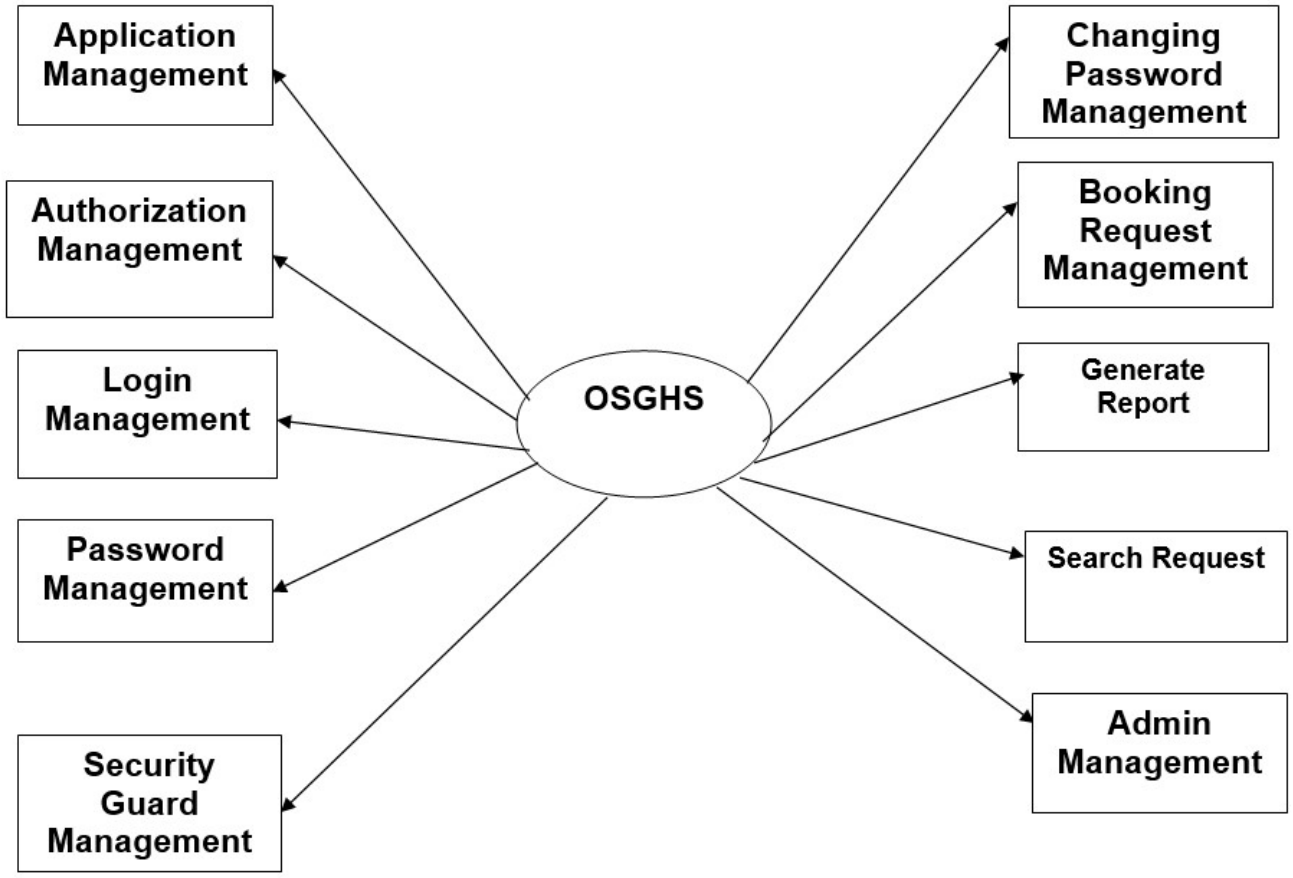
Data Store: A set of parallel lines shows a place for the collection of data items. A data store indicates that the data is stored which can be used at a later stage or by the other processes in a different order. The data store can have an element or group of elements.

Source or Sink: Source or Sink is an external entity and acts as a source of system inputs or sink of system outputs.

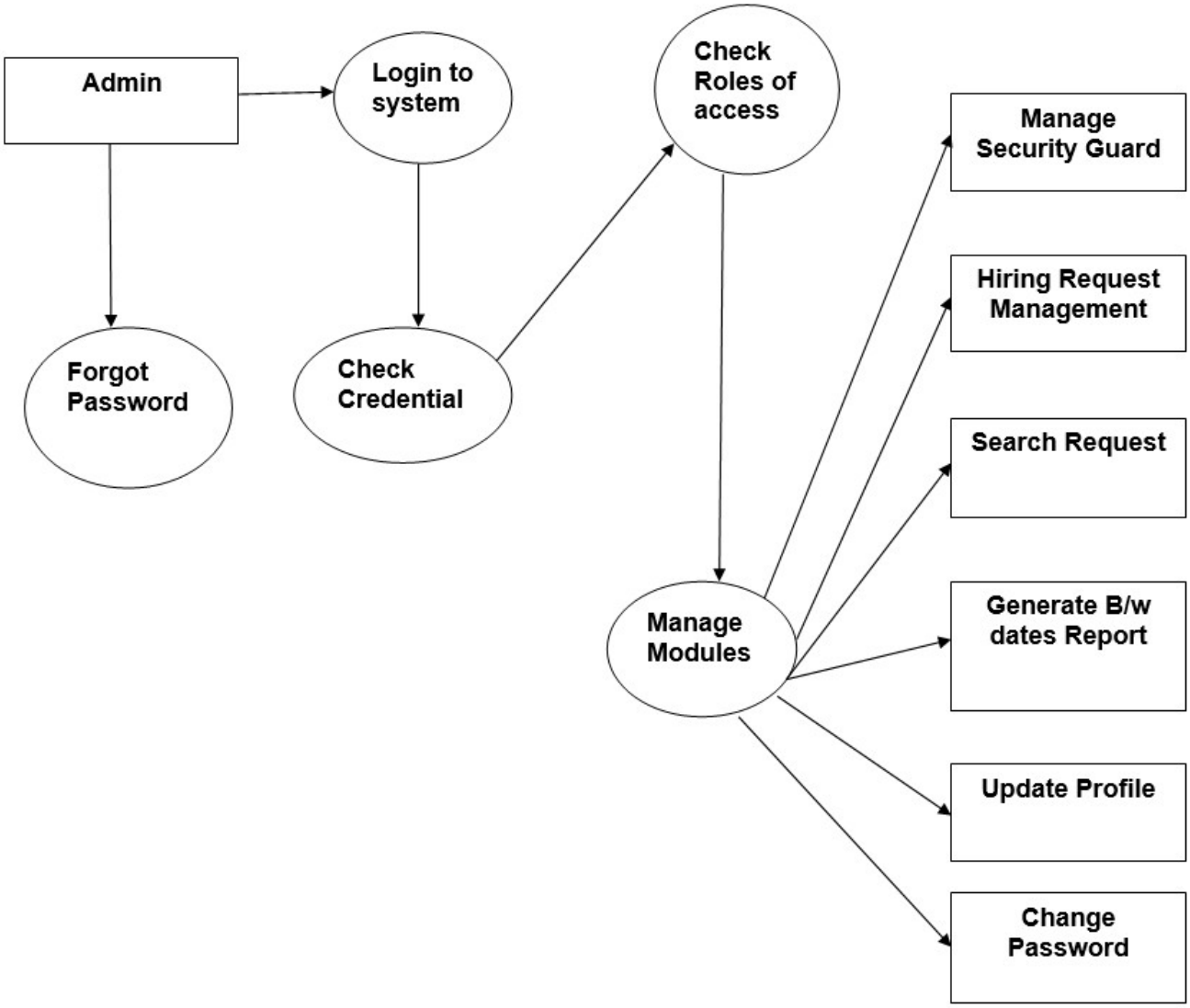
Zero Level DFD



First Level DFD



Second Level DFD



Database Design

The data in the system has to be stored and retrieved from database. Designing the database is part of system design. Data elements and data structures to be stored have been identified at analysis stage. They are structured and put together to design the data storage and retrieval system.

A database is a collection of interrelated data stored with minimum redundancy to serve many users quickly and efficiently. The general objective is to make database access easy, quick, inexpensive and flexible for the user. Relationships are established between the data items and unnecessary data items are removed. Normalization is done to get an internal consistency of data and to have minimum redundancy and maximum stability. This ensures minimizing data storage required, minimizing chances of data inconsistencies and optimizing for updates. The MS Access database has been chosen for developing the relevant databases.

"Online Security Guard Hiring System" (OSGHS) contains three MySQL tables :

Table admin table Structure : This table store the admin login and personal Details.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(10)			No	*None*		AUTO_INCREMENT
2	AdminName	varchar(120)	utf8mb4_general_ci		Yes	*NULL*		
3	UserName	varchar(120)	utf8mb4_general_ci		Yes	*NULL*		
4	MobileNumber	bigint(10)			Yes	*NULL*		
5	Email	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
6	Password	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
7	AdminRegdate	timestamp			Yes	current_timestamp()		

tblguard table Structure : This table store ticket detail of security guard.

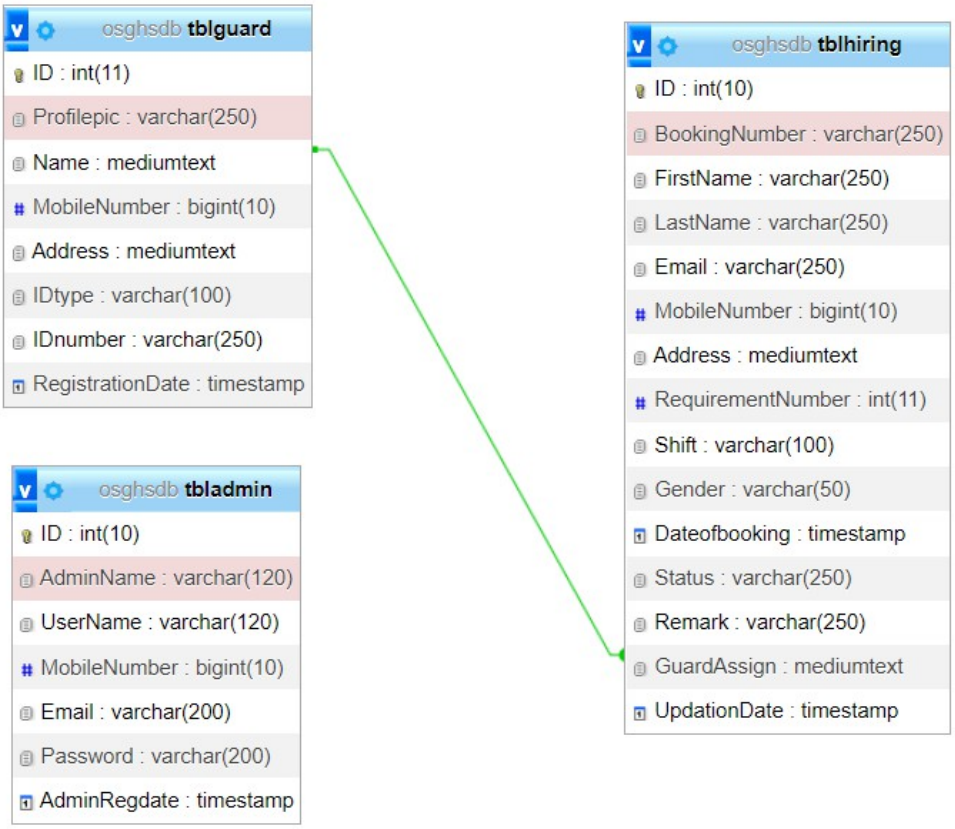
#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(11)			No	*None*		AUTO_INCREMENT
2	Profilepic	varchar(250)	latin1_swedish_ci		Yes	*NULL*		
3	Name	varchar(250)	latin1_swedish_ci		Yes	*NULL*		
4	MobileNumber	bigint(10)			Yes	*NULL*		
5	Address	mediumtext	latin1_swedish_ci		Yes	*NULL*		
6	IDtype	varchar(100)	latin1_swedish_ci		Yes	*NULL*		
7	IDnumber	varchar(250)	latin1_swedish_ci		Yes	*NULL*		
8	RegistrationDate	timestamp			Yes	current_timestamp()		

Table hiring table Structure : This table store security guard booking detail.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(10)			No	*None*		AUTO_INCREMENT
2	BookingNumber	varchar(250)	latin1_swedish_ci		Yes	*NULL*		
3	FirstName	varchar(250)	latin1_swedish_ci		Yes	*NULL*		
4	LastName	varchar(250)	latin1_swedish_ci		Yes	*NULL*		
5	Email	varchar(250)	latin1_swedish_ci		Yes	*NULL*		
6	MobileNumber	bigint(10)			Yes	*NULL*		
7	Address	mediumtext	latin1_swedish_ci		Yes	*NULL*		
8	RequirementNumber	int(10)			Yes	*NULL*		
9	Shift	varchar(100)	latin1_swedish_ci		Yes	*NULL*		
10	Gender	varchar(50)	latin1_swedish_ci		Yes	*NULL*		
11	Dateofbooking	timestamp			Yes	current_timestamp()		
12	Status	varchar(250)	latin1_swedish_ci		Yes	*NULL*		
13	Remark	varchar(250)	latin1_swedish_ci		Yes	*NULL*		
14	GuardAssign	mediumtext	latin1_swedish_ci		Yes	*NULL*		
15	UpdationDate	timestamp			Yes	*NULL*		ON UPDATE CURRENT_TIMESTAMP()

Class Diagram:

The class diagram shows a set of classes, interfaces, collaborations and their relationships.



System Testing

SOFTWARE TESTING TECHNIQUES:

Software testing is a critical element of software quality assurance and represents the ultimate review of specification, designing and coding.

TESTING OBJECTIVES:

1. Testing is process of executing a program with the intent of finding an error.

2. A good test case design is one that has a probability of finding an as yet undiscovered error.

3. A successful test is one that uncovers an as yet undiscovered error.

These above objectives imply a dramatic change in view port.
Testing cannot show the absence of defects, it can only show that software errors are present.

There are three types of testing strategies

1. Unit test
2. Integration test
3. Performance test

Unit Testing:

Unit testing focuses verification efforts on the smallest unit of software design module. The unit test is always white box oriented. The tests that occur as part of unit testing are testing the module interface, examining the local data structures, testing the boundary conditions, execution all the independent paths and testing error-handling paths.

Integration Testing:

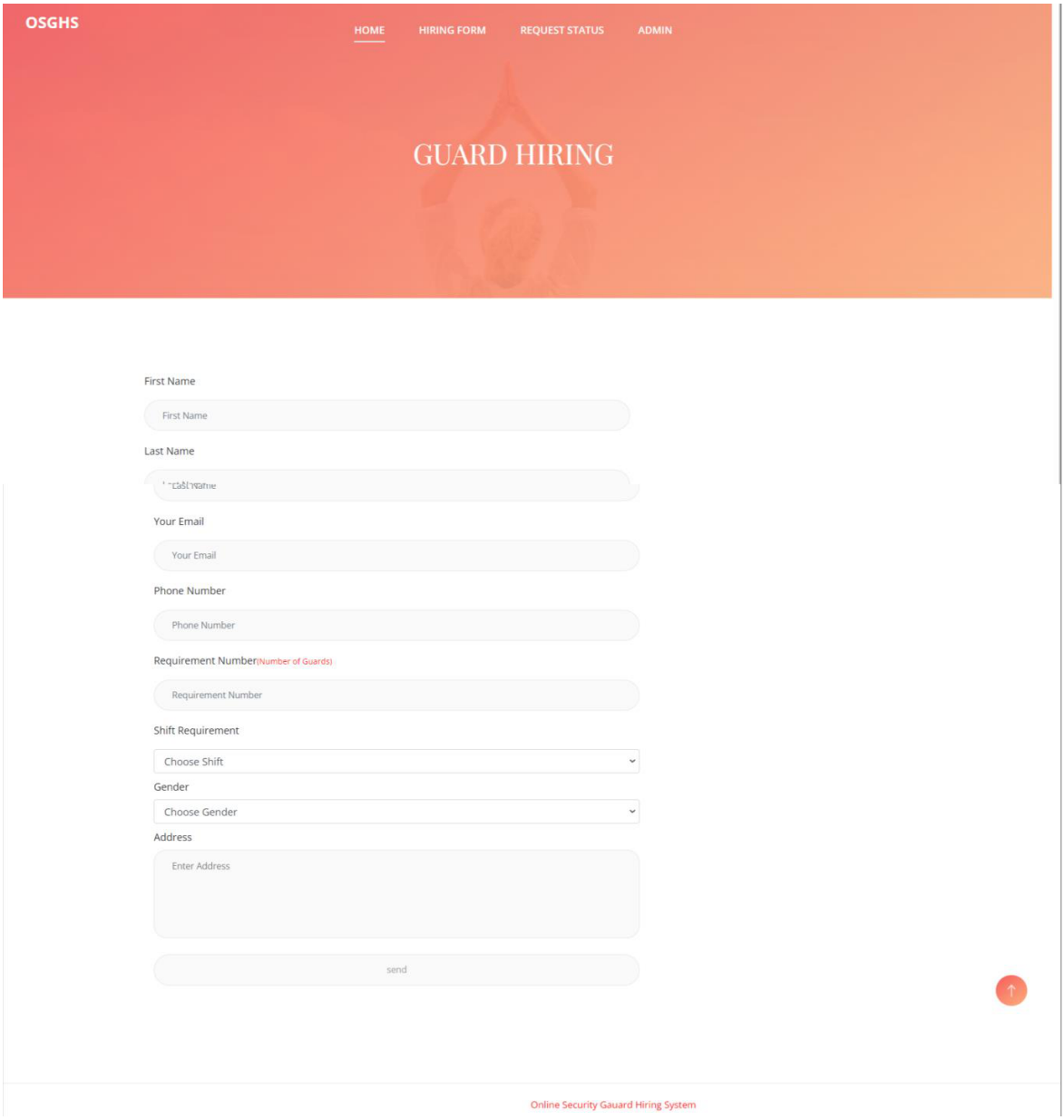
Integration testing is a systematic technique or construction the program structure while at the same time conducting tests to uncover errors associated with interfacing. Scope of testing summarizes the specific functional, performance, and internal design characteristics that are to be tested. It employs top-down testing and bottom-up testing methods for this case.

Performance Testing:

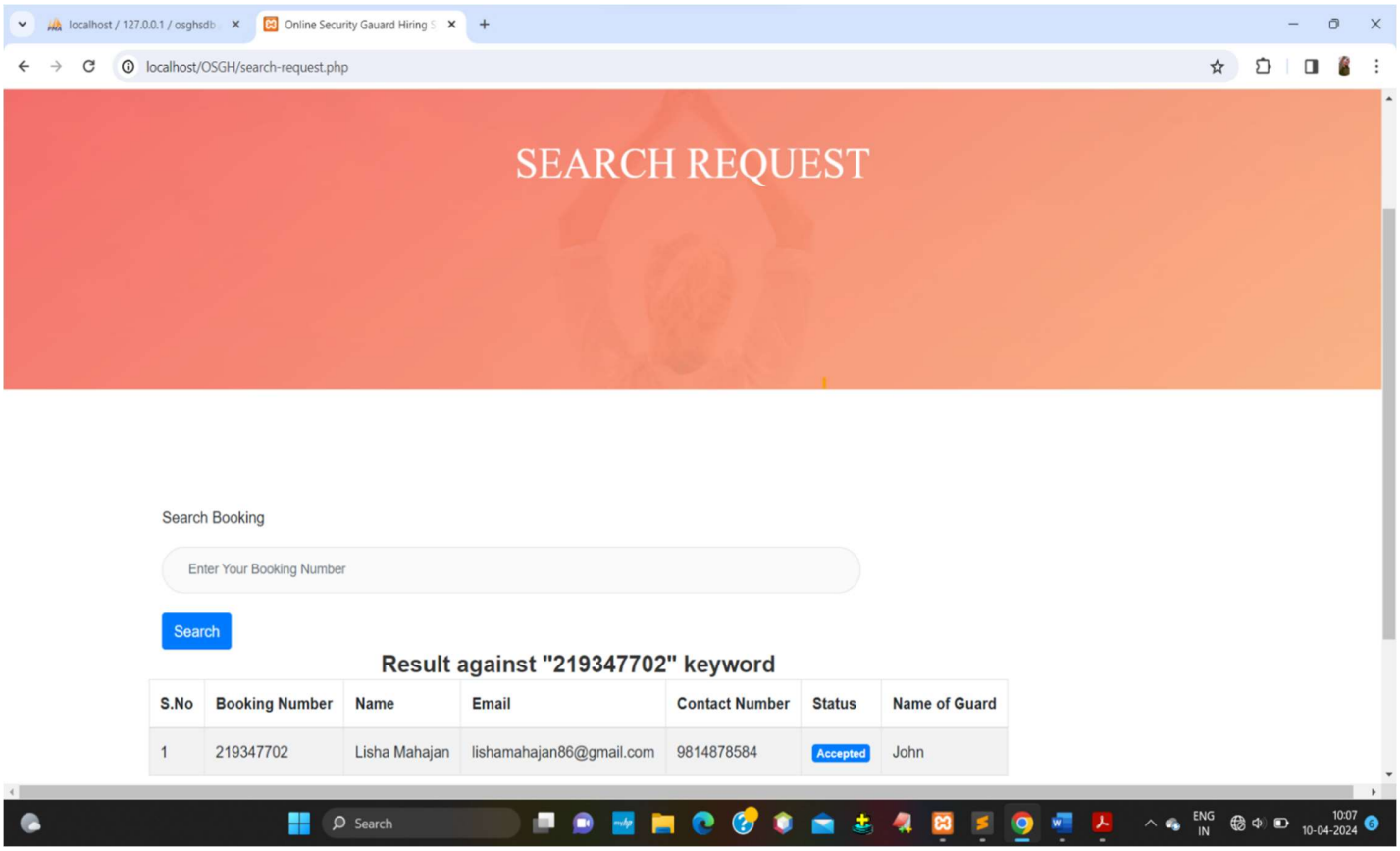
Timing for both read and update transactions should be gathered to determine whether system functions are being performed in an acceptable timeframe.

Output Screen of Project

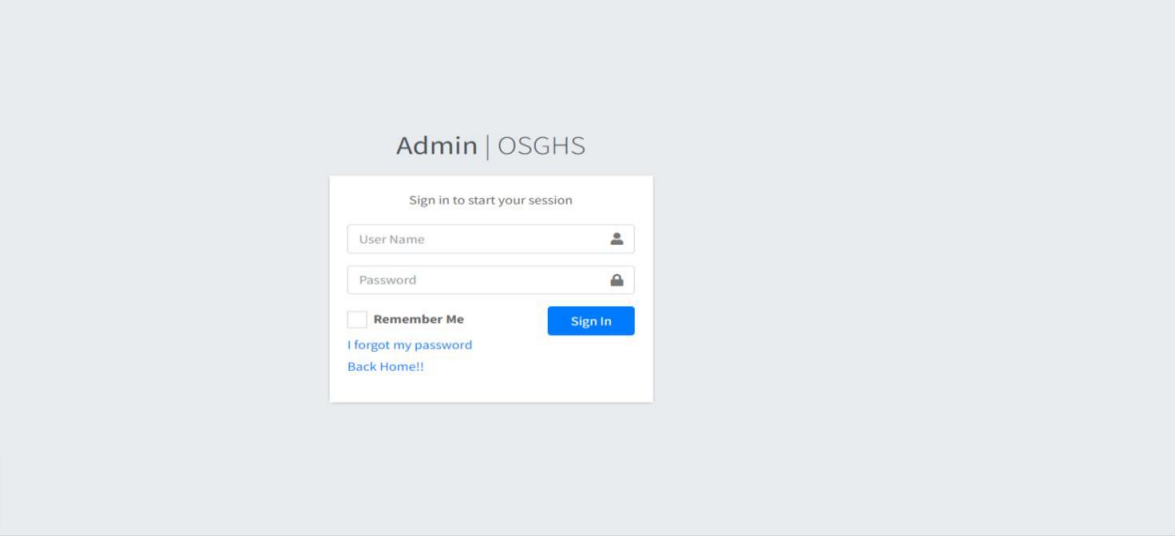
Hiring Form



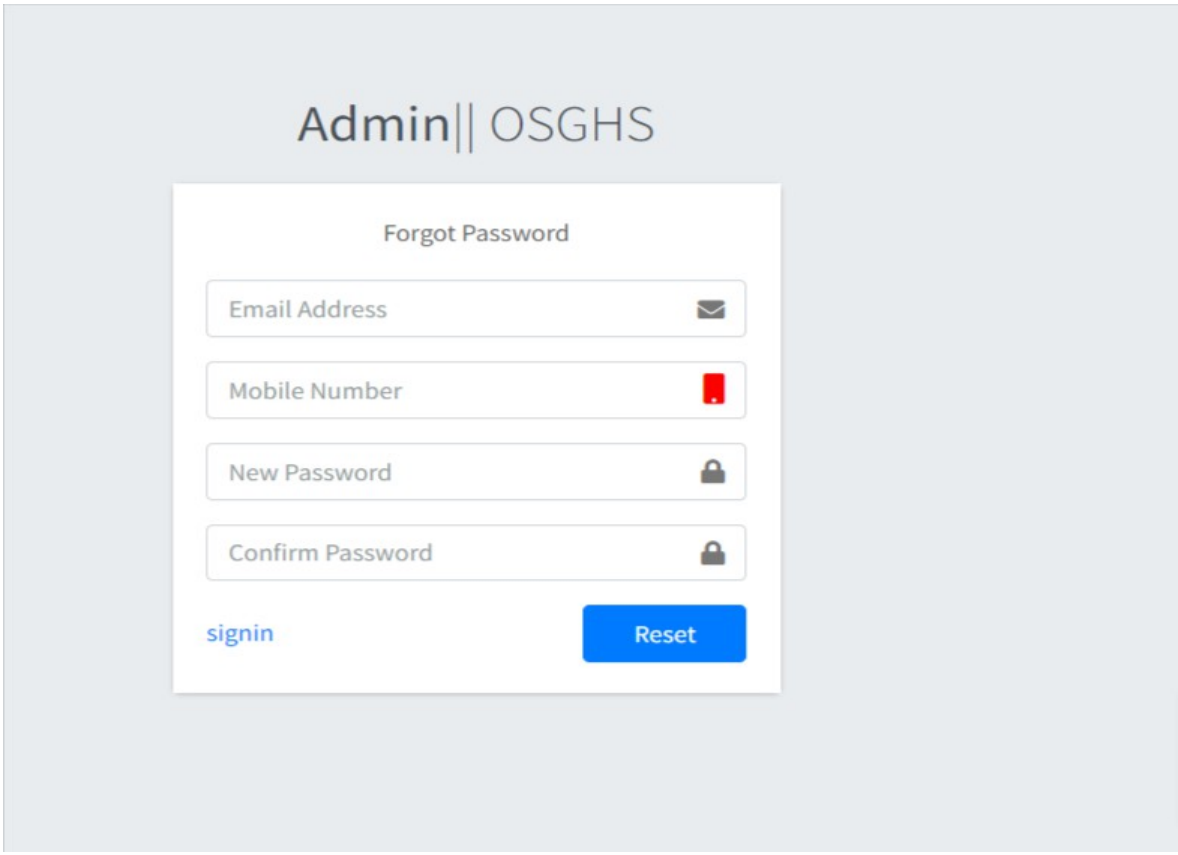
Search Hiring Request Status



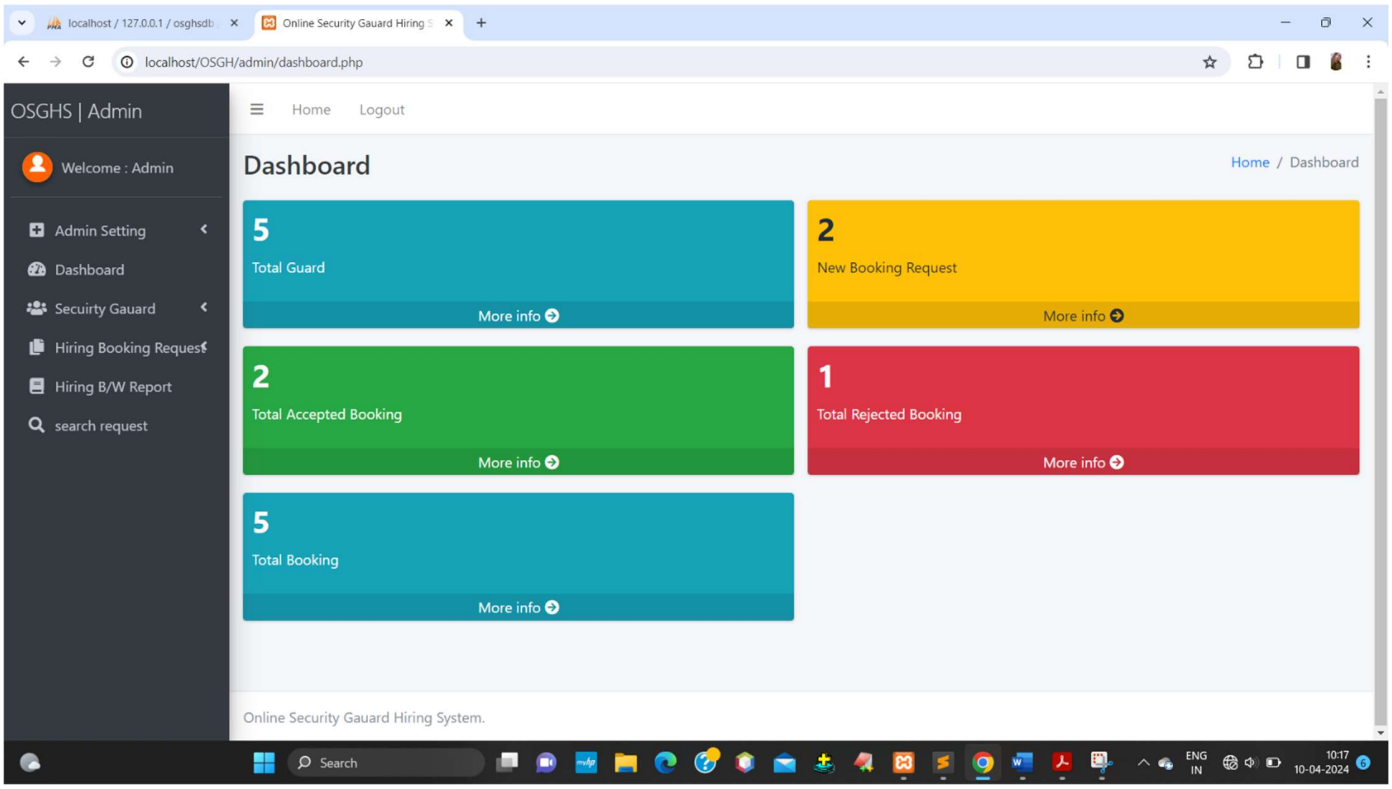
Admin Login



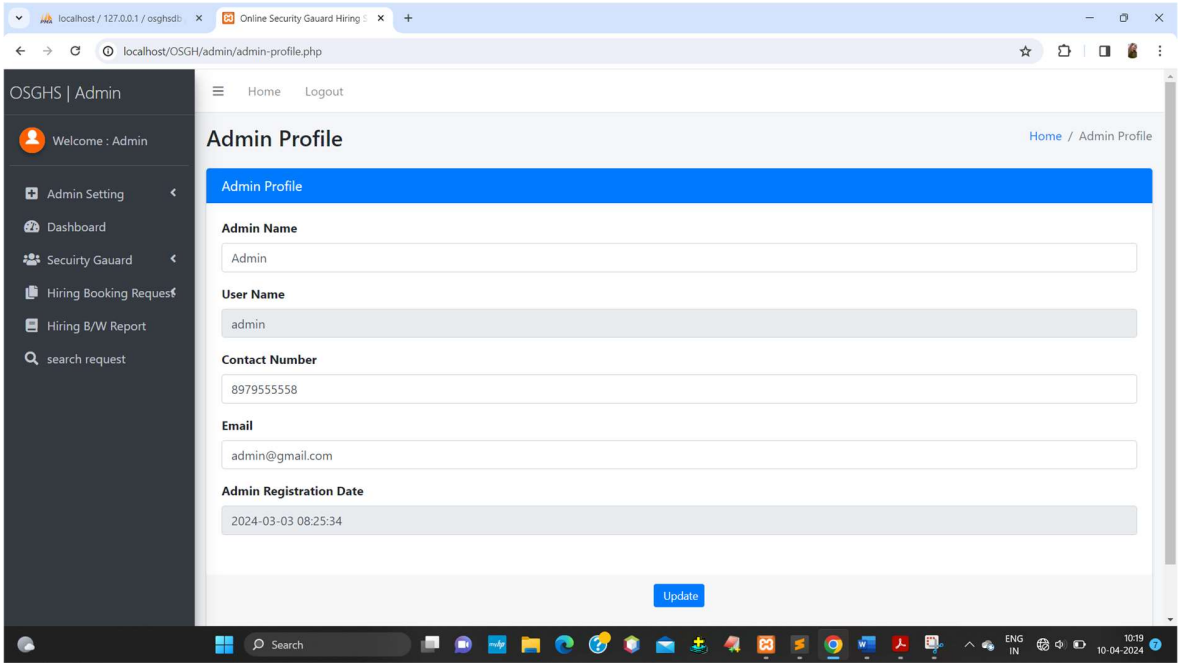
Forgot Password



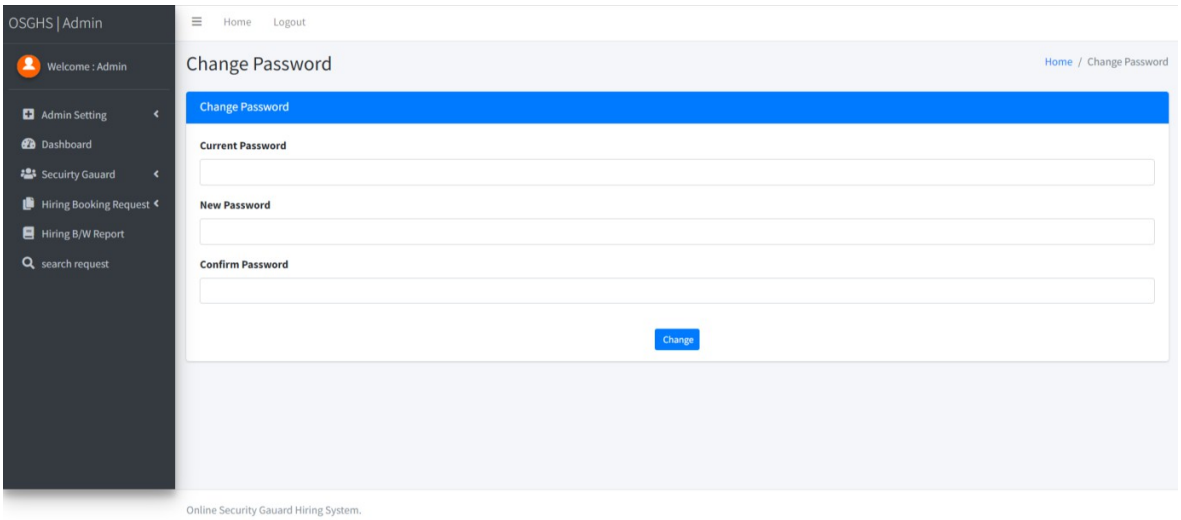
Dashboard



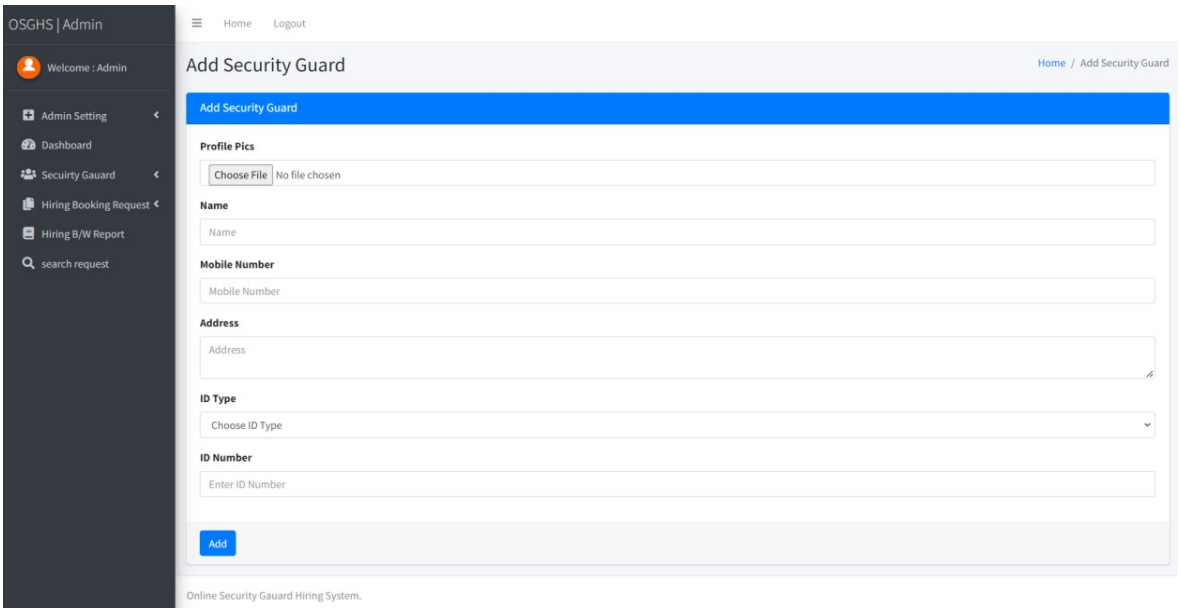
Admin Profile



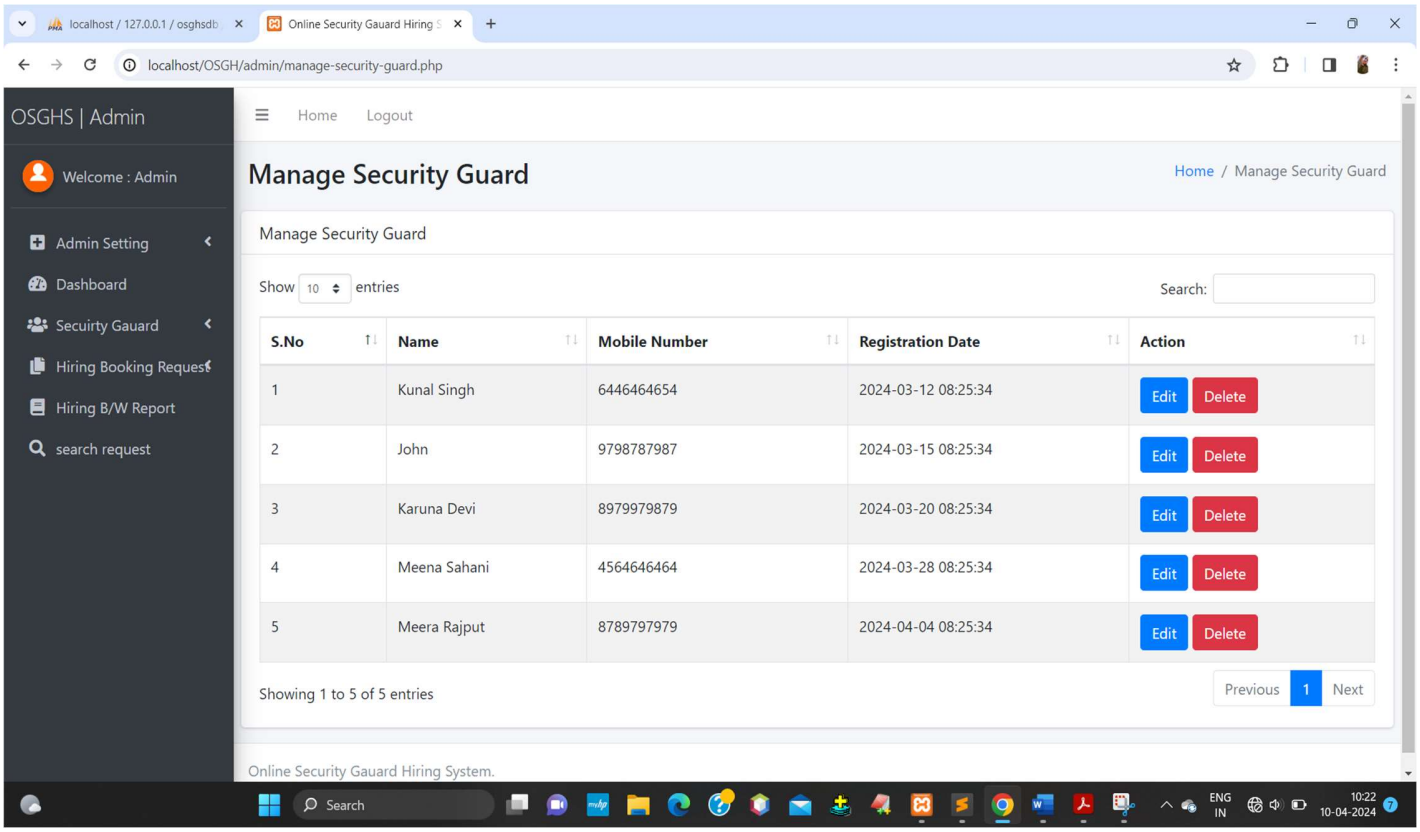
Change Password



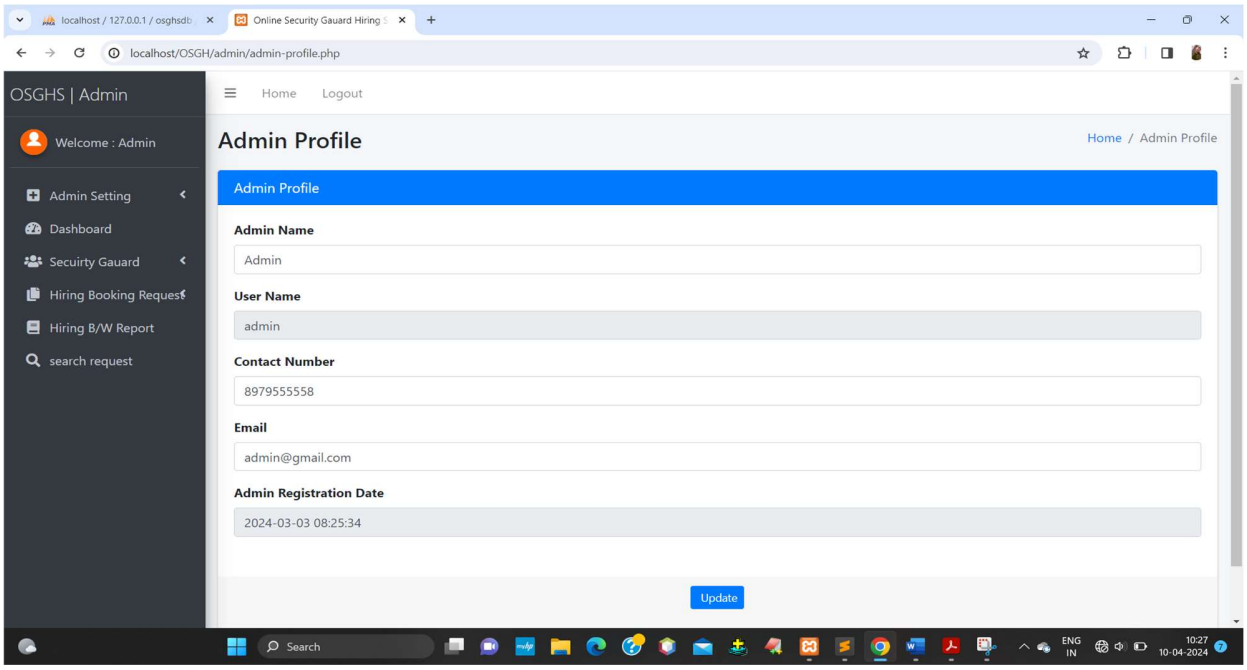
Add Security Guard



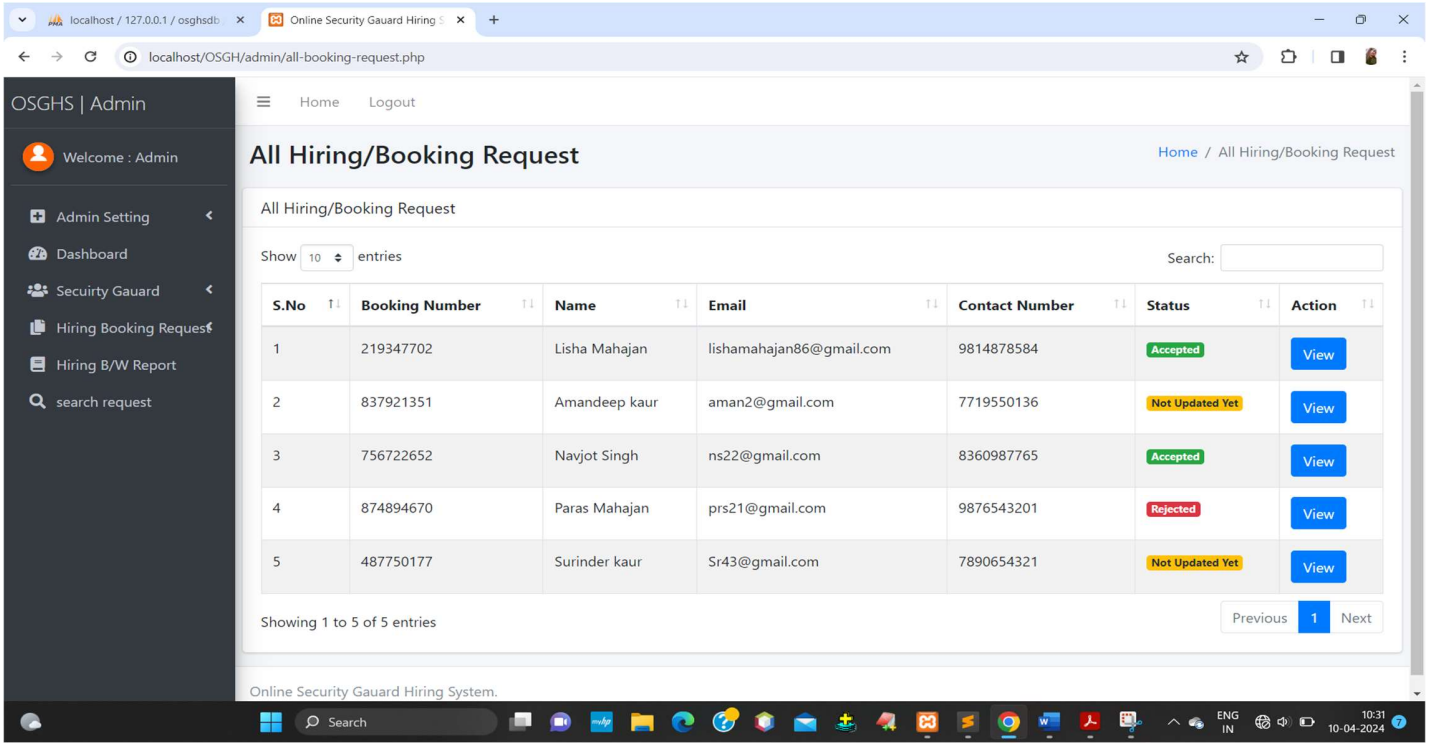
Manage Security Guard



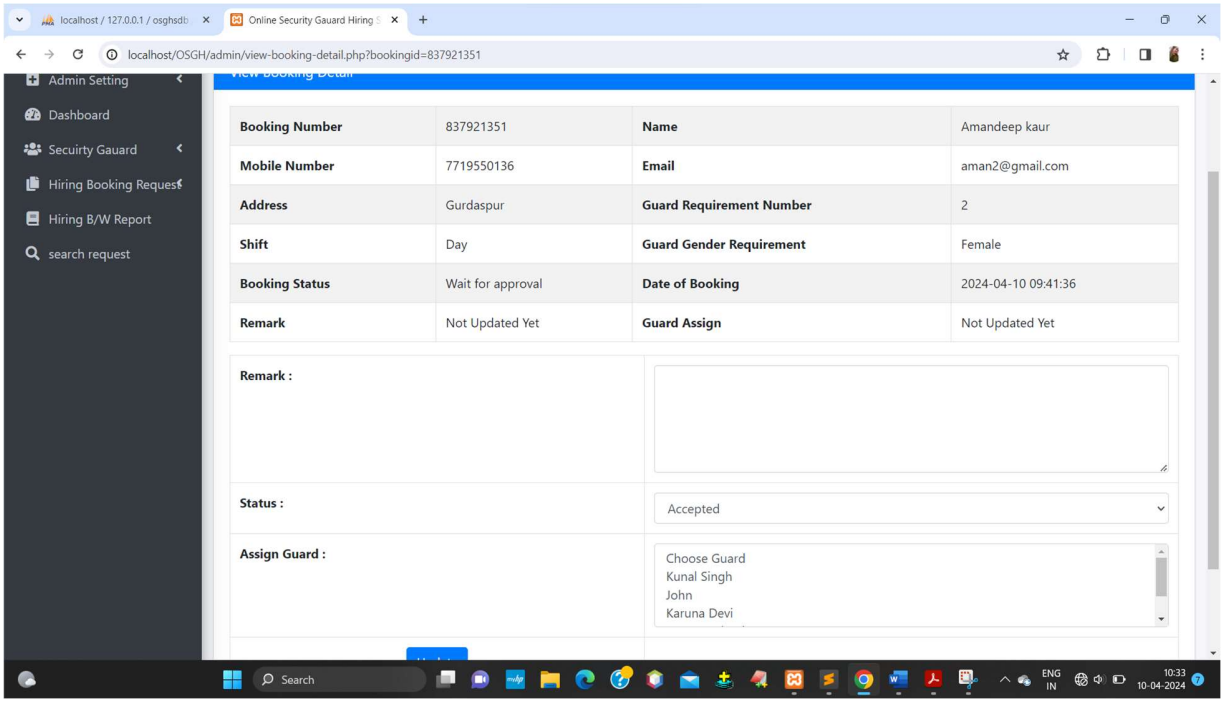
Update Security Guard



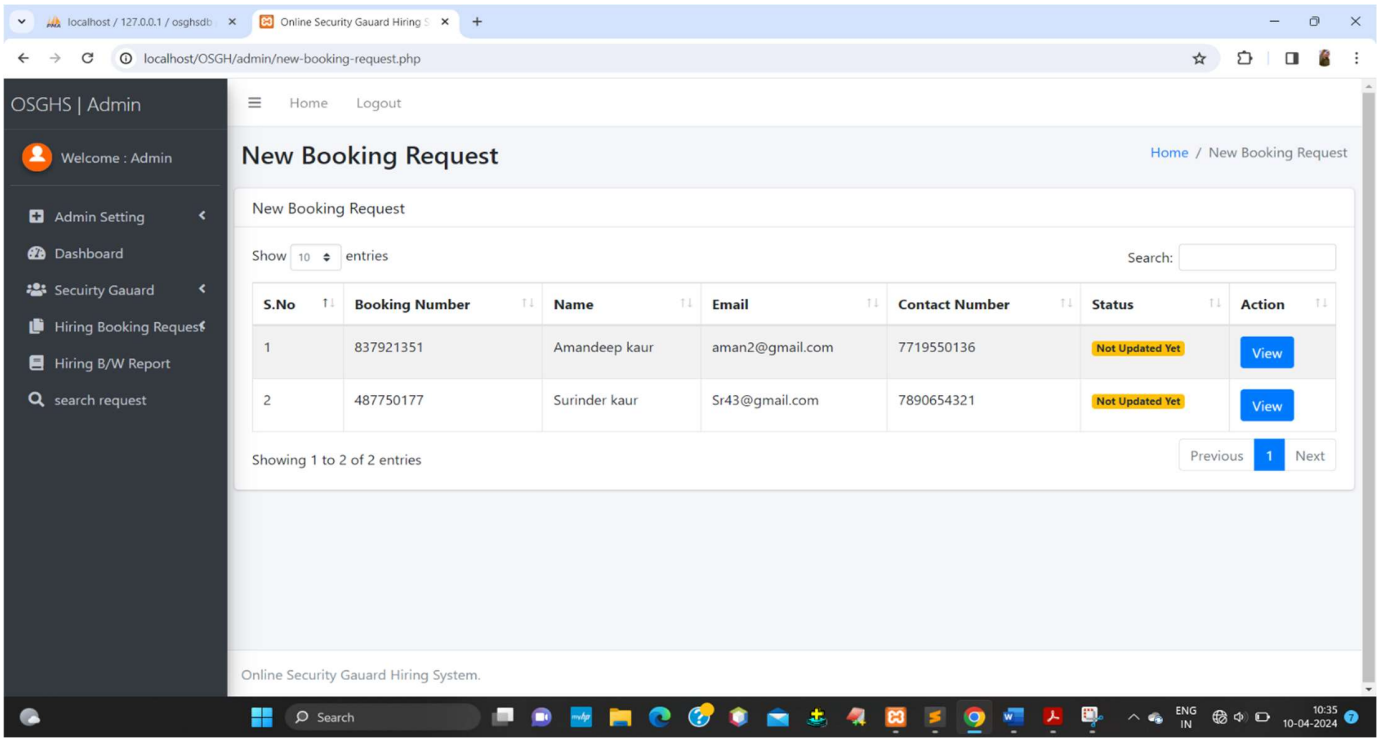
All Booking Request



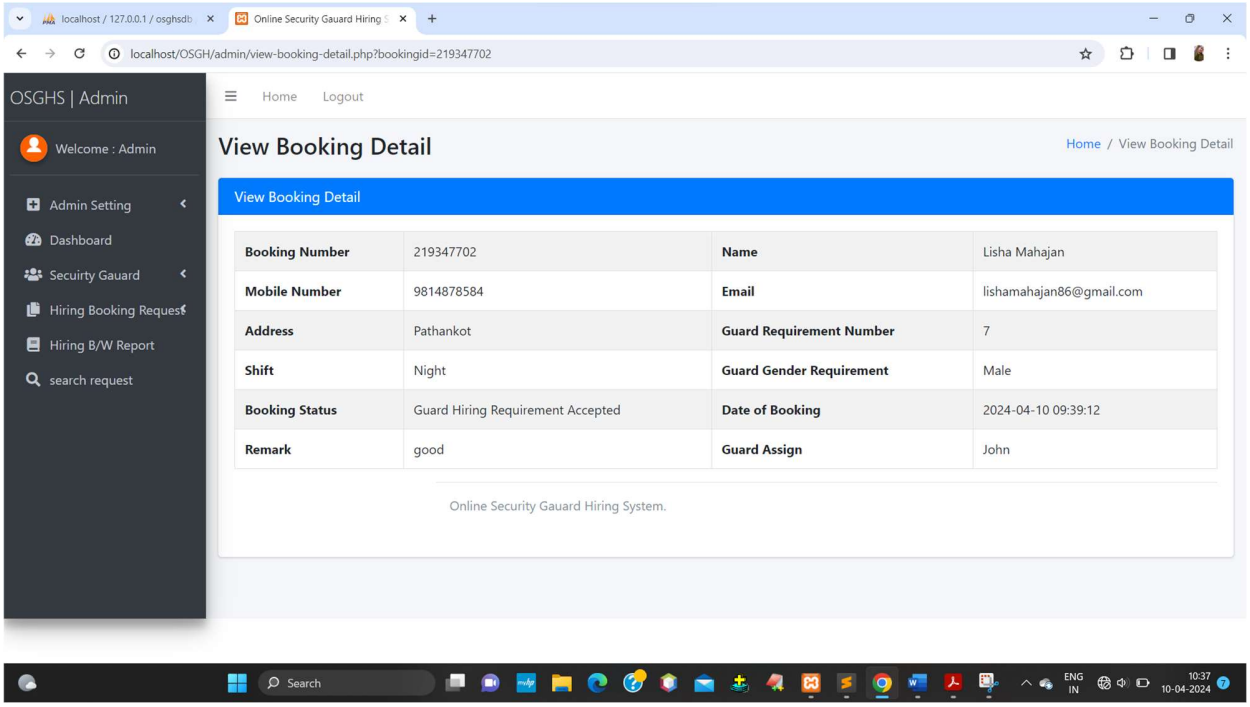
View All Booking Request



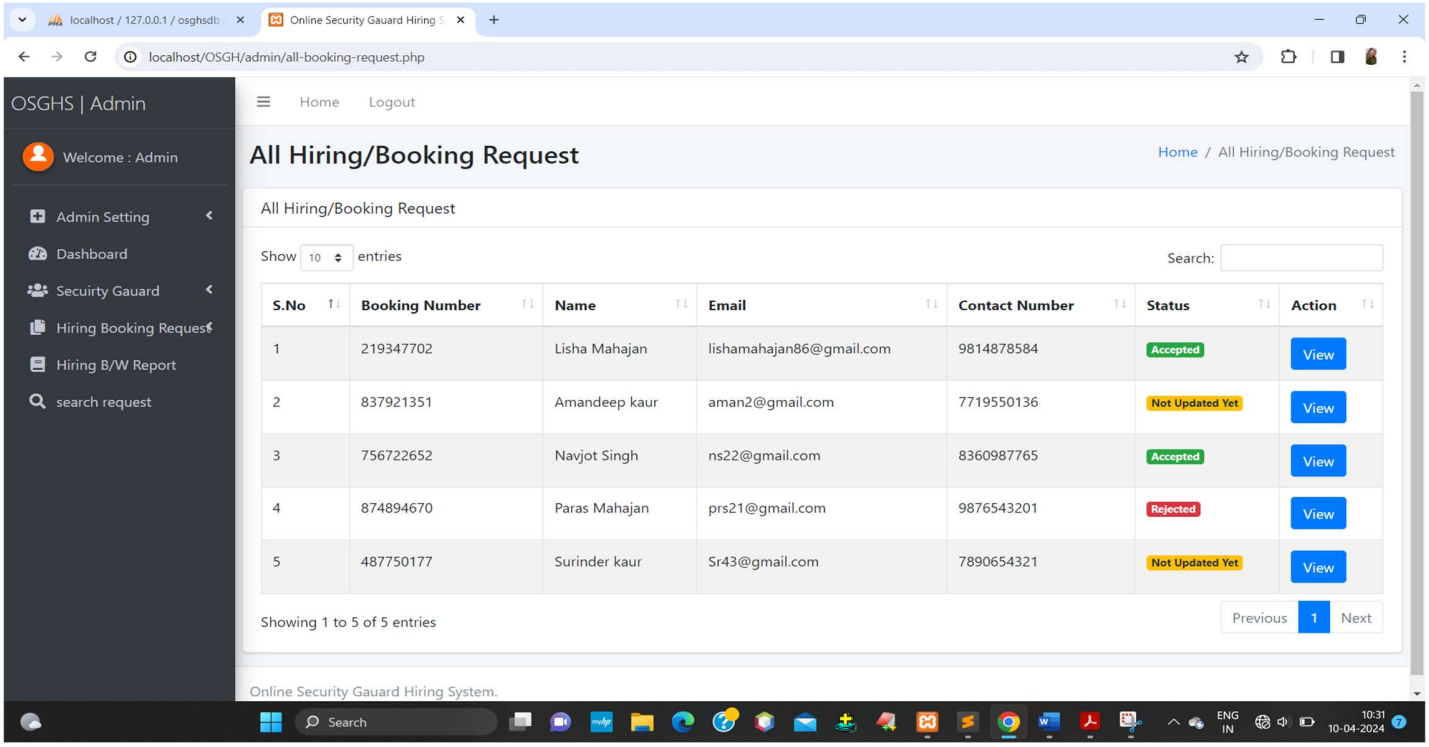
New Booking Request



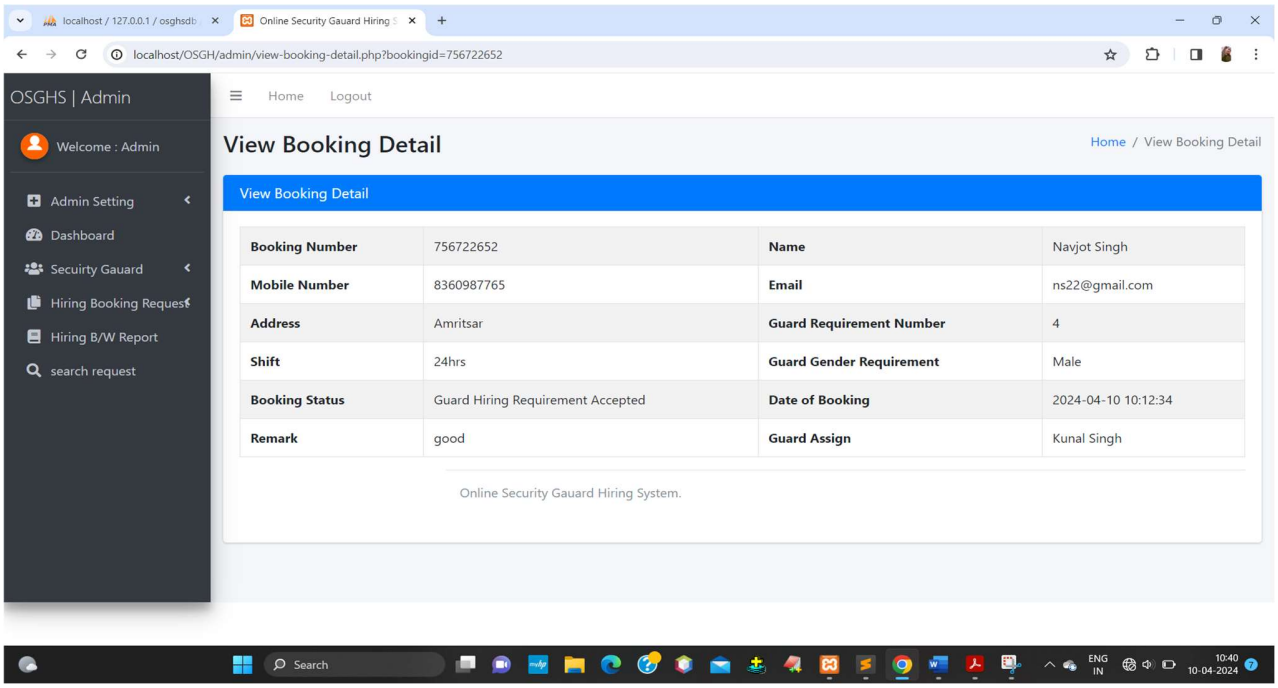
View New booking Request



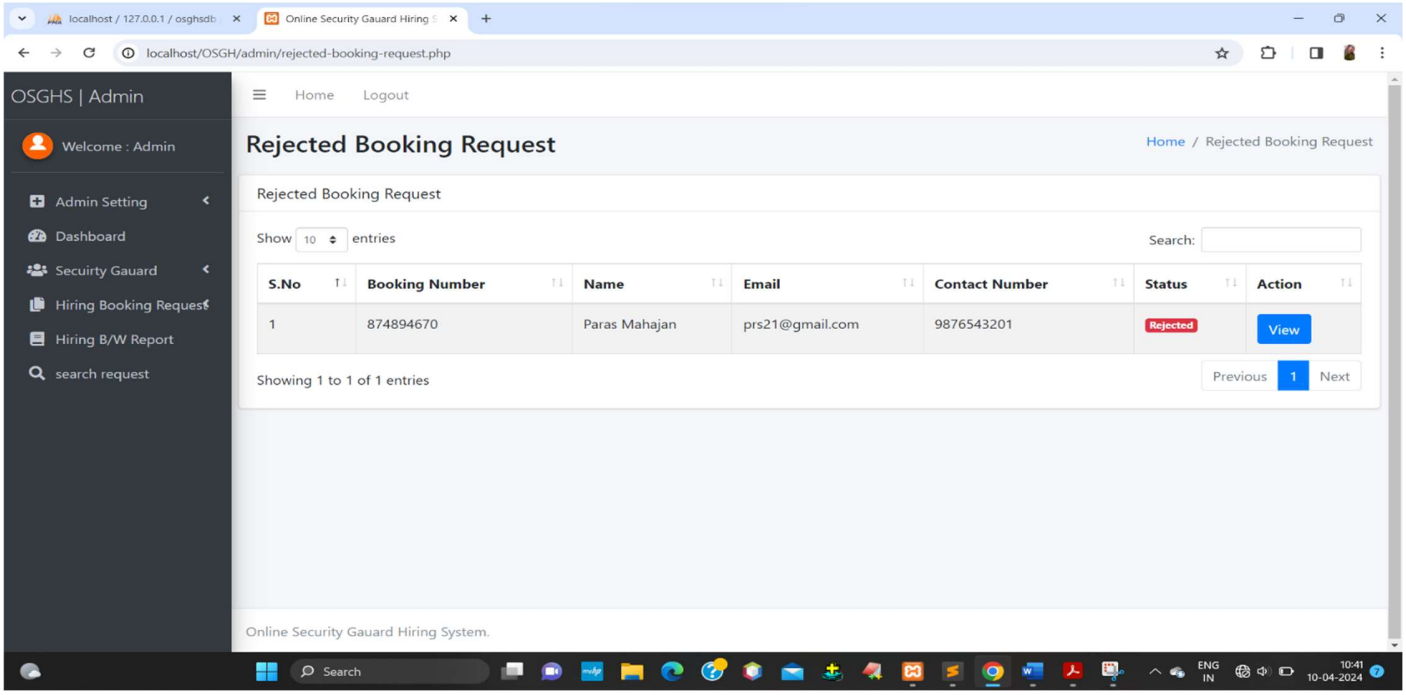
Accepted Booking Request



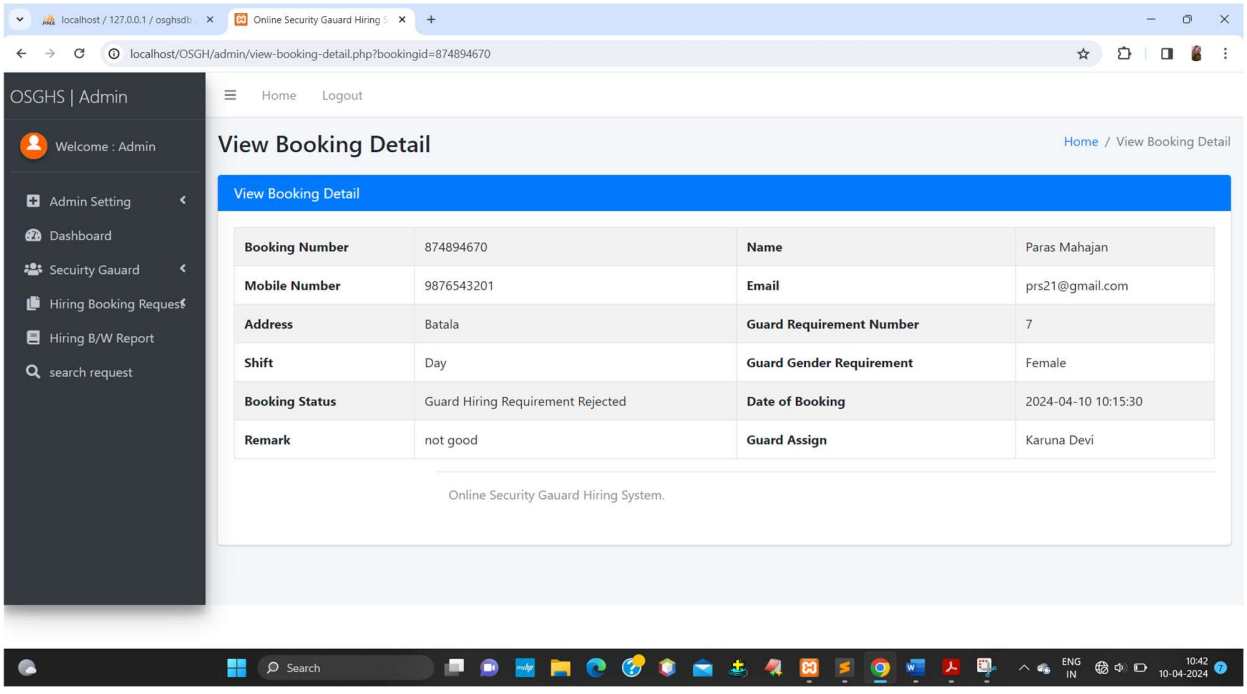
View accepted booking details



Rejected Booking Requests

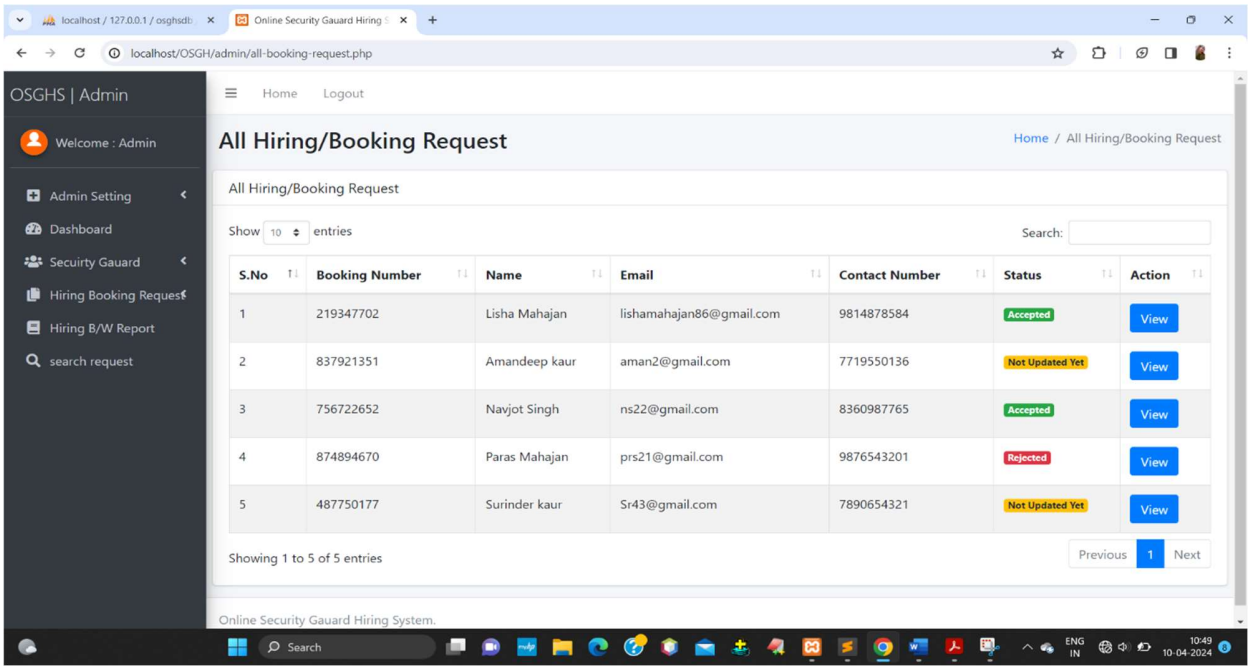


View rejected booking

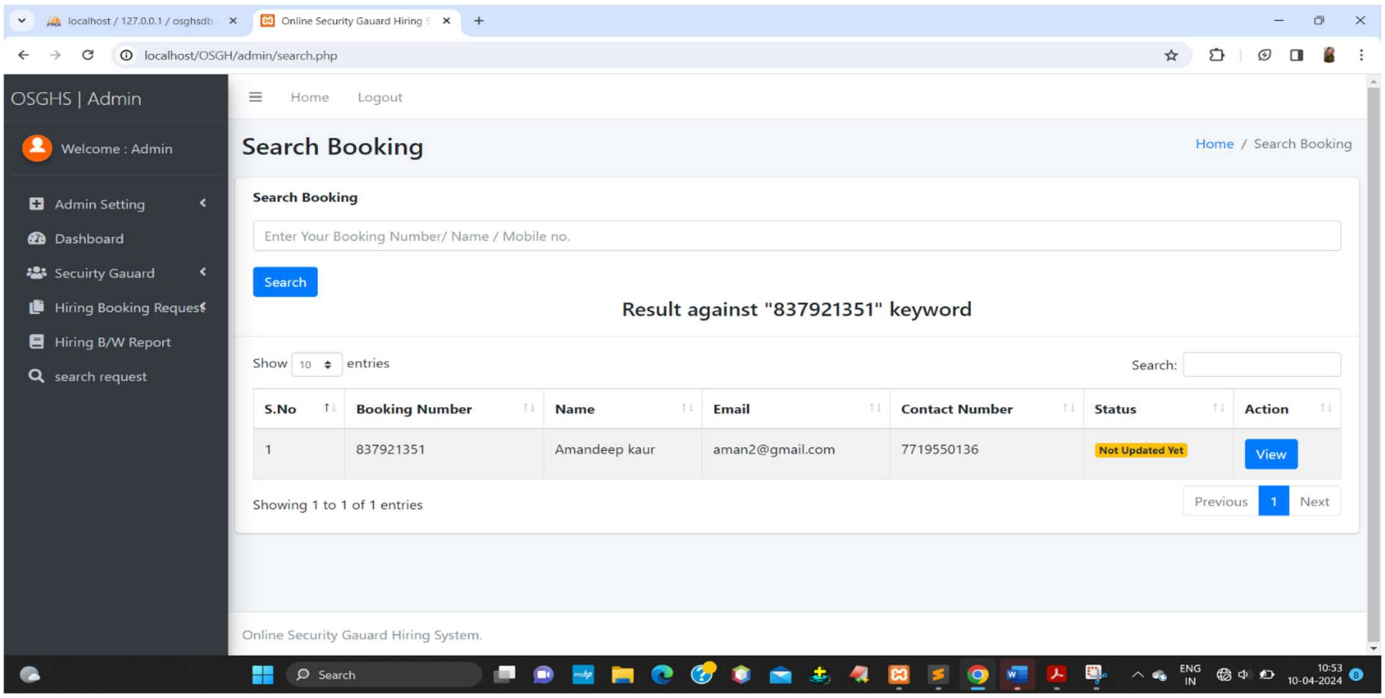


Between dates report

View between dates report



Search Request



Conclusion

The project titled as “Online Security Guard Hiring System” was deeply studied and analyzed to design the code and implement. It was done under the guidance of the experienced project guide. All the current requirements and possibilities have been taken care during the project time.

“Online Security Guard Hiring System” is a web based application which manages and handles guards details and guard hiring details.

Bibliography

For PHP

- https://www.w3schools.com/php/default.asp
- https://www.sitepoint.com/php/
- https://www.php.net/

For MySQL

- https://www.mysql.com/
- http://www.mysqltutorial.org

For XAMPP

- https://www.apachefriends.org/download.html

PROJECT REPORT

ON

ART GALLERY MANAGEMENT SYSTEM

Submitted in partial fulfillment of the requirements for the award of degree of

M.Sc (COMPUTER SCIENCE)

TO

SHANTI DEVI ARYA MAHILA COLLEGE

DINANAGAR

Submitted To:-

Miss Anima Mahajan

Assistant Professor

Deptt. of Computer Science

Submitted By:-

Tanu Devi

(20672225405)

POST GRADUATE DEPARTMENT OF COMPUTER SCIENCE

GURU NANAK DEV UNIVERSITY, AMRITSAR

Acknowledgement

With deep sense of gratitude I express my sincere thanks and obligation to my esteemed guide Miss. Anima Mahajan (Assistant Professor). It is because of her able and mature guidance and co-operation without which it would not have been possible for me to complete my project. I would also like to thank Dr. Deepak Jyoti, HOD, Post Graduate Deptt. of Computer Science, Shanti Devi Arya Mahila College, Dinanagar for providing the institute with an environment where one can use her intellect and creativity to develop something fruitful and also for allowing me the opportunity to experience dynamic professional environment during my Training. This environment facilitated me in pursuing this project. It is my pleasant duty to thank all the staff members of the Computer Department for their time to time suggestions. Finally, I would like to thank the almighty and my parents for their moral support and my friends with whom I shared my day-to-day experience and received lots of suggestions that improved my quality of work.

Tanu Devi

(20672225405)

CERTIFICATE OF APPROVAL

This is certify that the project report entitled **Art Gallery Management System** submitted to Shanti Devi Arya Mahila College, Dinanagar in partial fulfillment of the requirement for the award of Degree of M.Sc (CS) , is an authentic and original work carried out by Tanu Devi (20672225405) under my guidance and supervision. The Post Graduate deptt. of Computer Science has accepted the report as the fulfillment of the requirements for the degree of Master of Computer Science. No part of this report has been submitted to any other College/University for the reward of any Degree to the best of my knowledge.

Miss Anima Mahajan

Assistant Professor (Comp Sc.)
(Project Supervisor)
Shanti Devi Mahila College
Dinanagar

Dr. Deepak Jyoti

HOD, PG Department of Computer Sc.
Shanti Devi Arya Mahila
Dinanagar

DECLARATION

I hereby declare that this project report on " **Art Gallery Management System** " which is being submitted in partial fulfillment of the Training Programme of M.Sc(CS) to Shanti Devi Arya Mahila College, Dinanagar is the result of the work carried out by us, under the guidance of Miss.Anima Mahajan (Assistant Professor). Shanti Devi Arya Mahila College, Dinanagar.

Tanu Devi

20672225405

Abstract

The aim of ‘Art Gallery Management System’ is to automate its existing manual system by the help of computerized equipment and full-fledge computer software, fulfilling their requirements so that their valuable date can be stored for a longer period with easy accessing and manipulation of the same. Basically the project describes how to handle good performance and provide better services to clients. This project can lead to error free, secure, reliable and fast management system. This system will help the organization in better utilization of resources.

Introduction

Introduction:-

The Art Gallery Management System has been designed to override the problem of existing manual system. This web application is supported to eliminate and in some case reduce the hardship faced by manual system. The application is reduced as much as possible to avoid errors while entering the data. Its also provide message while entering invalid data. No formal knowledge is required for the user to operate this system. Overall we said that Art Gallery Management System is user friendly.

In Art Gallery Management System we use PHP and MySQL Database. This project keeps the records of user enquiry, art products and art artist. Art Gallery Management System has two module i.e. admin and user.

Admin Module

1. Dashboard: In this section, admin can briefly view the total number of artist, total answer enquiry, total unanswer enquiry, Total Art Type, total art medium and total art products.

2. Art Type: In this section, admin can manage art type (add/delete/update).

3. Art Medium: In this section, admin can manage art medium(add/update/delete).

4. Art Product: In this section, admin can manage art products(add/update/delete).

5. Enquiry: In this section, admin can view and maintain the enquiry.

6. Search Enquiry: In this section admin, can search enquiry with the help of enquiry number.

6. Page: In this section, admin can manage about us and contact us pages..

Admin can also update his profile, change the password and recover the password.

User Module

1. Home: It is a welcome page for users.

2. About: It is a about us page of website.

3. Art Type: In this section, users can view art products according to art type and sent enquiry for art products.

Objective

The main objective of the Art Gallery Management System project is to manage the details of enquiry, artist, art type, art medium, and art products. This Art Gallery Management System will definitely reduce the time, energy and money wasted in manually searching the details of the enquiry. With the help of this software, all the services and users can be properly channelized.

Existing System

The present scenario offers manual data entry. A lot of time is wasted in creating the reports as well as maintaining them. In case, if any query arises to get the information about the enquiry, artist, art type, art medium and art products the whole report is re-typed or xeroxed. This seriously affects the authentication of the system. This Art Gallery Management System is totally outdated and involves high risk of ambiguity and redundancy.

Proposed System

The proposed Art Gallery Management System is to have everything completely automated and computerized. The software is very easy to use and manage even for a non technical person. The redundancy and ambiguity will be removed by assigning every enquiry a unique number (i.e Enquiry Number).

Requirement Specification

Hardware Configuration :

Client Side:

RAM	512 MB
Hard disk	10 GB
Processor	1.0 GHz

Server side:

RAM	**1 GB**
Hard disk	**20 GB**
Processor	**2.0 GHz**

Software Requirement:

Client Side:

Web Browser	Google Chrome or any compatible browser
Operating System	Windows or any equivalent OS

Server Side:

Web Server	APACHE
Server side Language	PHP5.6 or above version
Database Server	MYSQL
Web Browser	Google Chrome or any compatible browser
Operating System	Windows or any equivalent OS

APACHE

The Apache HTTP Server Project is an effort to develop and maintain an open-source HTTP server for modern operating systems including UNIX and Windows. The goal of this project is to provide a secure, efficient and extensible server that provides HTTP services in sync with the current HTTP standards.

The Apache HTTP Server ("httpd") was launched in 1995 and it has been the most popular web server on the Internet since April 1996. It has celebrated its 20th birthday as a project in February 2015.

PHP

- PHP stands for PHP: Hypertext Preprocessor.

- PHP is a server-side scripting language, like ASP.
- PHP scripts are executed on the server.
- PHP supports many databases (MYSQL, Informix, Oracle, Sybase, Solid, Generic ODBC, etc.).

- PHP is an open source software .
- PHP is free to download and use.

MYSQL

- MYSQL is a database server

- MYSQL is ideal for both small and large applications
- MYSQL supports standard SQL
- MYSQL compiles on a number of platforms
- MYSQL is free to download and use

How to access MySQL: http://localhost/phpmyadmin

Analysis and Design

Analysis:

The present scenario offers manual data entry. A lot of time is wasted in creating the reports as well as maintaining them. In case, if any query arises to get the information about the client, the whole report is re-typed or Xeroxed. This seriously affects the authentication of the system. This Client Management System is totally outdated and involves high risk of ambiguity and redundancy.

Disadvantage of present system:

- **Not user friendly:** The present system not user friendly because data is not stored in structure and proper format.
- **Manual Control:** All report calculation is done manually so there is a chance of error.
- **Lots of paper work:** Visitors maintain in the register so lots of paper require storing details.
- **Time consuming**

Design Introduction:

Design is the first step in the development phase for any techniques and principles for the purpose of defining a device, a process or system in sufficient detail to permit its physical realization.

Once the software requirements have been analyzed and specified the software design involves three technical activities - design, coding, implementation and testing that are required to build and verify the software.

The design activities are of main importance in this phase, because in this activity, decisions ultimately affecting the success of the software implementation and its ease of maintenance are made. These decisions have the final bearing upon reliability and maintainability of the system. Design is the only way to accurately translate the customer's requirements into finished software or a system.

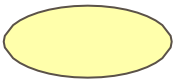
Design is the place where quality is fostered in development. Software design is a process through which requirements are translated into a representation of software. Software design is conducted in two steps. Preliminary design is concerned with the transformation of requirements into data

UML Diagrams:

Actor:

A coherent set of roles that users of use cases play when interacting with the use `cases.

Use case: A description of sequence of actions, including variants, that a system performs that yields an observable result of value of an actor.



UML stands for Unified Modeling Language. UML is a language for specifying, visualizing and documenting the system. This is the step while developing any product after analysis. The goal from this is to produce a model of the entities involved in the project which later need to be built. The representation of the entities that are to be used in the product being developed need to be designed.

USECASE DIAGRAMS:

Use case diagrams model behavior within a system and helps the developers understand of what the user require. The stick man represents what's called an actor.

Use case diagram can be useful for getting an overall view of the system and clarifying who can do and more importantly what they can't do.

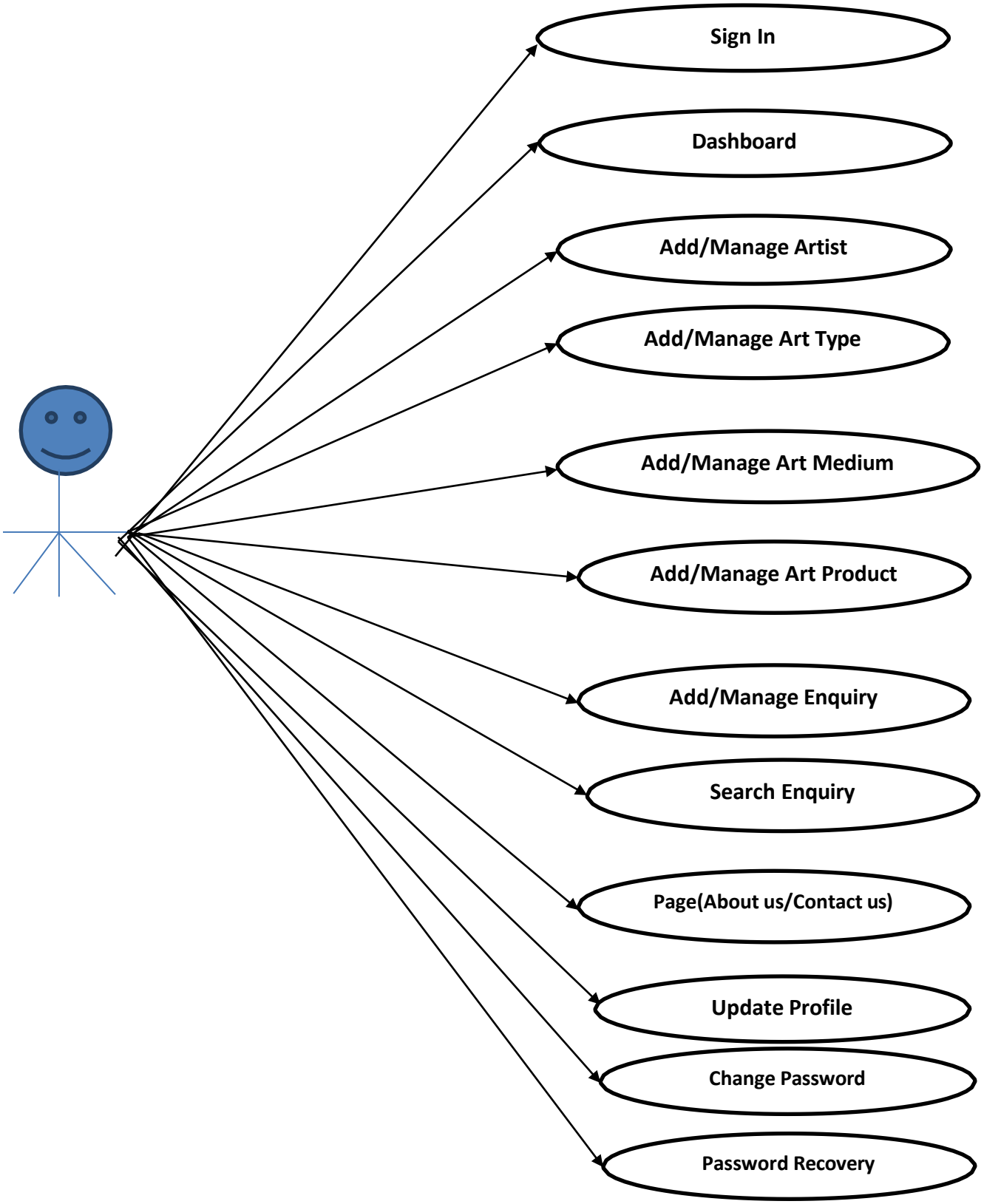
Use case diagram consists of use cases and actors and shows the interaction between the use case and actors.

- The purpose is to show the interactions between the use case and actor.
- To represent the system requirements from user's perspective.
- An actor could be the end-user of the system or an external system.

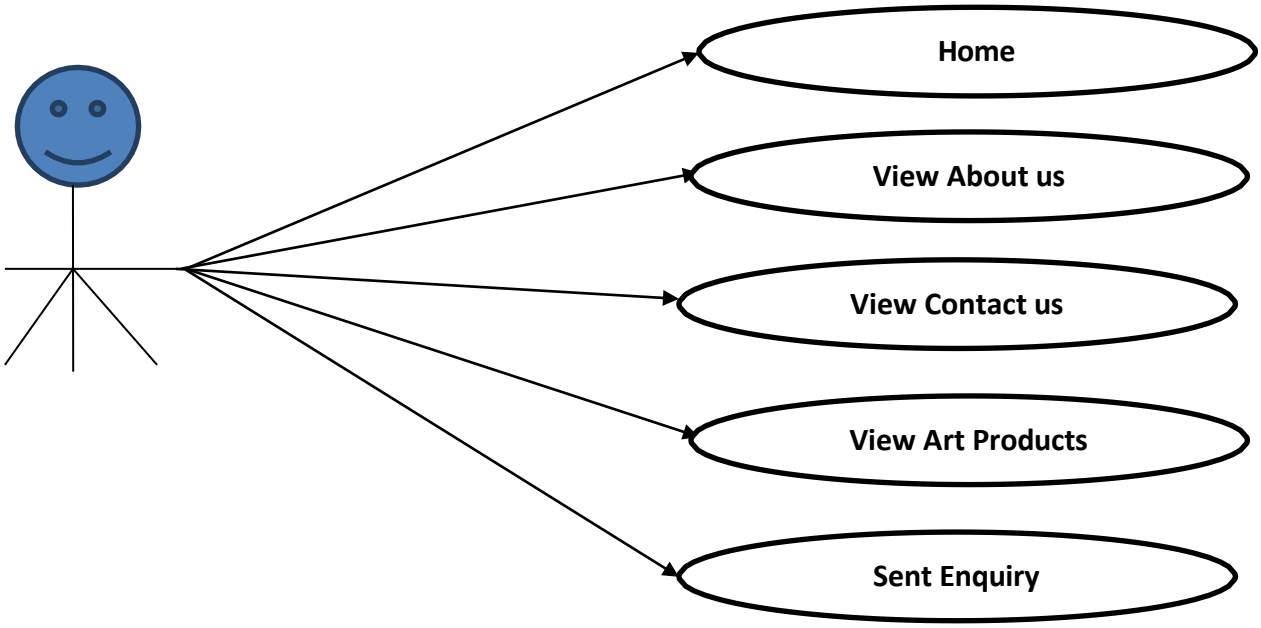
USECASE DIAGRAM: A Use case is a description of set of sequence of actions. Graphically it is rendered as an ellipse with solid line including only its name. Use case diagram is a behavioral diagram that shows a set of use cases and actors and their relationship. It is an association between the use cases and actors. An actor represents a real-world object. Primary Actor – Sender, Secondary Actor Receiver.

Use Case Diagrams:

Admin

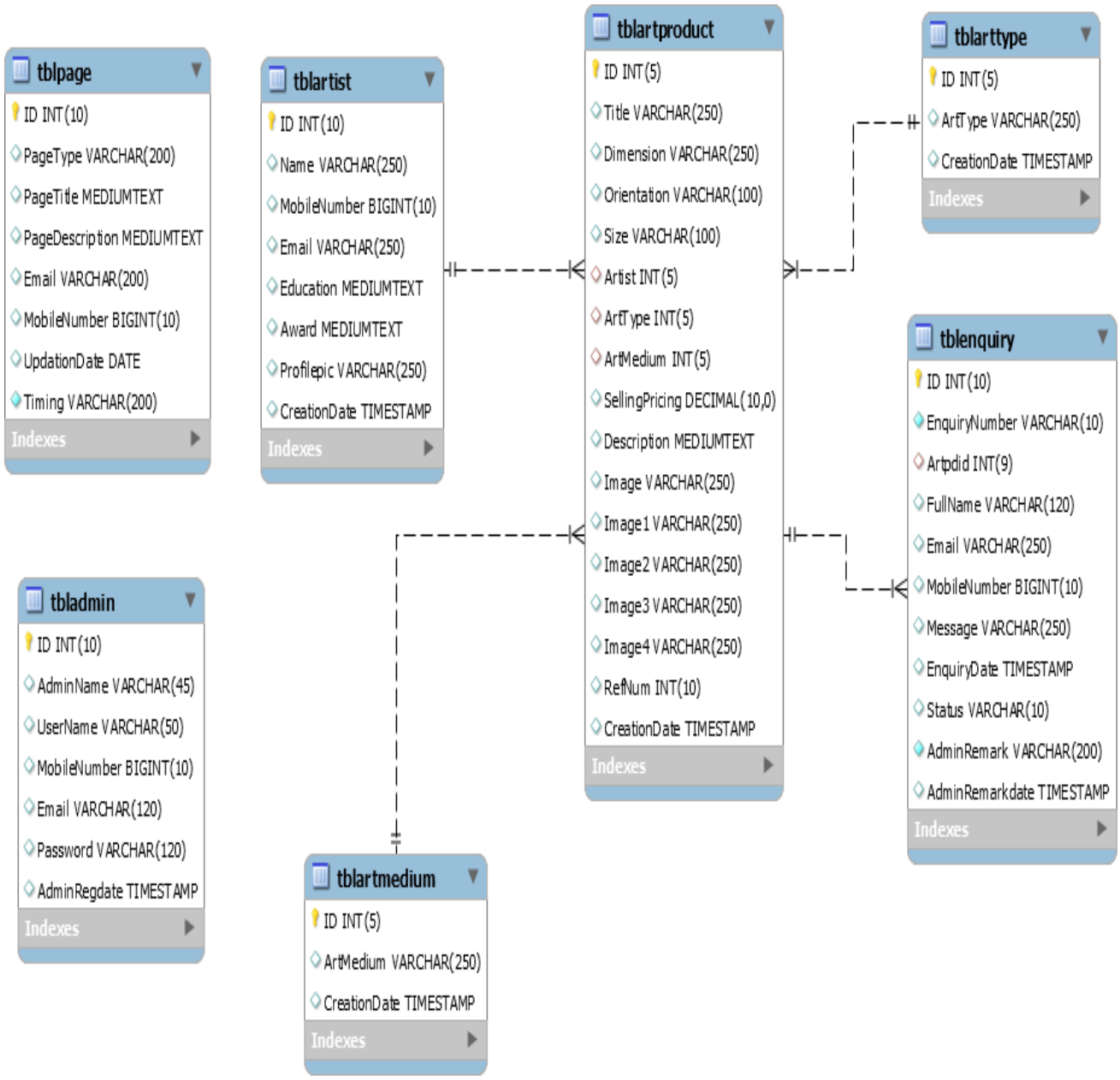


Users


Home
View About us
View Contact us
View Art Products
Sent Enquiry

Class Diagram:

A description of set of objects that share the same attributes operations, relationships, and semantics.



ER Diagram:

The Entity-Relationship (ER) model was originally proposed by Peter in 1976 [Chen76] as a way to unify the network and relational database views. Simply stated the ER model is a conceptual data model that views the real world as entities and relationships. A basic component of the model is the Entity-Relationship diagram which is used to visually represent data objects. Since Chen wrote his paper the model has been extended and today it is commonly used for database design for the database designer, the utility of the ER model is:

- It maps well to the relational model. The constructs used in the ER model can easily be transformed into relational tables.
- It is simple and easy to understand with a minimum of training. Therefore, the model can be used by the database designer to communicate the design to the end user.
- In addition, the model can be used as a design plan by the database developer to implement a data model in specific database management software.

ER Notation

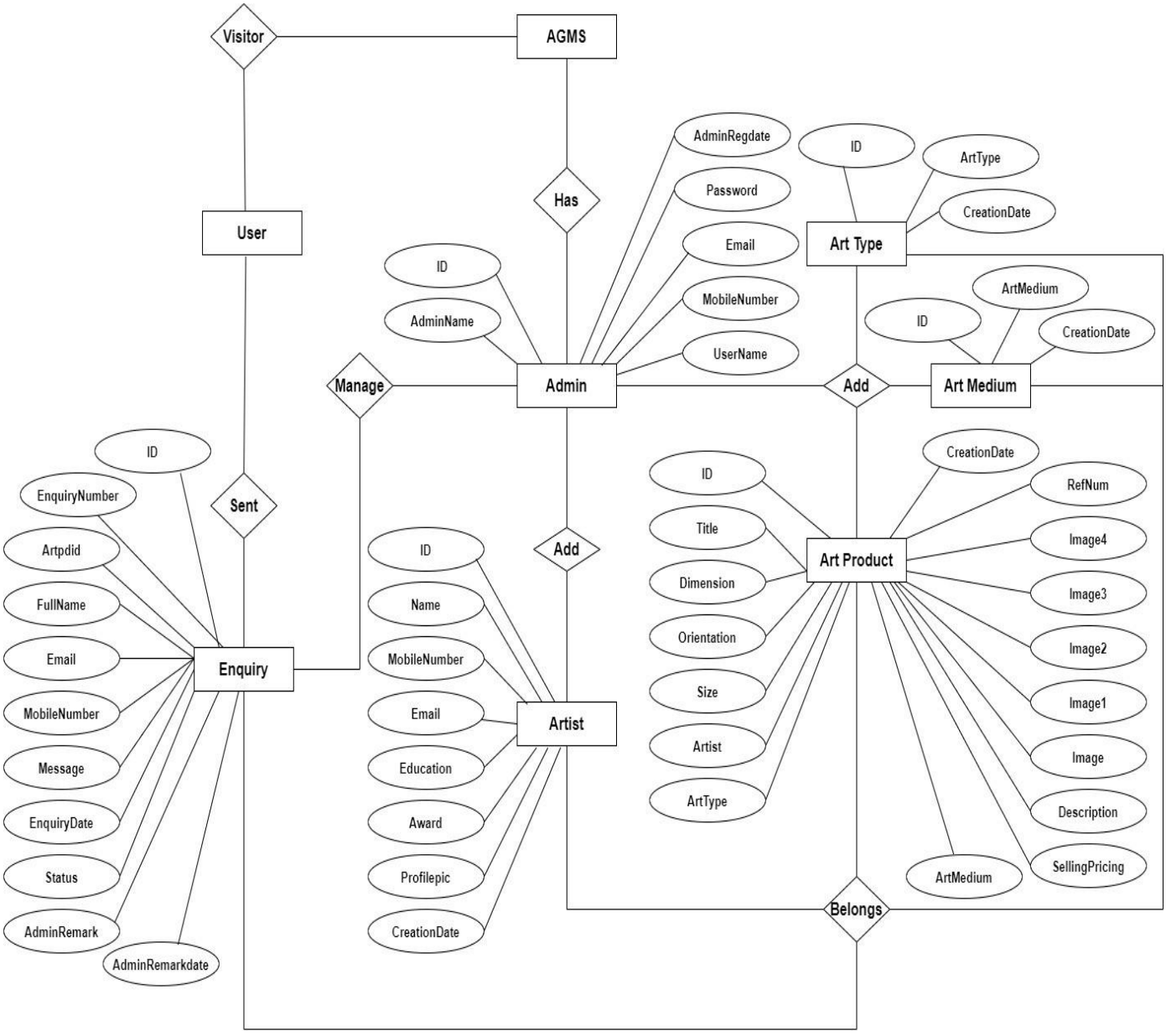
There is no standard for representing data objects in ER diagrams. Each modeling methodology uses its own notation. The original notation used by Chen is widely used in academics texts and journals but rarely seen in either CASE tools or publications by non-academics. Today, there are a number of notations used; among the more common are Bachman, crow's foot, and IDEFIX.

All notational styles represent entities as rectangular boxes and relationships as lines connecting boxes. Each style uses a special set of symbols to represent the cardinality of a connection. The notation used in this document is from Martin. The symbols used for the basic ER constructs are:

- **Entities** are represented by labeled rectangles. The label is the name of the entity. Entity names should be singular nouns.
- **Relationships** are represented by a solid line connecting two entities. The name of the relationship is written above the line. Relationship names should be verbs
- **Attributes**, when included, are listed inside the entity rectangle. Attributes which are identifiers are underlined. Attribute names should be singular nouns.
- **Cardinality** of many is represented by a line ending in a crow's foot. If the crow's foot is omitted, the cardinality is one.

Existence is represented by placing a circle or a perpendicular bar on the line. Mandatory existence is shown by the bar (looks like a 1) next to the entity for an instance is required. Optional existence is shown by placing a circle next to the entity that is optional.

ER Diagram


Visitor
AGMS
User
Has
AdminRegdate
Password
Email
MobileNumber
UserName
ID
AdminName
Admin
Manage
Add
Art Type
ID
ArtType
CreationDate
Art Medium
ID
ArtMedium
CreationDate
Sent
ID
EnquiryNumber
Artpdid
FullName
Email
MobileNumber
Message
EnquiryDate
Status
AdminRemark
AdminRemarkdate
Enquiry
Add
ID
Name
MobileNumber
Email
Education
Award
Profilepic
CreationDate
Artist
Art Product
ID
Title
Dimension
Orientation
Size
Artist
ArtType
CreationDate
RefNum
Image4
Image3
Image2
Image1
Image
Description
SellingPricing
ArtMedium
Belongs

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It can be manual, automated, or a combination of both.

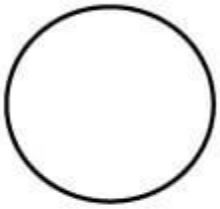
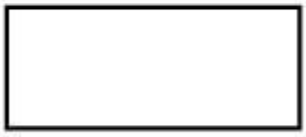
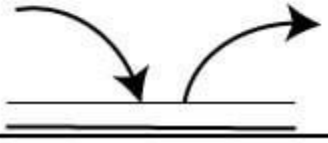
It shows how data enters and leaves the system, what changes the information, and where data is stored.

The objective of a DFD is to show the scope and boundaries of a system as a whole. It may be used as a communication tool between a system analyst and any person who plays a part in the order that acts as a starting point for redesigning a system. The DFD is also called as a data flow graph or bubble chart.

The following observations about DFDs are essential:

1. All names should be unique. This makes it easier to refer to elements in the DFD.
2. Remember that DFD is not a flow chart. Arrows is a flow chart that represents the order of events; arrows in DFD represents flowing data. A DFD does not involve any order of events.
3. Suppress logical decisions. If we ever have the urge to draw a diamond-shaped box in a DFD, suppress that urge! A diamond-shaped box is used in flow charts to represents decision points with multiple exists paths of which the only one is taken. This implies an ordering of events, which makes no sense in a DFD.
4. Do not become bogged down with details. Defer error conditions and error handling until the end of the analysis.

Standard symbols for DFDs are derived from the electric circuit diagram analysis and are shown in fig:

Symbol	Name	Function
	Data flow	Used to Connect Processes to each , other , to sources or Sinks; te arrow head indicates direction of data flow.
	Process	Perfroms Some transformation of Input data to yield output data.
	Source of Sink (External Entity)	A Source of System inputs or Sink of System outputs.
	Data Store	A repository of data; the arrow heads indicate net inputs and net outputs to store.

Symbols for Data Flow Diagrams

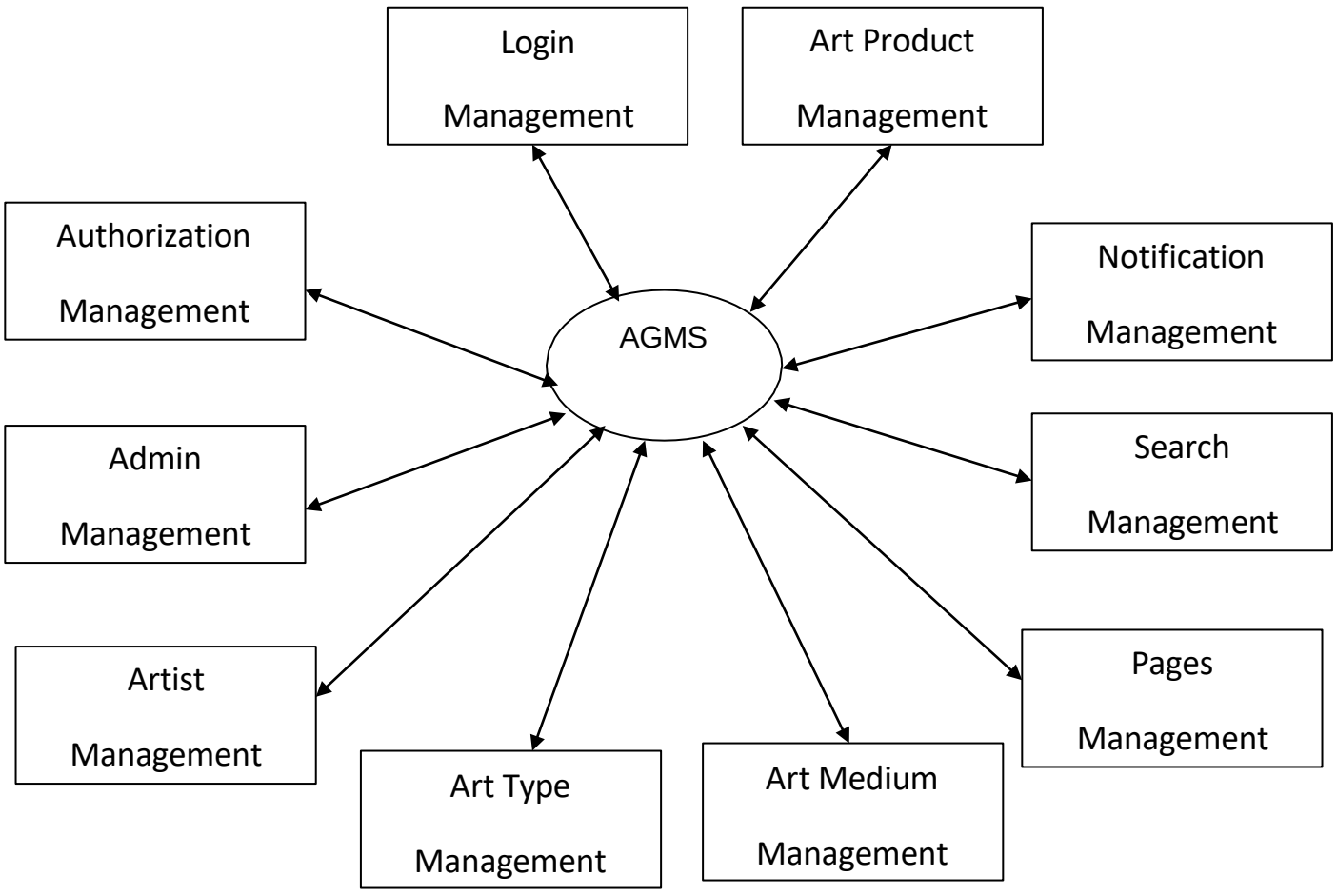
Circle: A circle (bubble) shows a process that transforms data inputs into data outputs.

Data Flow: A curved line shows the flow of data into or out of a process or data store.

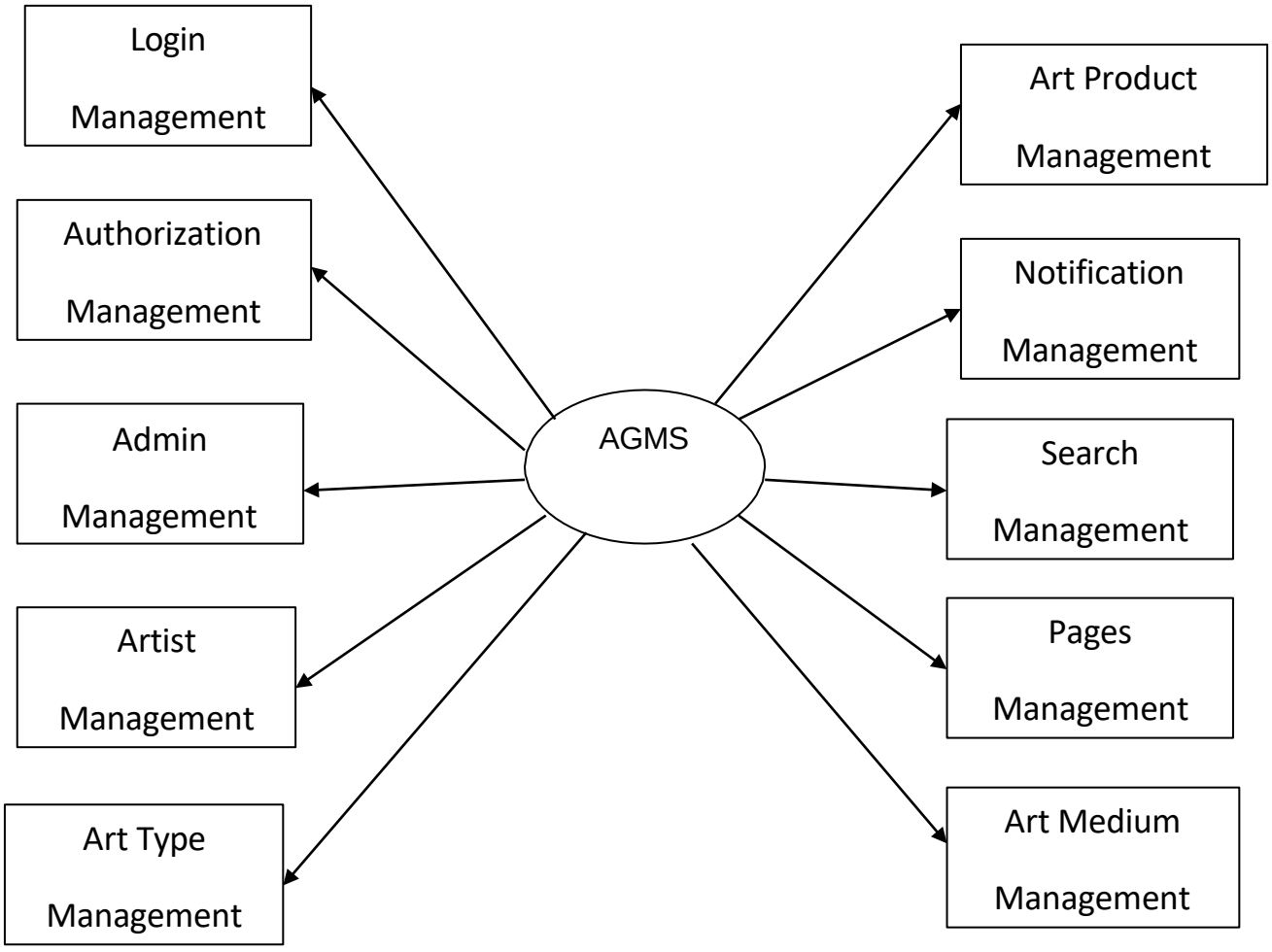
Data Store: A set of parallel lines shows a place for the collection of data items. A data store indicates that the data is stored which can be used at a later stage or by the other processes in a different order. The data store can have an element or group of elements.

Source or Sink: Source or Sink is an external entity and acts as a source of system inputs or sink of system outputs.

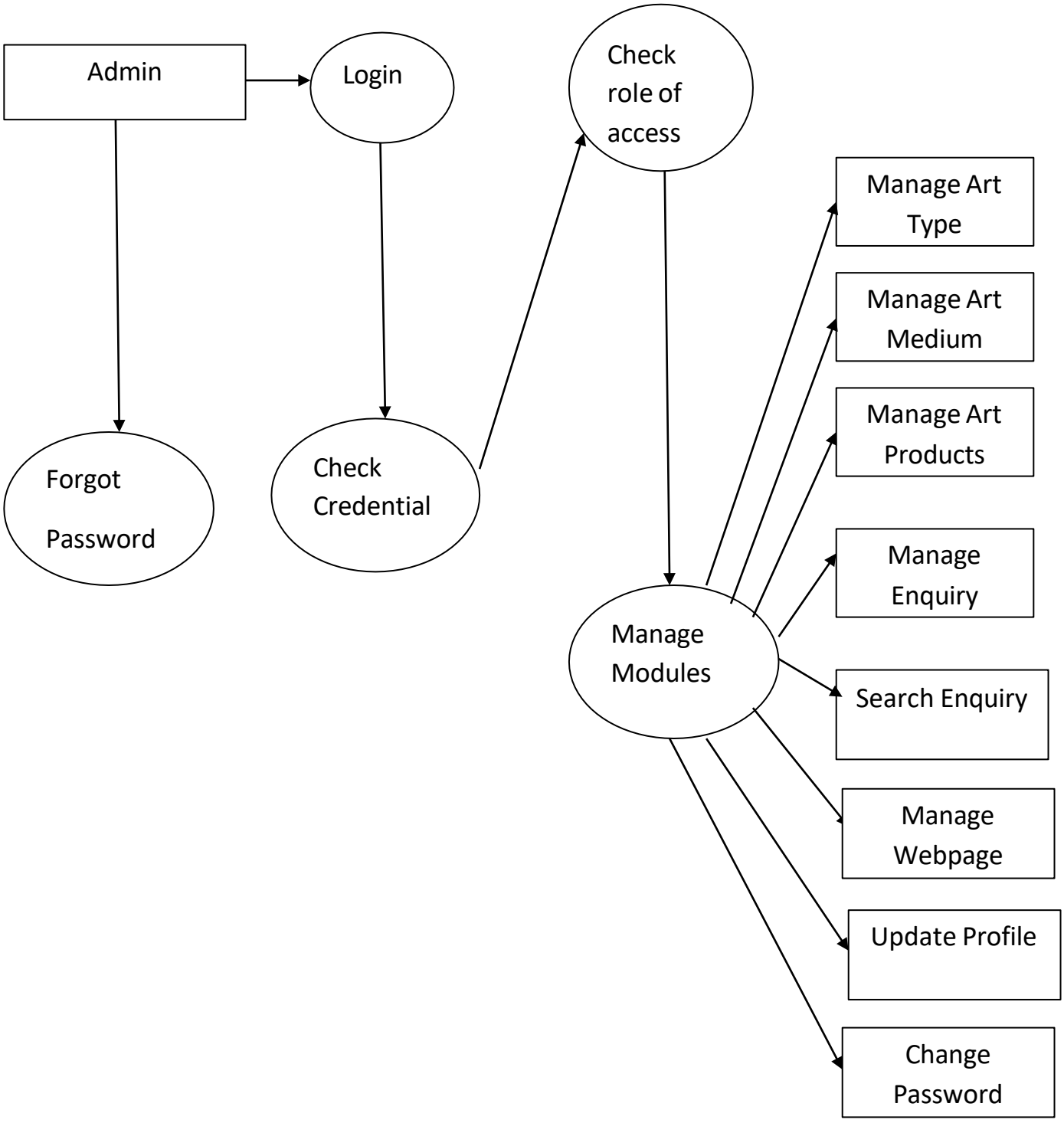
Zero Level DFD

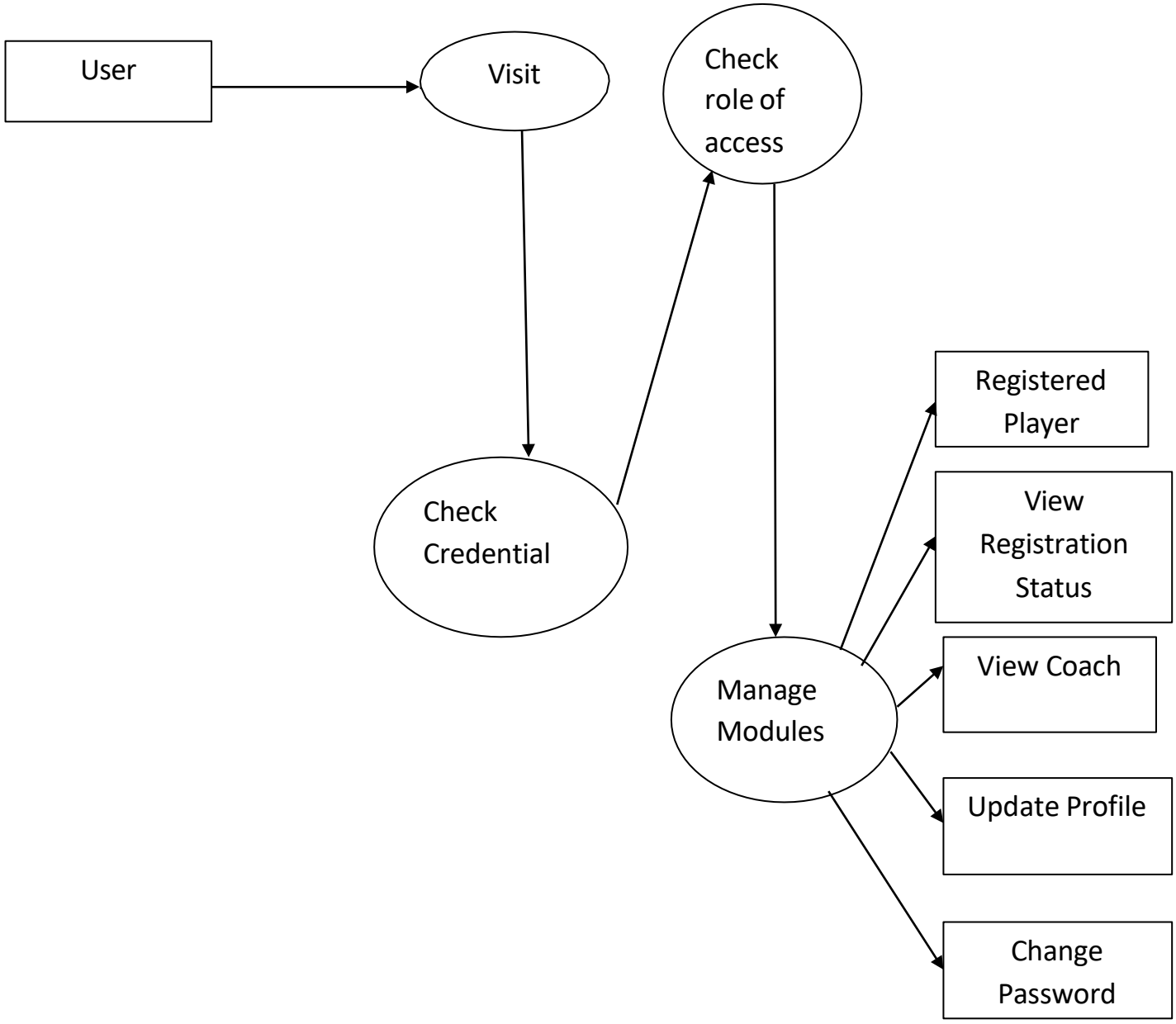


First Level DFD



Second Level DFD




User
Visit
Check role of access
Check Credential
Registered Player
View Registration Status
View Coach
Manage Modules
Update Profile
Change Password

MySQL Data Tables:

Admin Table :(Table name is admin)

This store admin personal and login details.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(10)			No	*None*		AUTO_INCREMENT
2	AdminName	varchar(45)	latin1_swedish_ci		Yes	*NULL*		
3	UserName	varchar(50)	latin1_swedish_ci		Yes	*NULL*		
4	MobileNumber	bigint(10)			Yes	*NULL*		
5	Email	varchar(120)	latin1_swedish_ci		Yes	*NULL*		
6	Password	varchar(120)	latin1_swedish_ci		Yes	*NULL*		
7	AdminRegdate	timestamp			Yes	current_timestamp()		

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	ID	1	A	No	

Artist Table (Table name is tblartist)

This store the detail of artist.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(10)			No	*None*		AUTO_INCREMENT
2	Name	varchar(250)	latin1_swedish_ci		Yes	*NULL*		
3	MobileNumber	bigint(10)			Yes	*NULL*		
4	Email	varchar(250)	latin1_swedish_ci		Yes	*NULL*		
5	Education	mediumtext	latin1_swedish_ci		Yes	*NULL*		
6	Award	mediumtext	latin1_swedish_ci		Yes	*NULL*		
7	Profilepic	varchar(250)	latin1_swedish_ci		Yes	*NULL*		
8	CreationDate	timestamp			Yes	current_timestamp()		

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	ID	8	A	No	

Art Medium Table: (Table name is tblartmedium)

This store the art medium.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(5)			No	*None*		AUTO_INCREMENT
2	ArtMedium	varchar(250)	latin1_swedish_ci		Yes	*NULL*		
3	CreationDate	timestamp			Yes	current_timestamp()		

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	ID	12	A	No	

Art Type Table: (Table name is tblarttype)

This store the art type.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(5)			No	*None*		AUTO_INCREMENT
2	ArtType	varchar(250)	latin1_swedish_ci		Yes	*NULL*		
3	CreationDate	timestamp			Yes	current_timestamp()		

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	ID	7	A	No	

Enquiry Table: (Table name is tblenquiry)

This table stores the data of enquiry which is raise by users.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(10)			No	*None*		AUTO_INCREMENT
2	EnquiryNumber	varchar(10)	latin1_swedish_ci		No	*None*		
3	Artpdid	int(9)			Yes	*NULL*		
4	FullName	varchar(120)	latin1_swedish_ci		Yes	*NULL*		
5	Email	varchar(250)	latin1_swedish_ci		Yes	*NULL*		
6	MobileNumber	bigint(10)			Yes	*NULL*		
7	Message	varchar(250)	latin1_swedish_ci		Yes	*NULL*		
8	EnquiryDate	timestamp			Yes	current_timestamp()		
9	Status	varchar(10)	latin1_swedish_ci		Yes	*NULL*		
10	AdminRemark	varchar(200)	latin1_swedish_ci		No	*None*		
11	AdminRemarkdate	timestamp			Yes	*NULL*		

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	ID	6	A	No	
CardId	BTREE	No	No	Artpdid	6	A	Yes	

Art Product Table: (Table name is tblartproduct)

This table stores the data of facility art products.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(5)			No	*None*		AUTO_INCREMENT
2	Title	varchar(250)	latin1_swedish_ci		Yes	*NULL*		
3	Dimension	varchar(250)	latin1_swedish_ci		Yes	*NULL*		
4	Orientation	varchar(100)	latin1_swedish_ci		Yes	*NULL*		
5	Size	varchar(100)	latin1_swedish_ci		Yes	*NULL*		
6	Artist	int(5)			Yes	*NULL*		
7	ArtType	int(5)			Yes	*NULL*		
8	ArtMedium	int(5)			Yes	*NULL*		
9	SellingPricing	decimal(10,0)			Yes	*NULL*		
10	Description	mediumtext	latin1_swedish_ci		Yes	*NULL*		
11	Image	varchar(250)	latin1_swedish_ci		Yes	*NULL*		
12	Image1	varchar(250)	latin1_swedish_ci		Yes	*NULL*		
13	Image2	varchar(250)	latin1_swedish_ci		Yes	*NULL*		
14	Image3	varchar(250)	latin1_swedish_ci		Yes	*NULL*		
15	Image4	varchar(250)	latin1_swedish_ci		Yes	*NULL*		
16	RefNum	int(10)			Yes	*NULL*		
17	CreationDate	timestamp			Yes	current_timestamp()		

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	ID	4	A	No	

Page Table: (Table name is tblpage)

This table stores the about us and contact us details of hotels.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(10)			No	*None*		AUTO_INCREMENT
2	PageType	varchar(200)	latin1_swedish_ci		Yes	*NULL*		
3	PageTitle	mediumtext	latin1_swedish_ci		Yes	*NULL*		
4	PageDescription	mediumtext	latin1_swedish_ci		Yes	*NULL*		
5	Email	varchar(200)	latin1_swedish_ci		Yes	*NULL*		
6	MobileNumber	bigint(10)			Yes	*NULL*		
7	UpdationDate	date			Yes	*NULL*		
8	Timing	varchar(200)	latin1_swedish_ci		No	*None*		

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	ID	2	A	No	

Implementation and System Testing

After all phase have been perfectly done, the system will be implemented to the server and the system can be used.

System Testing

The goal of the system testing process was to determine all faults in our project .The program was subjected to a set of test inputs and many explanations were made and based on these explanations it will be decided whether the program behaves as expected or not. Our Project went through two levels of testing

1. Unit testing
2. Integration testing

UNIT TESTING

Unit testing is commenced when a unit has been created and effectively reviewed .In order to test a single module we need to provide a complete environment i.e. besides the section we would require

- The procedures belonging to other units that the unit under test calls
- Non local data structures that module accesses
- A procedure to call the functions of the unit under test with appropriate parameters
-

1. Test for the admin module

- **Testing admin login form-**This form is used for log in of administrator of the system. In this form we enter the username and password if both are correct administration page will open otherwise if any of data is wrong it will get redirected back to the login page and again ask the details

- **Report Generation:** admin can generate report from the main database.

INTEGRATION TESTING

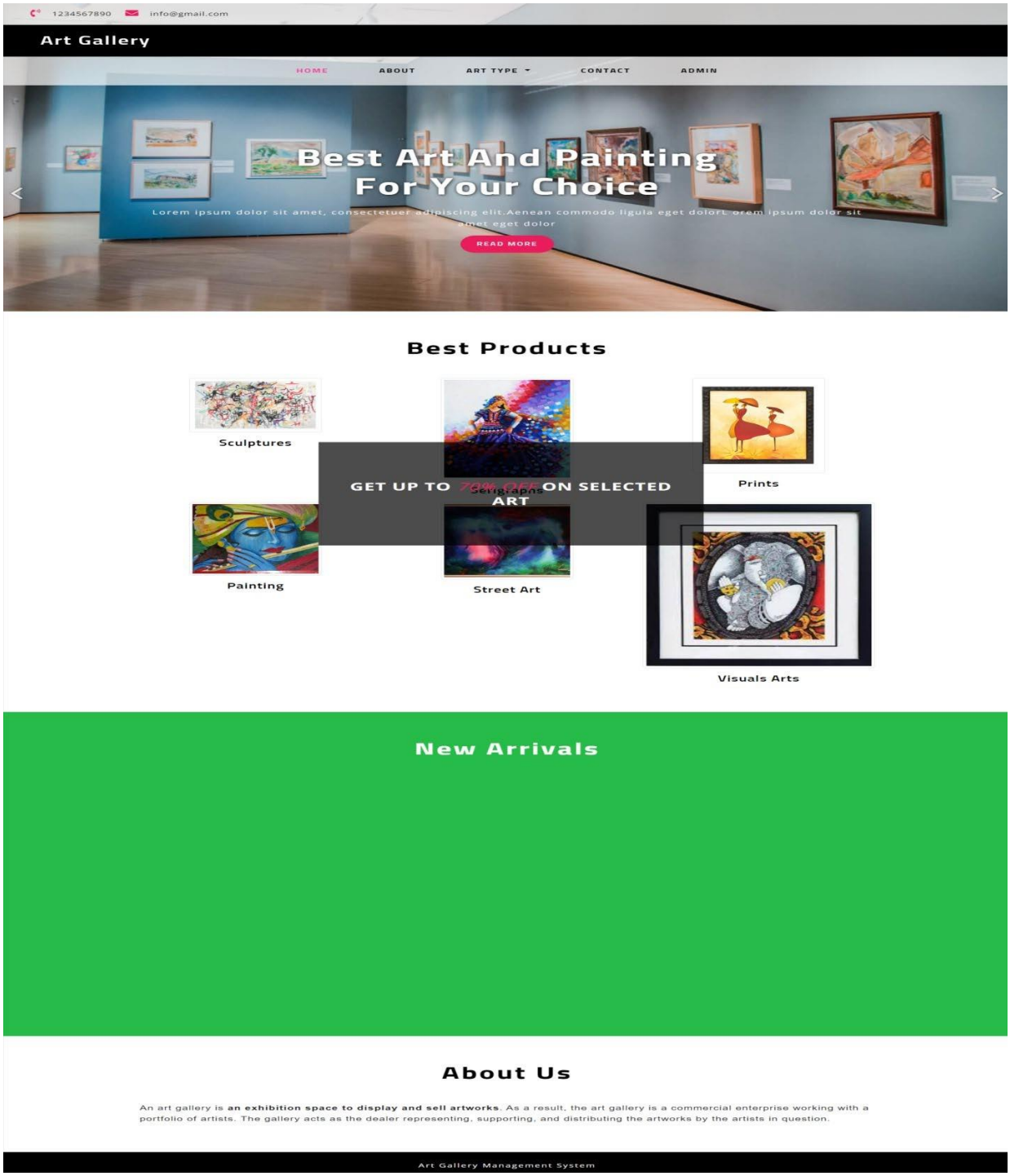
In the Integration testing we test various combination of the project module by providing the input.

The primary objective is to test the module interfaces in order to confirm that no errors are occurring when one module invokes the other module.

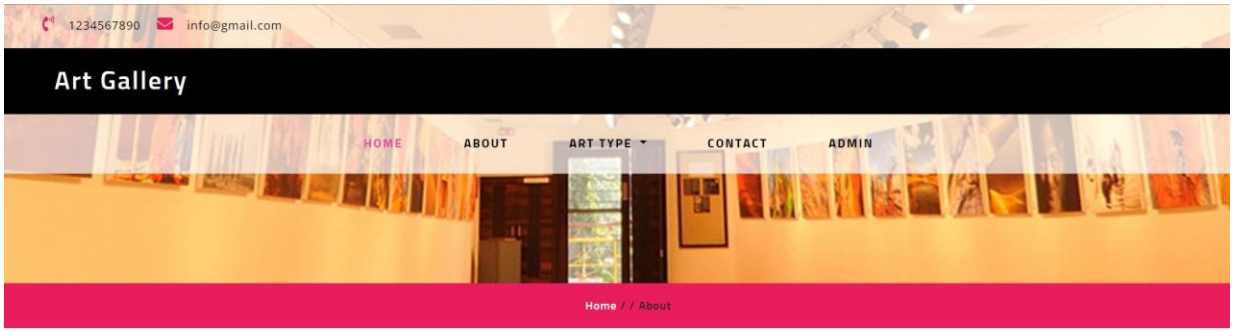
Evaluation

Project URL: http://localhost/agms

Home Page



About Us Page



About Us

WELCOME TO OUR GALLERY

An art gallery is **an exhibition space to display and sell artworks**. As a result, the art gallery is a commercial enterprise working with a portfolio of artists. The gallery acts as the dealer representing, supporting, and distributing the artworks by the artists in question.

ART GALLERY

Shipping

velit sagittis vehicula. Duis posuere ex in mollis iaculis. Suspendisse tincidunt

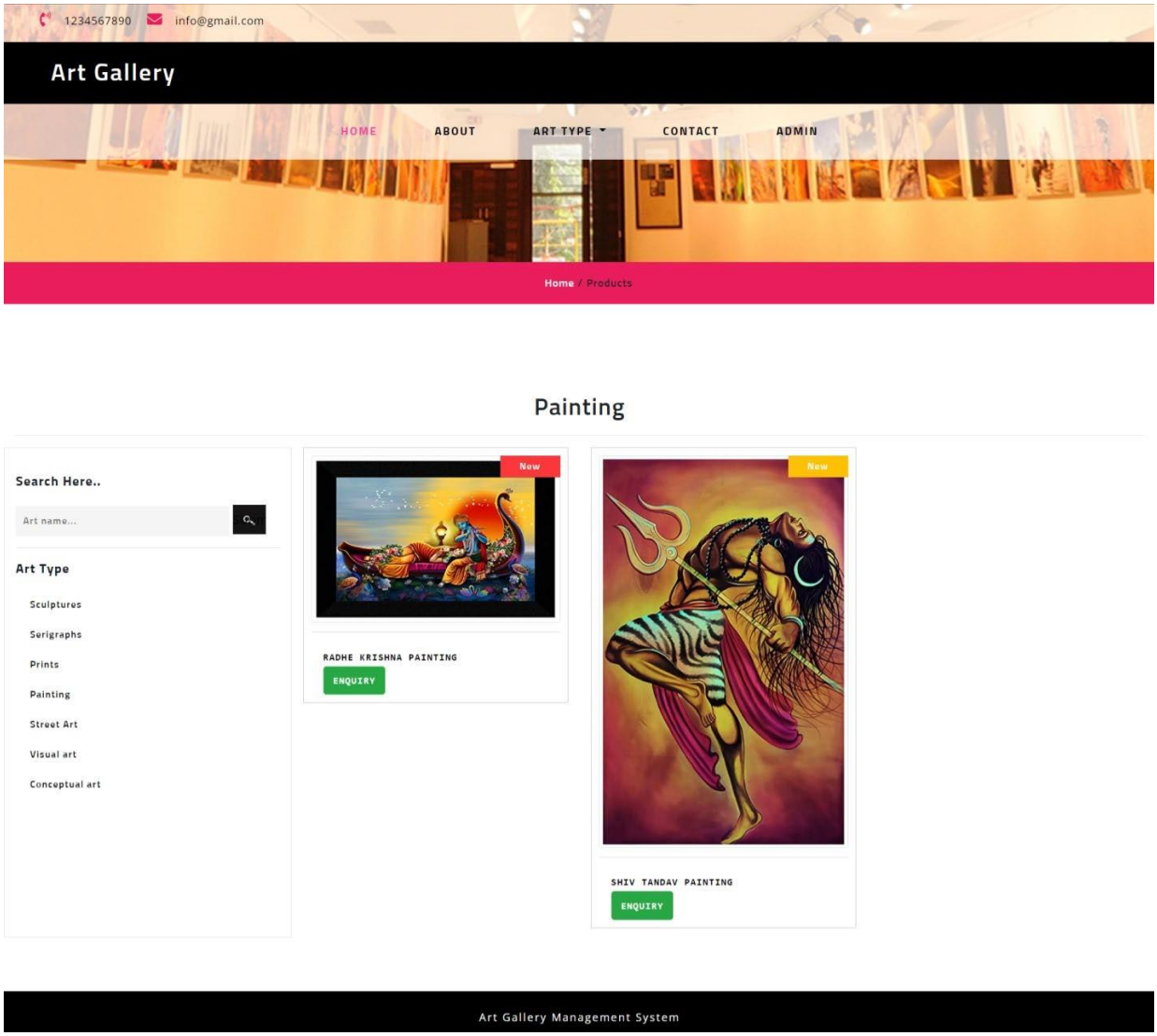
Support

velit sagittis vehicula. Duis posuere ex in mollis iaculis. Suspendisse tincidunt

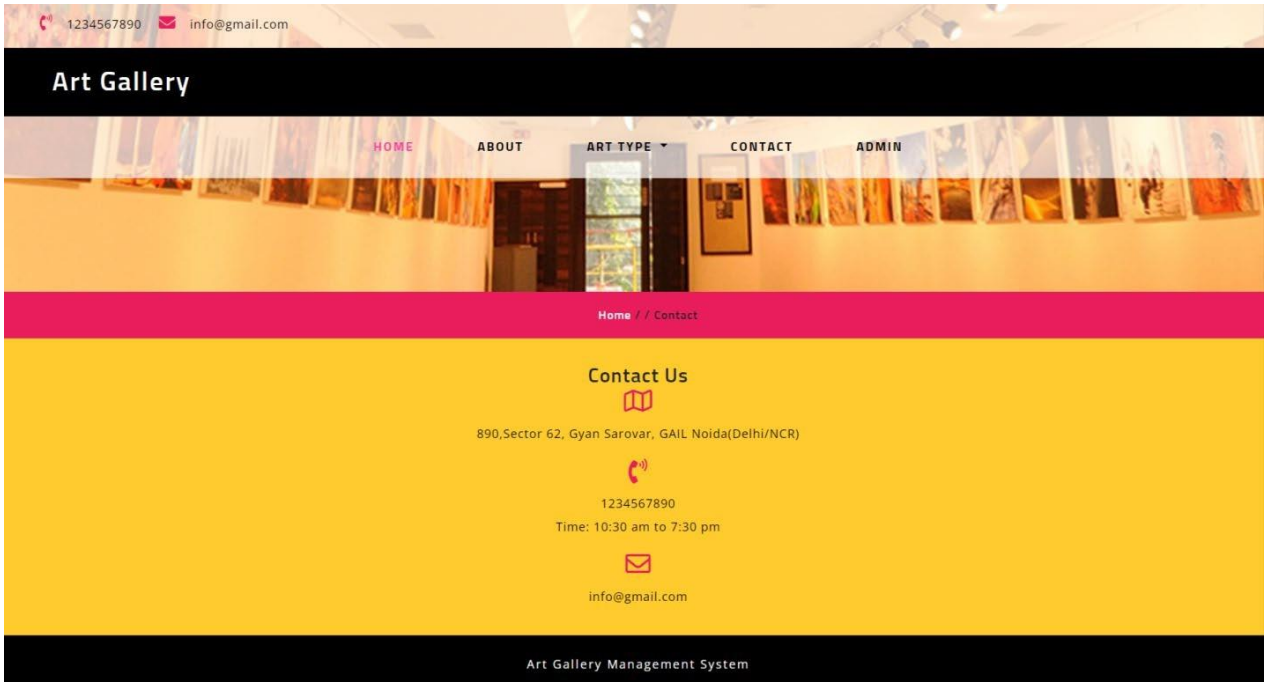
Return

velit sagittis vehicula. Duis posuere ex in mollis iaculis. Suspendisse tincidunt

Art Type Product

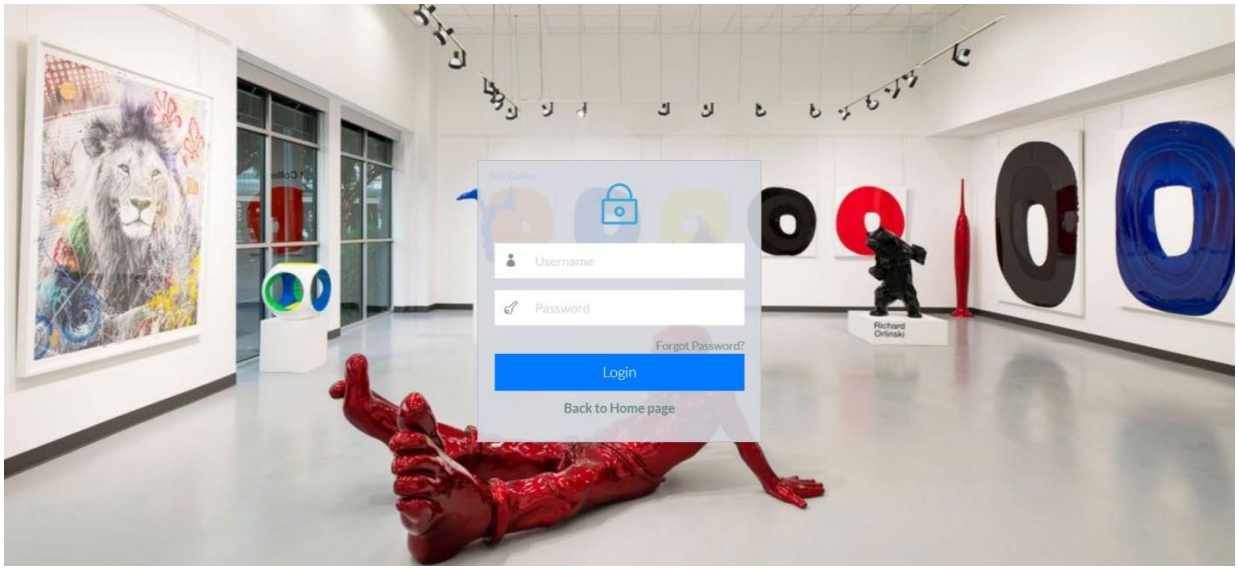


Contact Us

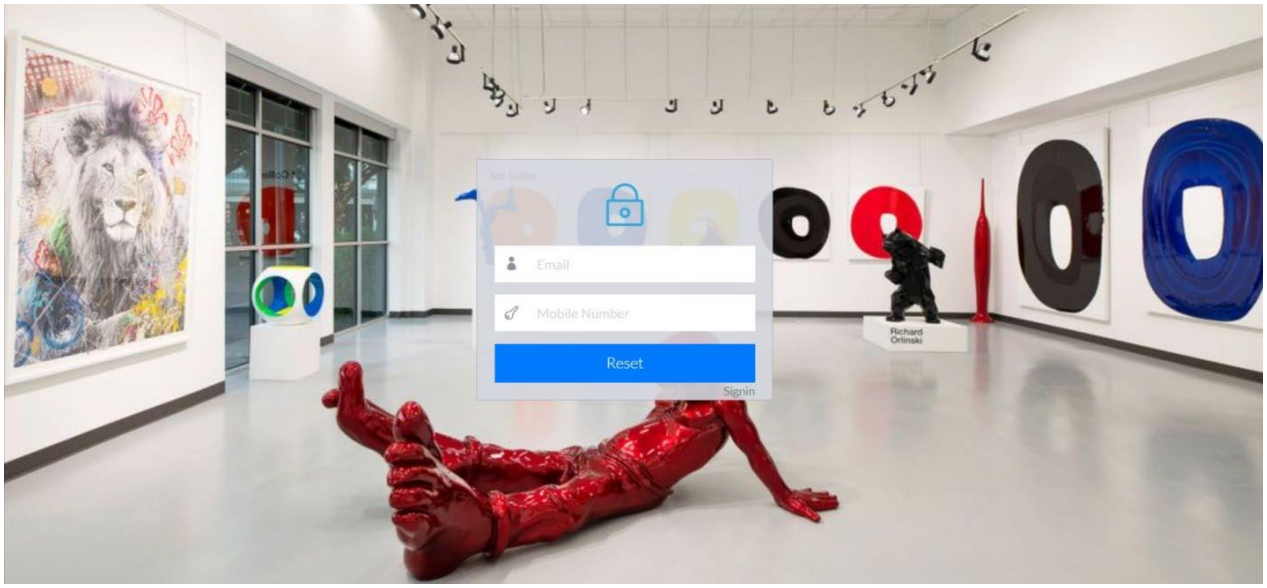


Admin Panel

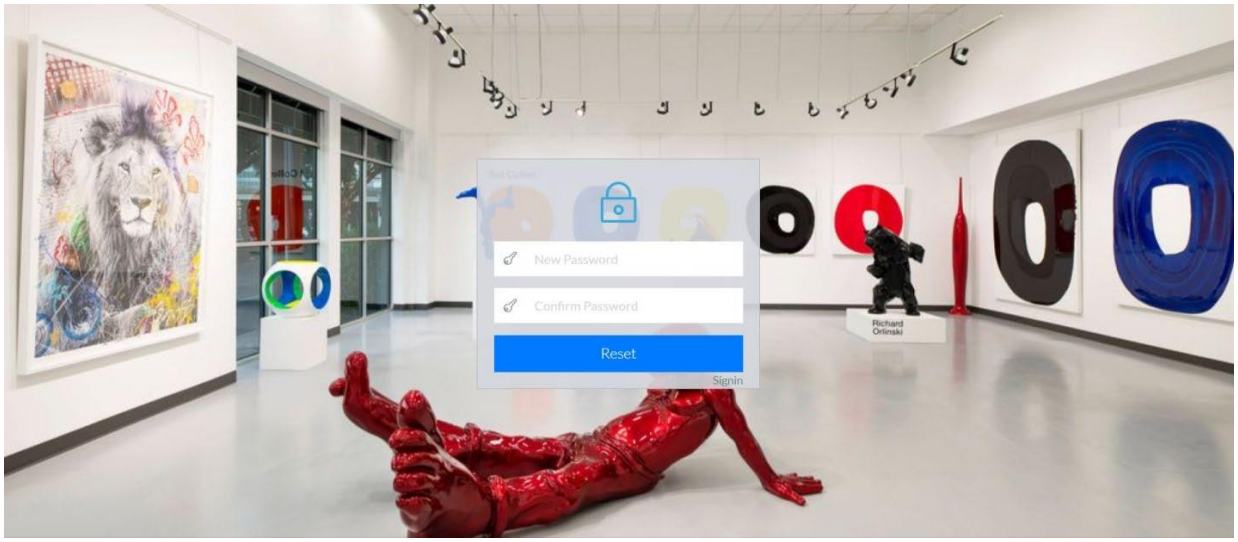
Login Page



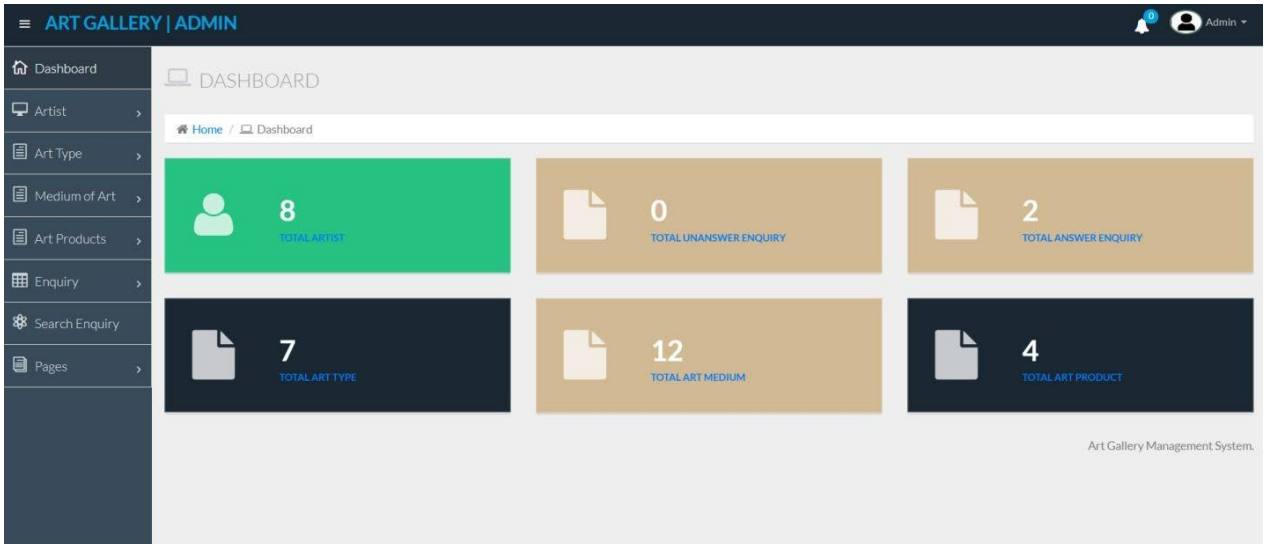
Forgot Password



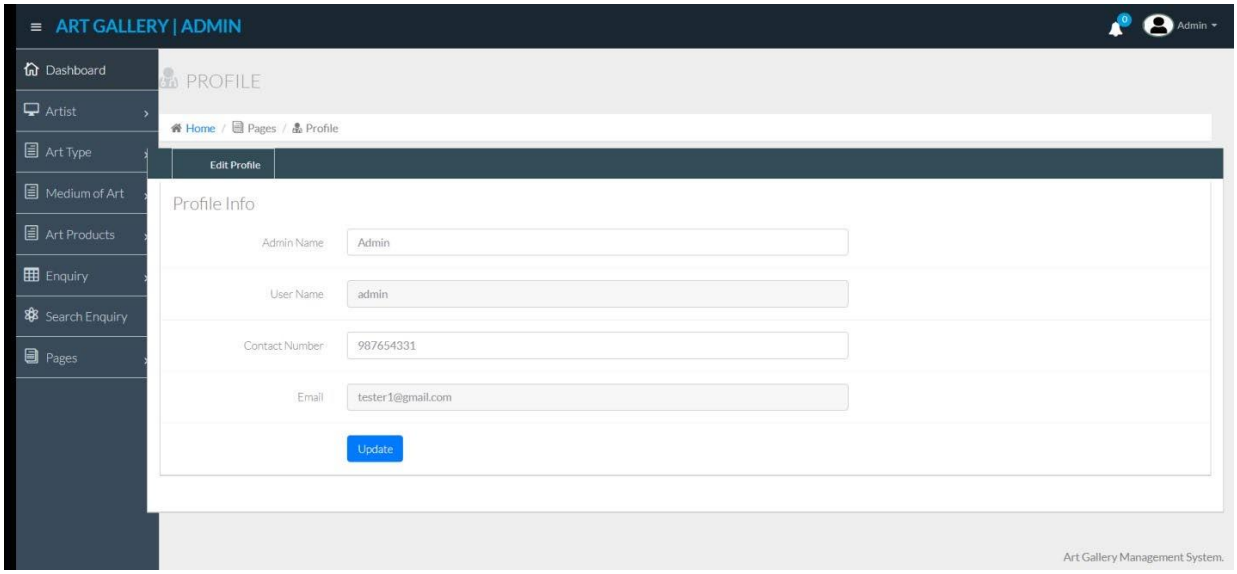
Reset Password



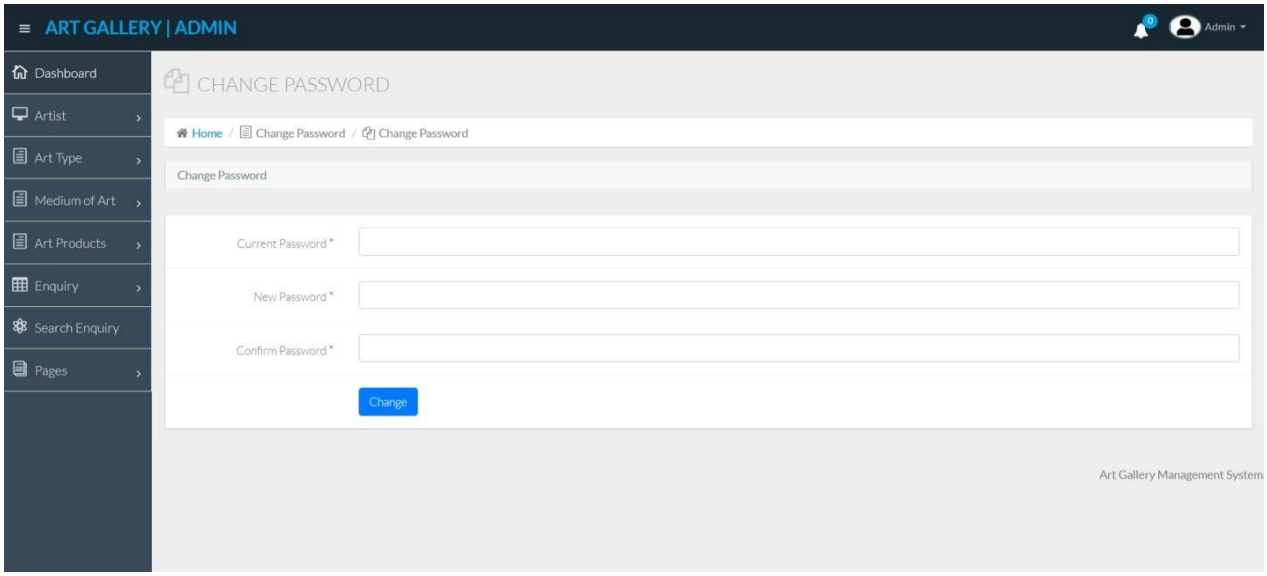
Dashboard



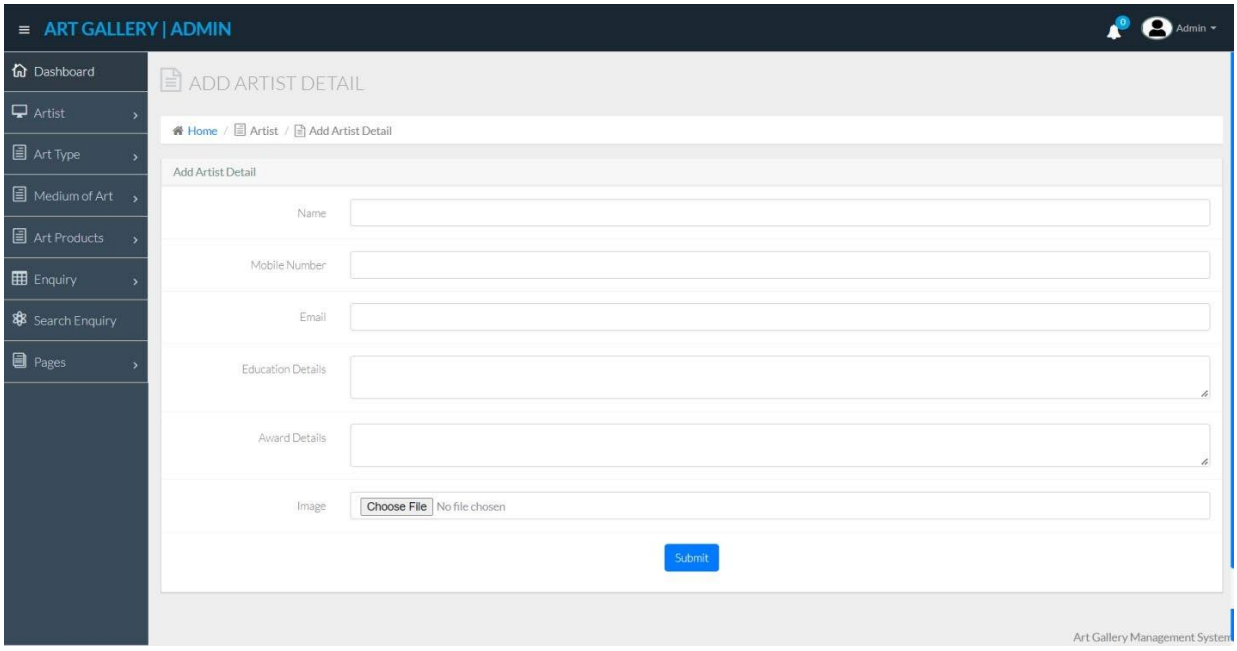
Profile



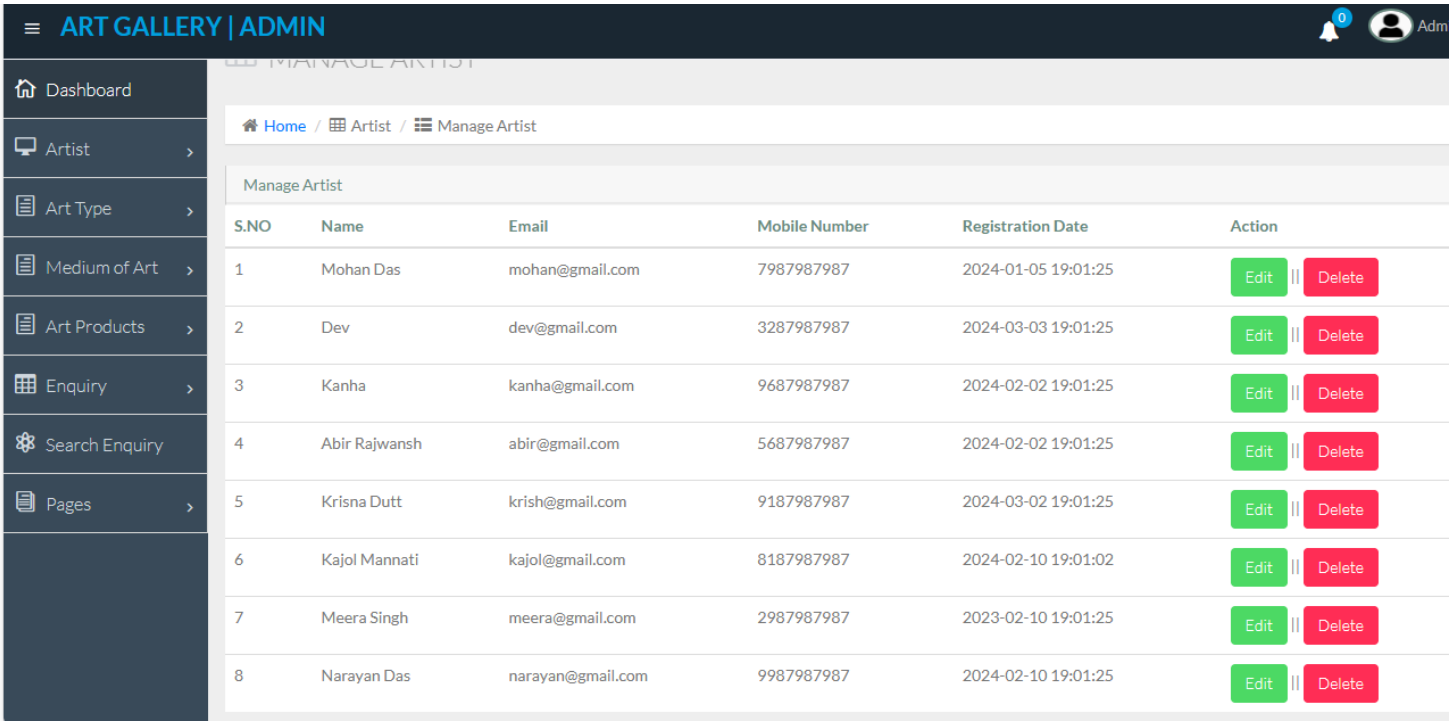
Change Password



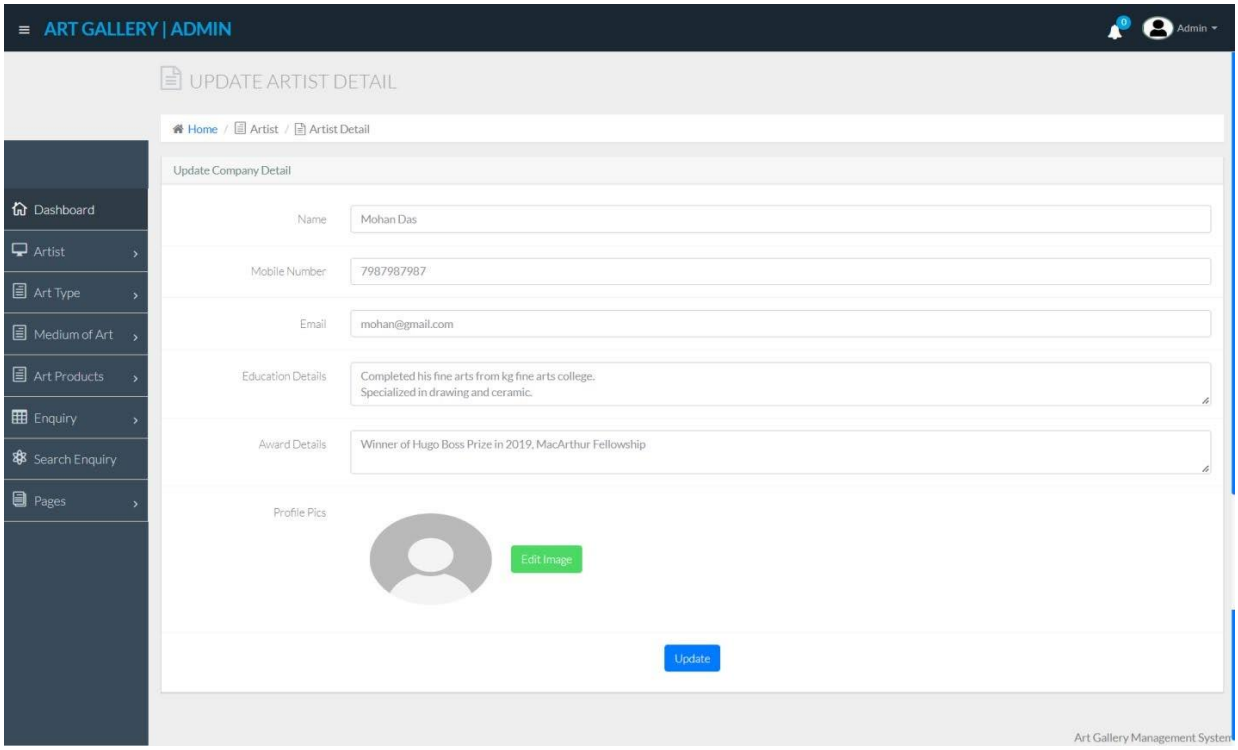
Add Artist



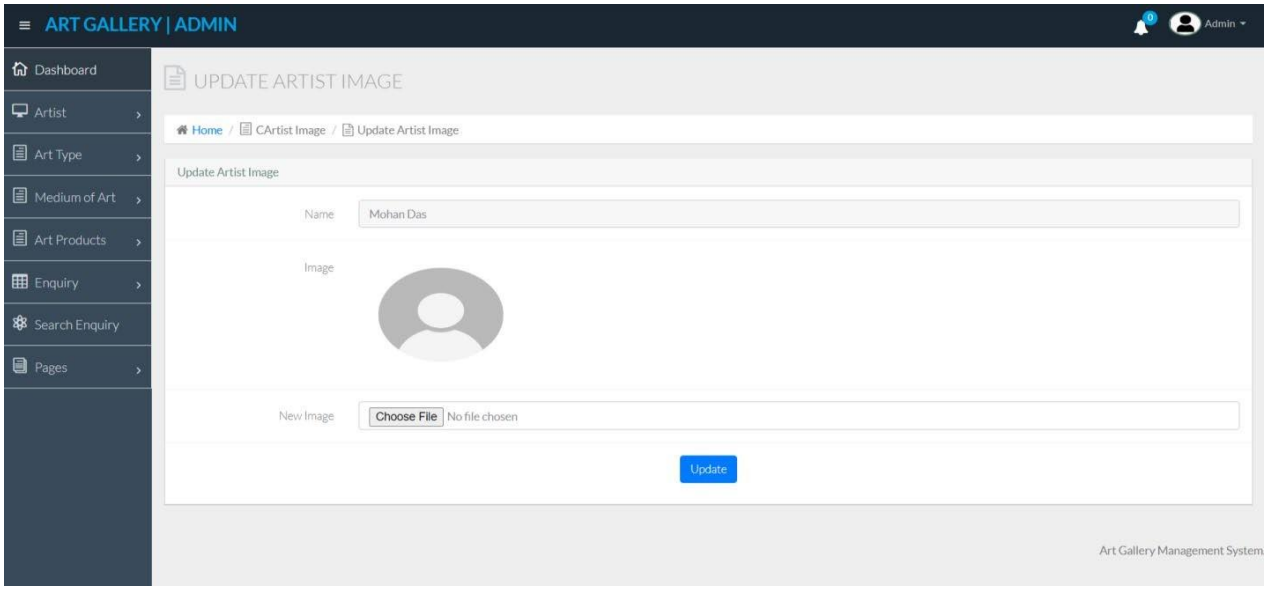
Manage Artist



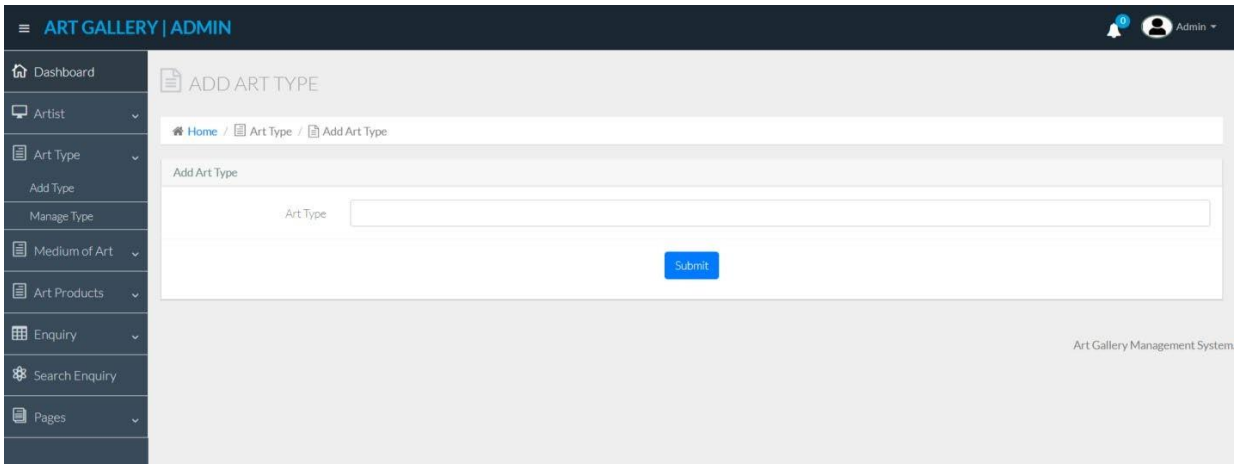
Update Artist



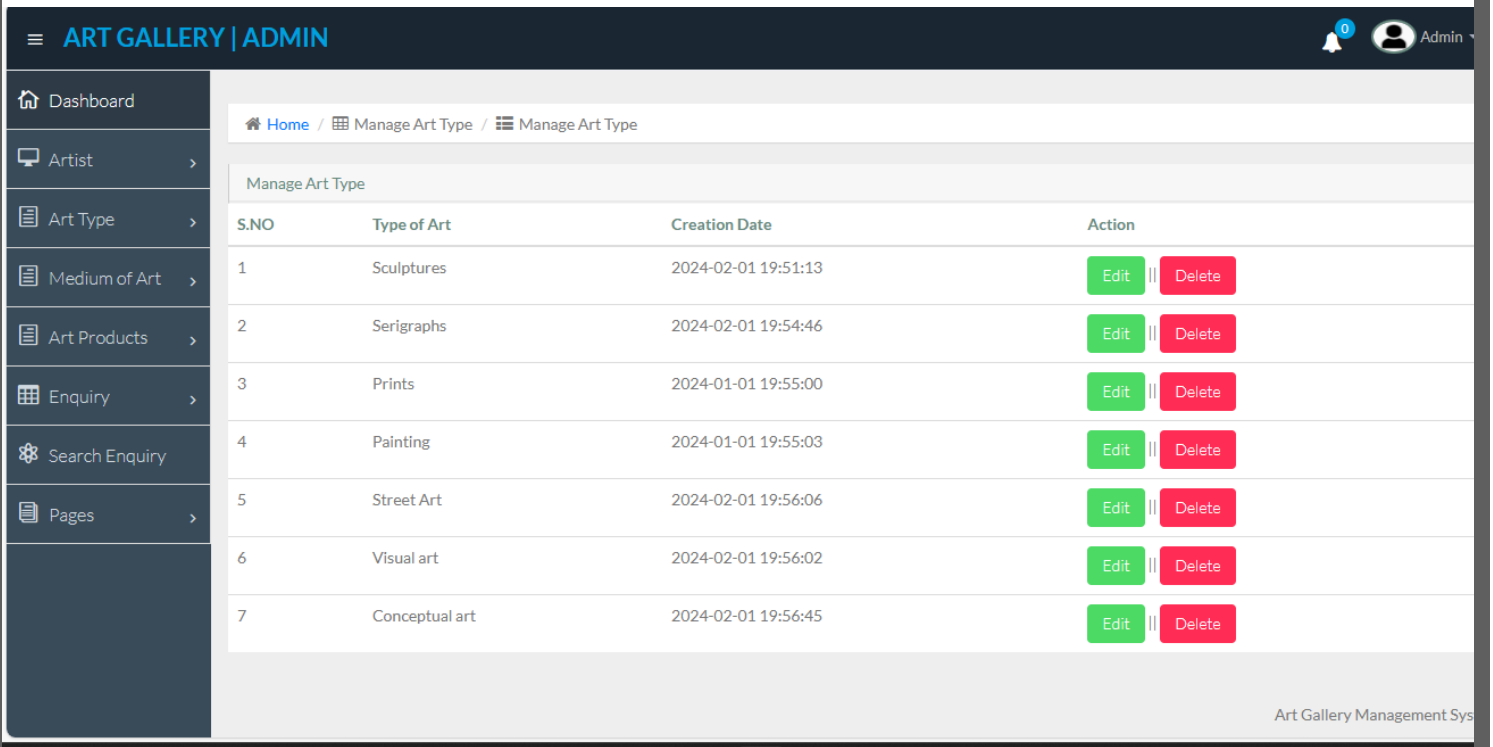
Update Artist Image



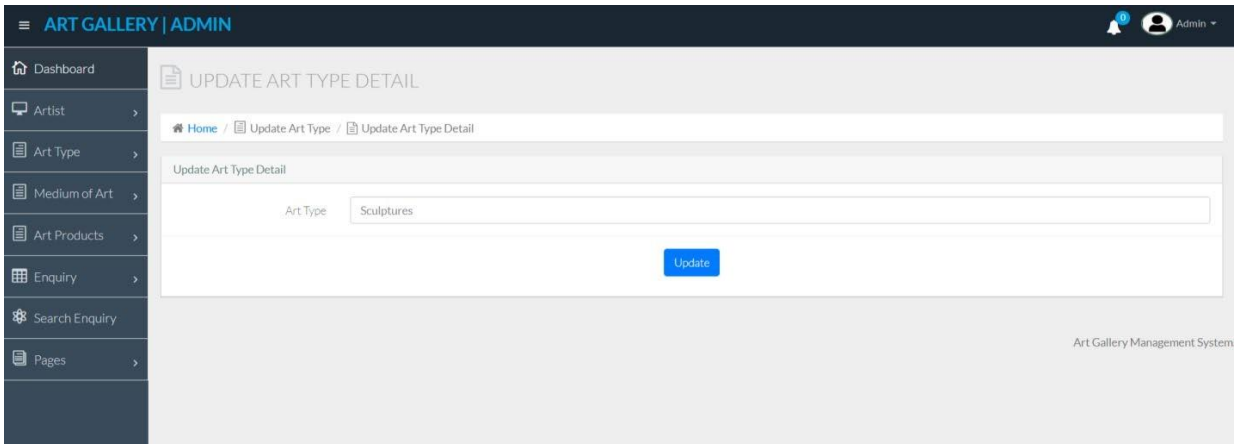
Add Art Type



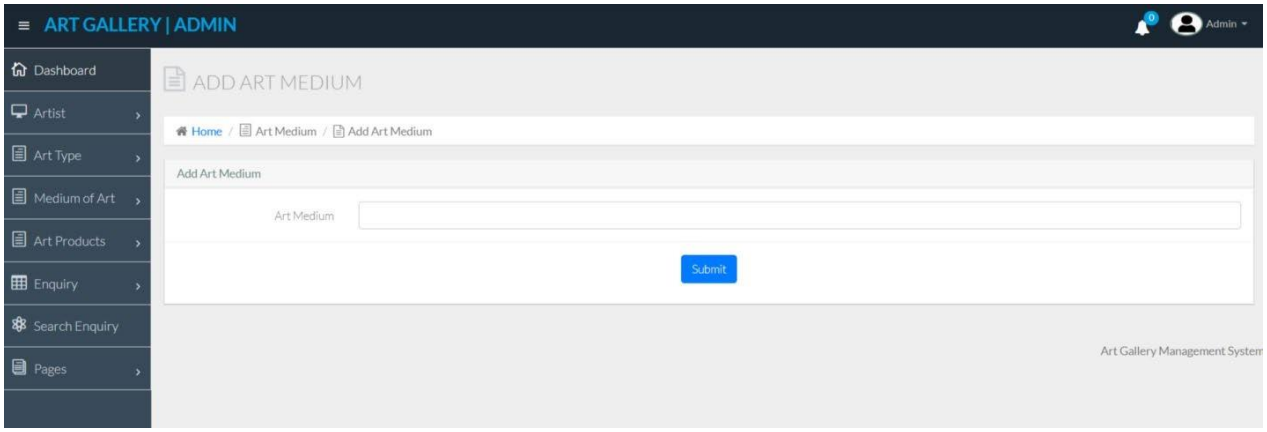
Manage Art Type



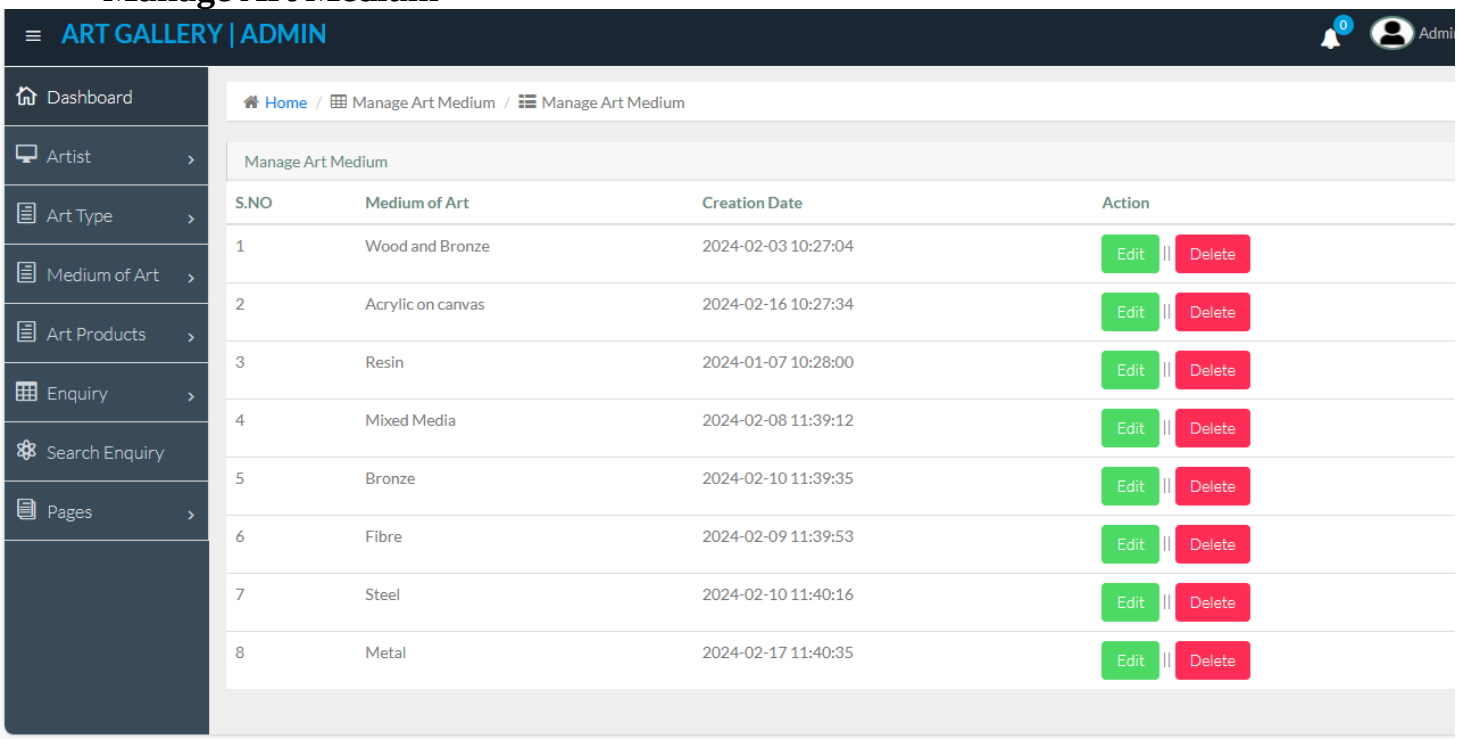
Update Art Type



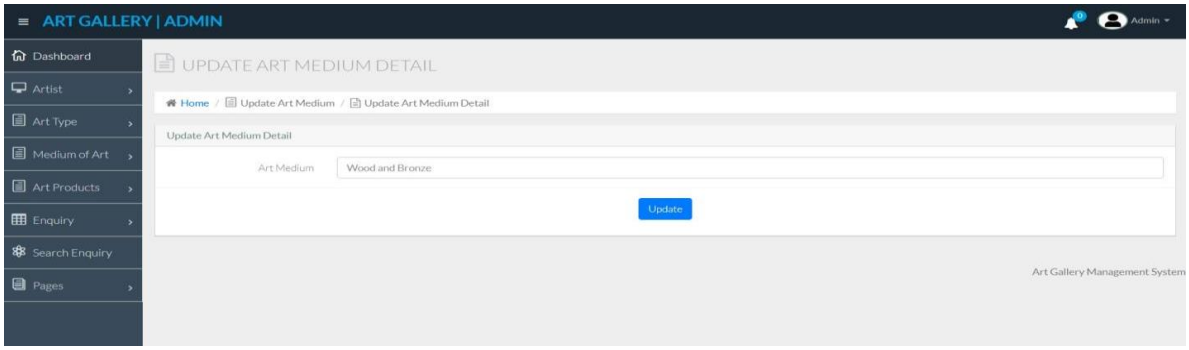
Add Art Medium



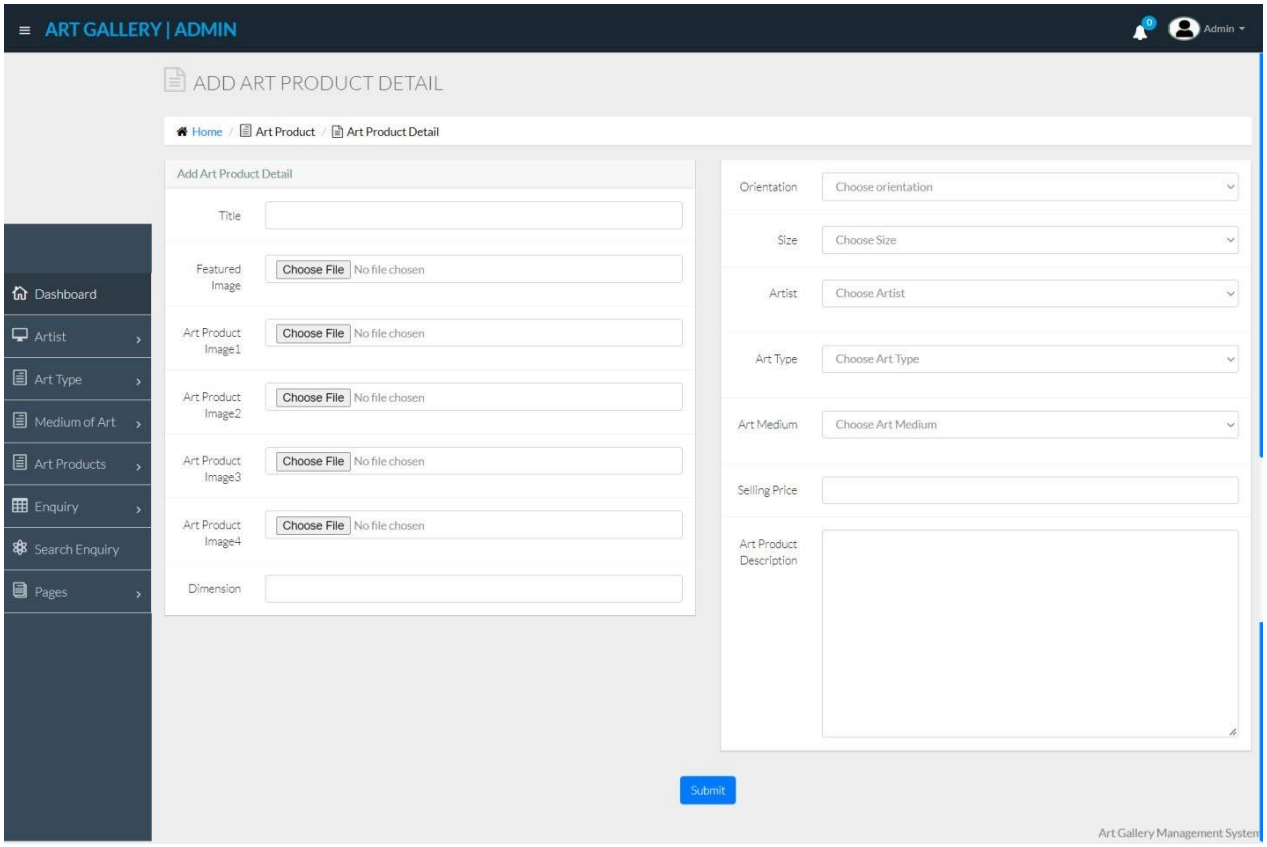
Manage Art Medium



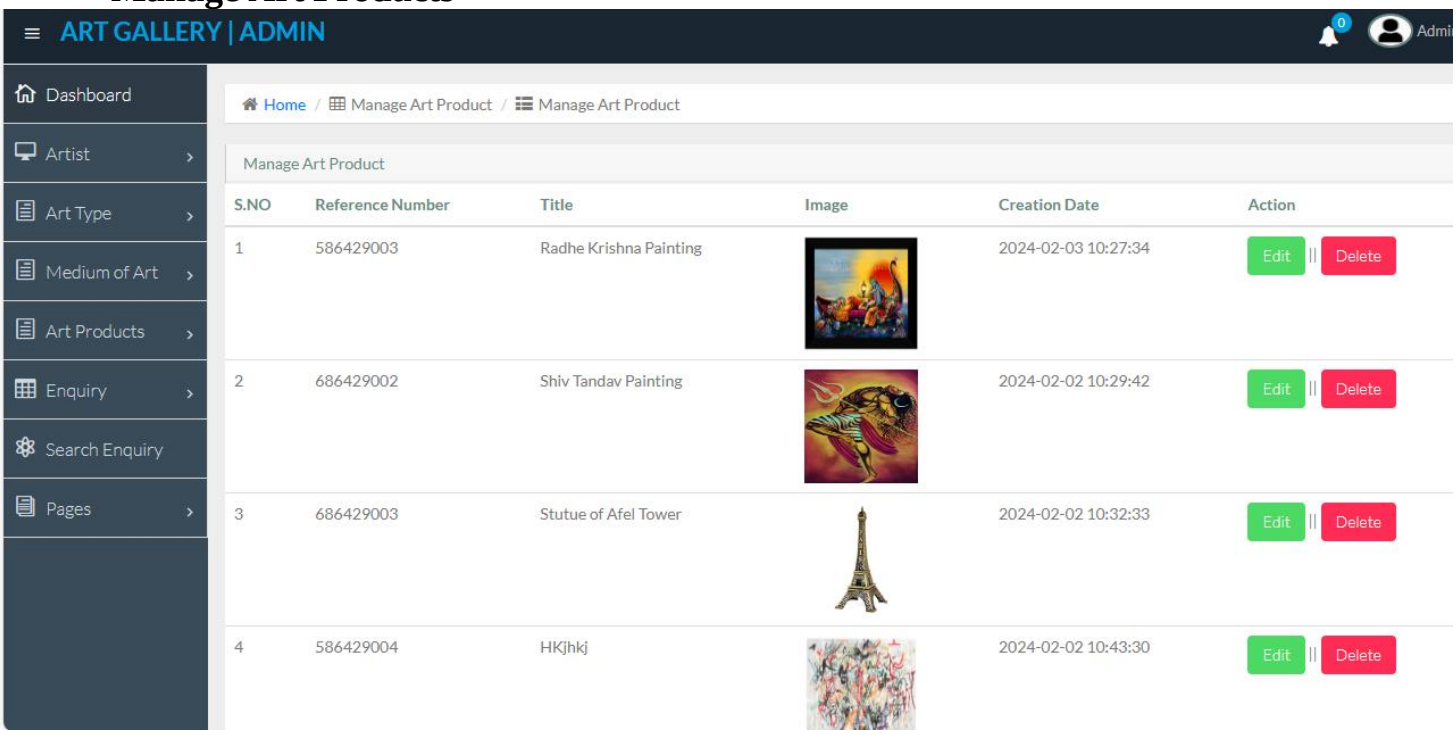
Update Art Medium



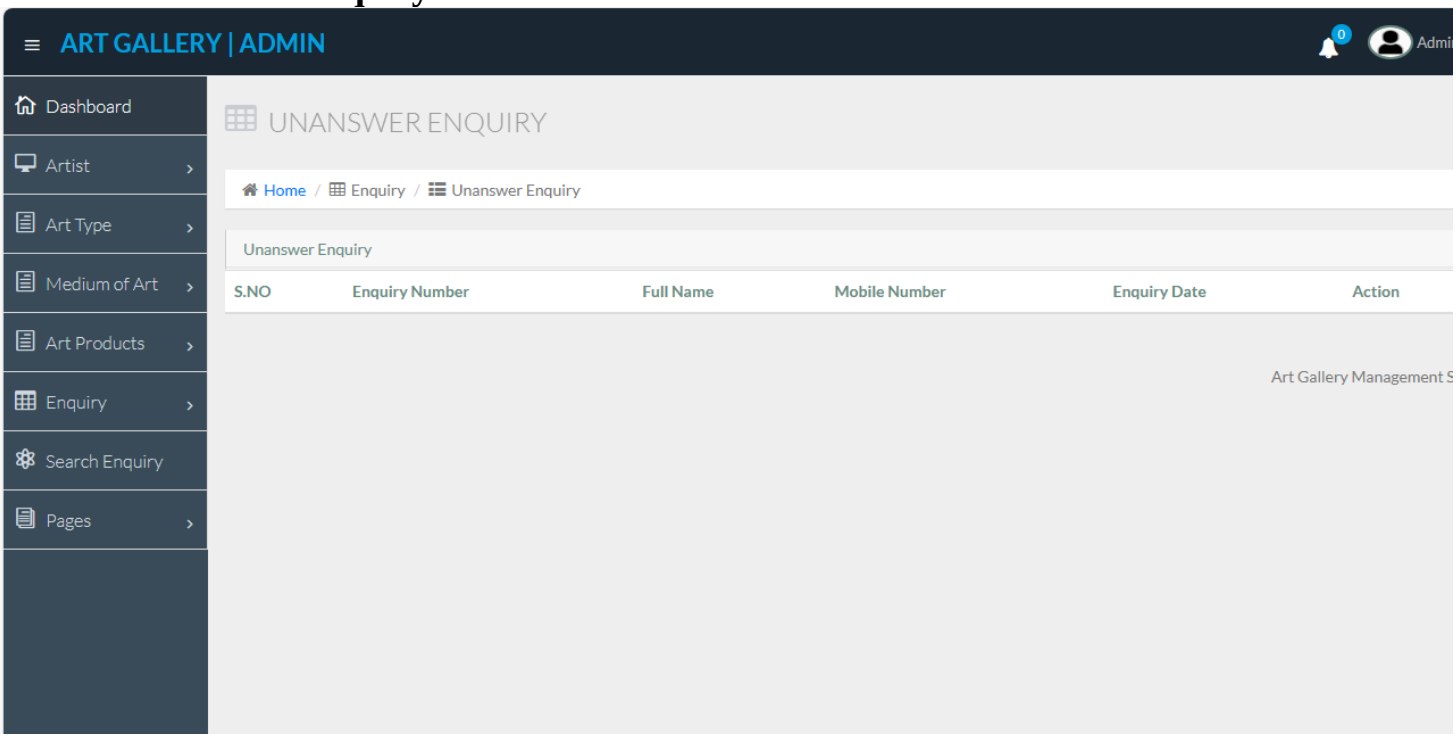
Add Art Products



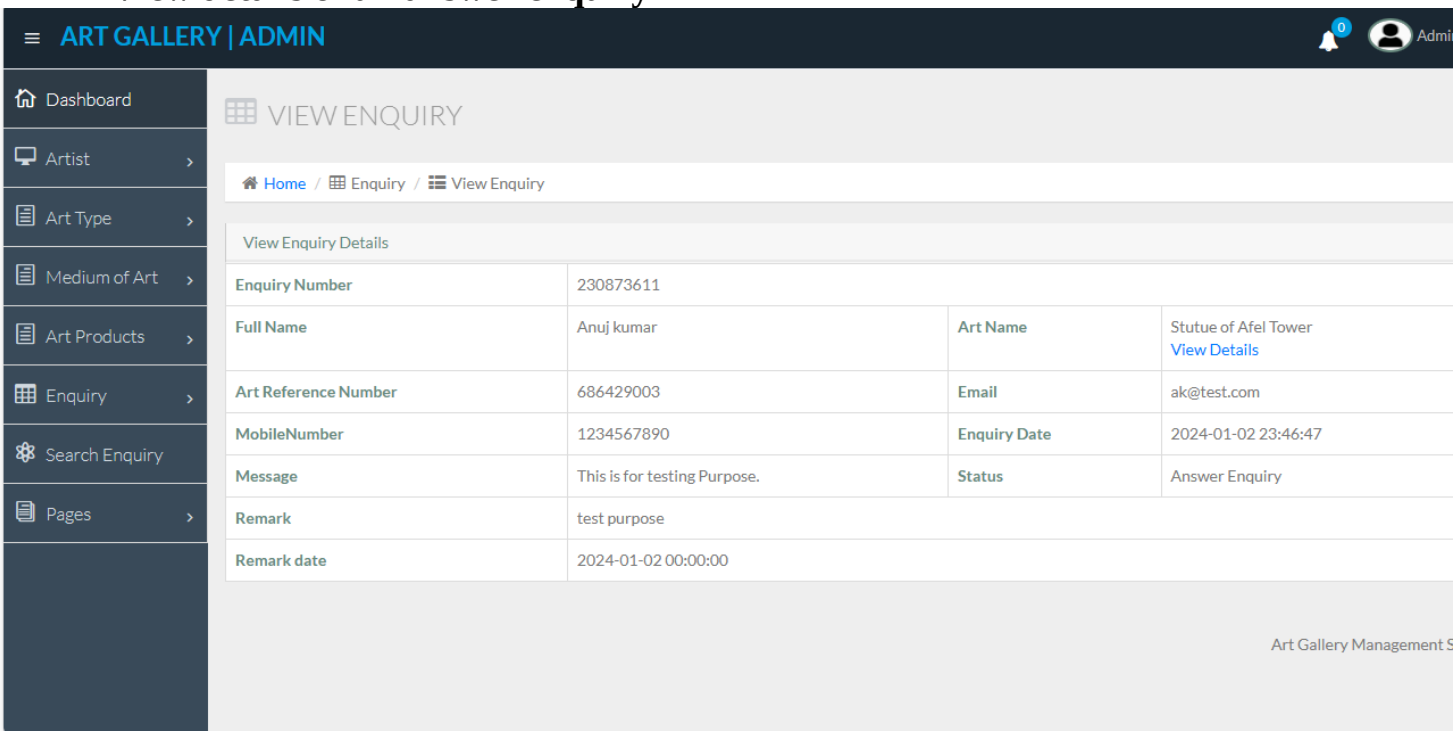
Manage Art Products



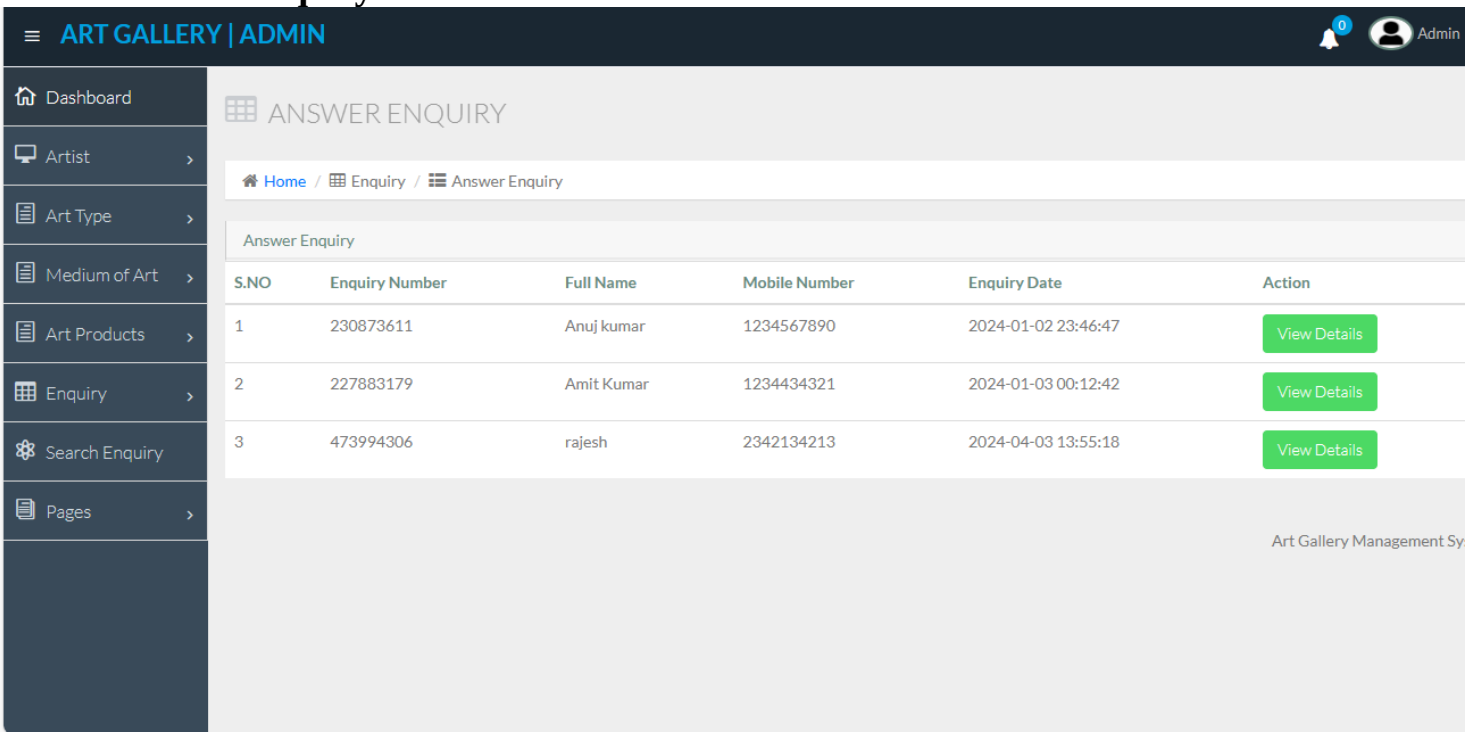
Un Answer Enquiry



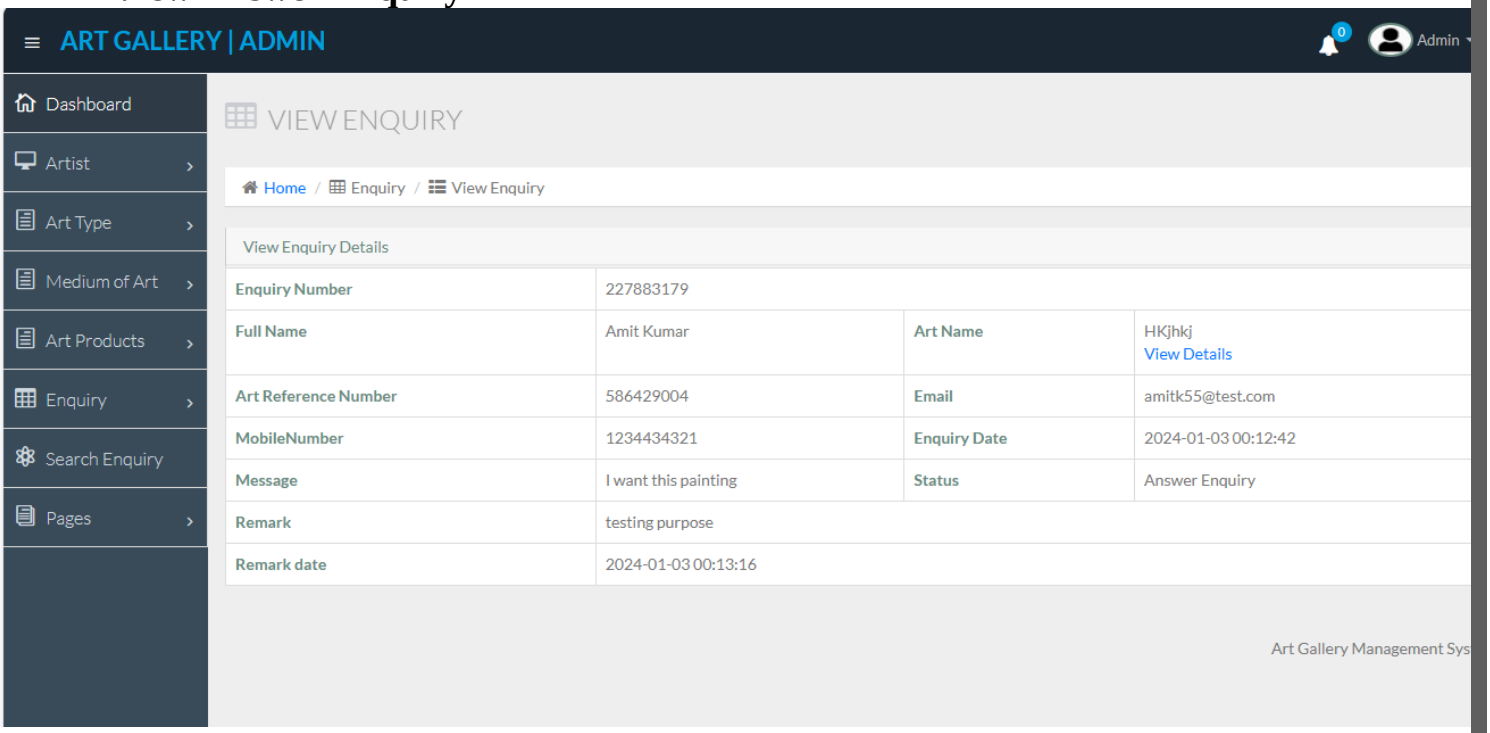
View details of un answer enquiry



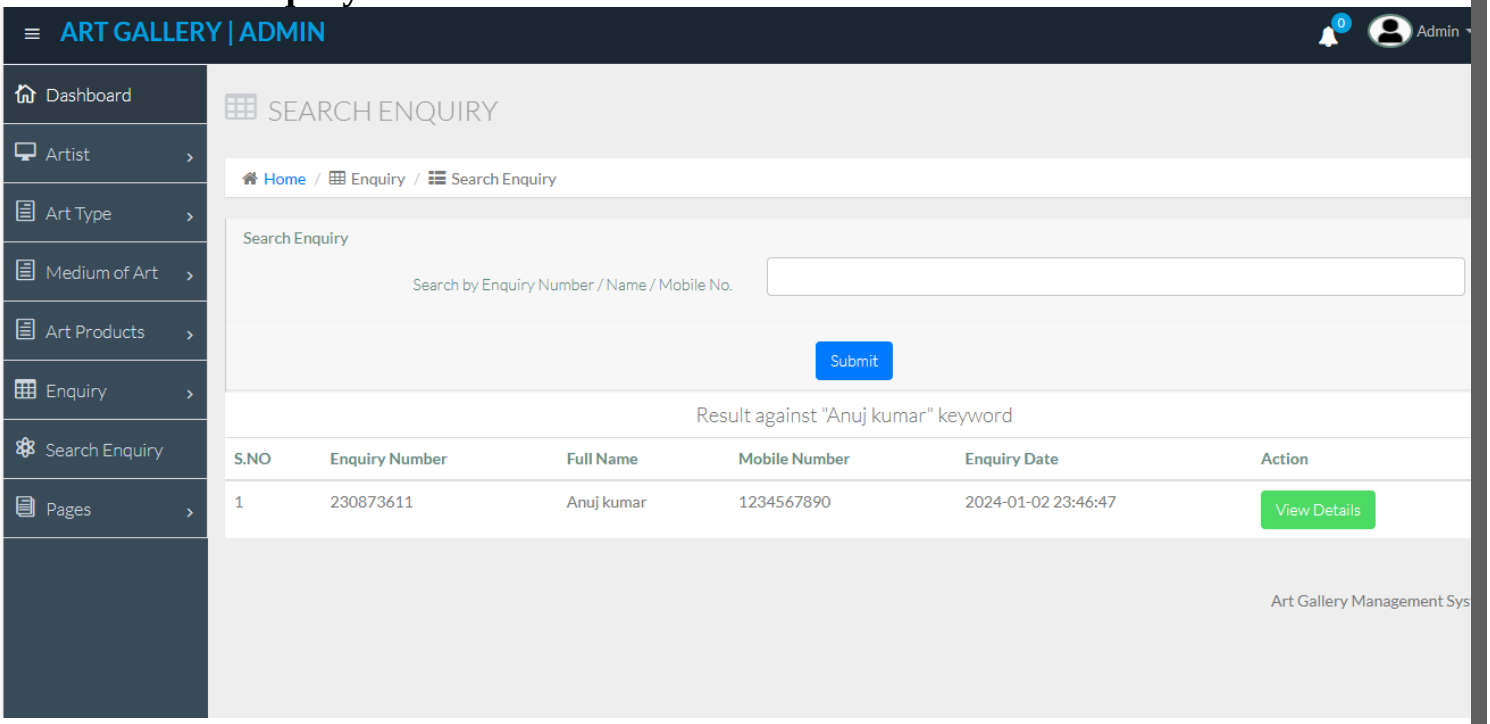
Answer Enquiry



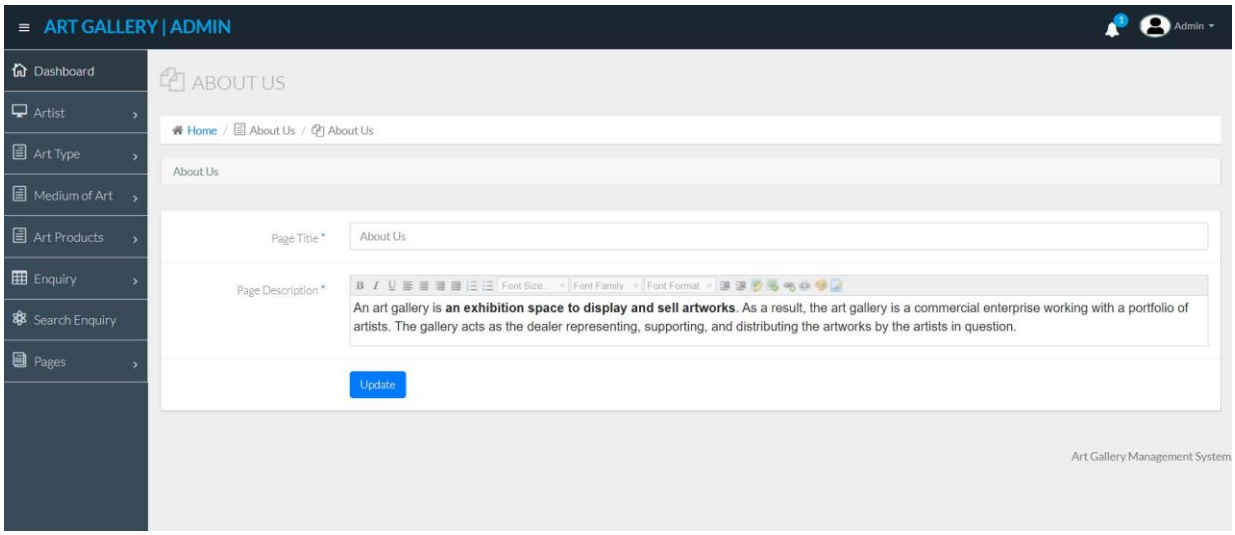
View Answer Enquiry



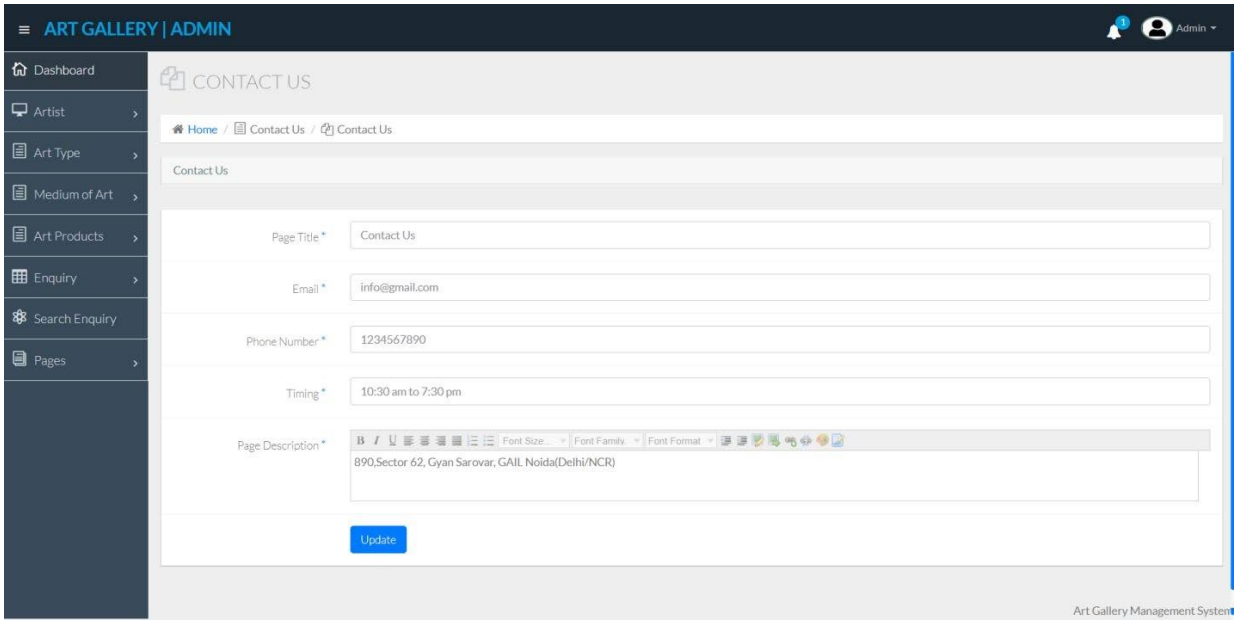
Search Enquiry



About Us Page



Contact Us Page



Conclusion

This Application provides a computerized and automated version of Art Gallery Management System which will benefit the hotel companies and their users.

It makes entire process online and can generate reports. It has a facility of user's login where users can view their booking details.

The Application was designed in such a way that future changes can be done easily. The following conclusions can be deduced from the development of the project.

- Automation of the entire system improves the productivity.
- It provides a friendly graphical user interface which proves to be better when compared to the existing system.
- It gives appropriate access to the authorized users depending on their permissions.
- It effectively overcomes the delay in communications.
- Updating of information becomes so easier.
- System security, data security and reliability are the striking features.
- The System has adequate scope for modification in future if it is necessary.

References

For PHP

- https://www.w3schools.com/php/default.asp
- https://www.sitepoint.com/php/
- https://www.php.net/

For MySQL

- https://www.mysql.com/
- http://www.mysqltutorial.org

For XAMPP

- https://www.apachefriends.org/download.html

PROJECT REPORT

ON

STUDENT STUDY CENTER MANAGEMENT SYSTEM

Submitted in partial fulfillment of the requirements for the award of degree of

MSC(CS) (MASTER OF COMPUTER SCIENCE)

TO

SHANTI DEVI ARYA MAHILA COLLEGE

DINANAGAR

Submitted To:-

Ms.Anima Mahajan

Assistant Professor

Deptt. Of Computer Science

Submitted By:

Manpreet Kaur

(20672225408)

Shakshi

(20672225407)

POST GRADUATE DEPARTMENT OF COMPUTER SCIENCE

GURU NANAK DEV UNIVERSITY, AMRITSAR

Acknowledgement

With deep sense of gratitude We express our sincere thanks and obligation to our esteemed guide Ms. Anima Mahajan (Assistant Professor). It is because of her able and mature guidance and co-operation without which it would not have been possible for us to complete our project. We would also like to thank Mrs. Deepak Jyoti, HOD, Post Graduate Deptt. of Comp Science, Shanti Devi Arya Mahila College, Dinanagar for providing the institute with an environment where one can use her intellect and creativity to develop something fruitful and also for allowing us the opportunity to experience dynamic professional environment during us Training. This environment facilitated us in pursuing this project. It is our pleasant duty to thank all the staff membersof the Computer Department for their time to time suggestions. Finally,We would like to thank the almighty and my parents for their moral support and my friends with whom We shared our day-to-day experience and received lots of suggestions that improved our quality of work.

Manpreet kaur
(20672225408)

Shakshi
(20672225407)

CERTIFICATE OF APPROVAL

This is certify that the project report entitled **Student Study Center Management System** submitted to Shanti Devi Arya Mahila College, Dinanagar in partial fulfillment of the requirement for the award of Degree of Msc(CS) (Master of Computer Science) , is an authentic and original work carried out by Manpreet Kaur (20672225408) Shakshi (20672225407) under our guidance and supervision. The Post Graduate deptt. of Computer Science has accepted the report as the fulfillment of the requirements for the Degree of Master of Computer Science. No part of this report has been submitted to any other College/University for the reward of any Degree to the best of our knowledge.

Miss Anima Mahajan

Assistant Professor (Comp Sc.)
(Project Supervisor)

Shanti Devi Mahila College
Dinanagar

Mrs. Deepak Jyoti
Hod, PG Department of Computer Sc.

Shanti Devi Mahila College
Dinanagar

DECLARATION

We hereby declare that this project report on **" Student Study CenterManagemnet "** which is being submitted in partial fulfillment of the Training Programme of Msc(CS) (Master of Computer Science) to Shanti Devi Arya Mahila College, Dinanagar is the result of the work carried out by us, under the guidance of Anima Mahajan (Assistant Professor). Shanti Devi Arya College, Dinanagar.

Manpreet kaur
(20672225408)

Shakshi
(20672225407)

Abstract

"Student Study Center Management System" contains data and information of student who want to study in study center. The main purpose of SSCM is to systematically record, store and update the details of admin/student and also manage the desk to students. It is a user friendly system which is used by any study center easily.

"Student Study Center Management System" can lead to error free, secure, reliable and fast management system. It assists the user to concentrate on their other activities rather concentrate on the record keeping. Thus it will help study centers in better utilization of resources. The study centers can maintain computerized records without redundant entries. That means that one need not be distracted by information that not relevant, while being able to reach the information.

The aim to automate its existing manual system by the help of computerized equipments and full-fledge computer software, fulfilling their requirements, so that their valuable data/information can be stored for a long period with easy accessing and manipulation of the same. Basically the project describes how to manage for good performance and better services for the study centers.

Introduction

Introduction:-

"Student Study Center Management System" contains data and information of student who want to study in study center. The main purpose of SSCM is to systematically record, store and update the details of admin/student and also manage the desk to students.

In "Student Study Center Management System" we use PHP and MySQL database. This is the project which keeps records of admin/student and also manage the desk to students.

In SSCMS project we use PHP and MySQL database. It has One module.

Admin Module

Dashboard: In this section, admin can view the total, available, and occupied Desks. Admin can also view the total registered users.
Desks: In this section, admin can manage the desks (add, update, delete).
Students: In this section, admin can manage the students (add, update, delete, view details).
Assigned/Un-Assigned Desk: In this section, admin can assign and un-assign the desk to the students.
Report: In this section, admin can generate the b/w dates report of assigned desks.
Admin can also update his profile, change password and recover password.

Purpose

In the Previous System, Details are Stored Manually in papers, to share the details between study centers was a financial drawback. Updations in the details is a tedious task.

But a new system was proposed to overcome the above drawbacks.

Functionalities and advantages of proposed system are:

- Data is Centralized which has overcome the Sharing problem in previous system.
- As data is Maintained electronically, it's easy for a person to update the details, which has overcome the tedious updation in previous system.
- Maintenance is easy and performance is good.

Scope

“Student Study Center Management System” contains data and information of student who want to study in study center. The main purpose of SSCM is to systematically record, store and update the details of admin/student and also manage the desk to students. It is a user friendly system which is used by any study center easily.

The aim to automate its existing manual system by the help of computerized equipments and full-fledge computer software, fulfilling their requirements, so that their valuable data/information can be stored for a long period with easy accessing and manipulation of the same. Basically the project describes how to manage for good performance and better services for the study centers.

Requirement Specification

Hardware Configuration :

Client Side:

RAM	512 MB
Hard disk	10 GB
Processor	1.0 GHz

Server side:

RAM	**1 GB**
Hard disk	**20 GB**
Processor	**2.0 GHz**

Software Requirement:

Client Side:

Web Browser	Google Chrome or any compatible browser
Operating System	Windows or any equivalent OS

Server Side:

Web Server	APACHE
Server side Language	PHP5.6 or above version
Database Server	MYSQL
Web Browser	Google Chrome or any compatible browser
Operating System	Windows or any equivalent OS

APACHE

The Apache HTTP Server Project is an effort to develop and maintain an open-source HTTP server for modern operating systems including UNIX and Windows. The goal of this project is to provide a secure, efficient and extensible server that provides HTTP services in sync with the current HTTP standards.

The Apache HTTP Server ("httpd") was launched in 1995 and it has been the most popular web server on the Internet since April 1996. It has celebrated its 20th birthday as a project in February 2015.

PHP

- PHP stands for PHP: Hypertext Preprocessor
- PHP is a server-side scripting language, like ASP.
- PHP scripts are executed on the server.
- PHP supports many databases (MYSQL, Informix, Oracle, Sybase, Solid, Generic ODBC, etc.).
- PHP is an open source software.
- PHP is free to download and use.

MYSQL

- MYSQL is a database server
- MYSQL is ideal for both small and large applications
- MYSQL supports standard SQL
- MYSQL compiles on a number of platforms
- MYSQL is free to download and use
- How to access MySQL:

  http://localhost/phpmyadmin

Analysis and Design

Analysis:

"Student Study Center Management System" contains data and information of student who want to study in study center. The main purpose of SSCM is to systematically record, store and update the details of admin/student and also manage the desk to students. It is a user friendly system which is used by any study center easily.

Disadvantage of present system:

- **Not user friendly:** The present system not user friendly because data is not stored in structure and proper format.
- **Manual Control:** All report calculation is done manually so there is a chance of error.
- **Lots of paper work:** Lawyers/Advocates record maintain in the register so lots of paper require storing details.
- **Time consuming**

Design Introduction:

Design is the first step in the development phase for any techniques and principles for the purpose of defining a device, a process or system in sufficient detail to permit its physical realization.

Once the software requirements have been analyzed and specified the software design involves three technical activities - design, coding, implementation and testing that are required to build and verify the software.

The design activities are of main importance in this phase, because in this activity, decisions ultimately affecting the success of the software implementation and its ease of maintenance are made. These decisions have the final bearing upon reliability and maintainability of the system. Design is the only way to accurately translate the customer's requirements into finished software or a system.

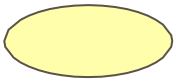
Design is the place where quality is fostered in development. Software design is a process through which requirements are translated into a representation of software. Software design is conducted in two steps. Preliminary design is concerned with the transformation of requirements into data

UML Diagrams:

Actor:

A coherent set of roles that users of use cases play when interacting with the use `cases.

Use case: A description of sequence of actions, including variants, that a system performs that yields an observable result of value of an actor.



UML stands for Unified Modeling Language. UML is a language for specifying, visualizing and documenting the system. This is the step while developing any product after analysis. The goal from this is to produce a model of the entities involved in the project which later need to be built. The representation of the entities that are to be used in the product being developed need to be designed.

USECASE DIAGRAMS:

Use case diagrams model behavior within a system and helps the developers understand of what the user require. The stick man represents what's called an actor.

Use case diagram can be useful for getting an overall view of the system and clarifying who can do and more importantly what they can't do.

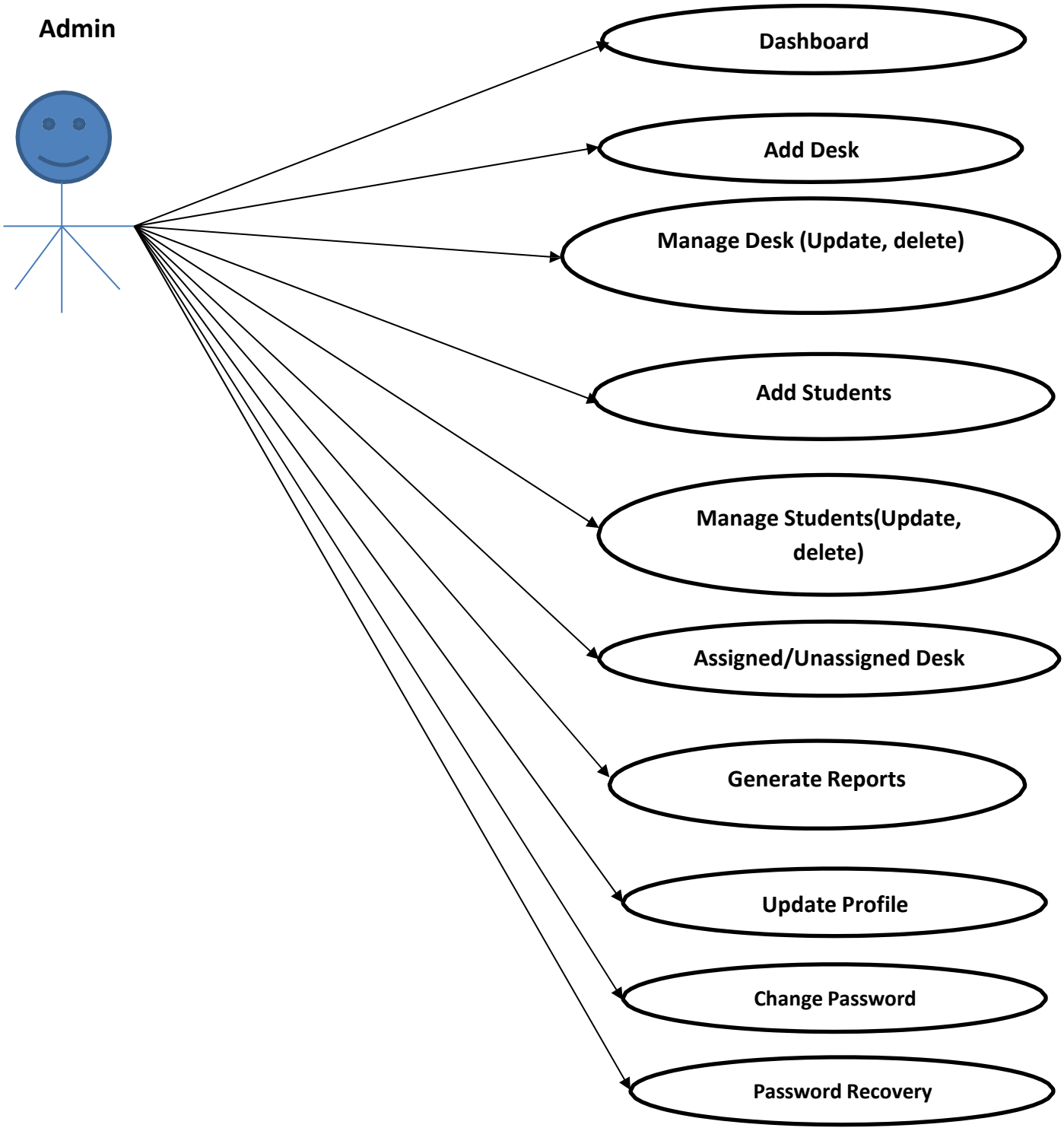
Use case diagram consists of use cases and actors and shows the interaction between the use case and actors.

- The purpose is to show the interactions between the use case and actor.
- To represent the system requirements from user's perspective.
- An actor could be the end-user of the system or an external system.

USECASE DIAGRAM: A Use case is a description of set of sequence of actions. Graphically it is rendered as an ellipse with solid line including only its name. Use case diagram is a behavioral diagram that shows a set of use cases and actors and their relationship. It is an association between the use cases and actors. An actor represents a real-world object. Primary Actor – Sender, Secondary Actor Receiver.

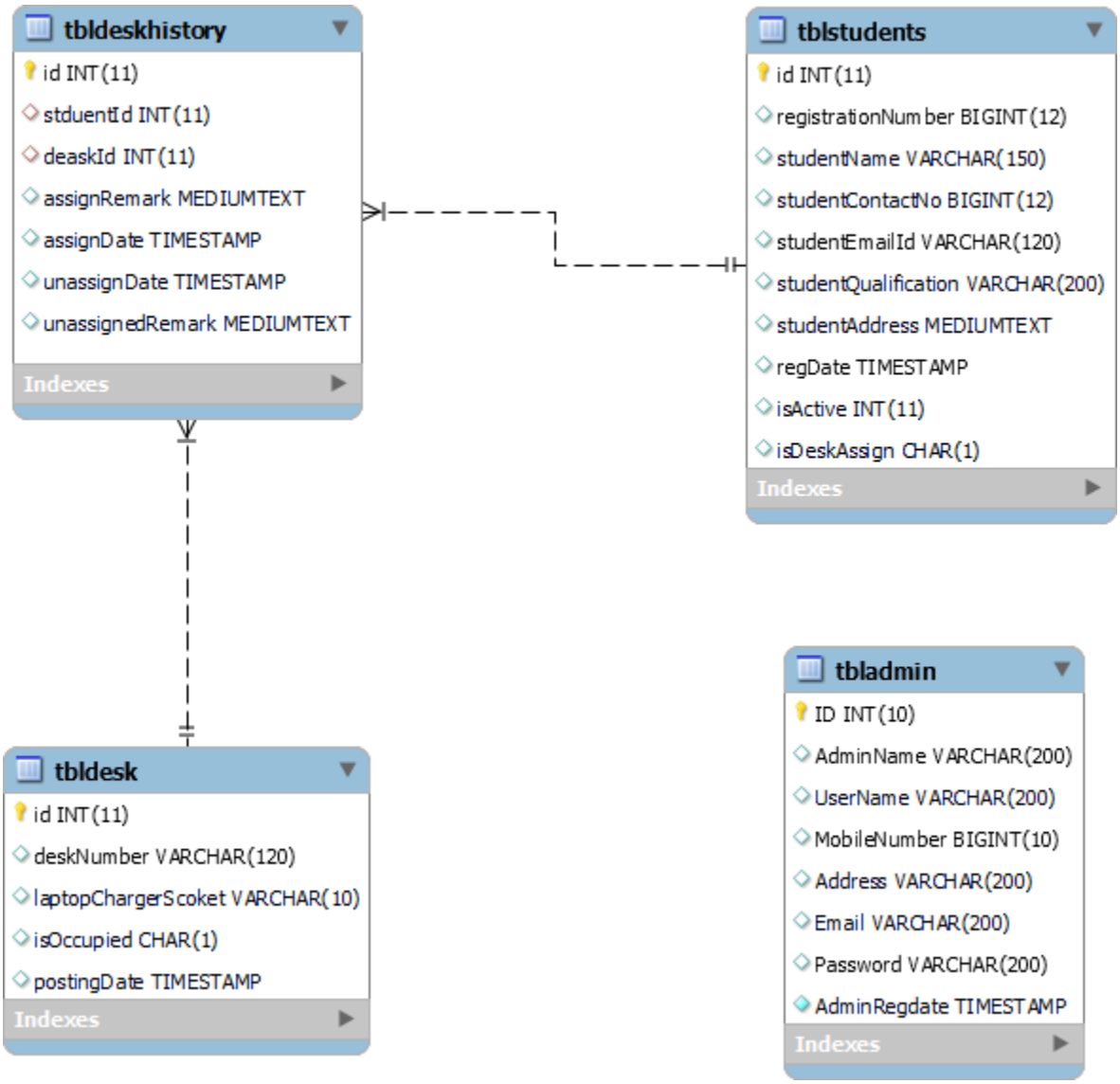
Use Case Diagrams:

Admin



Class Diagram:

A description of set of objects that share the same attributes operations, relationships, and semantics



ER Diagram:

The Entity-Relationship (ER) model was originally proposed by Peter in 1976 [Chen76] as a way to unify the network and relational database views. Simply stated the ER model is a conceptual data model that views the real world as entities and relationships. A basic component of the model is the Entity-Relationship diagram which is used to visually represent data objects. Since Chen wrote his paper the model has been extended and today it is commonly used for database design for the database designer, the utility of the ER model is:

- It maps well to the relational model. The constructs used in the ER model can easily be transformed into relational tables.
- It is simple and easy to understand with a minimum of training. Therefore, the model can be used by the database designer to communicate the design to the end user.
- In addition, the model can be used as a design plan by the database developer to implement a data model in specific database management software.

ER Notation

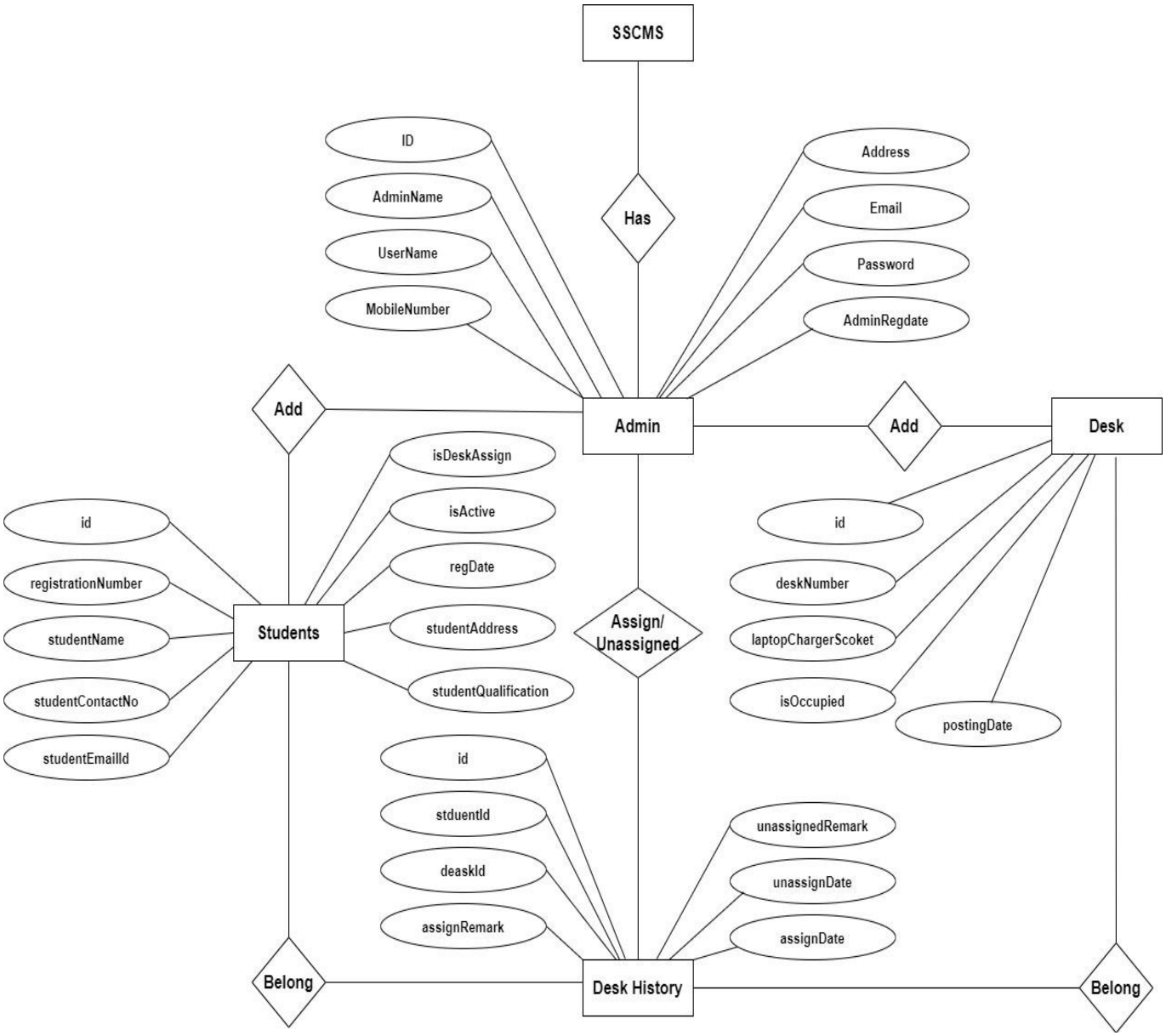
There is no standard for representing data objects in ER diagrams. Each modeling methodology uses its own notation. The original notation used by Chen is widely used in academics texts and journals but rarely seen in either CASE tools or publications by non-academics. Today, there are a number of notations used; among the more common are Bachman, crow's foot, and IDEFIX.

All notational styles represent entities as rectangular boxes and relationships as lines connecting boxes. Each style uses a special set of symbols to represent the

cardinality of a connection. The notation used in this document is from Martin. The symbols used for the basic ER constructs are:

- **Entities** are represented by labeled rectangles. The label is the name of the entity. Entity names should be singular nouns.
- **Relationships** are represented by a solid line connecting two entities. The name of the relationship is written above the line. Relationship names should be verbs
- **Attributes**, when included, are listed inside the entity rectangle. Attributes which are identifiers are underlined. Attribute names should be singular nouns.
- **Cardinality** of many is represented by a line ending in a crow's foot. If the crow's foot is omitted, the cardinality is one.

Existence is represented by placing a circle or a perpendicular bar on the line. Mandatory existence is shown by the bar (looks like a 1) next to the entity for an instance is required. Optional existence is shown by placing a circle next to the entity that is optional.


SSCMS
Has
ID
AdminName
UserName
MobileNumber
Address
Email
Password
AdminRegdate
Admin
Add
Add
Desk
Students
Assign/
Unassigned
Belong
Belong
Desk History
id
registrationNumber
studentName
studentContactNo
studentEmailId
isDeskAssign
isActive
regDate
studentAddress
studentQualification
id
deskNumber
laptopChargerScoket
isOccupied
postingDate
id
stduentId
deaskId
assignRemark
unassignedRemark
unassignDate
assignDate

Data Flow Diagrams

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It can be manual, automated, or a combination of both.

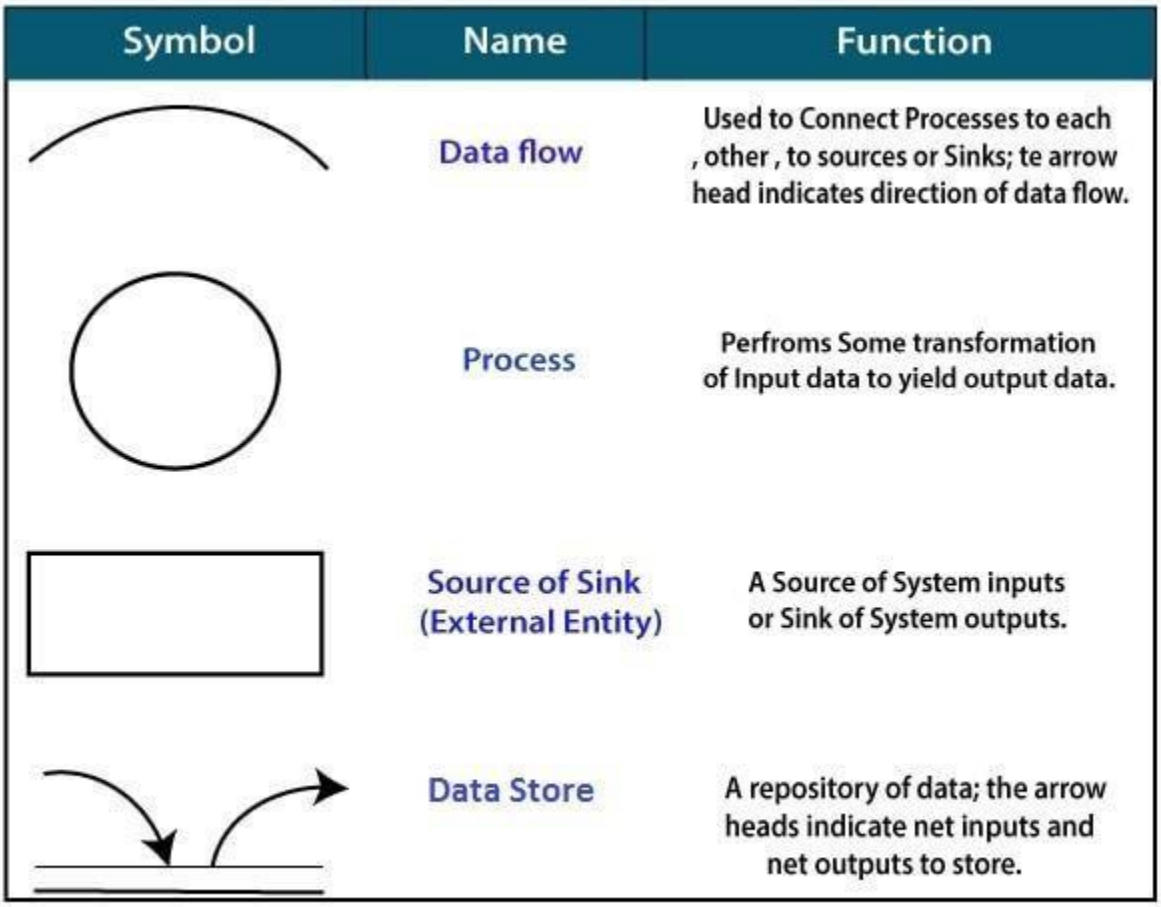
It shows how data enters and leaves the system, what changes the information, and where data is stored.

The objective of a DFD is to show the scope and boundaries of a system as a whole. It may be used as a communication tool between a system analyst and any person who plays a part in the order that acts as a starting point for redesigning a system. The DFD is also called as a data flow graph or bubble chart.

The following observations about DFDs are essential:

1. All names should be unique. This makes it easier to refer to elements in the DFD.
2. Remember that DFD is not a flow chart. Arrows is a flow chart that represents the order of events; arrows in DFD represents flowing data. A DFD does not involve any order of events.
3. Suppress logical decisions. If we ever have the urge to draw a diamond-shaped box in a DFD, suppress that urge! A diamond-shaped box is used in flow charts to represents decision points with multiple exists paths of which the only one is taken. This implies an ordering of events, which makes no sense in a DFD.
4. Do not become bogged down with details. Defer error conditions and error handling until the end of the analysis.

Standard symbols for DFDs are derived from the electric circuit diagram analysis and are shown in fig:



Symbols for Data Flow Diagrams

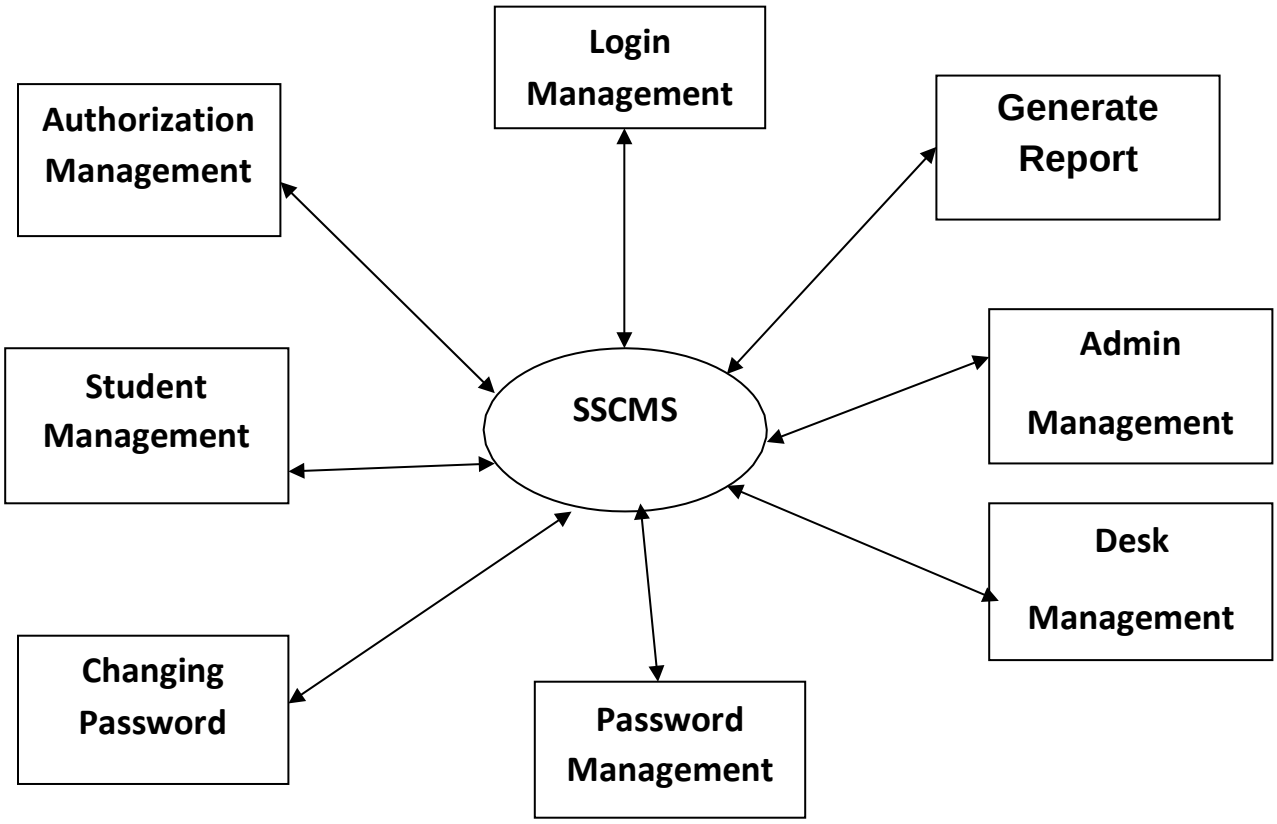
Circle: A circle (bubble) shows a process that transforms data inputs into data outputs.

Data Flow: A curved line shows the flow of data into or out of a process or data store.

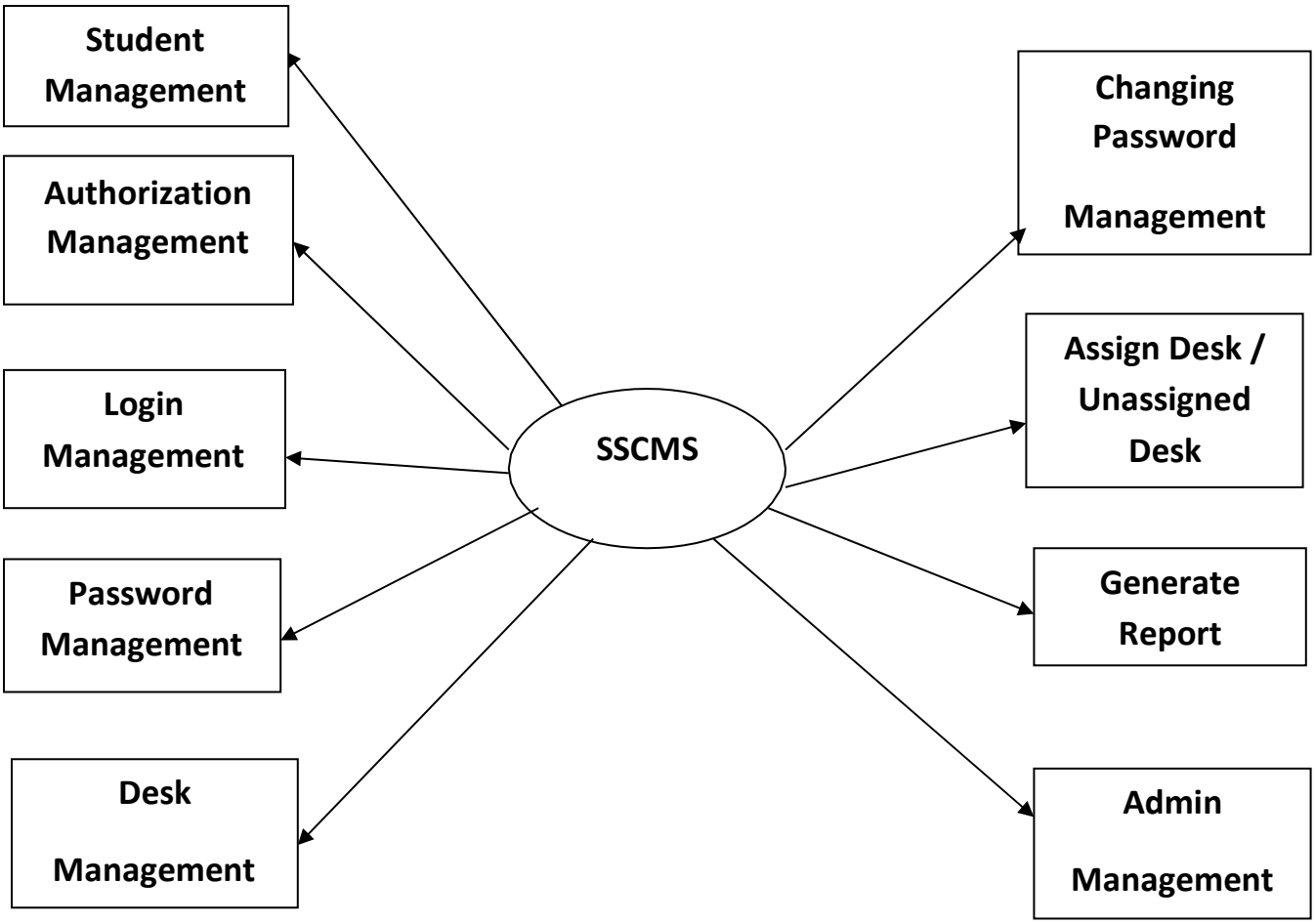
Data Store: A set of parallel lines shows a place for the collection of data items. A data store indicates that the data is stored which can be used at a later stage or by the other processes in a different order. The data store can have an element or group of elements.

Source or Sink: Source or Sink is an external entity and acts as a source of system inputs or sink of system outputs.

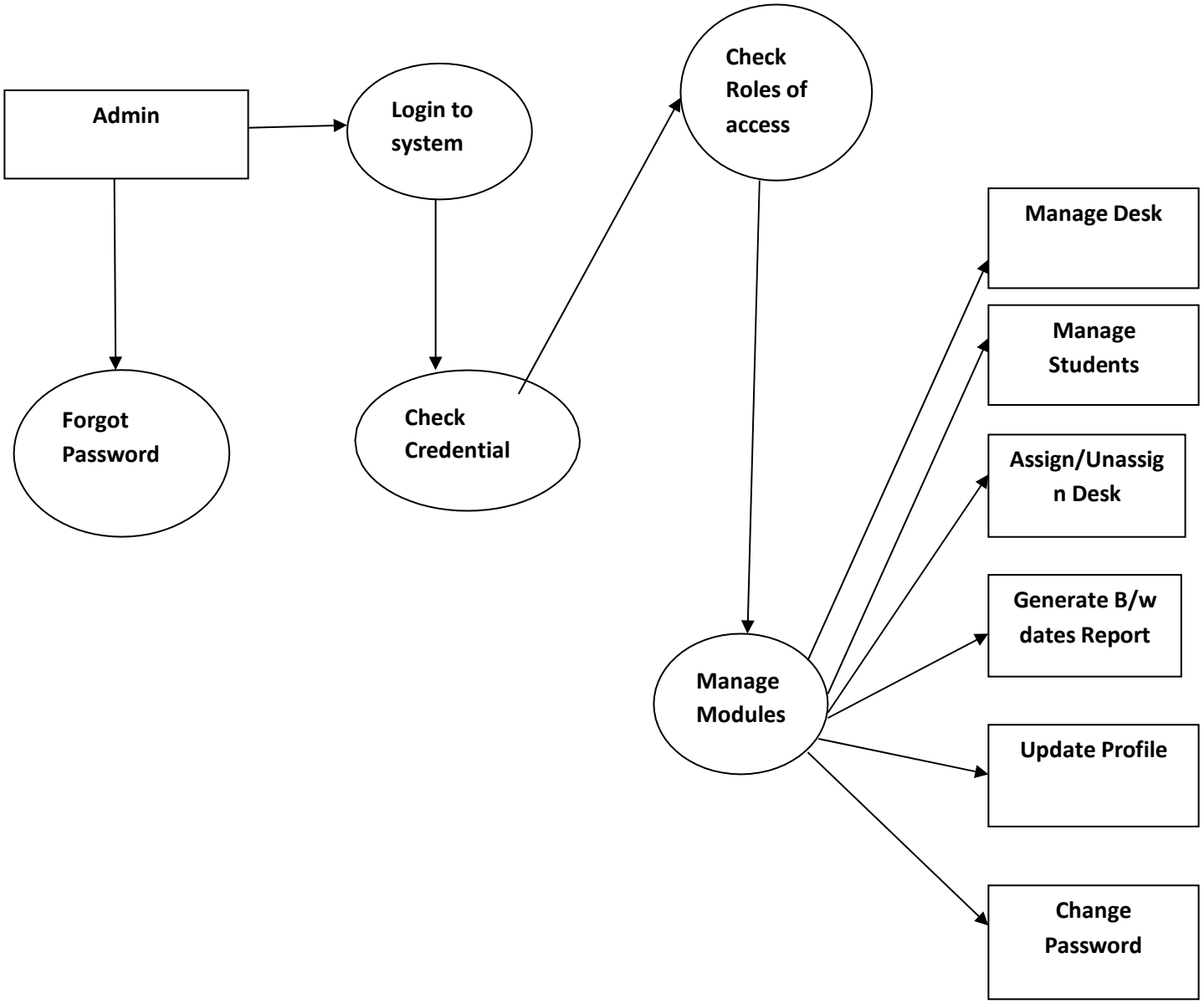
Zero Level DFD



Frist Level


Student Management
Authorization Management
Login Management
Password Management
Desk Management
SSCMS
Changing Password Management
Assign Desk / Unassigned Desk
Generate Report
Admin Management

Second Level DFD



MySQL Data Tables:

Admin Table :(Table name is admin)

This table stores admin login details.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(10)			No	*None*		AUTO_INCREMENT
2	AdminName	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
3	UserName	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
4	MobileNumber	bigint(10)			Yes	*NULL*		
5	Address	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
6	Email	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
7	Password	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
8	AdminRegdate	timestamp			No	current_timestamp()		

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	ID	1	A	No	

Desk Table: (Table name is tbldesk)

This table stores the details of desk which is available in study center.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	id	int(11)			No	*None*		AUTO_INCREMENT
2	deskNumber	varchar(120)	utf8mb4_general_ci		Yes	*NULL*		
3	laptopChargerScoket	varchar(10)	utf8mb4_general_ci		Yes	*NULL*		
4	isOccupied	char(1)	utf8mb4_general_ci		Yes	*NULL*		
5	postingDate	timestamp			Yes	current_timestamp()		

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	id	7	A	No	

Students Table: (Table name is tblstudents)

This table stores the details of students which study in study centers.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	**id**	int(11)			No	*None*		AUTO_INCREMENT
2	**registrationNumber**	bigint(12)			Yes	*NULL*		
3	**studentName**	varchar(150)	utf8mb4_general_ci		Yes	*NULL*		
4	**studentContactNo**	bigint(12)			Yes	*NULL*		
5	**studentEmailId**	varchar(120)	utf8mb4_general_ci		Yes	*NULL*		
6	**studentQualification**	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
7	**studentAddress**	mediumtext	utf8mb4_general_ci		Yes	*NULL*		
8	**regDate**	timestamp			Yes	current_timestamp()		
9	**isActive**	int(11)			Yes	*NULL*		
10	**isDeskAssign**	char(1)	utf8mb4_general_ci		Yes	*NULL*		

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	id	5	A	No	

Desk History Table: (Table name is tbldeskhistory)

This table stores the details of desk status.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	**id**	int(11)			No	*None*		AUTO_INCREMENT
2	**stduentId**	int(11)			Yes	*NULL*		
3	**deaskId**	int(11)			Yes	*NULL*		
4	**assignRemark**	mediumtext	utf8mb4_general_ci		Yes	*NULL*		
5	**assignDate**	timestamp			Yes	current_timestamp()		
6	**unassignDate**	timestamp			Yes	*NULL*		ON UPDATE CURRENT_TIMESTAMP()
7	**unassignedRemark**	mediumtext	utf8mb4_general_ci		Yes	*NULL*		

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	id	5	A	No	

Implementation and System Testing

After all phase have been perfectly done, the system will be implemented to the server and the system can be used.

System Testing

The goal of the system testing process was to determine all faults in our project .The program was subjected to a set of test inputs and many explanations were made and based on these explanations it will be decided whether the program behaves as expected or not. Our Project went through two levels of testing

1. Unit testing
2. Integration testing

UNIT TESTING

Unit testing is commenced when a unit has been created and effectively reviewed .In order to test a single module we need to provide a complete environment i.e. besides the section we would require

- The procedures belonging to other units that the unit under test calls
- Non local data structures that module accesses
- A procedure to call the functions of the unit under test with appropriate parameters.

1. Test for the admin module

- **Testing admin login form-**This form is used for log in of administrator of the system. In this form we enter the username and password if both are correct administration page will open otherwise if any of data is wrong it will get redirected back to the login page and again ask the details.

- **Report Generation:** admin can generate report from the main database.

INTEGRATION TESTING

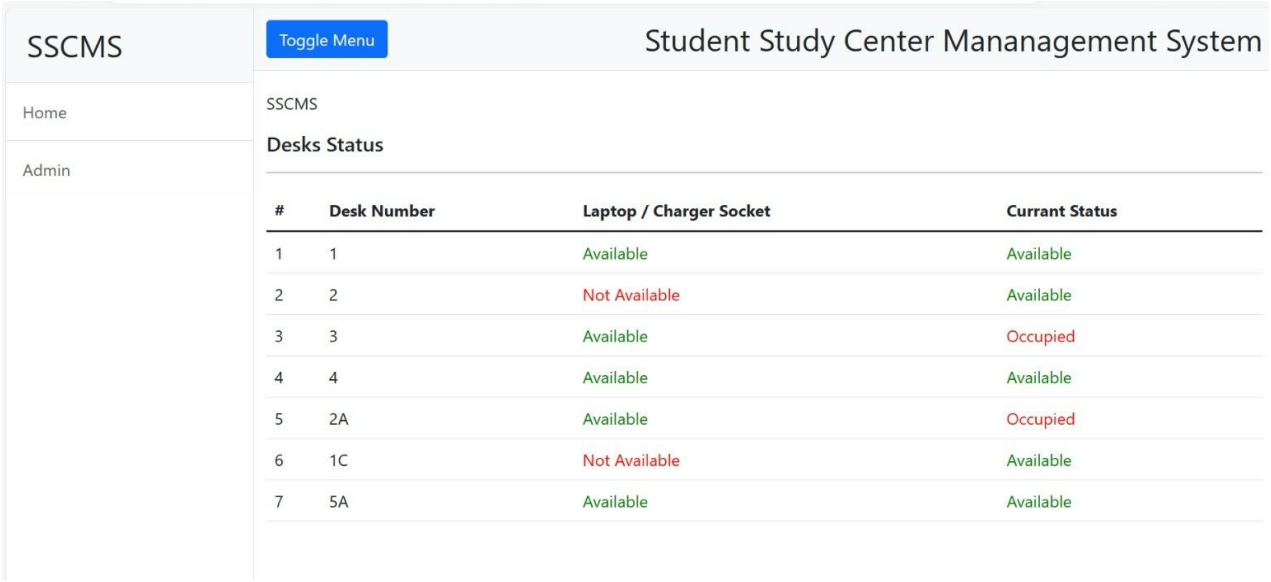
In the Integration testing we test various combination of the project module by providing the input.

The primary objective is to test the module interfaces in order to confirm that no errors are occurring when one module invokes the other module.

Evaluation (Project Output Screens)

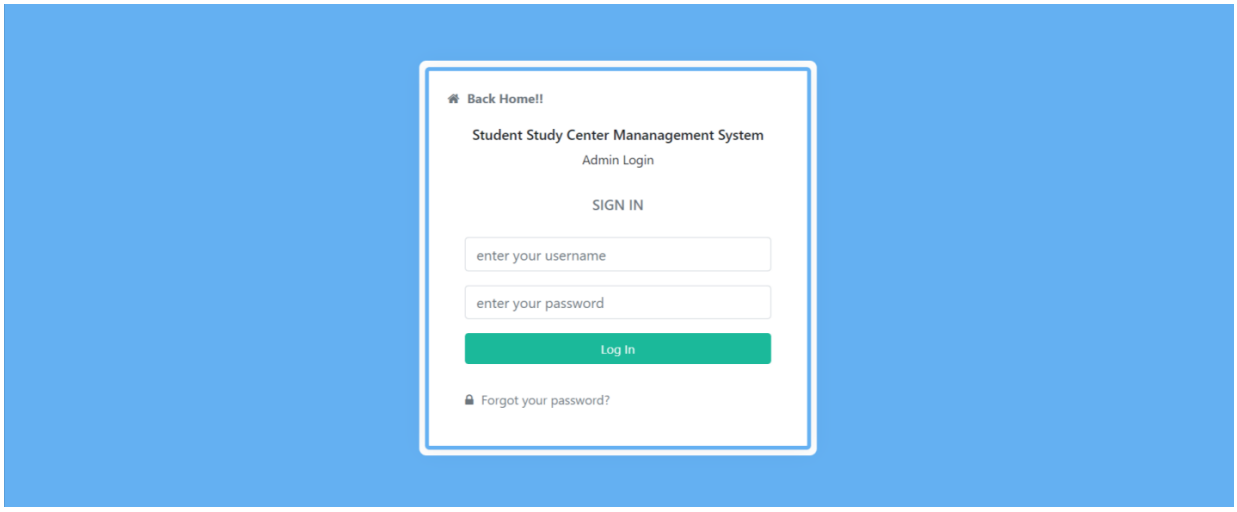
Project URL: http://localhost/sscms

Home Page

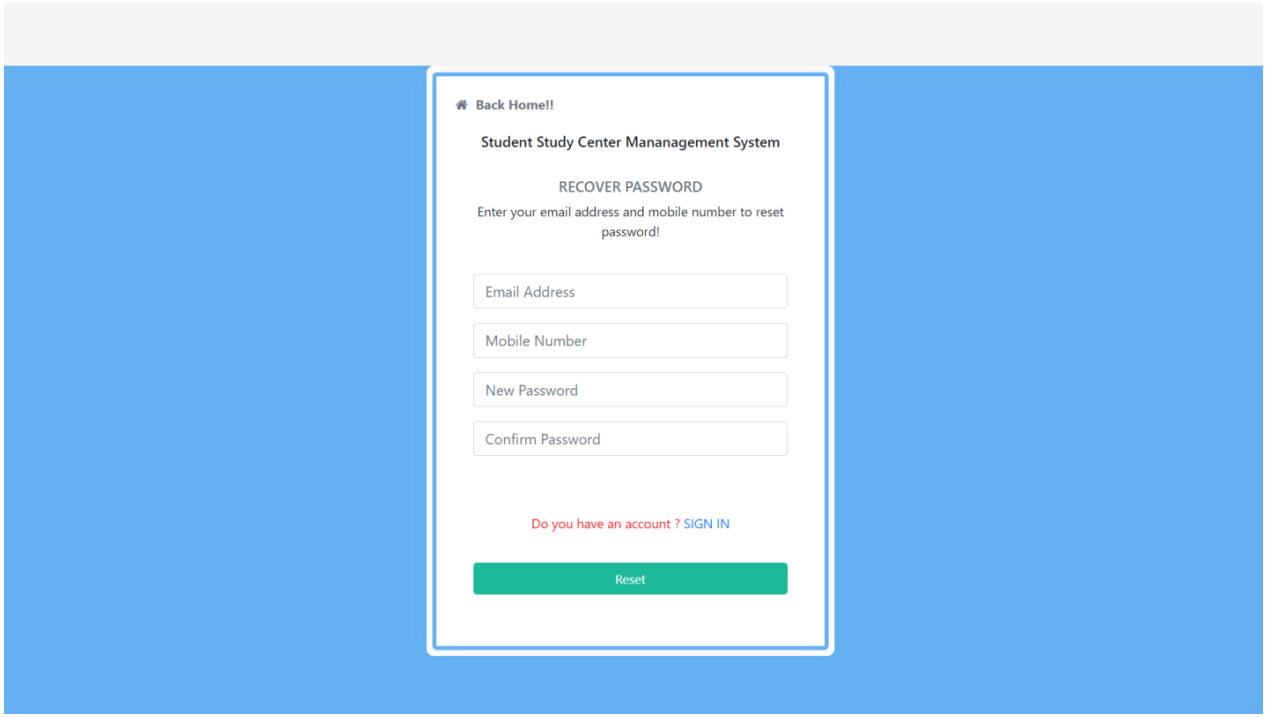


Admin Panel

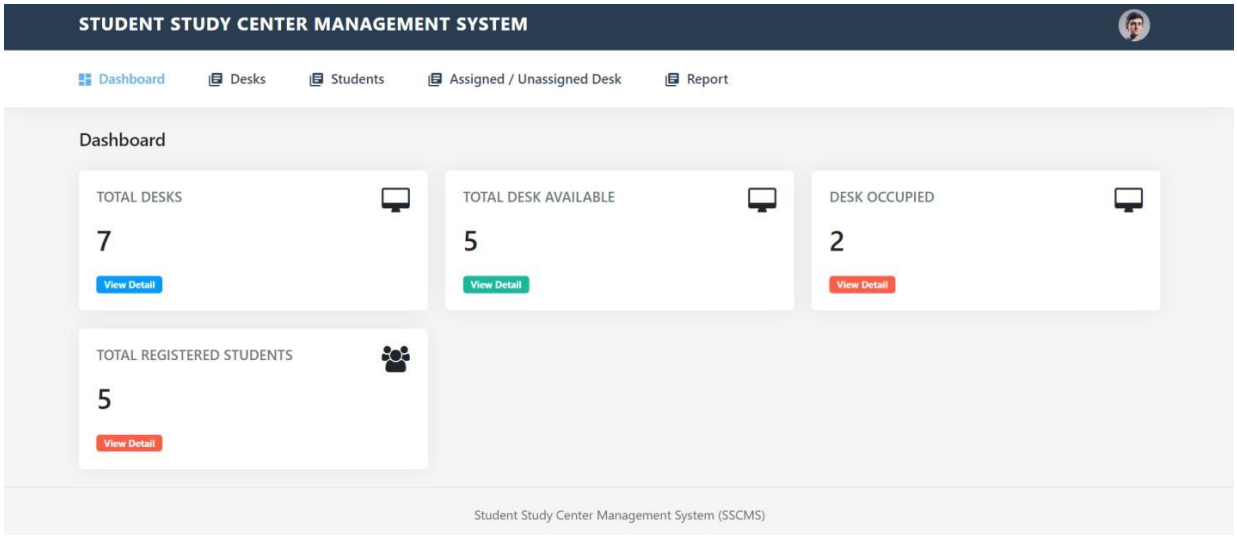
Login Page



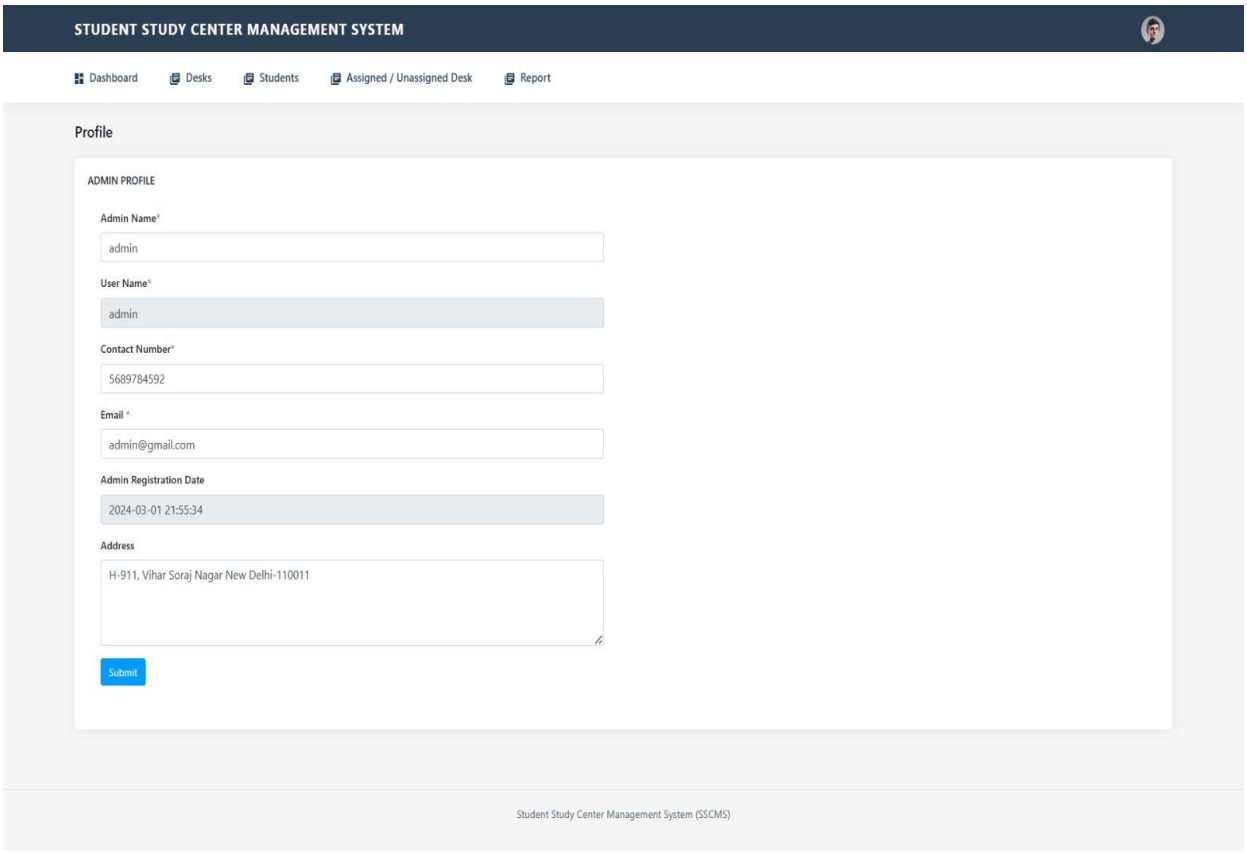
Forgot Password



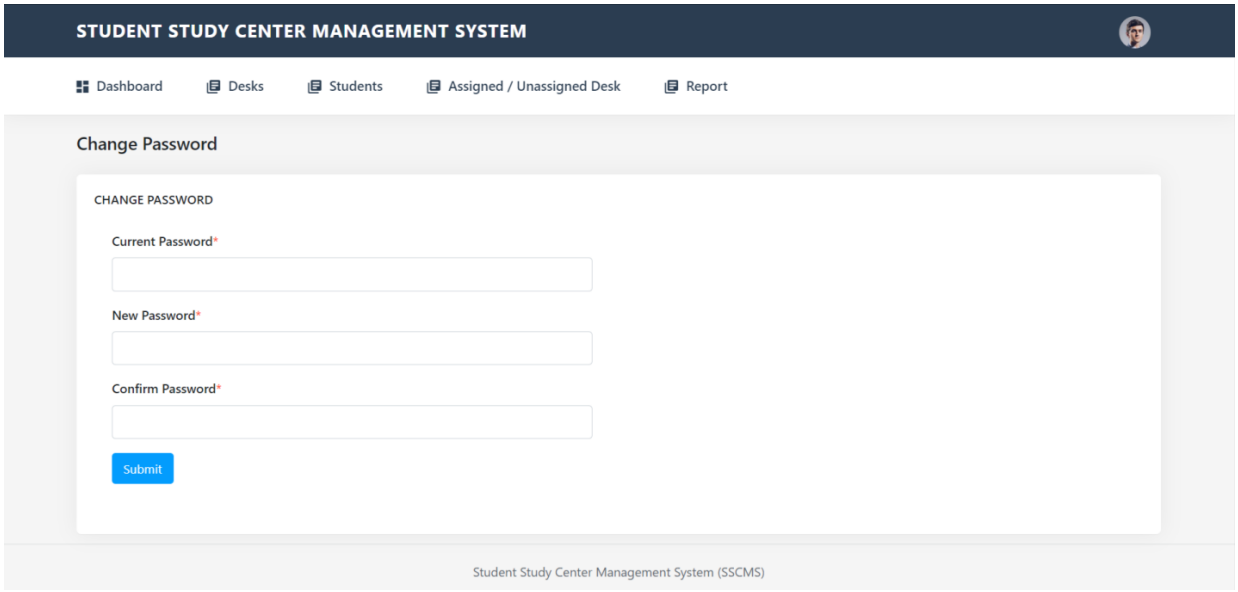
Dashboard



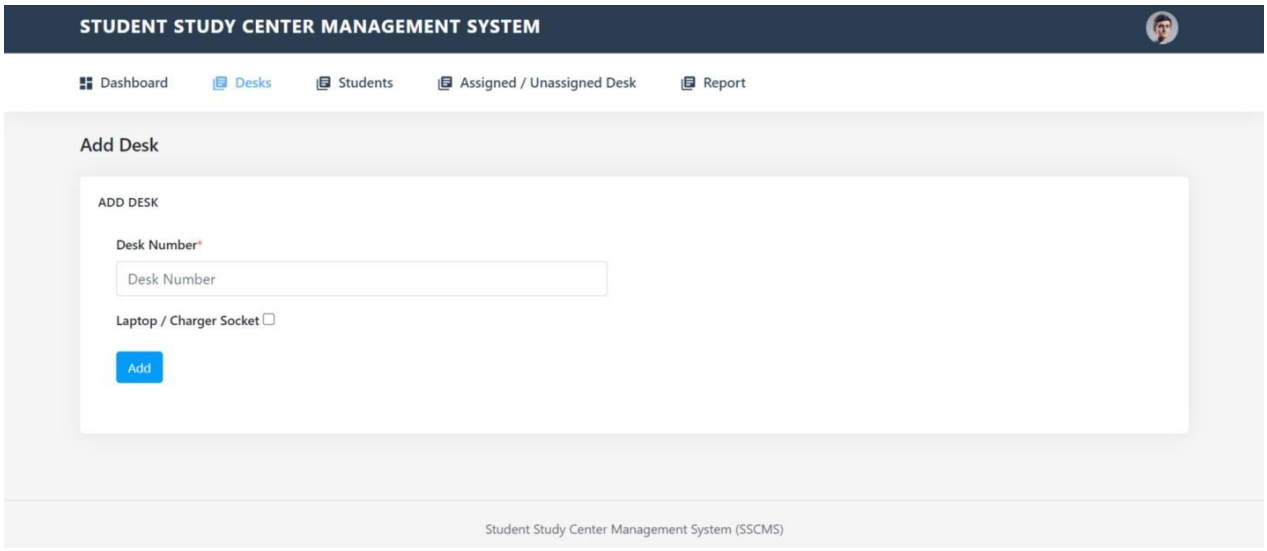
Profile



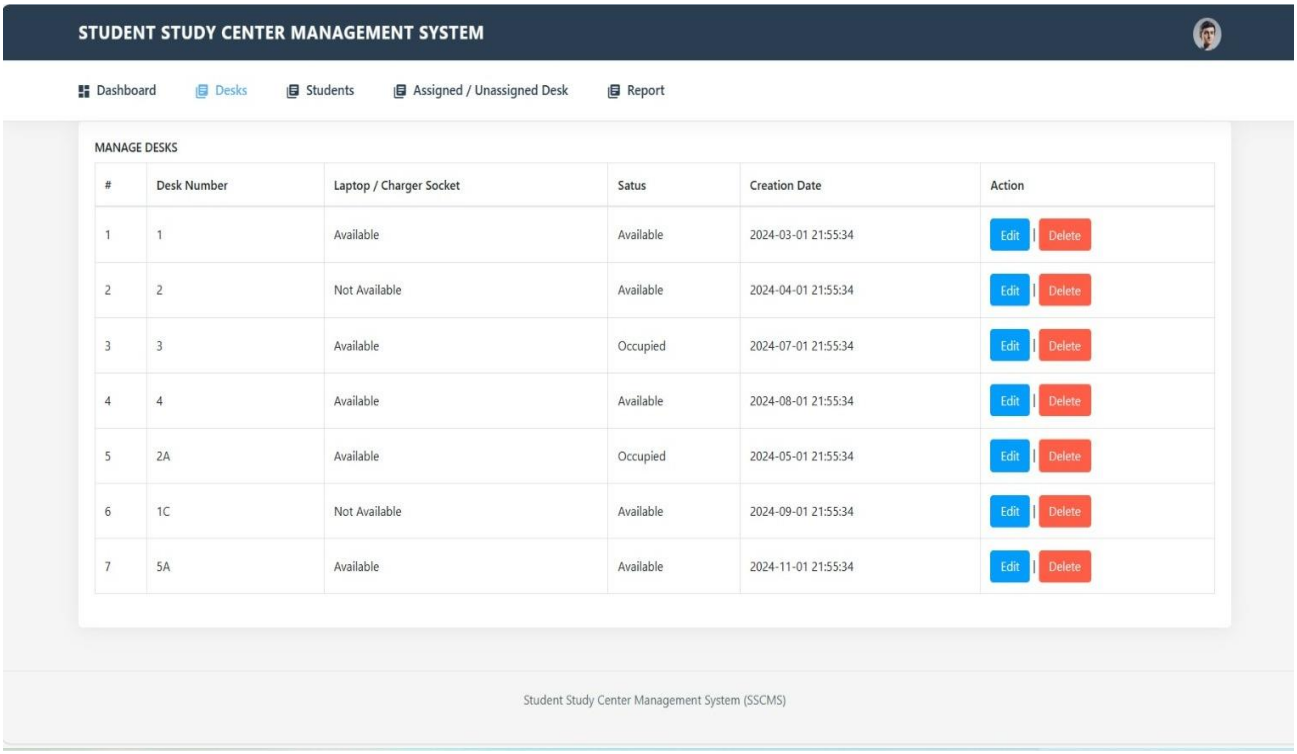
Change Password



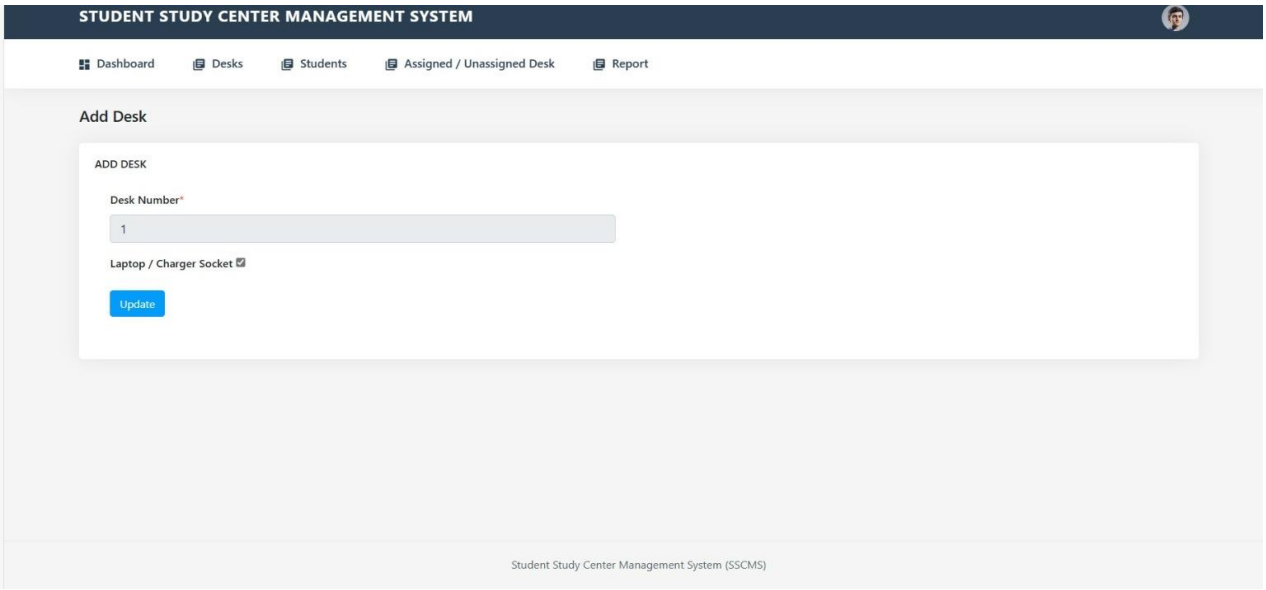
Add Desk



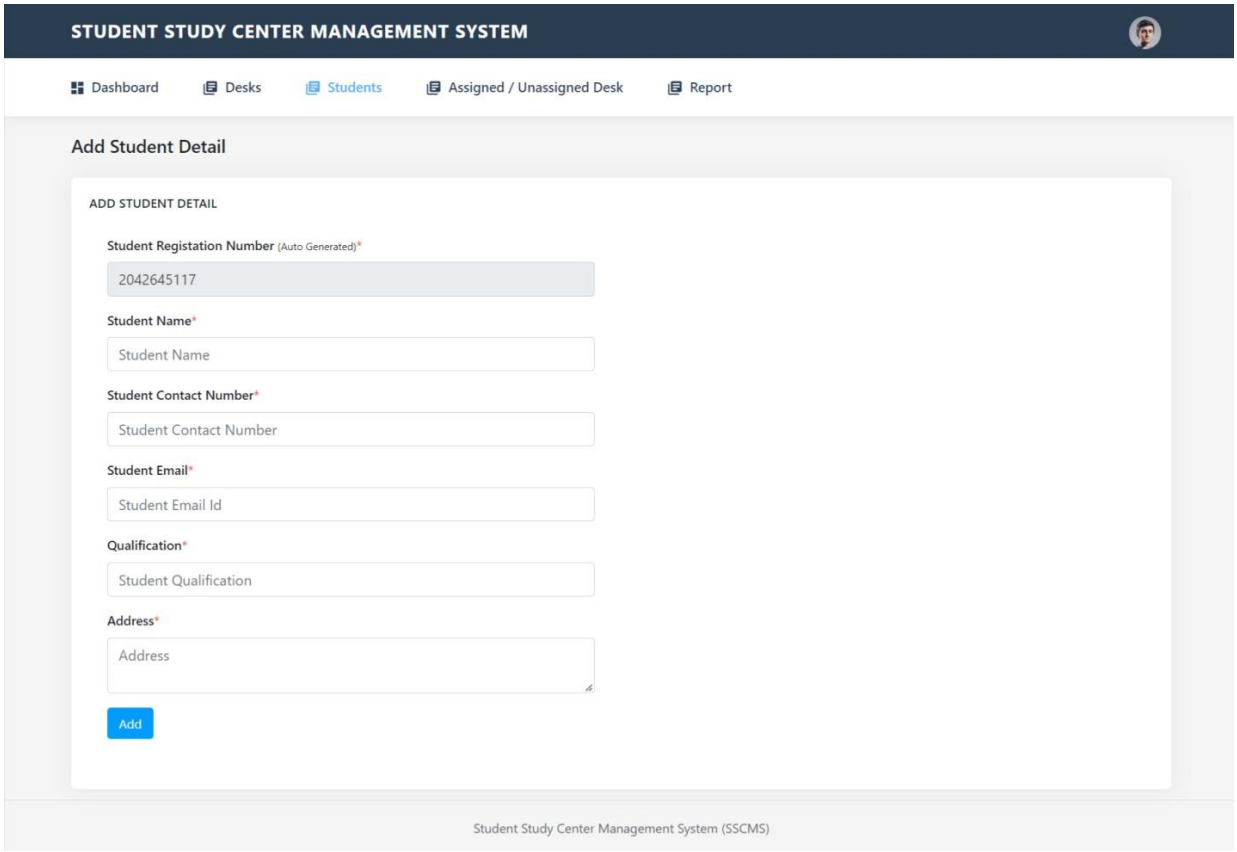
Manage Desk



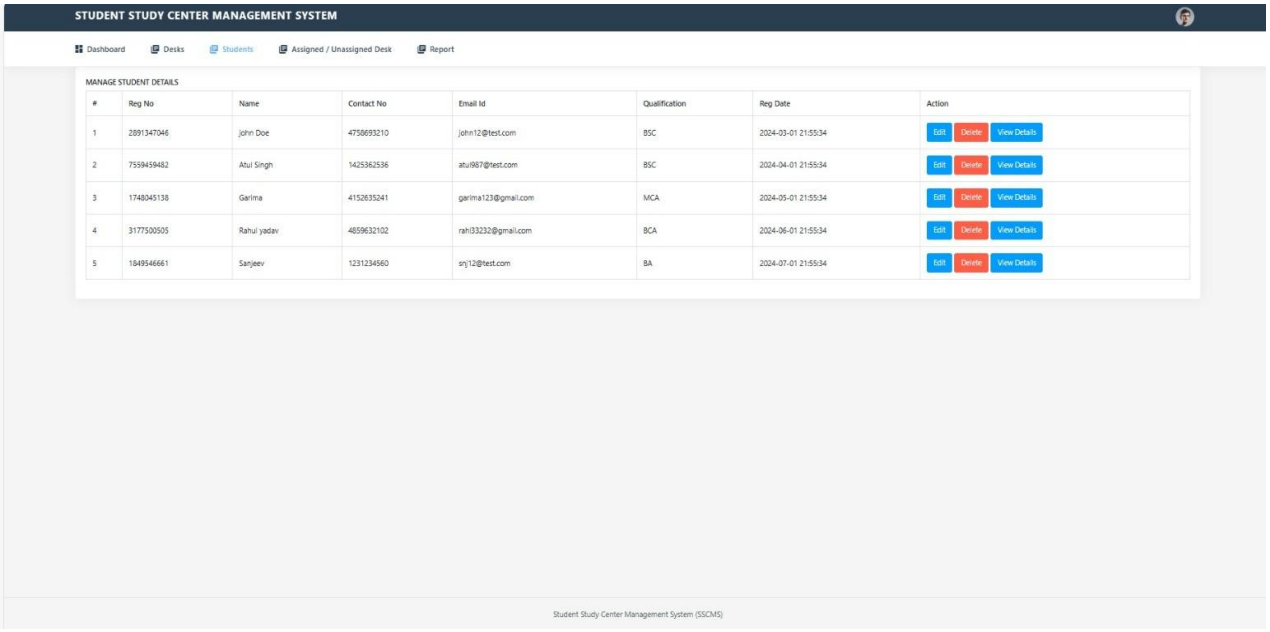
Update Desk



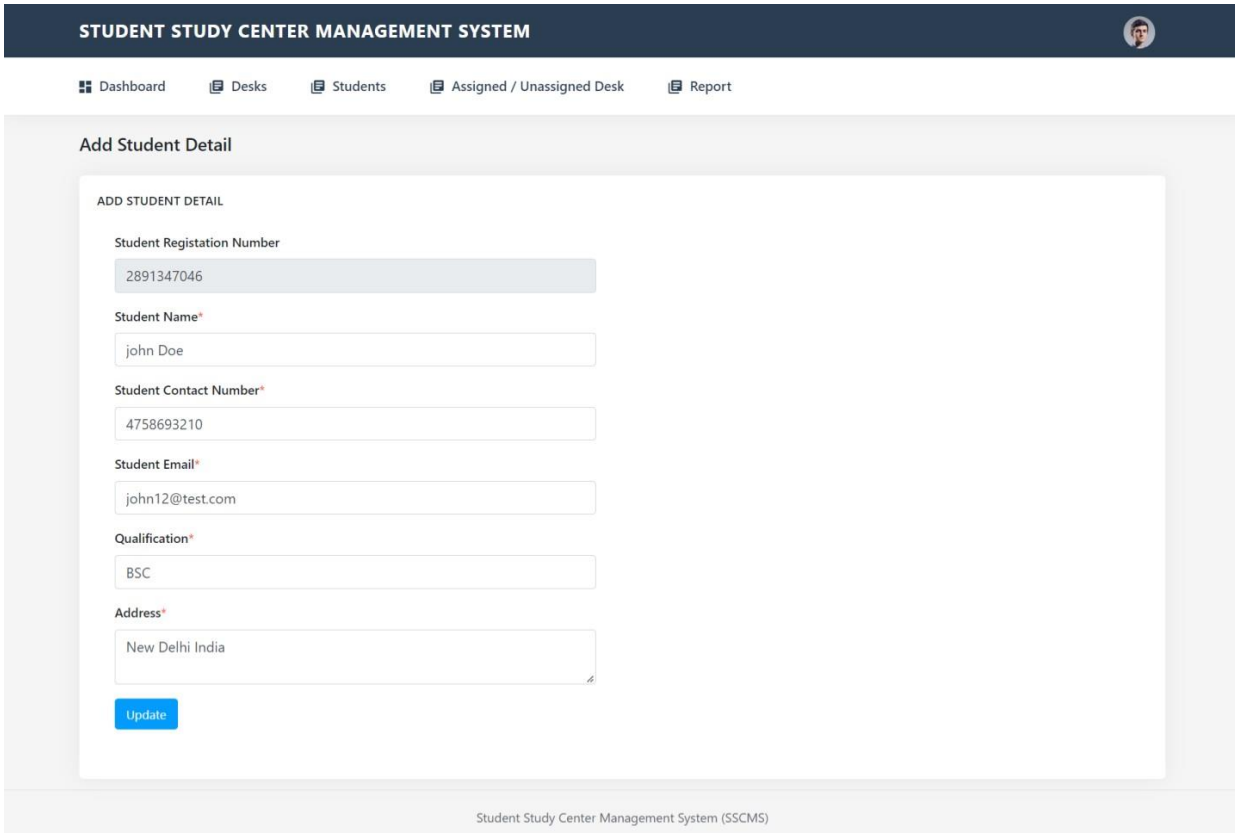
Add Students



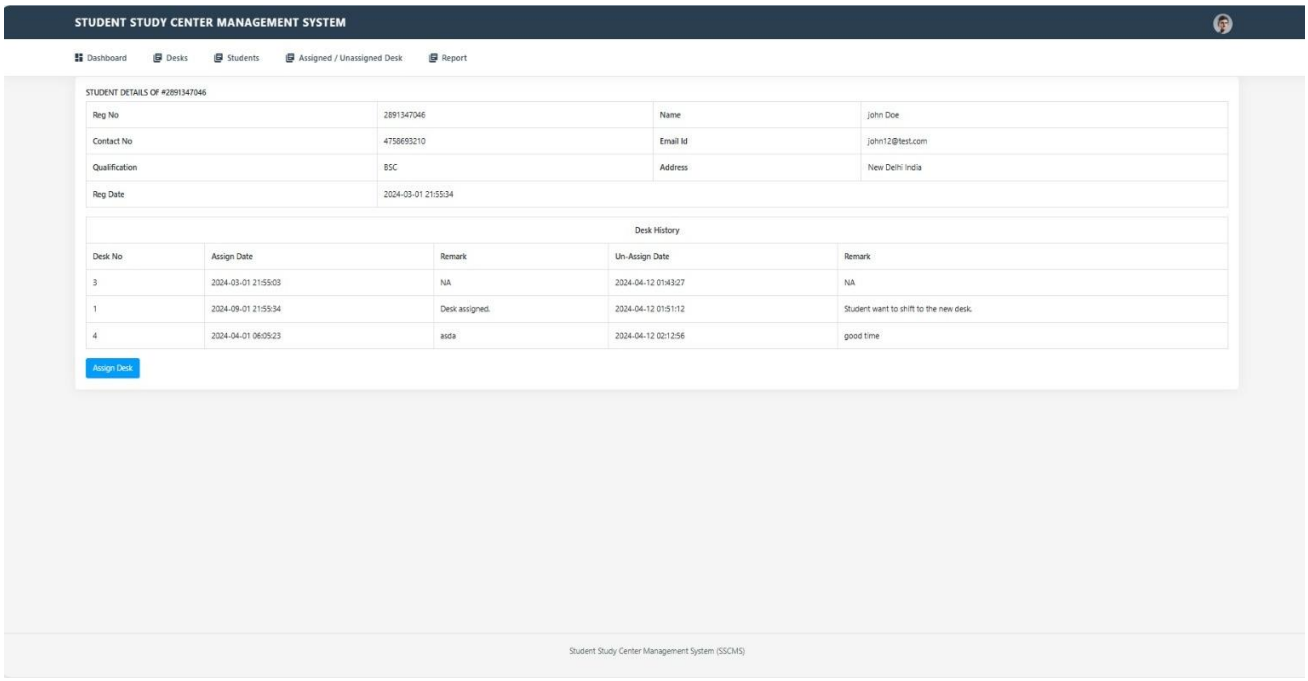
Manage Students



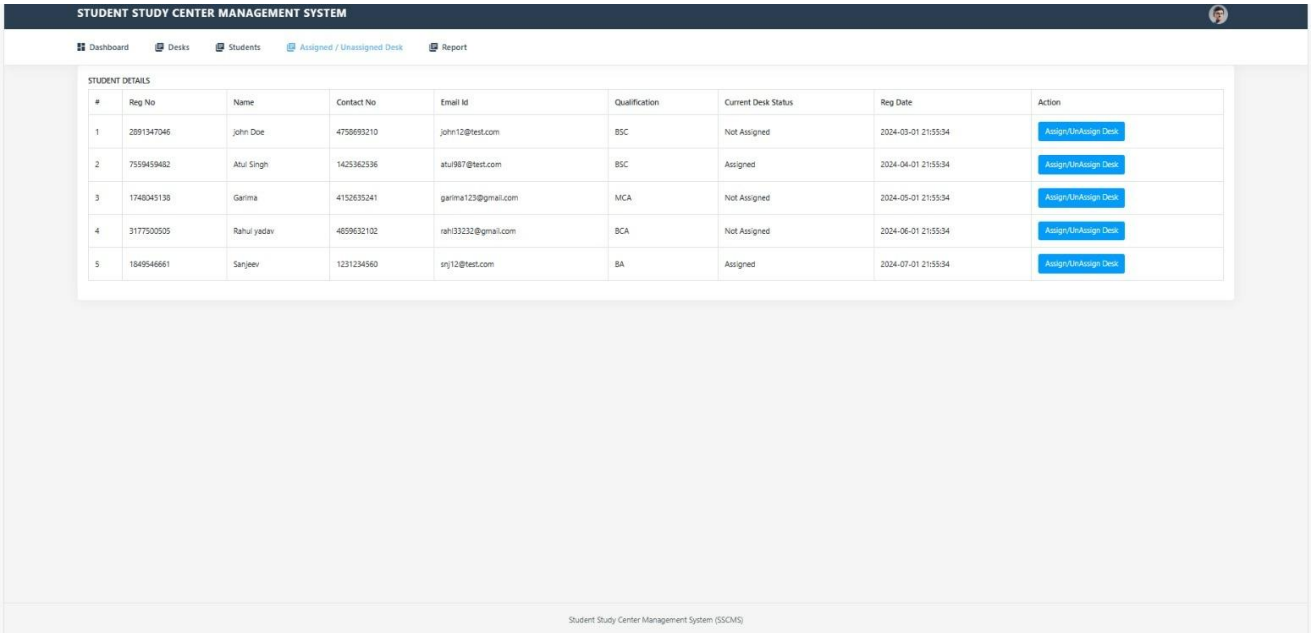
Update Students Details



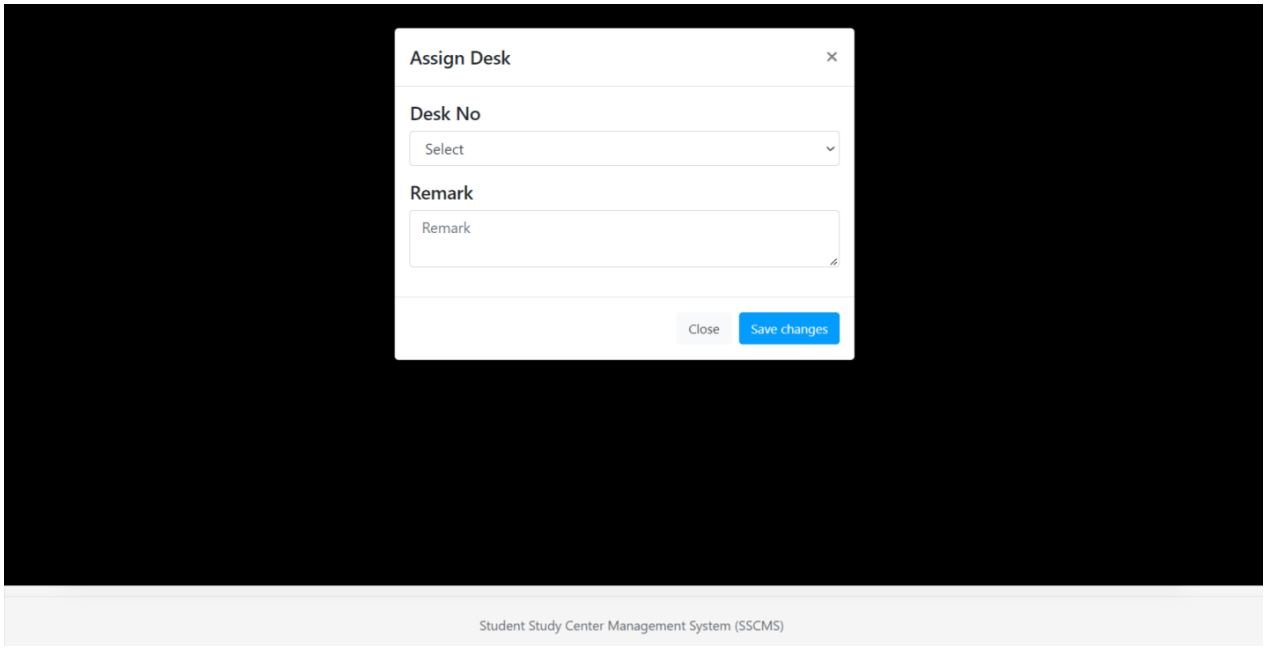
View Students Details



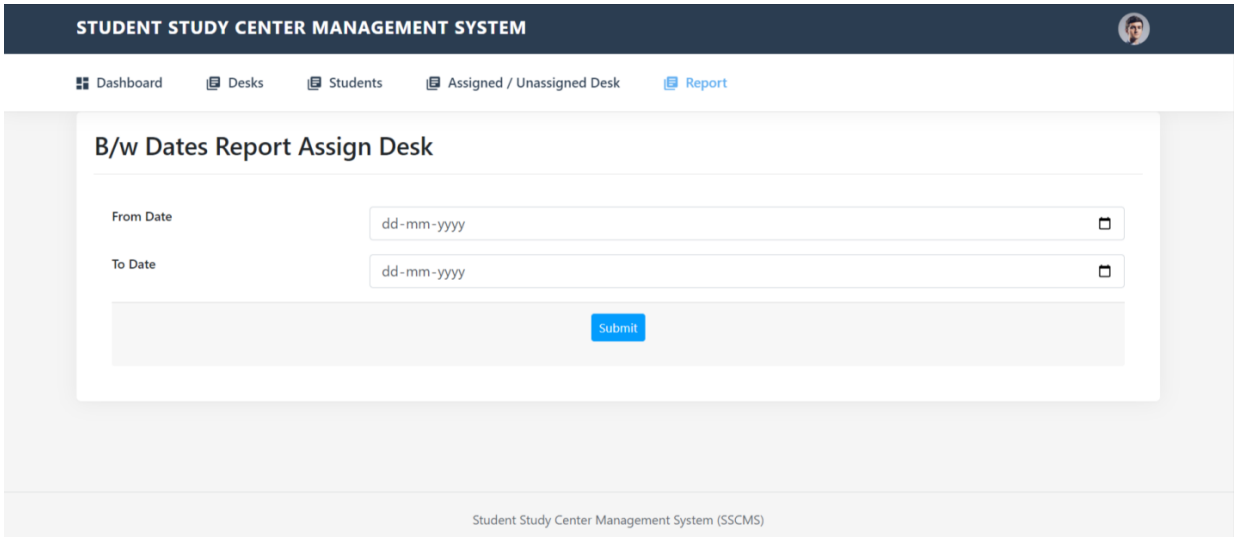
Assigned/Unassigned Desk



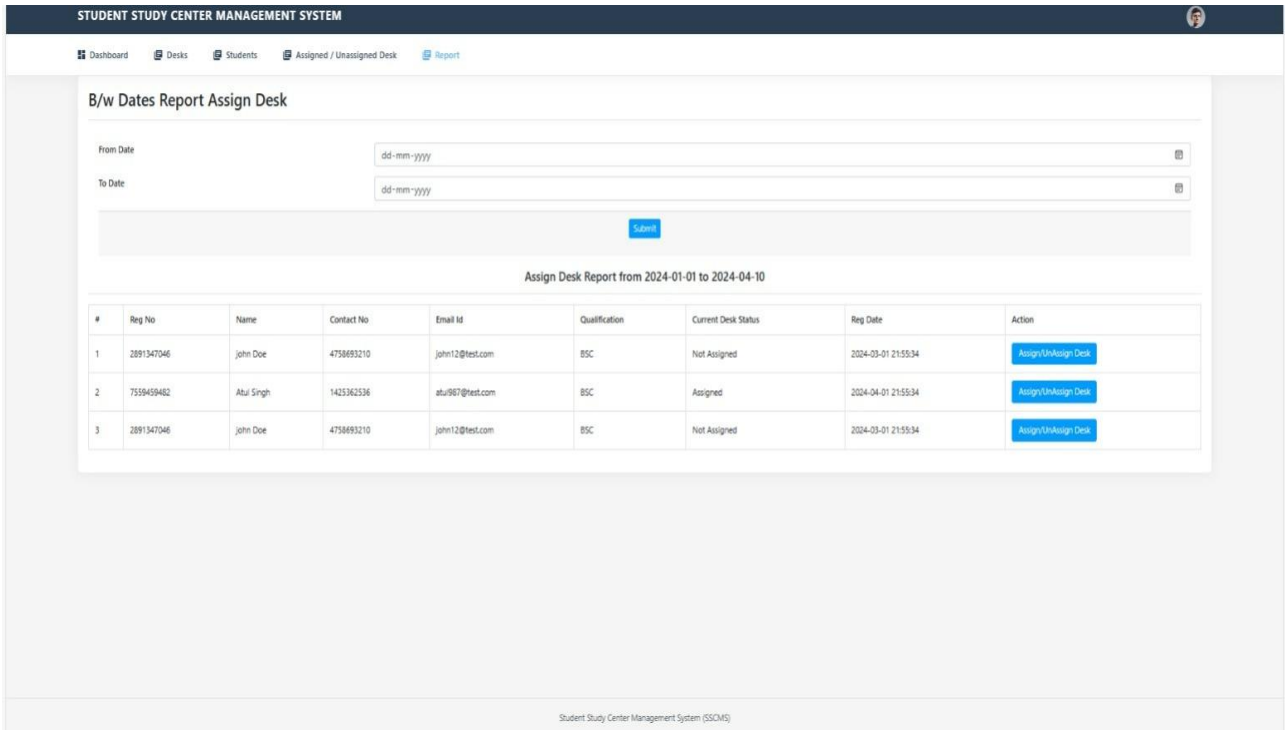
Assign Desk



Between Dates Report of Assign Desk



View Between Dates Report of Assign Desk



Conclusion

This Application provides an online version of Student Study Center Management System which will benefit the study centers who want to maintain records of student's details and assigned desk to student without wasting a time and apply with their convenience.

It makes entire process online and can generate reports.

The Application was designed in such a way that future changes can be done easily. The following conclusions can be deduced from the development of the project.

- Automation of the entire system improves the productivity.
- It provides a friendly graphical user interface which proves to be better when compared to the existing system.
- It gives appropriate access to the authorized users depending on their permissions.
- It effectively overcomes the delay in communications.
- Updating of information becomes so easier.
- System security, data security and reliability are the striking features.
- The System has adequate scope for modification in future if it is necessary.

References

For PHP

- https://www.w3schools.com/php/default.asp
- https://www.sitepoint.com/php/
- https://www.php.net/

For MySQL

- https://www.mysql.com/
- http://www.mysqltutorial.org

For XAMPP

- https://www.apachefriends.org/download.html

PROJECT REPORT

ON

ONLINE MARRIAGE REGISTRATION SYSTEM

Submitted in partial fulfillment of the requirements for the award of degree of

M.Sc (CS)

TO

SHANTI DEVI ARYA MAHILA COLLEGE

DINANAGAR

Submitted To:-

Mrs. Shivali Saini

Assistant Professor

Deptt. Of Computer Science

Submitted By:

Bishali

(20672225410)

Anjali

(20672225409)

POST GRADUATE DEPARTMENT OF COMPUTER SCIENCE

GURU NANAK DEV UNIVERSITY, AMRITSAR

Acknowledgement

With deep sense of gratitude we express our sincere thanks and obligation to our esteemed guide Mrs. Shivali Saini (Assistant Professor). It is because of his able and mature guidance and co-operation without which it would not have been possible for us to complete our project. We would also like to thank Dr. Deepak Jyoti, HOD, Post Graduate Deptt. of Computer Science, Shanti Devi Arya Mahila College, Dinanagar for providing the institute with an environment where one can use her intellect and creativity to develop something fruitful and also for allowing us the opportunity to experience dynamic professional environment during our Training. This environment facilitated us in pursuing this project. It is our pleasant duty to thank all the staff members of the Computer Department for their time to time suggestions. Finally, we would like to thank the almighty and our parents for their moral support and our friends with whom we shared our day-to-day experience and received lots of suggestions that improved our quality of work.

.

Bishali

20672225410

Anjali

20672225409

CERTIFICATE OF APPROVAL

This is certify that the project report entitled "**Online Marriage Registration System"** submitted to Shanti Devi Arya Mahila College, Dinanagar in partial fulfillment of the requirement for the award of degree of Msc(cs) (Master Of Computer Science) , is an authentic and original work carried out by Bishali (20672225410) Anjali (20672225409) under our guidance and supervision. The Post Graduate deptt. of Computer Science has accepted the report as the fulfillment of the requirements for the degree of Master of Computer Science. No part of this report has been submitted to any other College/University for the reward of any Degree to the best of our knowledge.

Mrs. Shivali Saini

Assistant Professor (Comp Sc.)
(Project Supervisor)
Shanti Devi Mahila College

Dinanagar

Dr. Deepak Jyoti

HOD, PG Department of Computer Sc.
Shanti Devi Arya Mahila
Dinanagar

DECLARATION

We hereby declare that this project report on " **Online Marriage Registration System** M.Sc (CS) to Shanti Devi Arya Mahila College, Dinanagar is the result of the work carried out by us, under the guidance of Mrs. Shivali Saini (Assistant Professor). Shanti Devi Arya College, Dinanagar.

Bishali
20672225410

Anjali
20672225409

Abstract

Online Marriage Registration System is responsible for keeping all the record of marriages. This system registers the marriage and generate marriage certificate.

The main objective of “Online Marriage Registration System” project is to providing easier registration of marriage and gets marriage certificate online which save lots of time.

Introduction

Introduction:-

Online Marriage Registration System is a web-based technology that will manage the records of the marriage and generate marriage certificate. It's an easy for Admin to retrieve the data of marriage couple. Online Marriage Registration System is an automatic system which delivers data processing in very high speed in systematic manner.

In Online Marriage Registration System we use PHP and MySQL Database. This project has two modules i.e. admin and user.

Admin Module

1. Dashboard: In this section, admin can briefly view the total number of the new applications, total verified application and total rejected the application.

2. Application: In this section, admin views the application details and they have also the right to change application status according to current status.

3. Reports: In this section admin can view the application details in a particular period.

4. Search: In this section, admin can search application with the help of user registration number

Admin can also update his profile, change the password and recover the password.

User Module

1. Dashboard: In this section, user can view the welcome page of the web application.

2. Registration Form: In this section, user can fill the form of marriage registration.

3. View Marriage Application: In this section, user can take print of verified certificates of marriage.

Purpose:-

The main purpose of developing Online Marriage Registration System is to computerized the tradition way of registering marriage. Another purpose for developing this application is to generate the report automatically. This software design specification is made with the purpose of outlining the software architecture and design of the Marriagr Registration System in detail.

Scope:

The Software design document would demonstrate how the design will accomplish the functional and non- functional requirements captured in the Software Requirement specification (SRS). The document will provide a framework to the programmers through describing the high level components and architecture, sub systems, interfaces, database design and algorithm design. This is achieved through the use of architectural patterns, design patterns, sequence diagrams, class diagrams, relational models and user interfaces

Requirement Specification

Hardware Configuration :

Client Side:

RAM	512 MB
Hard disk	10 GB
Processor	1.0 GHz

Server side:

RAM	**1 GB**
Hard disk	**20 GB**
Processor	**2.0 GHz**

Software Requirement:

Client Side:

Web Browser	Google Chrome or any compatible browser
Operating System	Windows or any equivalent OS

Server Side:

Web Server	APACHE
Server side Language	PHP5.6 or above version
Database Server	MYSQL
Web Browser	Google Chrome or any compatible browser
Operating System	Windows or any equivalent OS

APACHE

The Apache HTTP Server Project is an effort to develop and maintain an open-source HTTP server for modern operating systems including UNIX and Windows. The goal of this project is to provide a secure, efficient and extensible server that provides HTTP services in sync with the current HTTP standards.

The Apache HTTP Server ("httpd") was launched in 1995 and it has been the most popular web server on the Internet since April 1996. It has celebrated its 20th birthday as a project in February 2015.

PHP

- PHP stands for PHP: Hypertext Preprocessor.

- PHP is a server-side scripting language, like ASP.
- PHP scripts are executed on the server.
- PHP supports many databases (MYSQL, Informix, Oracle, Sybase, Solid, Generic ODBC, etc.).

- PHP is an open source software .

- PHP is free to download and use.

MYSQL

- MYSQL is a database server
- MYSQL is ideal for both small and large applications
- MYSQL supports standard SQL
- MYSQL compiles on a number of platforms

- MYSQL is free to download and use

- How to access MySQL:

  http://localhost/phpmyadmin

Feasibility analysis

The analysis of the requirement has lead to a conclusion that the project is feasible with respect to time and cost. The data collection from the field is assured by the client to provide. The technology used to develop is almost Open Source, therefore less cost for implementation and maintenance will be involved. A feasibility study is an analysis used in measuring the ability and likelihood to complete a project successfully including all relevant factors. It must account for factors that affect it such as economic, technological and time factors. It is used to assess the strengths and weaknesses of a proposed project and present directions of activities which will improve a project and achieve desired results.

Economic feasibility

The purpose of economic feasibility assessment is to determine the positive economic benefits to the organization that the proposed system will provide. The assessment typically involves a cost/benefits analysis.

Technical feasibility

Technical analysis is a trading tool employed to evaluate securities and attempt to forecast the future movement. I am using java language and other tools like net beans to develop the software.

Operational feasibility

Operational feasibility is a measure of how well proposed system solves the problems, and takes advantage of the opportunities identified during scope definition and how it satisfies the requirements analysis phase of the system development.

Analysis and Design

Analysis:

In present all marriage registration work done on the paper. The whole year data is stored in the registers. We can't generate reports as per our requirements because its take more time to calculate report of marriage.

Disadvantage of present system:

- **Not user friendly:** The present system not user friendly because data is not stored in structure and proper format.
- **Manual Control:** All report calculation is done manually so there is a chance of error.
- **Lots of paper work:** Visitors maintain in the register so lots of paper require storing details.
- **Time consuming**

Design Introduction:

Design is the first step in the development phase for any techniques and principles for the purpose of defining a device, a process or system in sufficient detail to permit its physical realization.

Once the software requirements have been analyzed and specified the software design involves three technical activities - design, coding, implementation and testing that are required to build and verify the software.

The design activities are of main importance in this phase, because in this activity, decisions ultimately affecting the success of the software implementation and its ease of maintenance are made. These decisions have the final bearing upon reliability and maintainability of the system. Design is the only way to accurately translate the customer's requirements into finished software or a system.

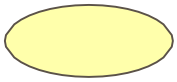
Design is the place where quality is fostered in development. Software design is a process through which requirements are translated into a representation of software. Software design is conducted in two steps. Preliminary design is concerned with the transformation of requirements into data

UML Diagrams:

Actor:

A coherent set of roles that users of use cases play when interacting with the use `cases.

Use case:A description of sequence of actions, including variants, that a system performs that yields an observable result of value of an actor.



UML stands for Unified Modeling Language. UML is a language for specifying, visualizing and documenting the system. This is the step while developing any product after analysis. The goal from this is to produce a model of the entities involved in the project which later need to be built. The representation of the entities that are to be used in the product being developed need to be designed.

USECASE DIAGRAMS:

Use case diagrams model behavior within a system and helps the developers understand of what the user require. The stick man represents what's called an actor.

Use case diagram can be useful for getting an overall view of the system and clarifying who can do and more importantly what they can't do.

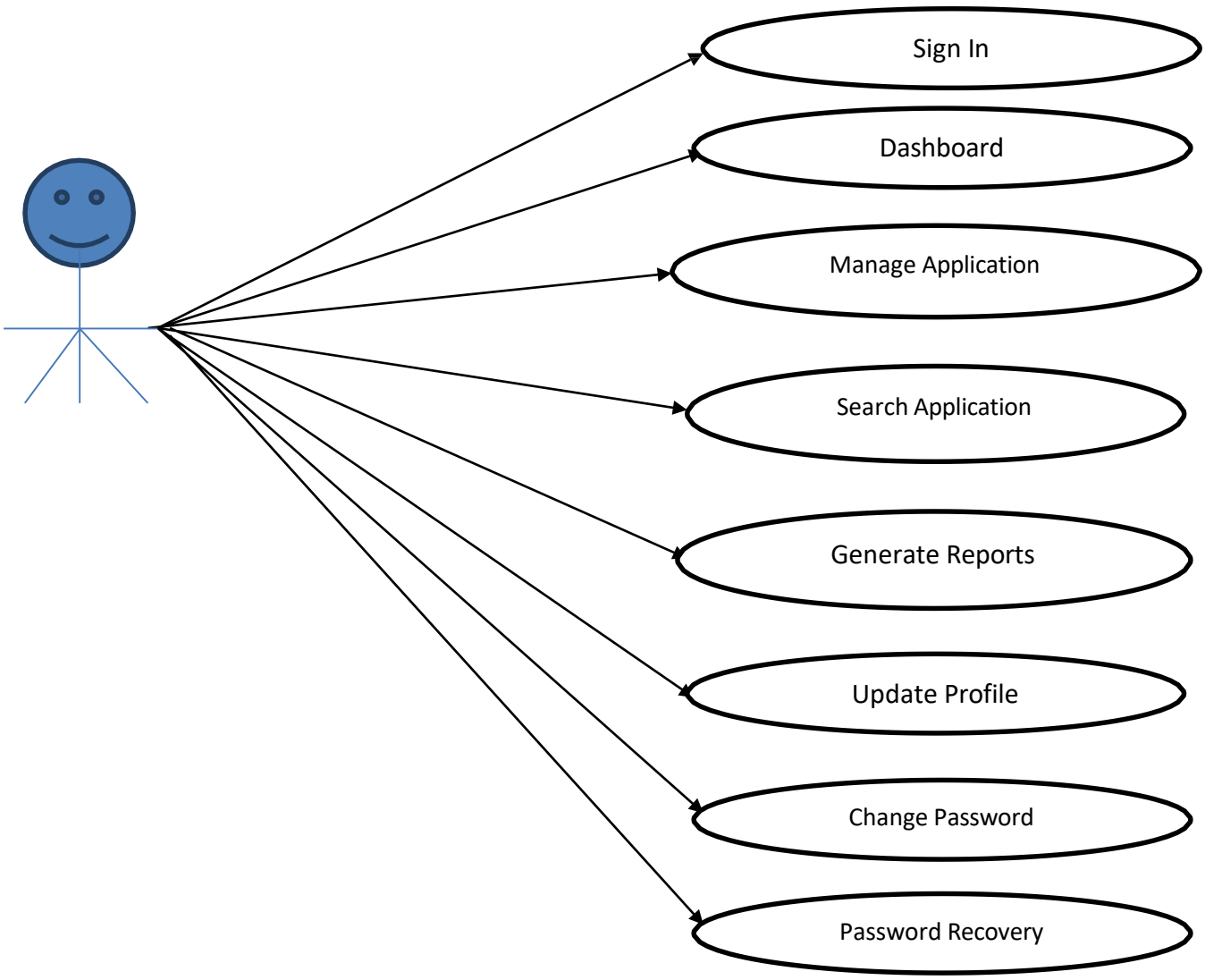
Use case diagram consists of use cases and actors and shows the interaction between the use case and actors.

- The purpose is to show the interactions between the use case and actor.
- To represent the system requirements from user's perspective.
- An actor could be the end-user of the system or an external system.

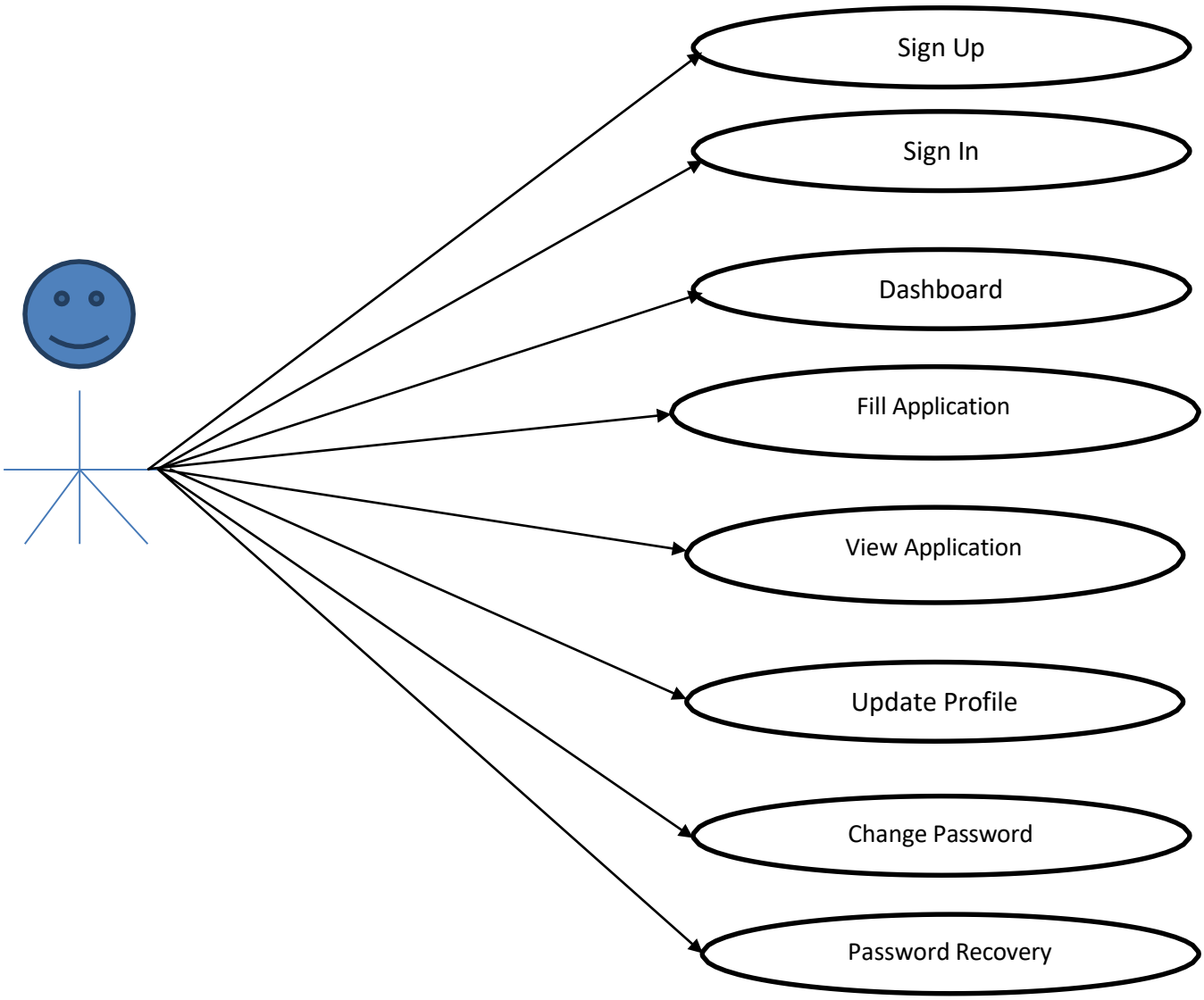
USECASE DIAGRAM: A Use case is a description of set of sequence of actions. Graphically it is rendered as an ellipse with solid line including only its name. Use case diagram is a behavioral diagram that shows a set of use cases and actors and their relationship. It is an association between the use cases and actors. An actor represents a real-world object. Primary Actor – Sender, Secondary Actor Receiver.

Use Case Diagrams:

Admin



User


Sign Up
Sign In
Dashboard
Fill Application
View Application
Update Profile
Change Password
Password Recovery

Class Diagram:

A description of set of objects that share the same attributes operations, relationships, and semantics

ER Diagram:

The Entity-Relationship (ER) model was originally proposed by Peter in 1976 [Chen76] as a way to unify the network and relational database views. Simply stated the ER model is a conceptual data model that views the real world as entities and relationships. A basic component of the model is the Entity-Relationship diagram which is used to visually represent data objects. Since Chen wrote his paper the model has been extended and today it is commonly used for database design for the database designer, the utility of the ER model is:

- It maps well to the relational model. The constructs used in the ER model can easily be transformed into relational tables.
- It is simple and easy to understand with a minimum of training. Therefore, the model can be used by the database designer to communicate the design to the end user.
- In addition, the model can be used as a design plan by the database developer to implement a data model in specific database management software.

ER Notation

There is no standard for representing data objects in ER diagrams. Each modeling methodology uses its own notation. The original notation used by Chen is widely used in academics texts and journals but rarely seen in either CASE tools or publications by non-academics. Today, there are a

number of notations used; among the more common are Bachman, crow's foot, and IDEFIX.

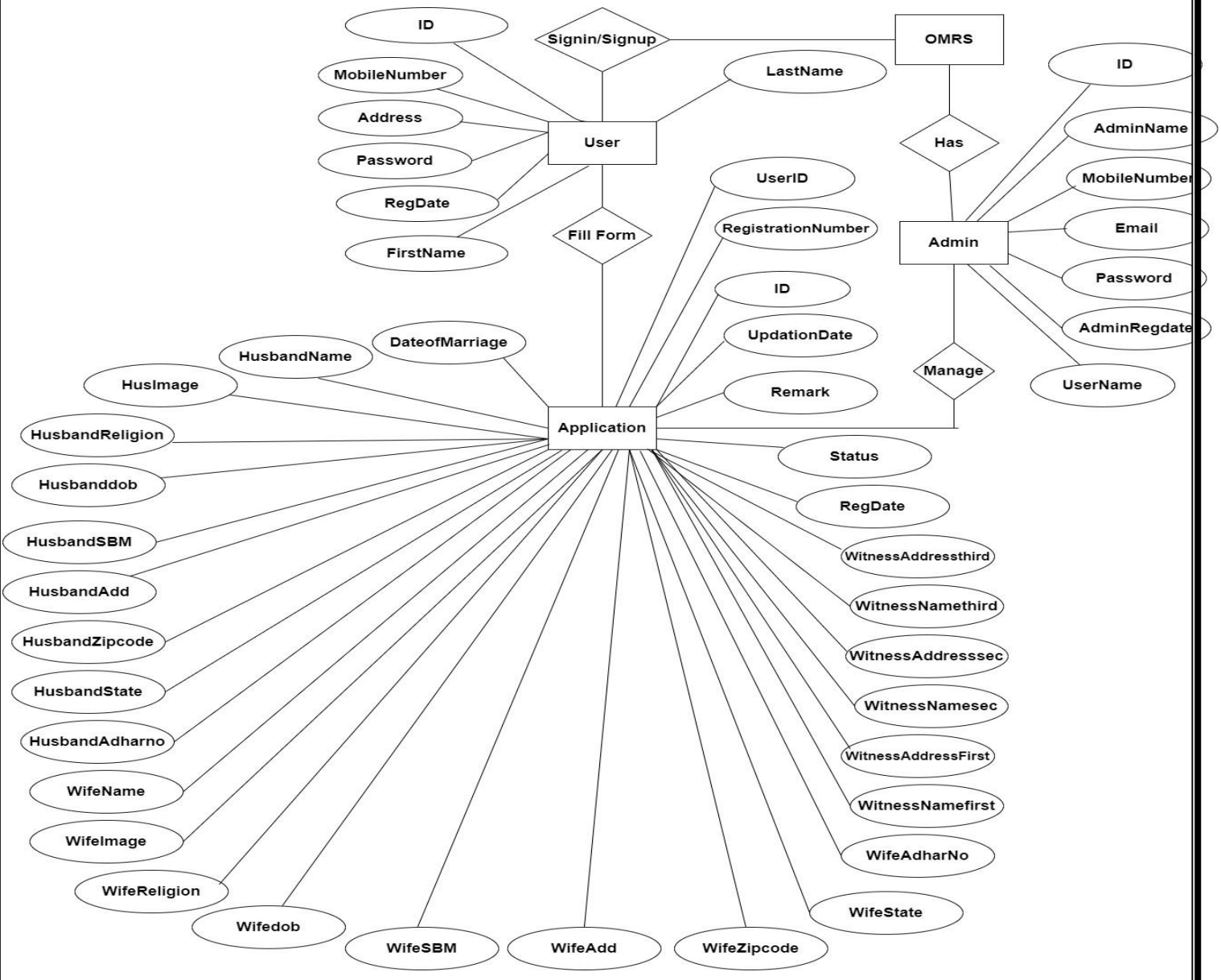
All notational styles represent entities as rectangular boxes and relationships as lines connecting boxes. Each style uses a special set of symbols to represent the cardinality of a connection. The notation used in this document is from Martin. The symbols used for the basic ER constructs are:

- **Entities** are represented by labeled rectangles. The label is the name of the entity. Entity names should be singular nouns.
- **Relationships** are represented by a solid line connecting two entities. The name of the relationship is written above the line. Relationship names should be verbs
- **Attributes**, when included, are listed inside the entity rectangle. Attributes which are identifiers are underlined. Attribute names should be singular nouns.
- **Cardinality** of many is represented by a line ending in a crow's foot. If the crow's foot is omitted, the cardinality is one.

Existence is represented by placing a circle or a perpendicular bar on the line. Mandatory existence is shown by the bar (looks like a 1) next to the

entity for an instance is required. Optional existence is shown by placing a circle next to the entity that is optional.

ER Diagram



MySQL Data Tables:

Admin Table:(Table name is admin)

This store admin personal and login details.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(10)			No	*None*		AUTO_INCREMENT
2	AdminName	varchar(120)	latin1_swedish_ci		Yes	*NULL*		
3	UserName	varchar(120)	latin1_swedish_ci		Yes	*NULL*		
4	MobileNumber	bigint(10)			Yes	*NULL*		
5	Email	varchar(200)	latin1_swedish_ci		Yes	*NULL*		
6	Password	varchar(120)	latin1_swedish_ci		Yes	*NULL*		
7	AdminRegdate	timestamp			Yes	current_timestamp()		

Category Table(Table name is tbluser)

This table stores the data of registered users

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(10)			No	*None*		AUTO_INCREMENT
2	FirstName	varchar(150)	utf8mb4_general_ci		Yes	*NULL*		
3	LastName	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
4	MobileNumber	bigint(10)			Yes	*NULL*		
5	Address	mediumtext	utf8mb4_general_ci		Yes			
6	Password	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
7	RegDate	timestamp			Yes	current_timestamp()		

Marriage Registration Table: (Table name is tblregistration)

This table stores the details of marriage couple and admin remark

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(10)			No	*None*		AUTO_INCREMENT
2	RegistrationNumber	varchar(100)	utf8mb4_general_ci		Yes	*NULL*		
3	UserID	int(10)			Yes	*NULL*		
4	DateofMarriage	varchar(200)	utf8mb4_general_ci		No	*None*		
5	HusbandName	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
6	HusImage	varchar(200)	utf8mb4_general_ci		No	*None*		
7	HusbandReligion	varchar(50)	utf8mb4_general_ci		Yes	*NULL*		
8	Husbanddob	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
9	HusbandSBM	varchar(50)	utf8mb4_general_ci		Yes	*NULL*		
10	HusbandAdd	mediumtext	utf8mb4_general_ci		Yes			
11	HusbandZipcode	int(10)			Yes	*NULL*		
12	HusbandState	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
13	HusbandAdharno	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
14	WifeName	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
15	WifeImage	varchar(200)	utf8mb4_general_ci		No	*None*		
16	WifeReligion	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
17	Wifedob	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
18	WifeSBM	varchar(50)	utf8mb4_general_ci		Yes	*NULL*		
19	WifeAdd	mediumtext	utf8mb4_general_ci		Yes			
20	WifeZipcode	int(10)			Yes	*NULL*		
21	WifeState	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
22	WifeAdharNo	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
23	WitnessNamefirst	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
24	WitnessAddressFirst	mediumtext	utf8mb4_general_ci		Yes			
25	WitnessNamesec	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
26	WitnessAddresssec	mediumtext	utf8mb4_general_ci		Yes			
27	WitnessNamethird	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
28	WitnessAddressthird	mediumtext	utf8mb4_general_ci		Yes			
29	RegDate	timestamp			No	current_timestamp()		ON UPDATE CURRENT_TIMESTAMP()
30	Status	varchar(100)	utf8mb4_general_ci		Yes	*NULL*		
31	Remark	varchar(120)	utf8mb4_general_ci		Yes	*NULL*		
32	UpdationDate	timestamp			Yes	*NULL*		ON UPDATE CURRENT_TIMESTAMP()

Implementation and System Testing

After all phase have been perfectly done, the system will be implemented to the server and the system can be used.

System Testing

The goal of the system testing process was to determine all faults in our project .The program was subjected to a set of test inputs and many explanations were made and based on these explanations it will be decided whether the program behaves as expected or not. Our Project went through two levels of testing

1. Unit testing
2. Integration testing

UNIT TESTING

Unit testing is commenced when a unit has been created and effectively reviewed .In order to test a single module we need to provide a complete environment i.e. besides the section we would require

- The procedures belonging to other units that the unit under test calls
- Non local data structures that module accesses

- A procedure to call the functions of the unit under test with appropriate parameters

1. Test for the admin module

- **Testing admin login form-**This form is used for log in of administrator of the system. In this form we enter the username and password if both are correct administration page will open otherwise if any of data is wrong it will get redirected back to the login page and again ask the details.
- **Report Generation:** admin can generate report from the main database.

INTEGRATION TESTING

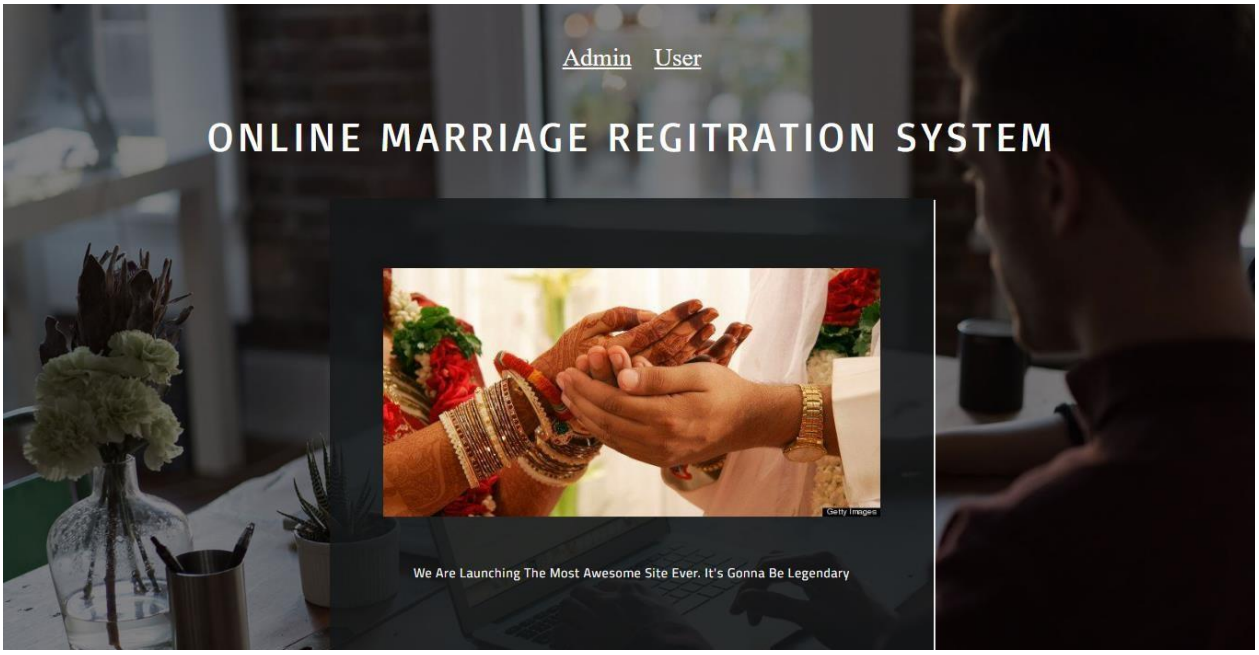
In the Integration testing we test various combination of the project module by providing the input.

The primary objective is to test the module interfaces in order to confirm that no errors are occurring when one module invokes the other module.

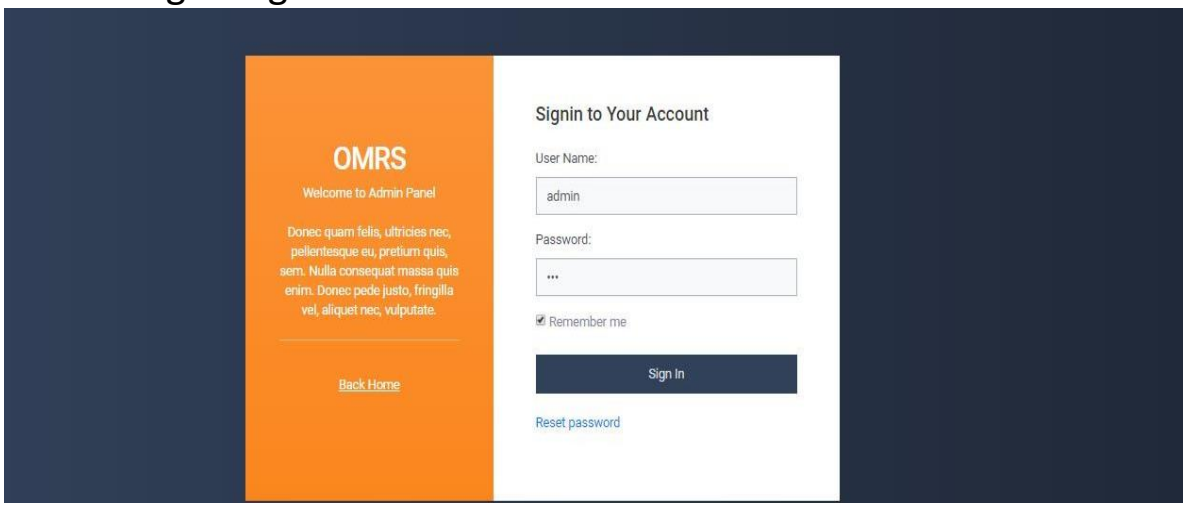
Evaluation

Project URL: http://localhost/omrs

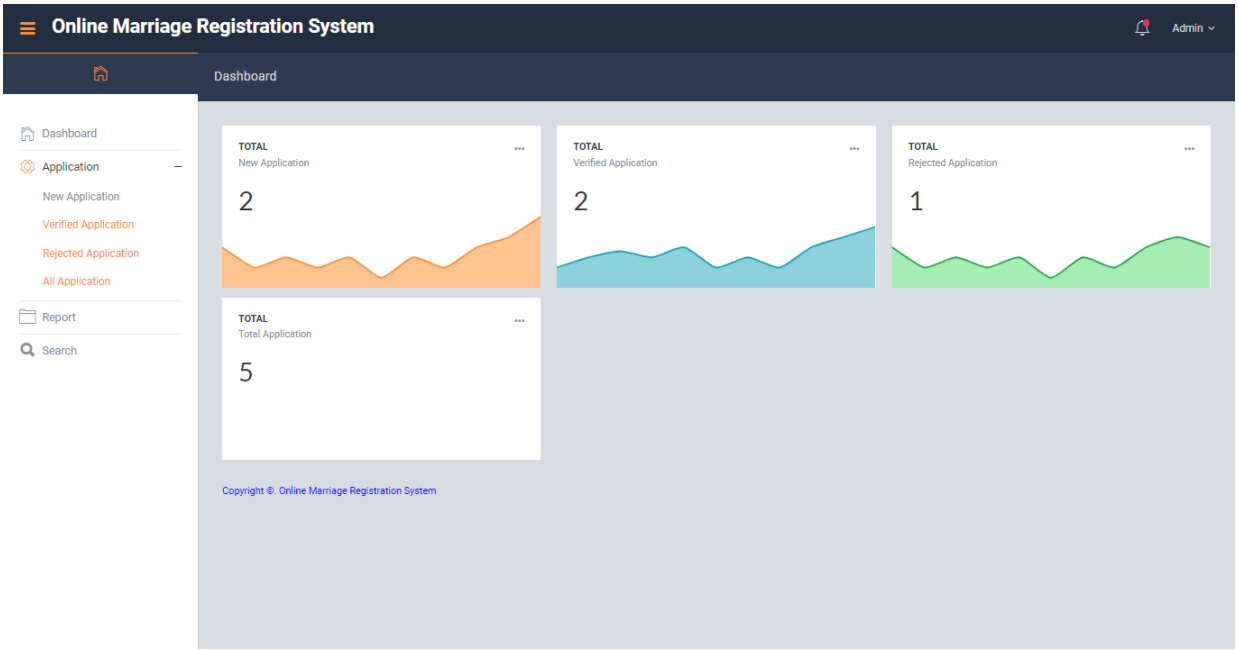
Home Page



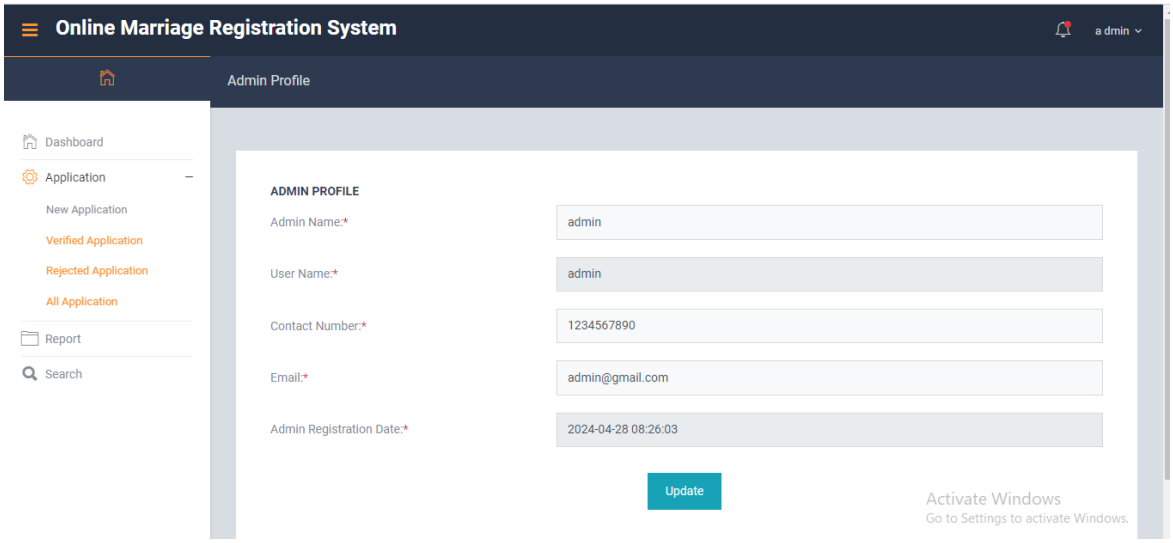
Admin Login Page



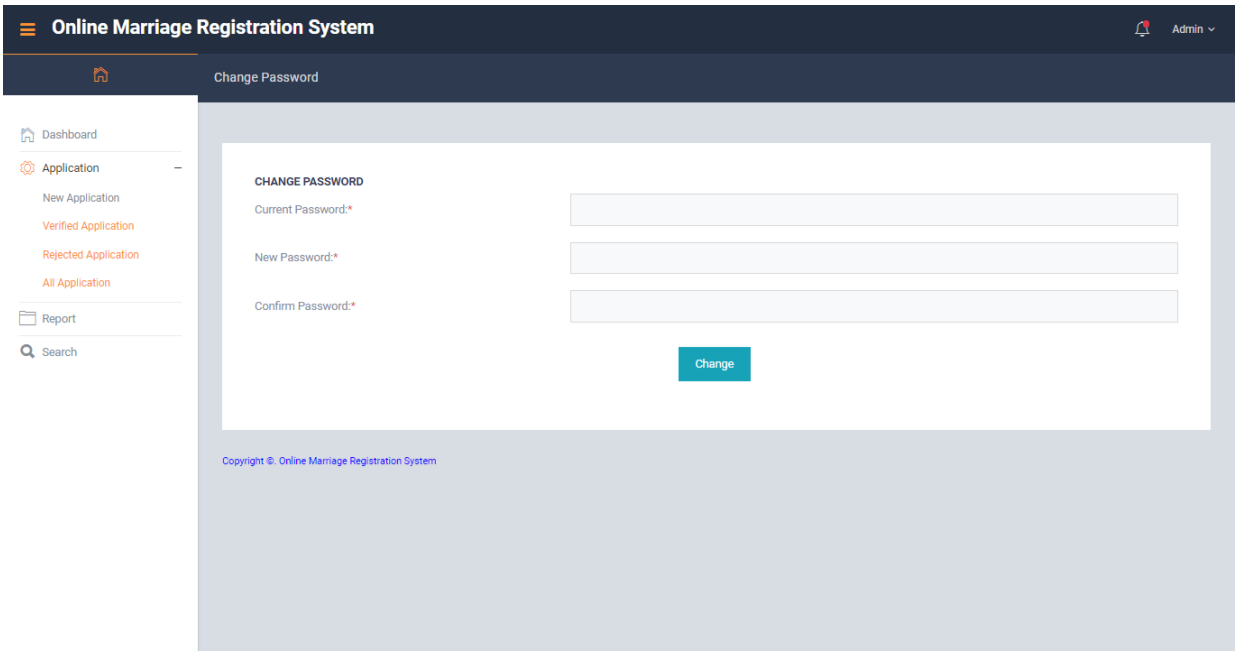
Dashboard


Online Marriage Registration System
Admin
Dashboard
Dashboard
Application
New Application
Verified Application
Rejected Application
All Application
Report
Search
TOTAL
New Application
2
TOTAL
Verified Application
2
TOTAL
Rejected Application
1
TOTAL
Total Application
5
Copyright ©. Online Marriage Registration System

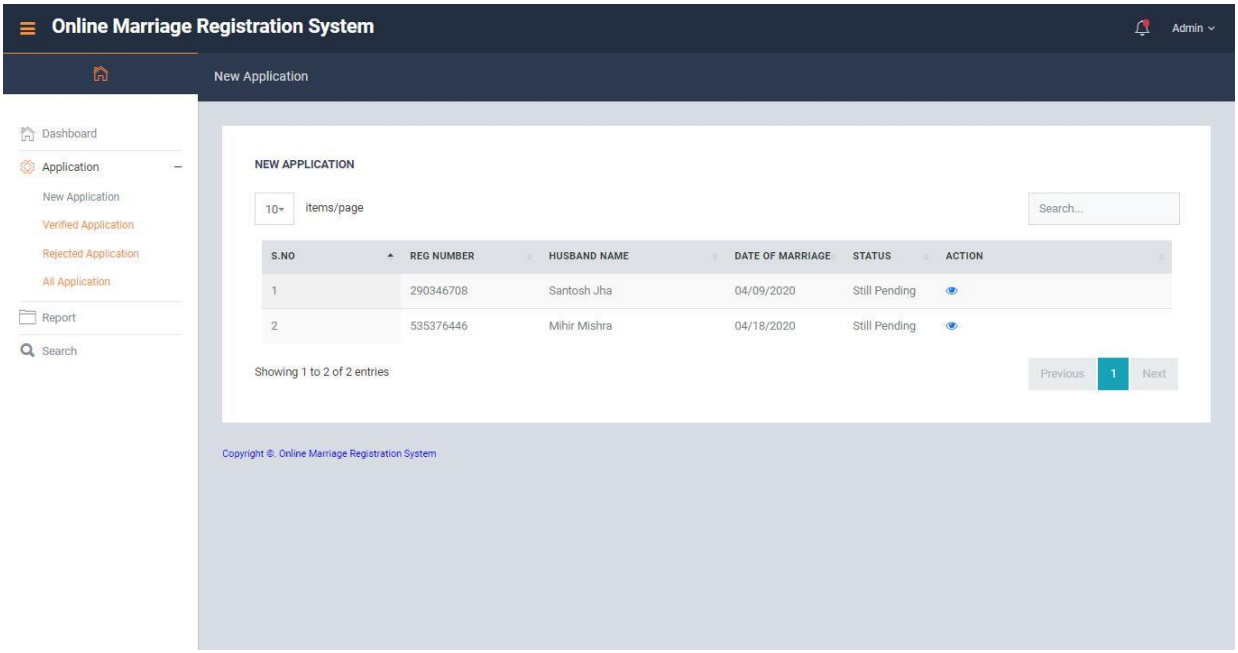
Profile



Change Password



New Application



View New Application

Online Marriage Registration System

Admin

View Marriage Application

- Dashboard
- Application
  - New Application
  - Verified Application
  - Rejected Application
  - All Application
- Report
- Search

VIEW MARRIAGE APPLICATION

Registration Number: 290346708

User Details

First Name	Abir	Last Name	Singh	Mobile Number	7979778979	Address	ABC-909 hussain marg new delhi 110096

Application Details

Date of Marriage: 04/09/2020

Husband Details

Name	Santosh Jha	Religion	Hindu	Date of Birth	04/08/1991	Status Before Marriage	Divorsee
Address	K-126 Ragunath Nagar Kailash Colony, Varanasi	Zipcode	221001	State	UP	Aadhar Number	765478977979

Photo of Groom

Wife Details

Name	Gayatri	Religion	Hindu	Date of Birth	05/02/1993	Status Before Marriage	Bachelor
Address	K-126 Ragunath Nagar Kailash Colony, Varanasi	Zipcode	221001	State	UP	Aadhar Number	798764987978

Photo of Bride

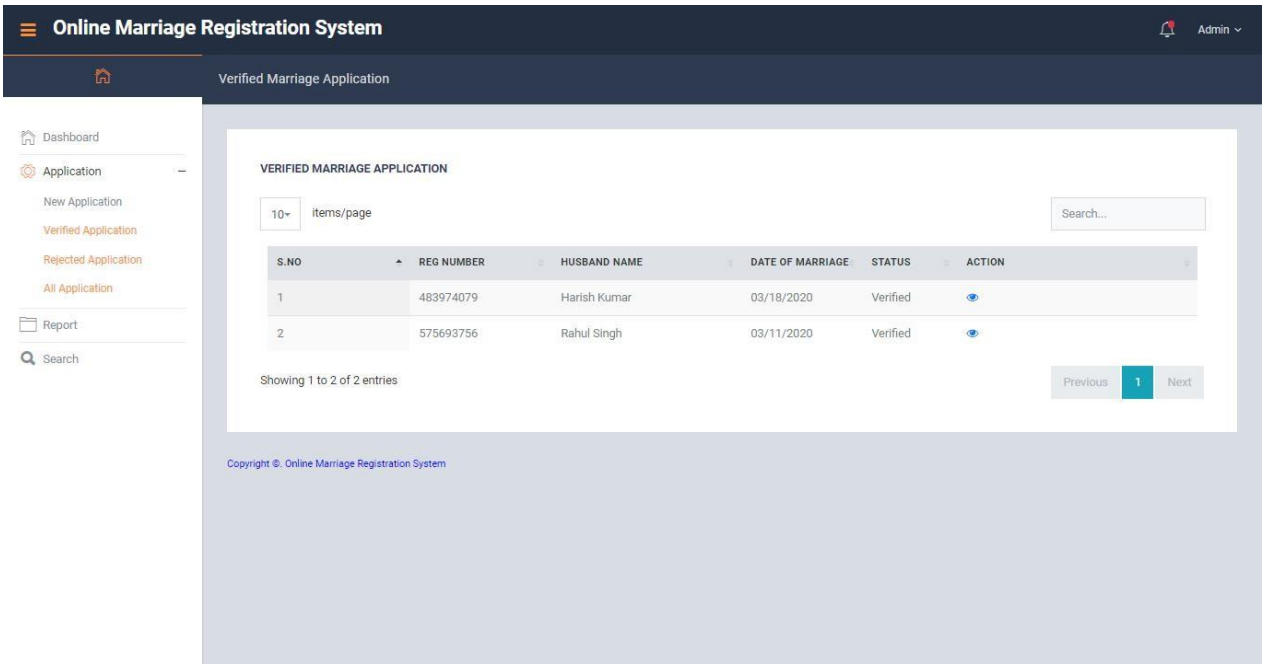
Witness Details

S.No	Witness Name	Witness Address
1	Kaushal Jja	U-910 Ravidrapuri Colony Bhelupura, Varanasi-221001
2	John	K-710 Bojubir Varanasi-221003
3	Janki Das Mishra	J-910 Lanka Varanasi-221009

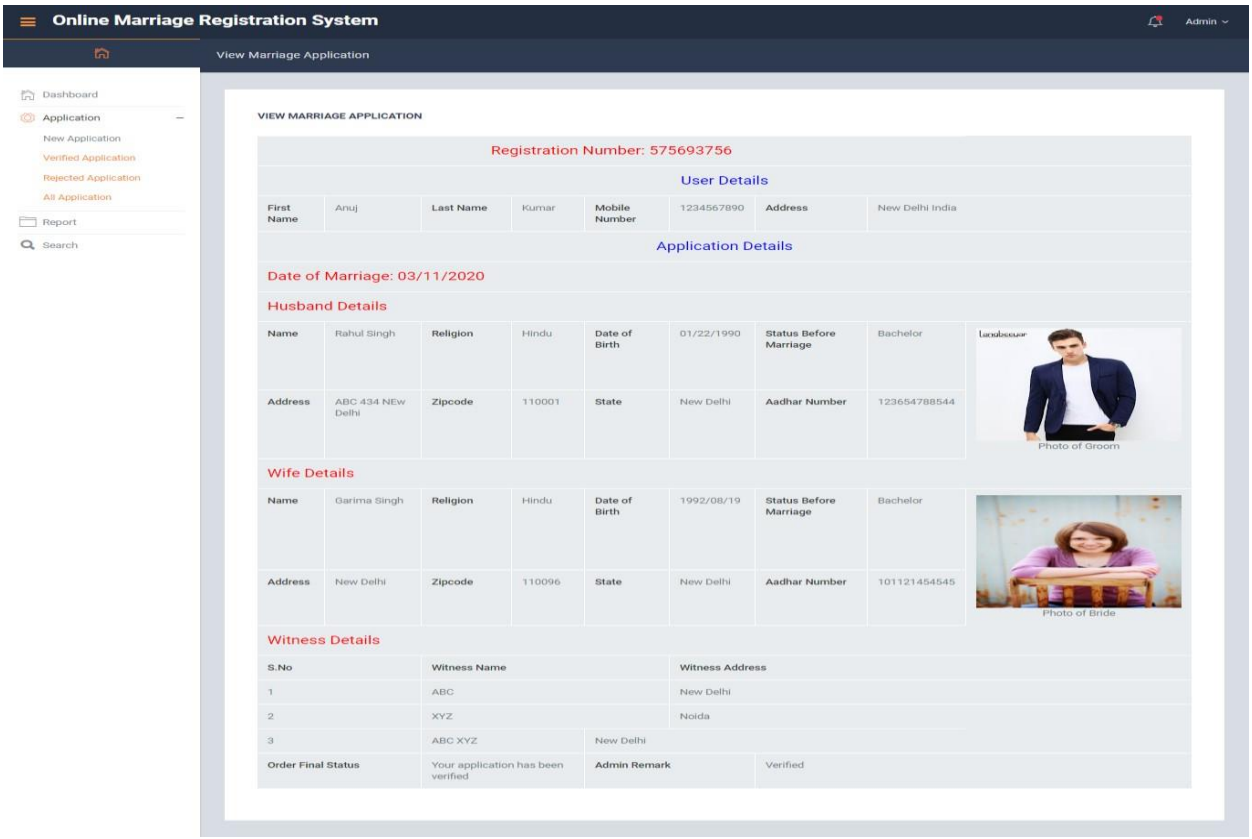
Order Final Status	Pending	Admin Remark	Your application has still pending

Take Action

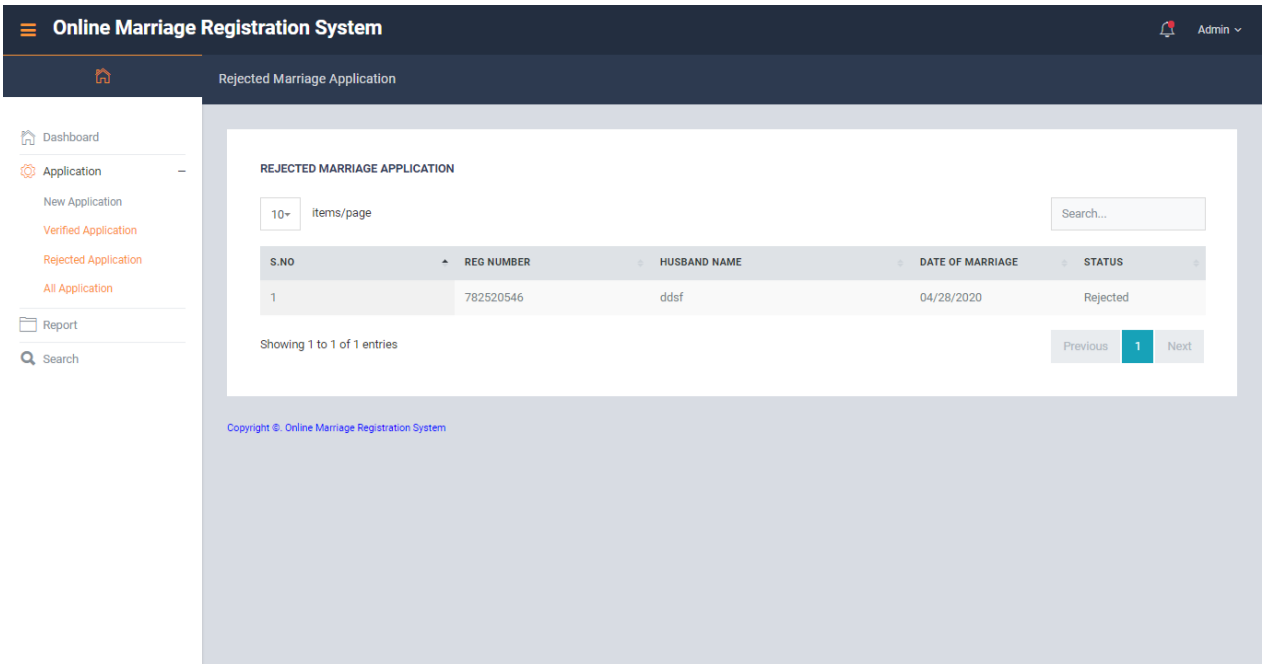
Verified Application



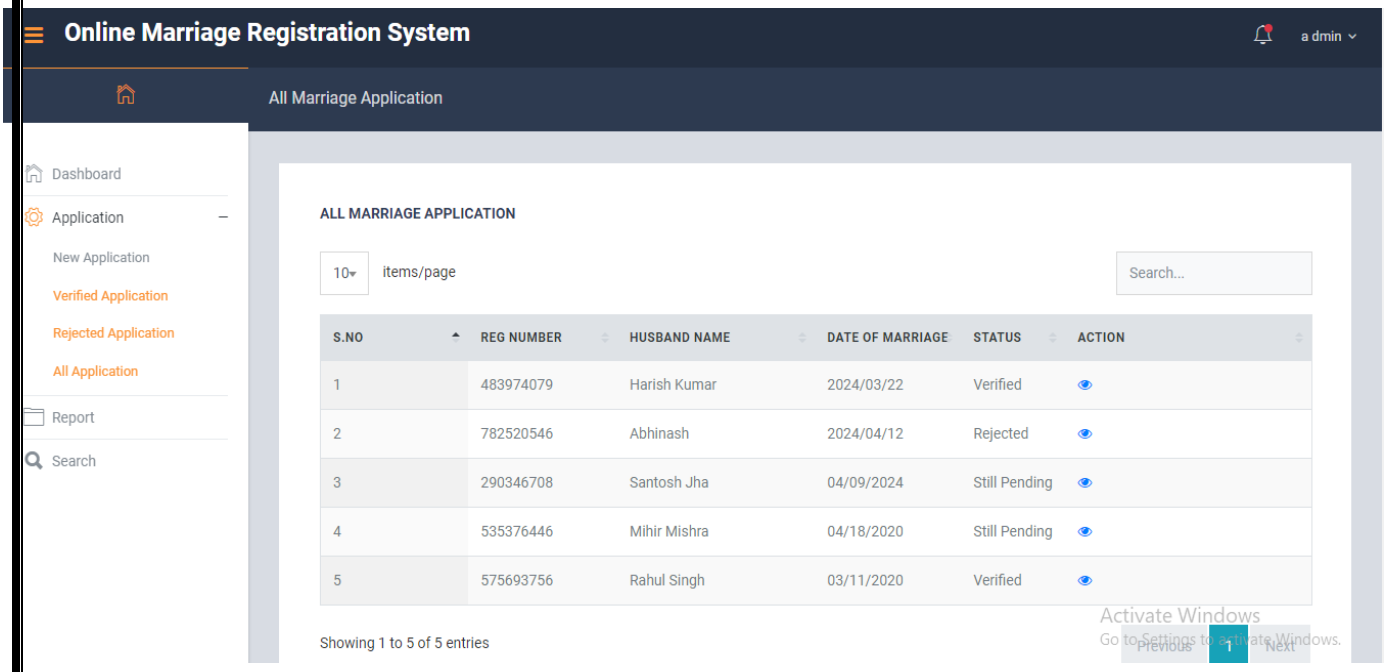
View Verified Application



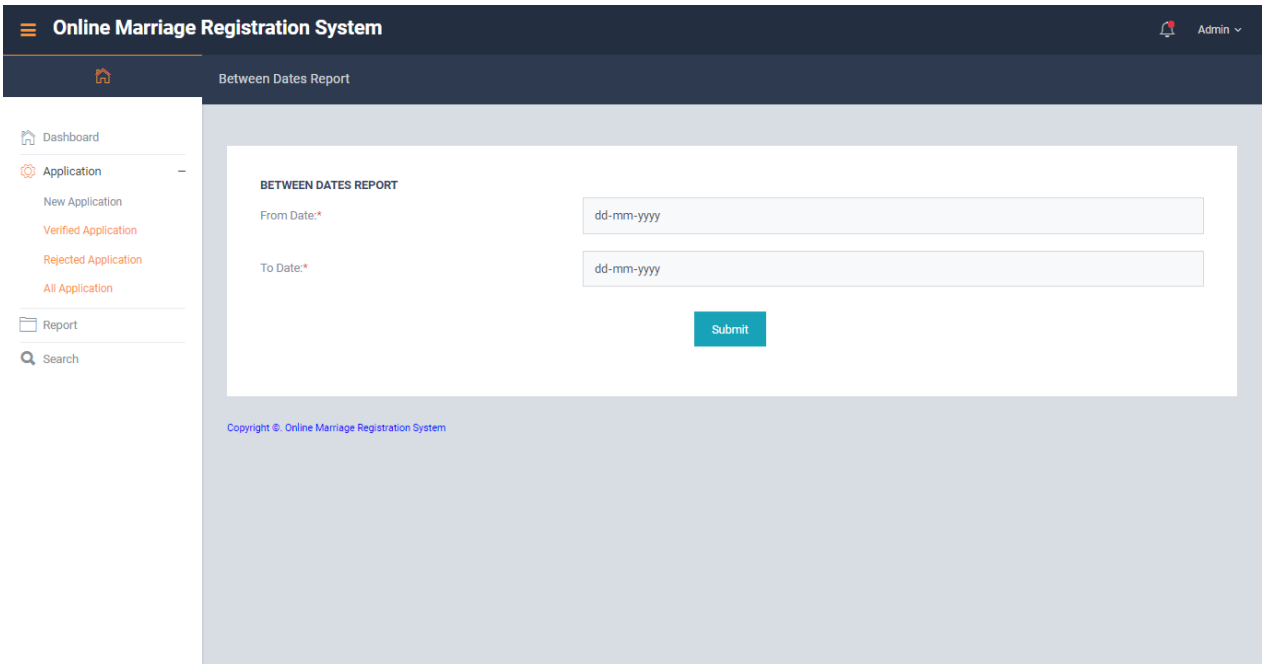
Rejected Application



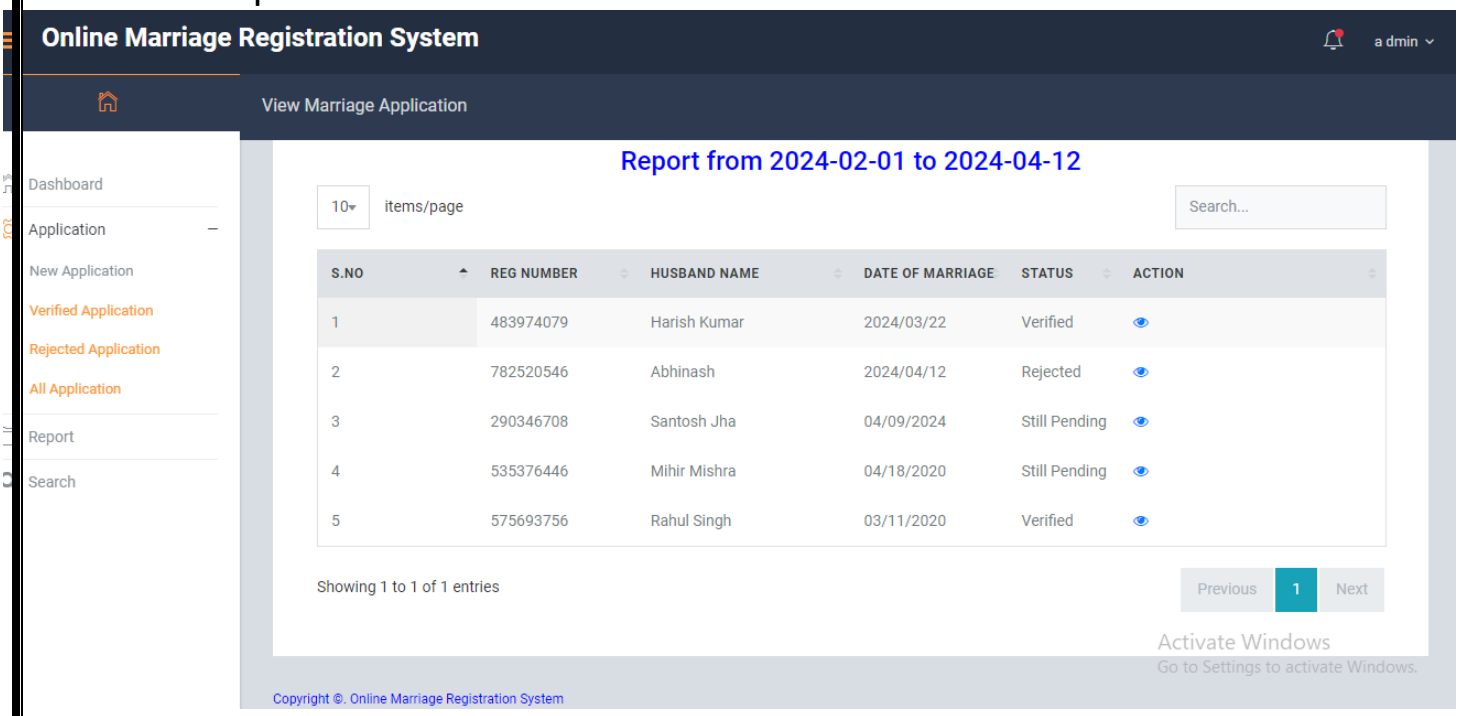
All Application



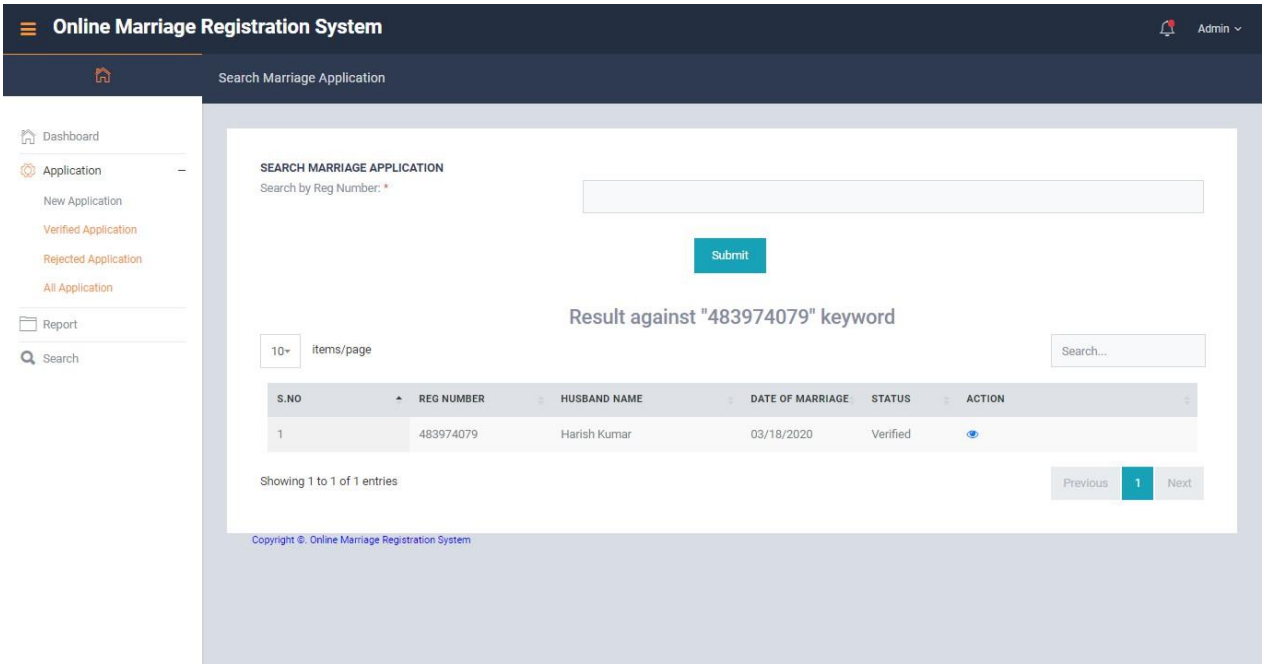
Reports



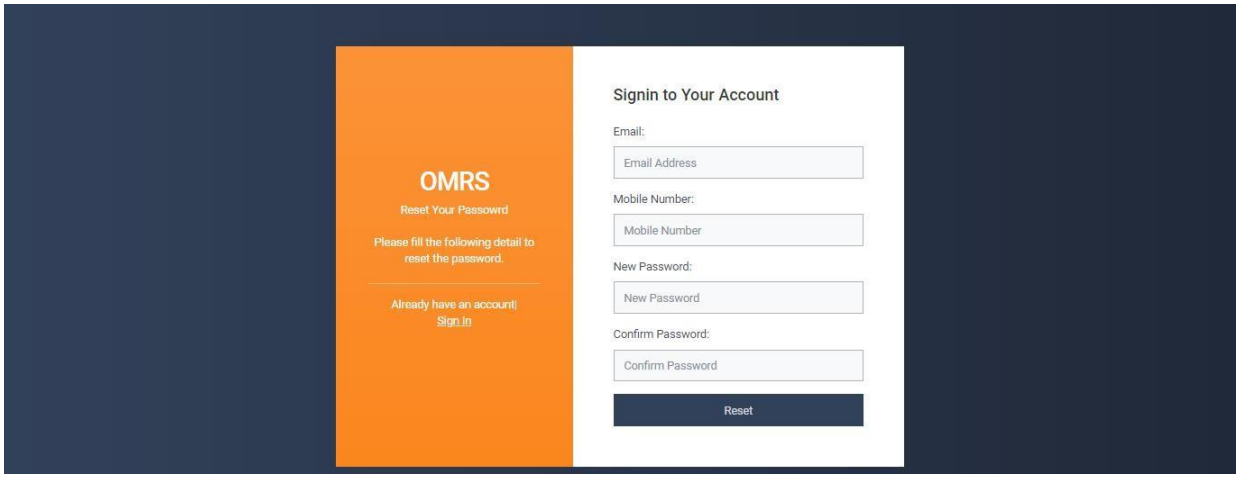
View Reports



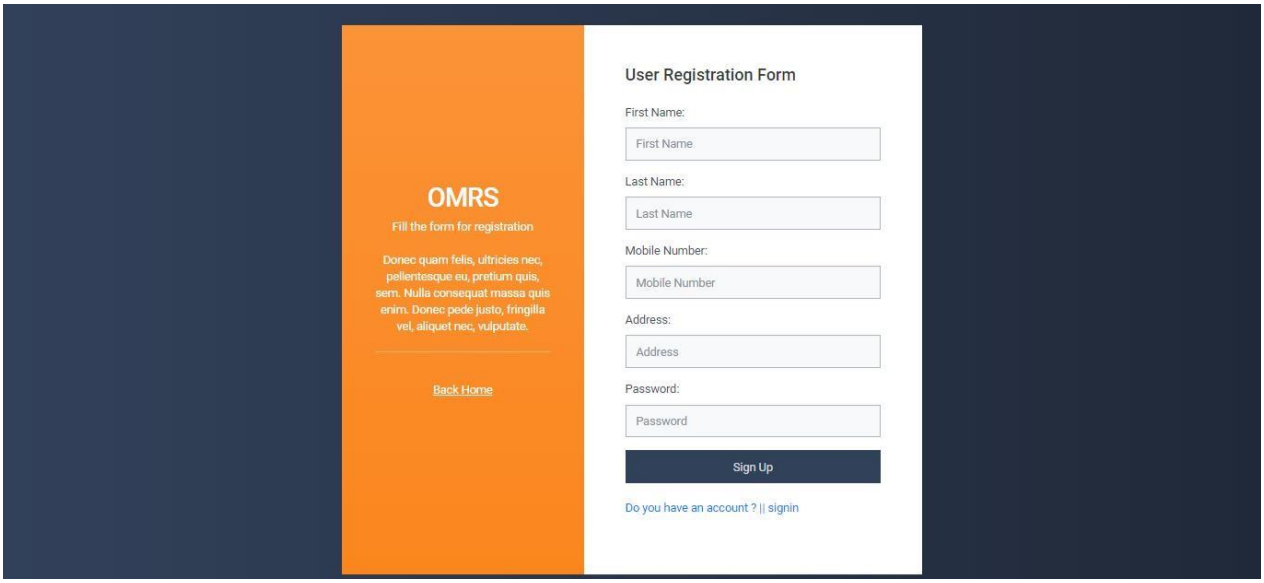
Search



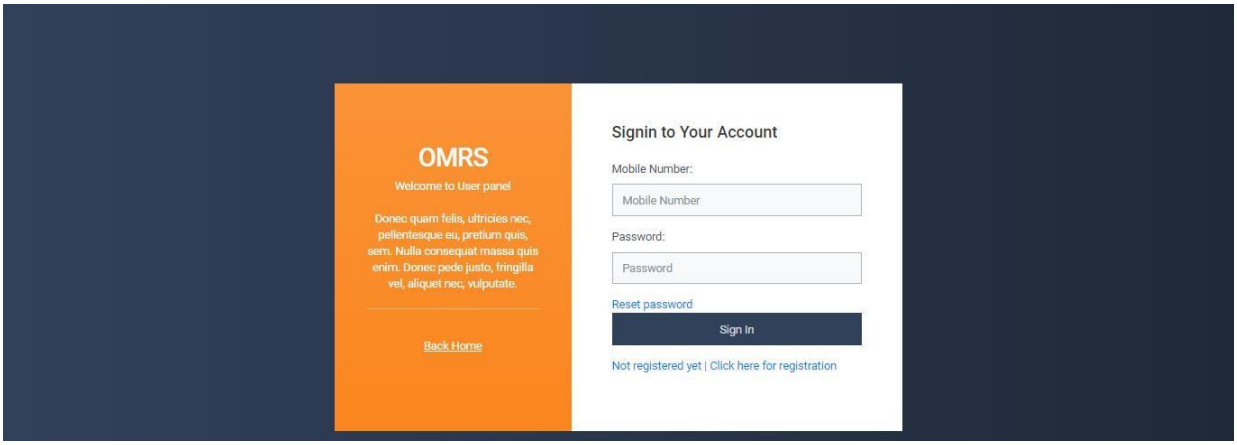
Reset Password



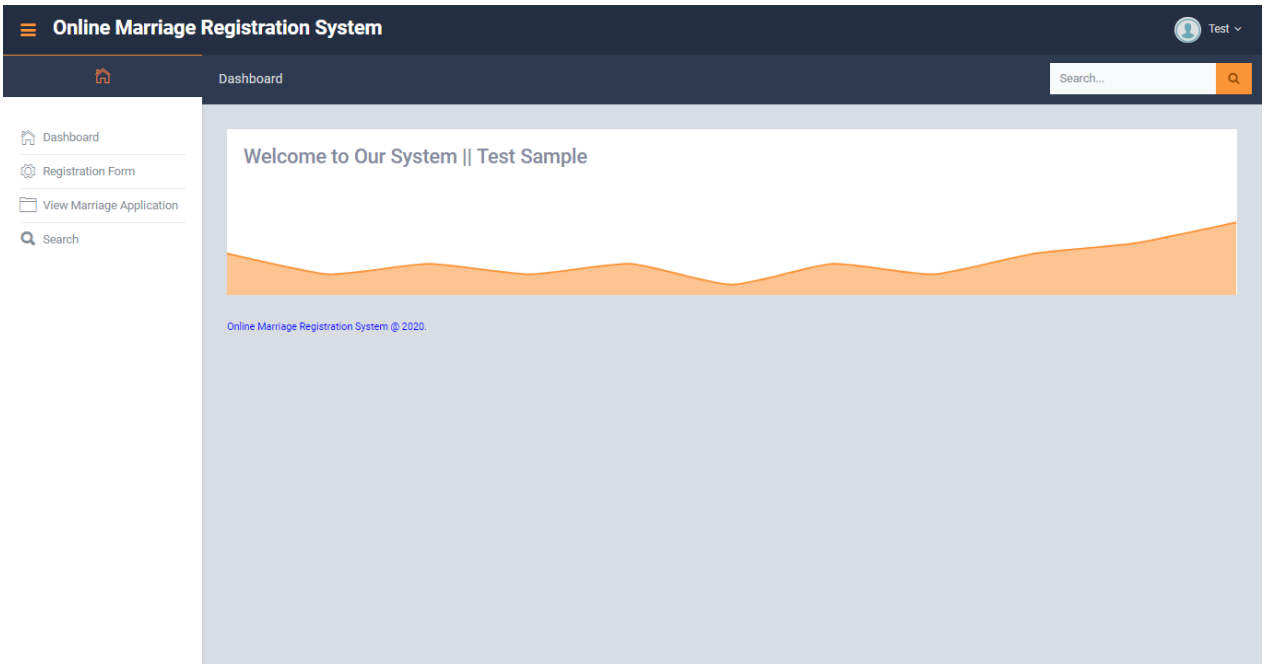
User Registration



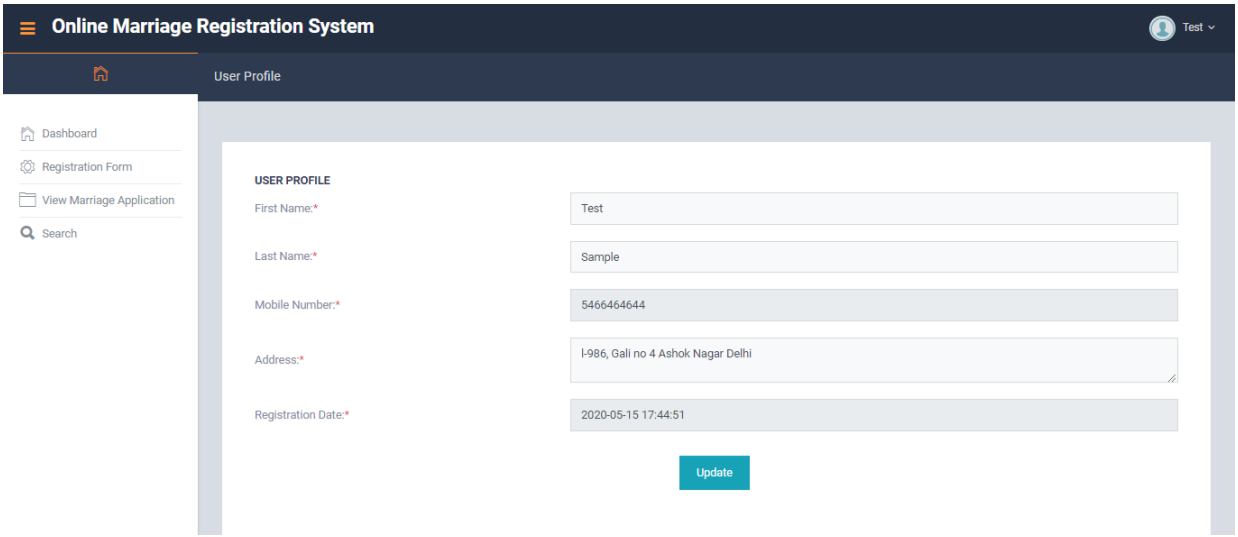
User Login Page



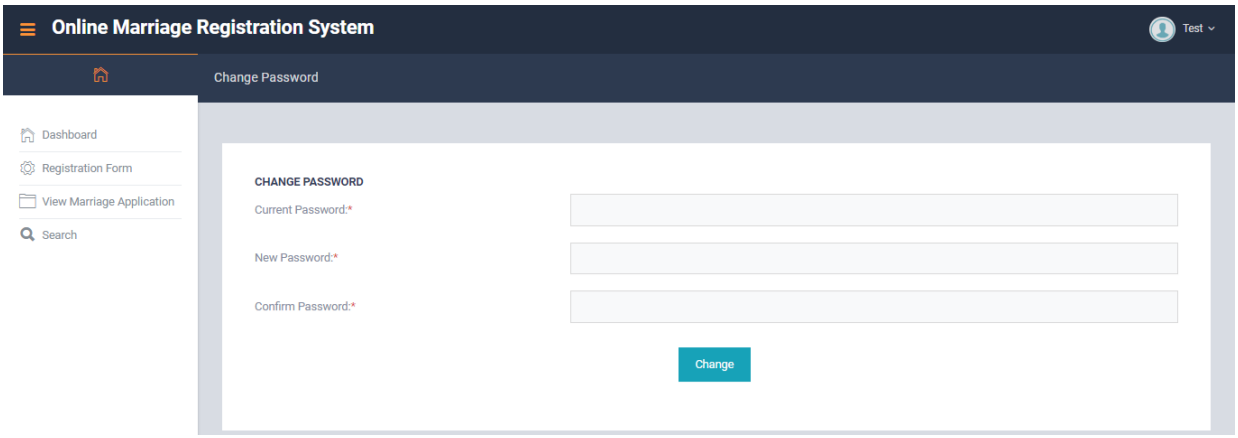
Dashboard



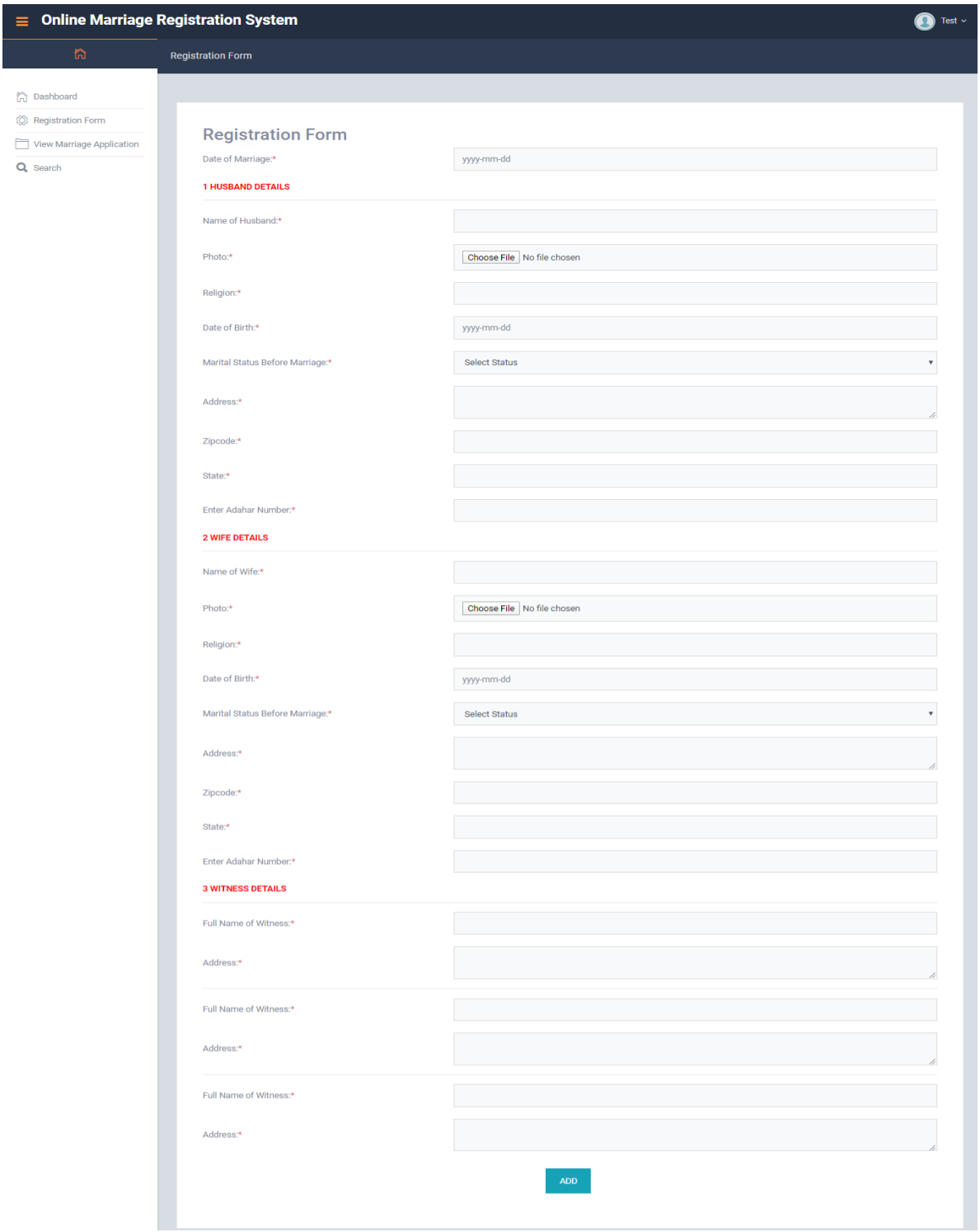
User Profile



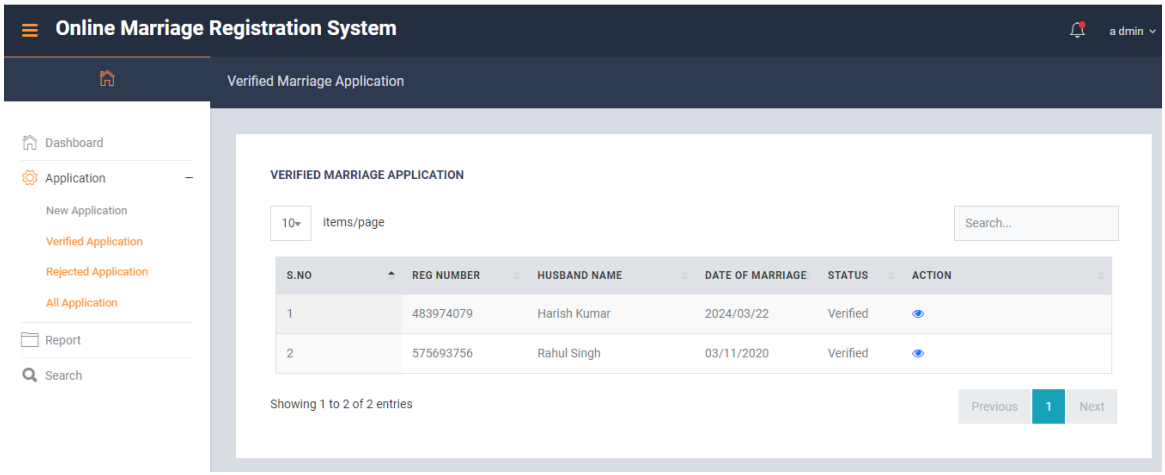
Change Password



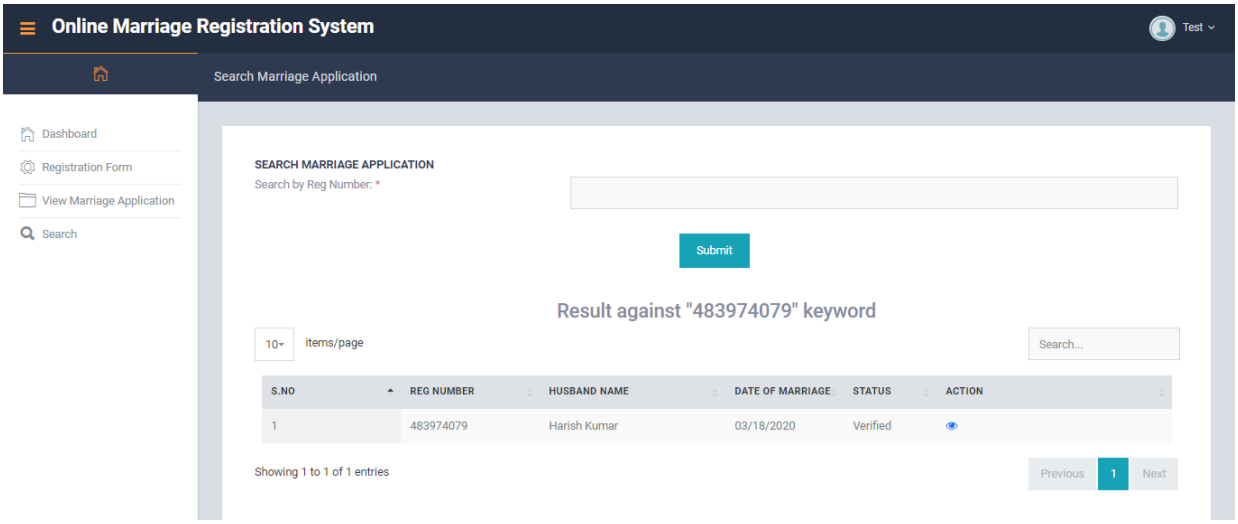
Registration Form



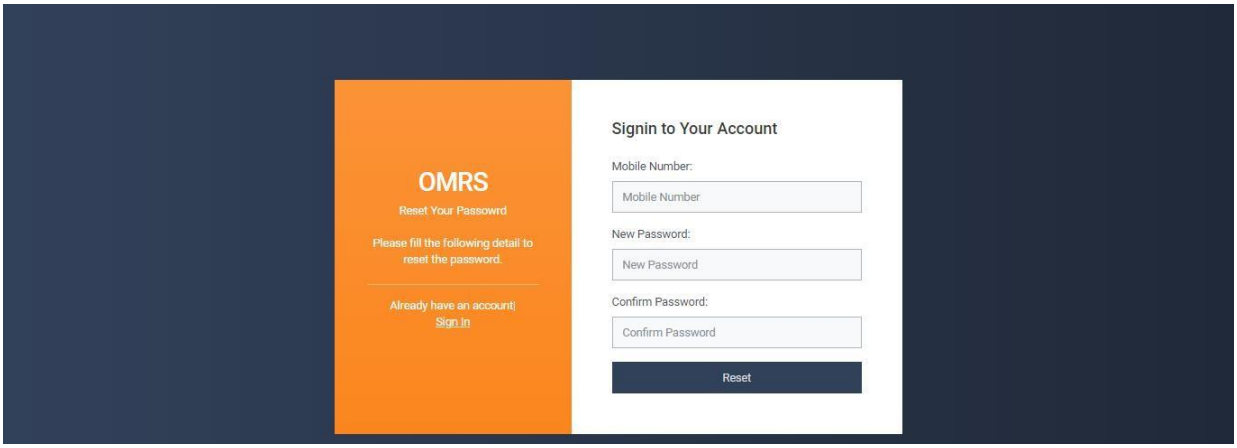
Verified Marriage Applications



Search Application



Forgot Password



Conclusion

This Application provides a computerized version of Marriage Registration which will benefit the people who wants to register their marriage.

It makes entire process online and can generate reports. It has a facility of admin login where admin can fill the marriage details and generate marriage certificate.

The Application was designed in such a way that future changes can be done easily. The following conclusions can be deduced from the development of the project.

- Automation of the entire system improves the productivity.
- It provides a friendly graphical user interface which proves to be better when compared to the existing system.
- It gives appropriate access to the authorized users depending on their permissions.
- It effectively overcomes the delay in communications.
- Updating of information becomes so easier.

- System security, data security and reliability are the striking features.
- The System has adequate scope for modification in future if it is necessary.

Future Enhancement

I have tried to design the software in such a way that the user may not have any difficulty in using this system and further expansion is also possible. New requirements will be added and risk will be analyzed in every phase until the requirement of user will not be fulfilled. The most priority will be given to keep confidential data secure and easy and simple for use.

The further enhancements which can be made in the system are:

- Any requirement that will make system easy to use or make a system secure, these requirement will be add using Spiral Model. Other requirement related to government or municipality will be added when required.
- For the identity of user and for their data integrity, digital signature can be added to this system.
- For the identity of user and for verification, image of user can be added to this system.
- There will be provision of filling form in multiple languages.
- A great concern will be given on frontend design which will make user to use system easily and enjoy while using this system.

Bibliography

For PHP

- https://www.w3schools.com/php/default.asp
- https://www.sitepoint.com/php/
- https://www.php.net/

For MySQL

- https://www.mysql.com/
- http://www.mysqltutorial.org

For XAMPP

- https://www.apachefriends.org/download.html

Project Report

On

ONLINE BANQUET BOOKING SYSTEM

Submitted in partial fulfillment of the requirements for the award of degree of

M.Sc(Computer Science)

TO

SHANTI DEVI ARYA MAHILA COLLEGE

DINANAGAR

Submitted To:-

Mrs. Bhanupriya Saini

Assistant Professor

Deptt. Of Computer Science

Submitted By:

Prerna Devi

(20672225411)

Tania

(20672225417)

POST GRADUATE DEPARTMENT OF COMPUTER SCIENCE

GURU NANAK DEV UNIVERSITY, AMRITSAR

ACKNOWLEDGEMENT

With deep sense of gratitude we express our sincere thanks and obligation to our esteemed guide Mrs. Bhanupriya Saini (Assistant Professor). It is because of his able and mature guidance and co-operation without which it would not have been possible for us to complete our project. We would also like to thank Dr. Deepak Jyoti, HOD, Post Graduate Deptt. of Computer Science, Shanti Devi Arya Mahila College, Dinanagar for providing the institute with an environment where one can use her intellect and creativity to develop something fruitful and also for allowing us the opportunity to experience dynamic professional environment during our Training. This environment facilitated us in pursuing this project. It is our pleasant duty to thank all the staff members of the Computer Department for their time to time suggestions. Finally, we would like to thank the almighty and our parents for their moral support and our friends with whom we shared our day-to-day experience and received lots of suggestions that improved our quality of work.

Prerna Devi

20672225411

Tania

20672225417

CERTIFICATE OF APPROVAL

This is certify that the project report entitled **Online Banquet Booking System** submitted to Shanti Devi Arya Mahila College, Dinanagar in partial fulfillment of the requirement for the award of degree of M.Sc (Computer Science), is an authentic and original work carried out by Prerna Devi (20672225411) Tania (20672225417) under my guidance and supervision. The Post Graduate deptt. of Computer Science has accepted the report as the fulfillment of the requirements for the Degree of Master of Computer Science. No part of this report has been submitted to any other College/ University for the reward of any Degree to the best of our knowledge.

Mrs. Bhanupriya Saini

Assistant Professor (Comp Sc.)
(Project Supervisor)
Shanti Devi Arya Mahila College
Dinanagar

Dr. Deepak Jyoti

HOD, PG Department of Computer Sc.
Shanti Devi Arya Mahila College
Dinanagar

DECLARATION

We hereby declare that this project report on " **Online Banquet Booking System** " which is being submitted in partial fulfillment of the Training Programme of M.Sc (Computer Science) to Shanti Devi Arya Mahila College,Dinanagar, is the result of the work carried out by us, under the guidance of Mrs. Bhanupriya Saini (Assistant Professor). Shanti Devi Arya Mahila College, Dinanagar.

Prerna Devi

20672225411

Tania

20672225417

1. INTRODUCTION

Scope of the Project

The objective of this application is to develop a system that effectively manages all the data related to the various banquet booking events that take place at the venue. The purpose is to maintain a centralized database of all banquet event related information. The goal is to support various functions and processes necessary to manage the data efficiently.

Existing System

This existing system is not providing secure registration and profile management of all the users properly. This system is not providing on-line Help. This system doesn't provide tracking of users activities and their progress. This manual system gives us very less security for saving data and some data may be lost due to mismanagement. This system is not providing event management through internet. This system is not providing proper events information. The system is giving manual information through the event management executer.

Proposed System

The development of this new system contains the following activities, which try to automate the entire process keeping in the view of database integration approach. This system maintains user's personal, and contact details. This system will provide on line help and search capabilities. User friendliness is provided in the application with various controls provided by system rich user interface. Authentication is provided for this application only registered users can access. Banquet event information files can be stored in centralized database which can be maintained by the system. This system provides the users to manage the banquet events systematically.

2. SYSTEM ANALYSIS

FEASIBILITY STUDY

A feasibility study is a high-level capsule version of the entire System analysis and Design Process. The study begins by classifying the problem definition. Feasibility is to determine if it's worth doing. Once an acceptance problem definition has been generated, the analyst develops a logical model of the system. A search for alternatives is analyzed carefully. There are 3 parts in feasibility study.

Operational Feasibility

Question that going to be asked are Will the system be used if it developed and implemented.

If there was sufficient support for the project from the management and from the users.

Have the users been involved in planning and development of the Project.

Technical feasibility

Does the necessary technology exist to do what is been suggested Does the proposed equipment have the technical capacity for using the new system? Are there technical guarantees of accuracy, reliability and data security? The project is developed on Pentium III with 128 MB RAM.
The environment required in the development of system is any windows platform.

The observer pattern along with factory pattern will update the results eventually.

The language used in the development is PHP, Apache Server and database as MySQL.

2.1.2 Economical Feasibility

To decide whether a project is economically feasible, to consider various factors as cost benefit analysis, long-term returns and maintenance costs.

FUNCTIONAL REQUIREMENTS

Functional requirement defines a function of a software system or its component. A function is described as a set of inputs, the behaviour, and outputs. Functional requirements may be calculations, technical details, data manipulation and processing and other specific functionality that define what a system is supposed to accomplish. Behavioural requirements describing all the cases where the system uses the functional requirements are captured in use cases.

NUMBER OF MODULES

The system after careful analysis has been identified to be presented with the following modules:

Online Banquet Booking System Module
In OBBS project we use PHP and MySQL database. It has two modules.
1. Admin Module
2. User Module

Admin Module

1. Dashboard: In this section, admin can see all detail in brief like the total services, Total unread queries, Total read queries, Total new booking, Total Approved booking, Total Cancelled Booking and Total Event Type
2. Services: In this section, admin can manage services (add/delete).
3. Type of Event: In this section, admin can manage event type (add/delete).
4. Pages: In this section, the admin can manage about us and contact us pages.
5. Booking: In this section, admin can view new, approved, cancelled bookings and also give a remark.
6. Contact us Queries: In this section, admin can view and maintain the Queries.
7. Reports: In this section, admin can view booking in a particular period.
   Search: In this section, admin can search booking details and user queries with the help of name, mobile number and booking id

Admin can also update his profile, change password and recover password.

User (Unregistered Users): user can view the website and check out the information about "Online Banquet Booking System" and they can also sent message to administration.

Registered Users: Only registered users can book the banquet and view status of his/her booking.

Registered users can also update his profile, change password and recover password.

NON-FUNCTIONAL REQUIREMENTS

Performance Requirements:

Performance is measured in terms of the output provided by the application. Requirement specification plays an important part in the analysis of a system. Only when the requirement specifications are properly given, it is possible to design a system, which will fit into required environment. It rests largely with the users of the existing system to give the requirement specifications because they are the people who finally use the system. This is because the requirements have to be known during the initial stages so that the system can be designed according to those requirements. It is very difficult to change the system once it has been designed and on the other hand designing a system, which does not cater to the requirements of the user, is of no use.

The requirement specification for any system can be broadly stated as given below:

The system should be able to interface with the existing system the system should be accurate.

The system should be better than the existing system

Reliability:

In this system reliability means the mail which is send by the source must reach the target user with any modification and accurate.

Security:

The web server and database server should be protected from hacking, virus etc

Portability:

The application will be developed using standard open source software like PHP, Apcahe web server, MySQL database, Internet Explorer Browser etc these software will work both on Windows and Linux o/s. Hence portability problems will not arise.

Availability:

This software will be available always.

Maintainability:

In this system the presentation layer is clearly separated from the service layer. So any modification in future will be done with less effort. The database will be running at the server. Users access these forms by using the user-ids and the passwords.

HARDWARE REQUIREMENTS:

Processor	:	Intel P-IV based system
Processor Speed	:	2.0. GHz
RAM	:	1GB
Hard Disk	:	40GB to 80GB

SOFTWARE REQUIREMENTS:

Database	:	MySQL
Server	:	Apache
Frontend	:	HTML
Scripting language	:	Java Script
IDE	:	Sublime
Technology	:	PHP

3. SYSTEM DESIGN

UML DIAGRAMS

The unified modelling language allows the software engineer to express an analysis model using the modelling notation that is governed by a set of syntactic semantic and pragmatic rules**.**

Class Diagram:

The class diagram shows a set of classes, interfaces, collaborations and their relationships.

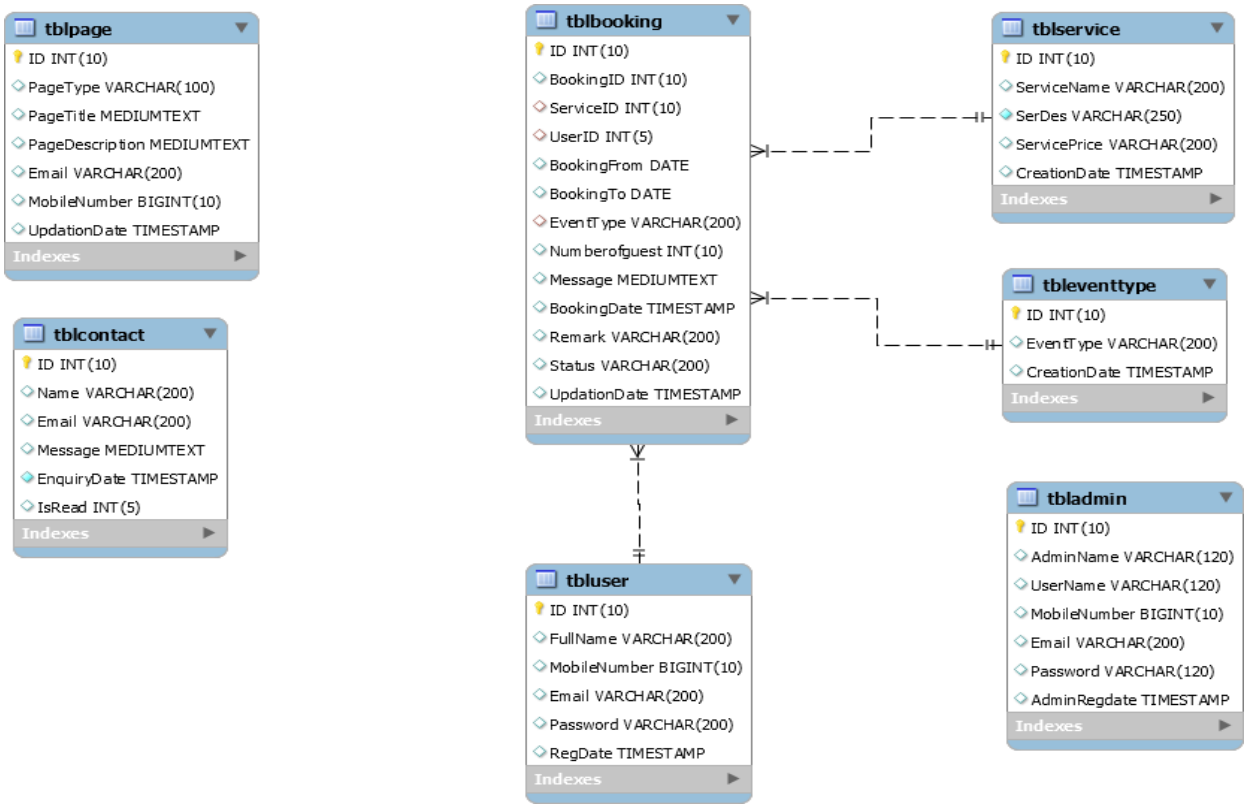
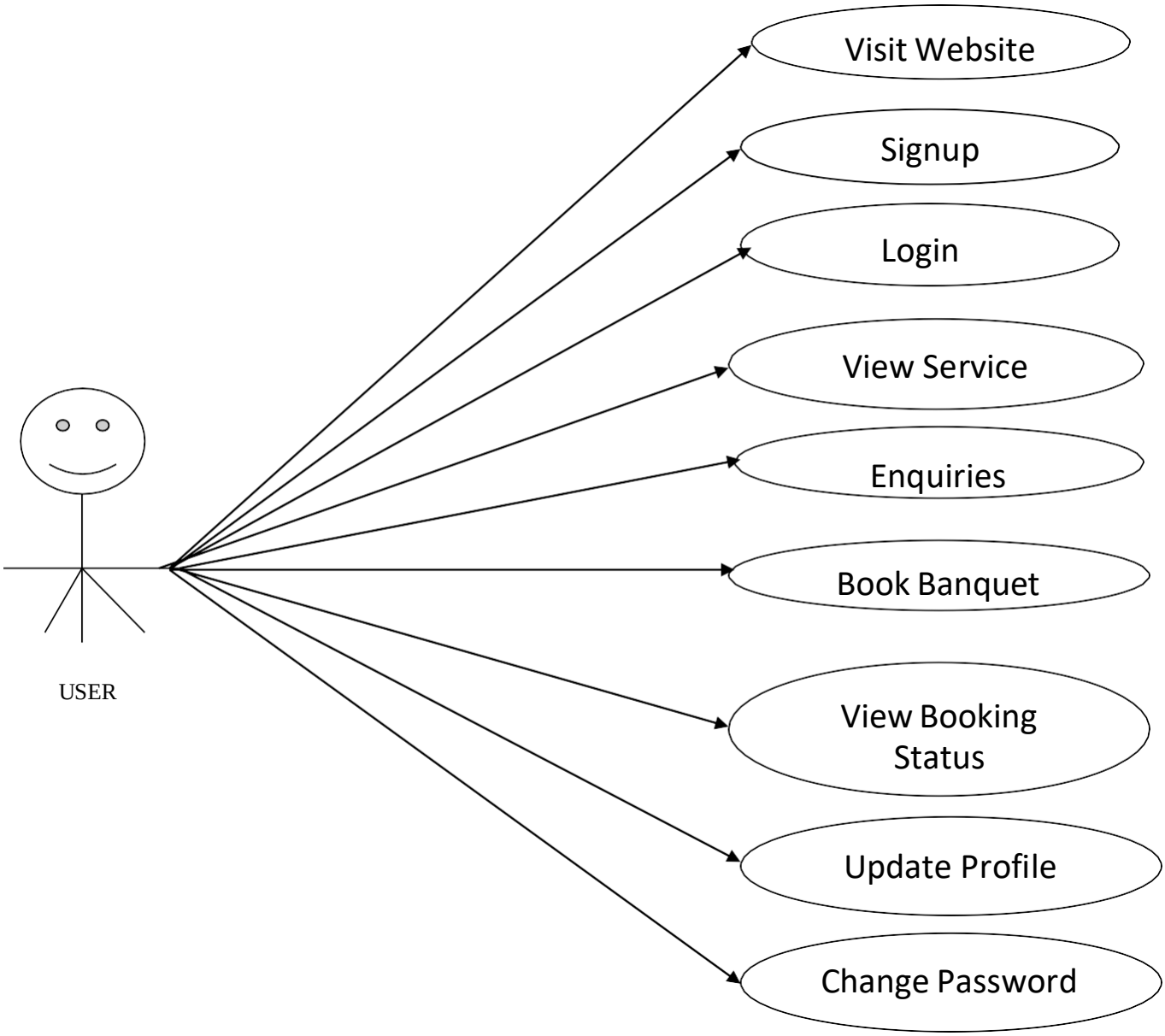


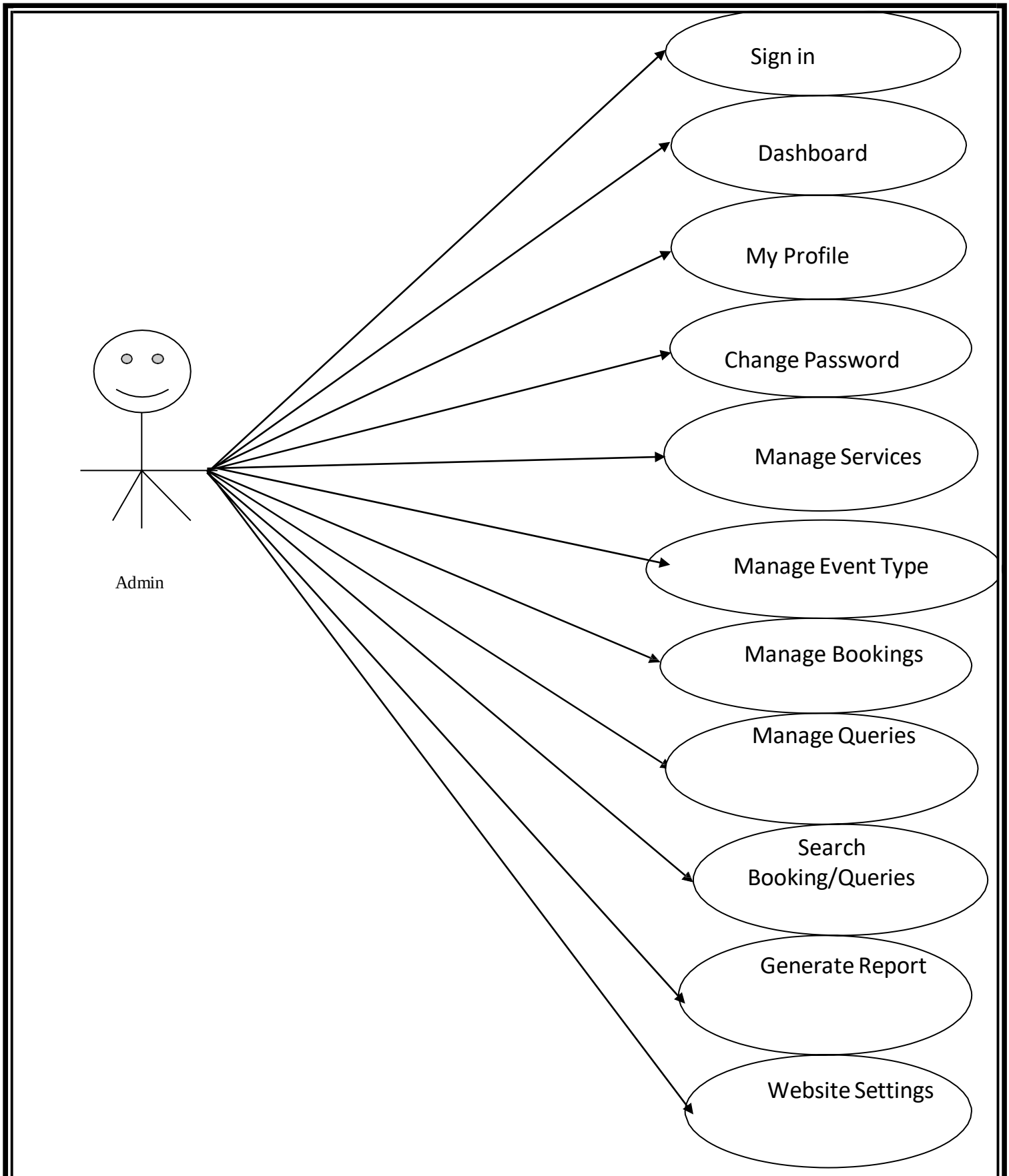
Fig: 3.1.1.1 Class diagram for on OBBS

Use case diagrams:

Use case diagram consists of actors, use cases and their relationships. These diagrams are especially important in organizing and modelling the behaviours of a system.



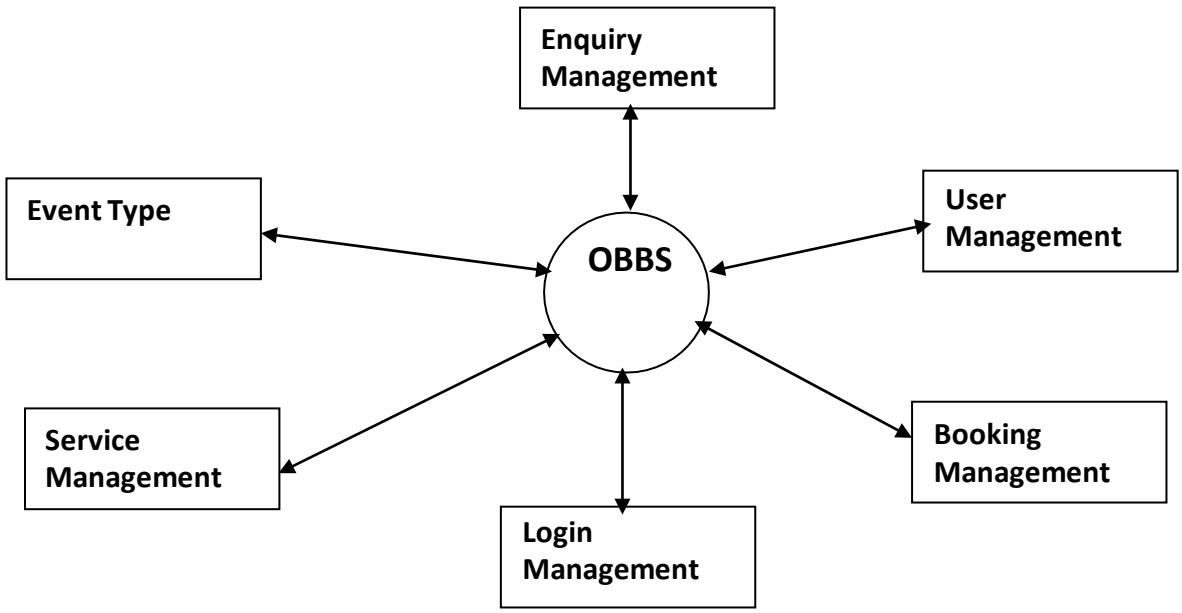
Use case diagram for user



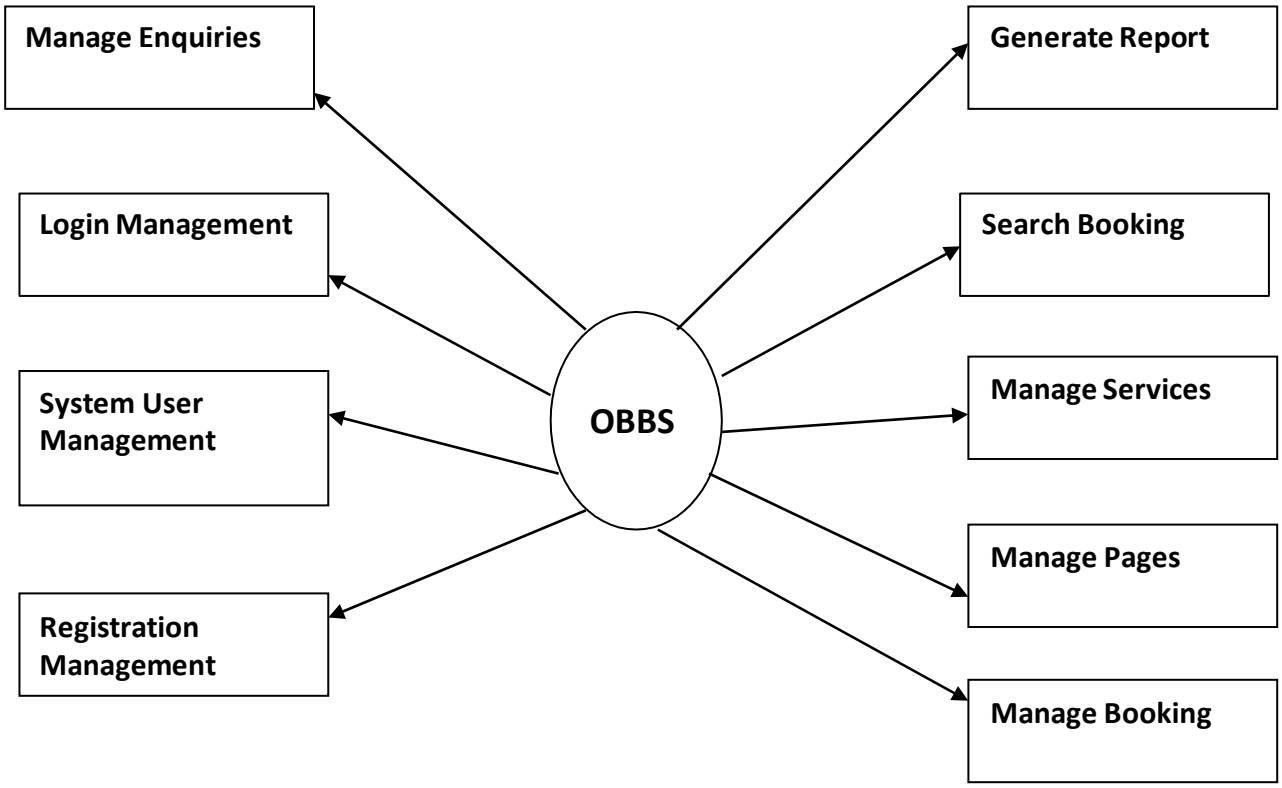
Use case diagram for Administrator

3.1.2 Data Flow Diagram:

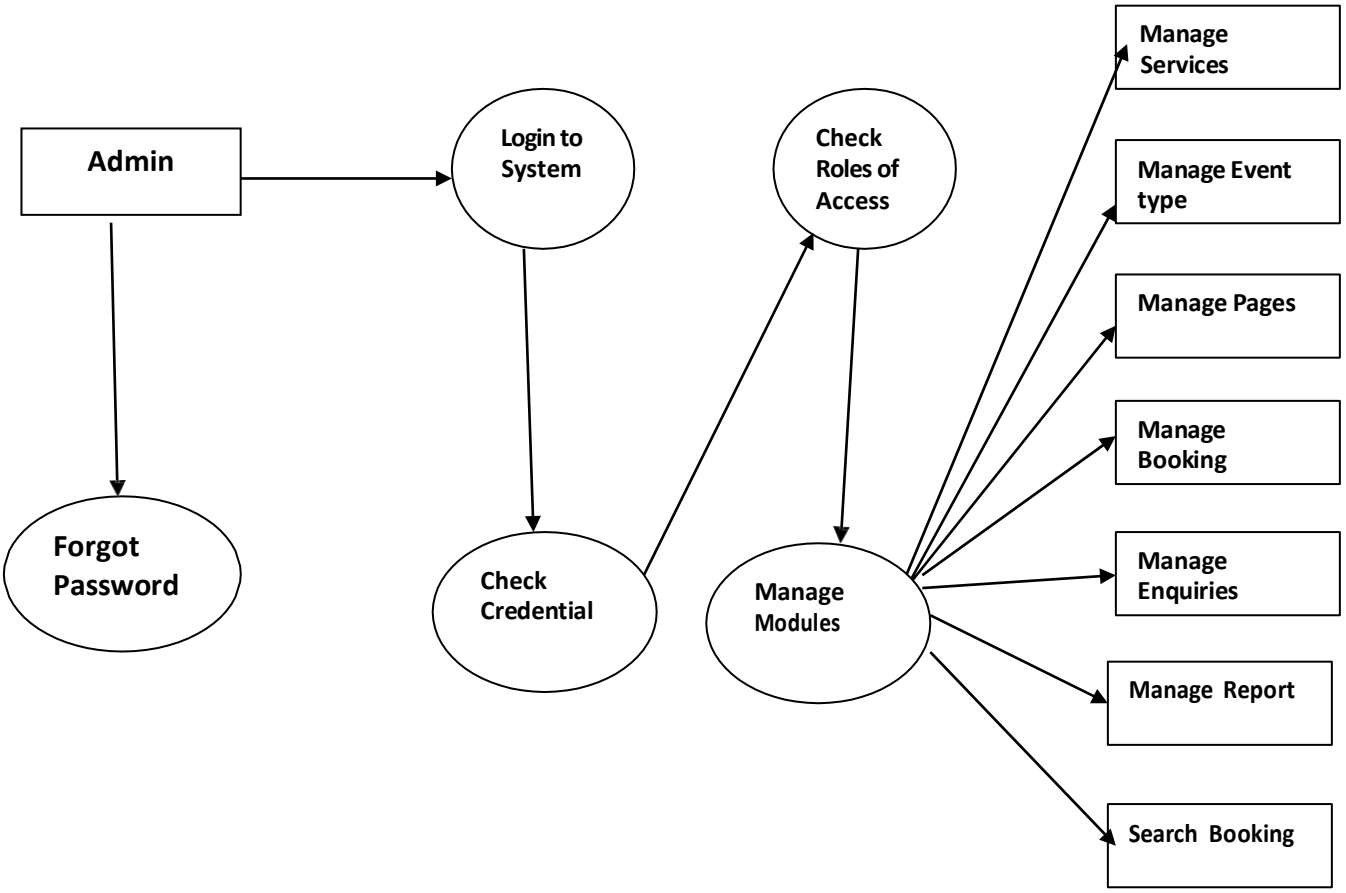
Zero Level DFD:

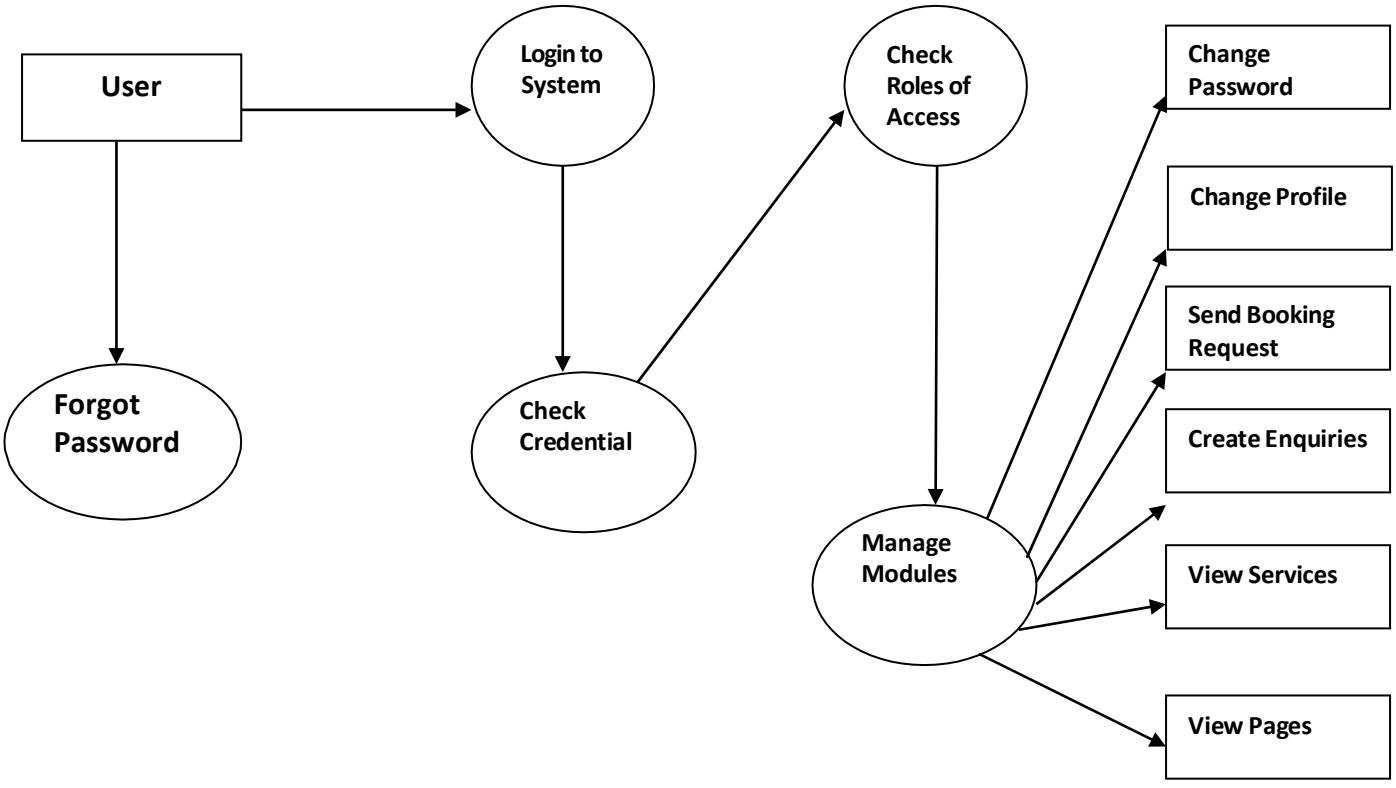


First Level DFD:

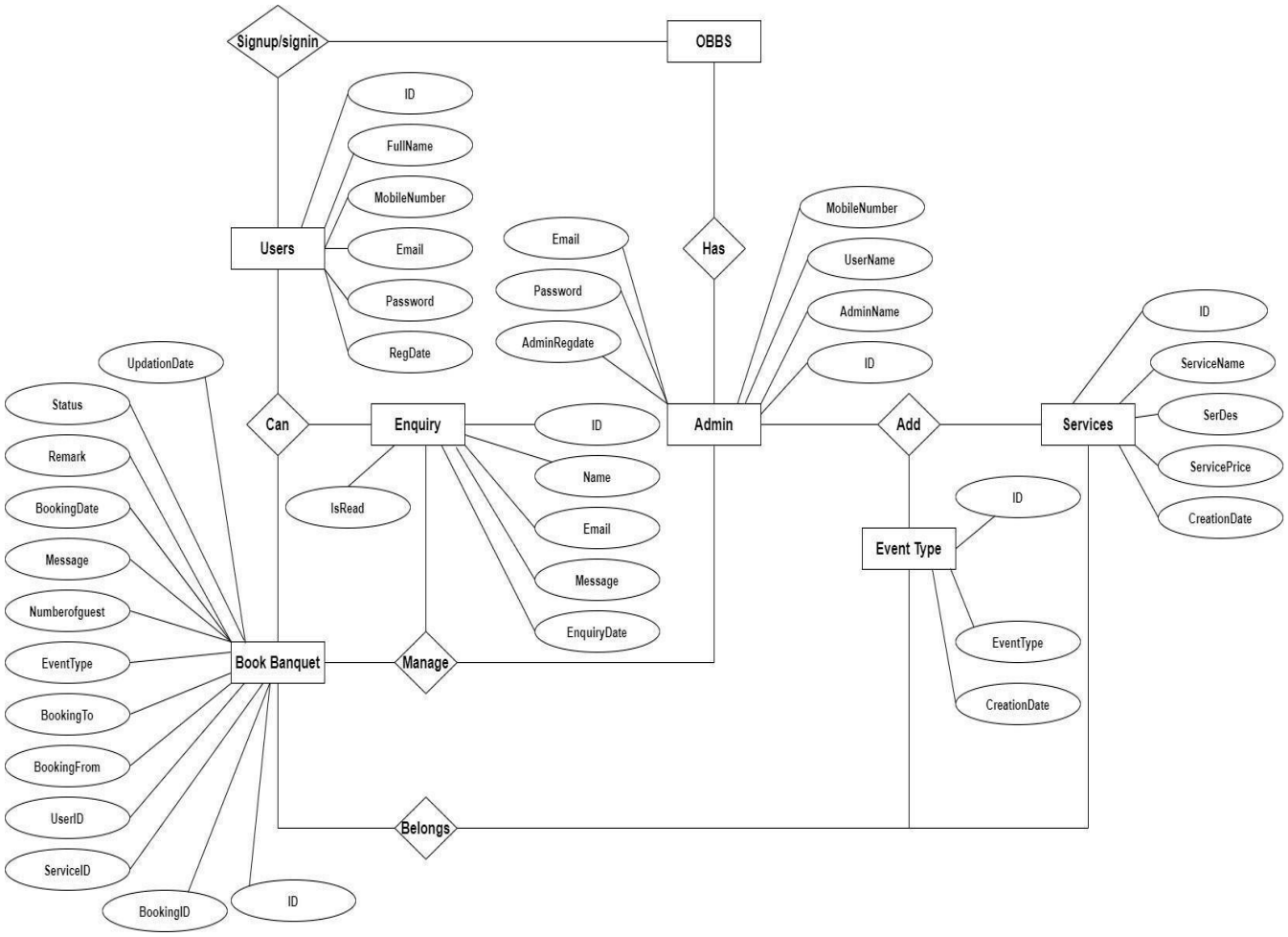


Second Level DFD





ER-DIAGRAM



ER diagram for Online Banquet Booking System

Tables

The data in the system has to be stored and retrieved from database. Designing the database is part of system design. Data elements and data structures to be stored have been identified at analysis stage. They are structured and put together to design the data storage and retrieval system.

A database is a collection of interrelated data stored with minimum redundancy to serve many users quickly and efficiently. The general objective is to make database

access easy, quick, inexpensive and flexible for the user. Relationships are established between the data items and unnecessary data items are removed. Normalization is done to get an internal consistency of data and to have minimum redundancy and maximum stability. This ensures minimizing data storage required, minimizing chances of data inconsistencies and optimizing for updates. The MySQL database has been chosen for developing the relevant databases.

Online Banquet Booking System (OBBS) contains 7 MySQL tables:

tbladmin : This table store the admin login details

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(10)			No	*None*		AUTO_INCREMENT
2	AdminName	varchar(120)	utf8mb4_general_ci		Yes	*NULL*		
3	UserName	varchar(120)	utf8mb4_general_ci		Yes	*NULL*		
4	MobileNumber	bigint(10)			Yes	*NULL*		
5	Email	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
6	Password	varchar(120)	utf8mb4_general_ci		Yes	*NULL*		
7	AdminRegdate	timestamp			Yes	current_timestamp()		

tblbooking: This table store the booking details.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(10)			No	*None*		AUTO_INCREMENT
2	BookingID	int(10)			Yes	*NULL*		
3	ServiceID	int(10)			Yes	*NULL*		
4	UserID	int(5)			Yes	*NULL*		
5	BookingFrom	date			Yes	*NULL*		
6	BookingTo	date			Yes	*NULL*		
7	EventType	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
8	Numberofguest	int(10)			Yes	*NULL*		
9	Message	mediumtext	utf8mb4_general_ci		Yes	*NULL*		
10	BookingDate	timestamp			Yes	current_timestamp()		
11	Remark	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
12	Status	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
13	UpdationDate	timestamp			Yes	*NULL*		ON UPDATE CURRENT_TIMESTAMP()

tbleventtype: This table store the type of event details.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(10)			No	*None*		AUTO_INCREMENT
2	EventType	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
3	CreationDate	timestamp			Yes	current_timestamp()		

tblpage: This table about us and contact us detail.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(10)			No	*None*		AUTO_INCREMENT
2	PageType	varchar(100)	utf8mb4_general_ci		Yes	*NULL*		
3	PageTitle	mediumtext	utf8mb4_general_ci		Yes			
4	PageDescription	mediumtext	utf8mb4_general_ci		Yes			
5	Email	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
6	MobileNumber	bigint(10)			Yes	*NULL*		
7	UpdationDate	timestamp			Yes	*NULL*		ON UPDATE CURRENT_TIMESTAMP()

tblservice: This table store the details of banquet services.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(10)			No	*None*		AUTO_INCREMENT
2	ServiceName	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
3	SerDes	varchar(250)	utf8mb4_general_ci		No	*None*		
4	ServicePrice	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
5	CreationDate	timestamp			Yes	current_timestamp()		

tbluser: This table store the details of registered user

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(10)			No	*None*		AUTO_INCREMENT
2	FullName	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
3	MobileNumber	bigint(10)			Yes	*NULL*		
4	Email	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
5	Password	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
6	RegDate	timestamp			Yes	current_timestamp()		

tblcontact: This table store the details of enquires.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(10)			No	*None*		AUTO_INCREMENT
2	Name	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
3	Email	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
4	Message	mediumtext	utf8mb4_general_ci		Yes	*NULL*		
5	EnquiryDate	timestamp			No	current_timestamp()		
6	IsRead	int(5)			Yes	*NULL*		

4. IMPLEMENTATION

INTRODUCTION:

Implementation is the stage of the project when the theoretical design is turned out into a working system. Thus, it can be considered to be the most critical stage in achieving a successful new system and in giving the user, confidence that the new system will work and be effective. The implementation stage involves careful planning, investigation of the existing system and its constraints on implementation, designing of methods to achieve changeover and evaluation of changeover methods.

TECHNOLOGIES USED

Programming Language

PHP

- ✓ PHP stands for PHP: Hypertext Pre-processor
- ✓ PHP is a server-side scripting language, like ASP
- ✓ PHP scripts are executed on the server
- ✓ PHP supports many databases (MYSQL, Informix, Oracle, Sybase, Solid, Generic ODBC, etc.)
- ✓ PHP is an open source software
- ✓ PHP is free to download and use

MYSQL

- ✓ MYSQL is a database server
- ✓ MYSQL is ideal for both small and large applications
- ✓ MYSQL supports standard SQL
- ✓ MYSQL compiles on a number of platforms
- ✓ MYSQL is free to download and use

CSS

- ✓ Cascading Style Sheets (CSS)
- ✓ Simple mechanism
- ✓ Easy for adding style (e.g., fonts, colors, spacing) to Web documents.

5. TESTING

Introduction

The purpose of testing is to discover errors. Testing is the process of trying to discover every conceivable fault or weakness in a work product. It provides a way to check the functionalities of components, sub assemblies, and/or a finished product it is the process of exercising software with the intent of ensuring that the software system meets its requirements and user expectations and does not fail in an unacceptable manner. There are various types of tests. Each test type addresses a specific testing requirement.

Types of Testing

Unit Testing

Unit testing focuses verification effort on the smallest unit of software design, the module. The unit testing, we have is white box oriented and some modules the steps are conducted in parallel.

5.1.2. Integration Testing

Testing is done for each module. After testing all the modules, the modules are integrated and testing of the final system is done with the test data, specially designed to show that the system will operate successfully in all its aspects conditions. Thus the system testing is a confirmation that all is correct and an opportunity to show the user that the system works. The purpose of integration testing is to verify functional, performance and reliability requirements placed on major design items. These "design items", i.e. assemblages (or groups of units), are exercised through their interfaces using black box testing, success and error cases being simulated via appropriate parameter and data inputs. Simulated usage of shared data areas and inter-process communication is tested and individual subsystems are exercised through their input interface.

Test cases are constructed to test that all components within assemblages interact correctly, for example across procedure calls or process activations, and this is done after testing individual modules, i.e. unit testing.

System Testing

System testing ensures that the entire integrated software system meets requirements. It tests a configuration to ensure known and predictable results. An example of system testing is the configuration oriented system integration test. System testing is based on process descriptions and flows, emphasizing pre-driven process links and integration points.

White Box Testing

This type of testing ensures that

All independent paths have been exercised at least once

All logical decisions have been exercised on their true and false sides

All loops are executed at their boundaries and within their operational bounds All internal

data structures have been exercised to assure their validity.

To follow the concept of white box testing we have tested each form .we have created independently to verify that Data flow is correct, All conditions are exercised to check their validity, All loops are executed on their boundaries.

Basic Path Testing

Established technique of flow graph with Cyclometer complexity was used to derive test cases for all the functions. The main steps in deriving test cases were:

Use the design of the code and draw correspondent flow graph.

Conditional Testing

In this part of the testing each of the conditions were tested to both true and false aspects. And all the resulting paths were tested. So that each path that may be generate on particular condition is traced to uncover any possible errors.

Data Flow Testing

This type of testing selects the path of the program according to the location of

Definition and use of variables. This kind of testing was used only when some local variable were declared. The definition-use chain method was used in this type of testing. These were particularly useful in nested statements.

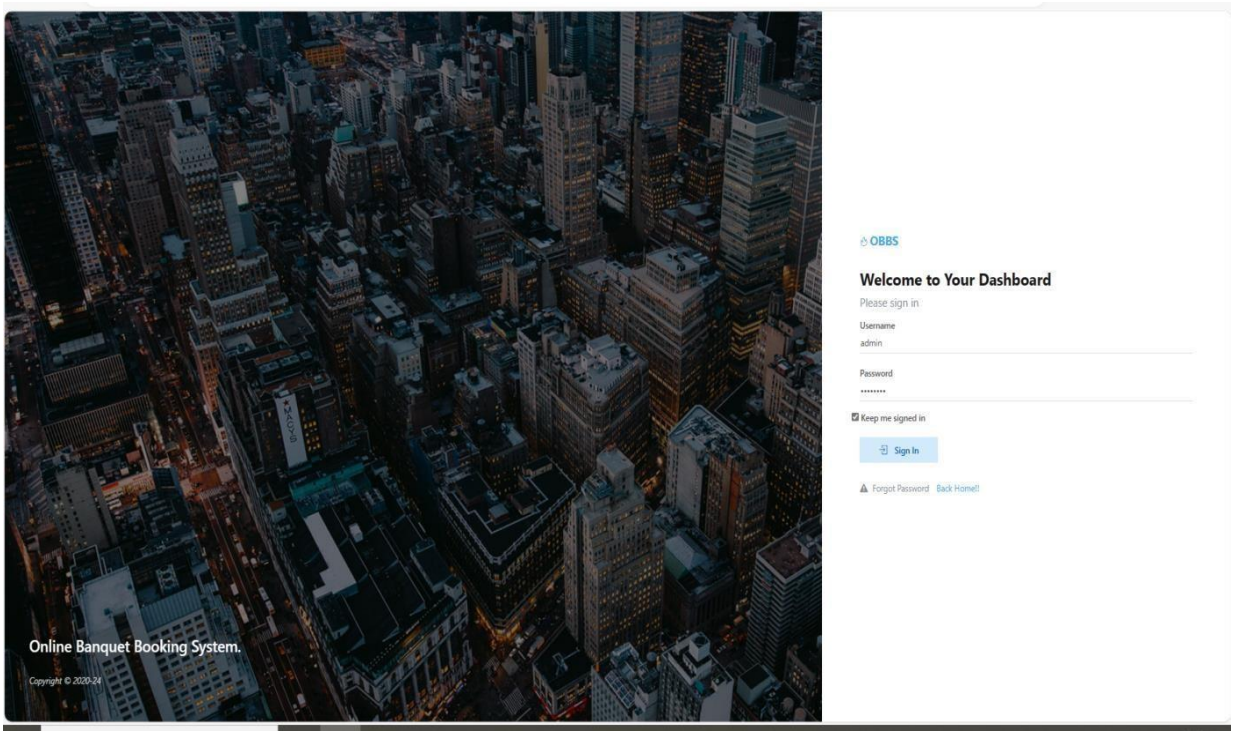
Loop Testing

In this type of testing all the loops are tested to all the limits possible. The following exercise was adopted for all loops: All the loops were tested at their limits, just above them and just below them. All the loops were skipped at least once. For nested loops test the inner most loop first and then work outwards. For concatenated loops the values of dependent loops were set with the help of connected loop. Unstructured loops were resolved into nested loops or concatenated loops and tested as above. Each unit has been separately tested by the development team itself and all the input have been validated.

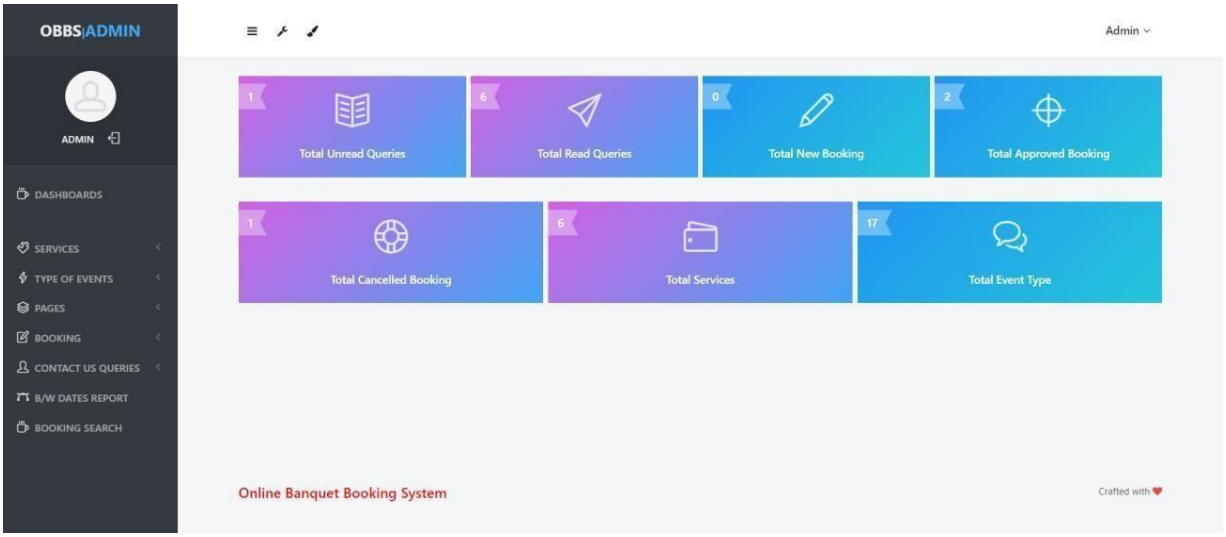
6. Output Screen of Project

Admin Module Screens

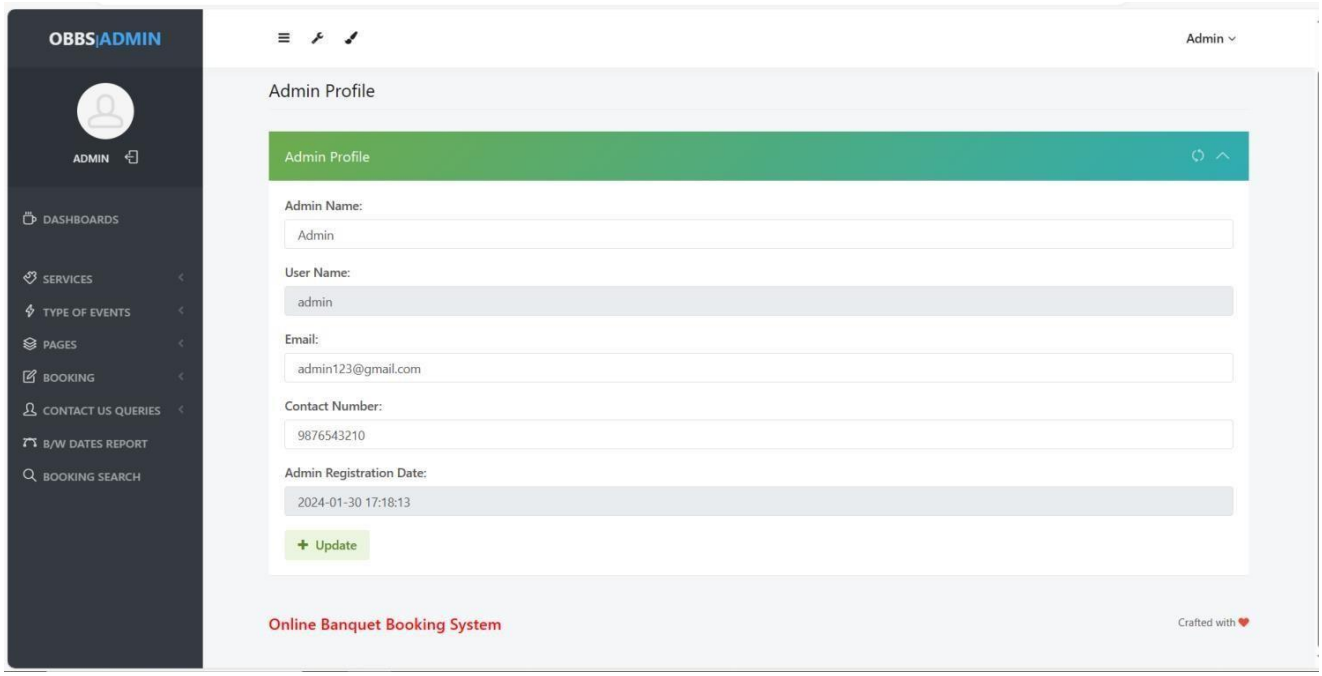
Sign In



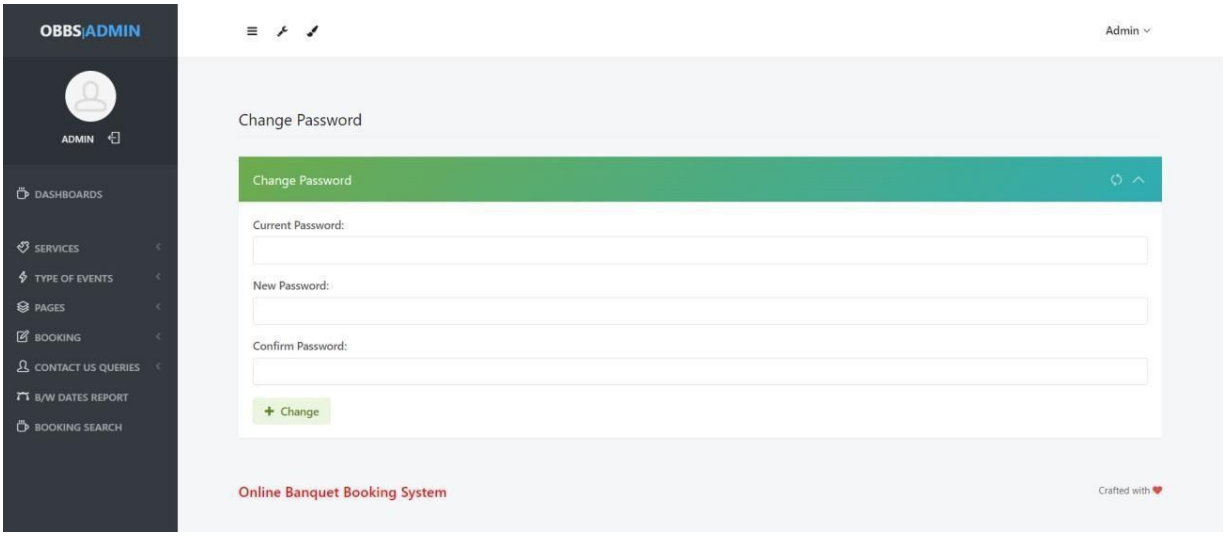
Dashboard



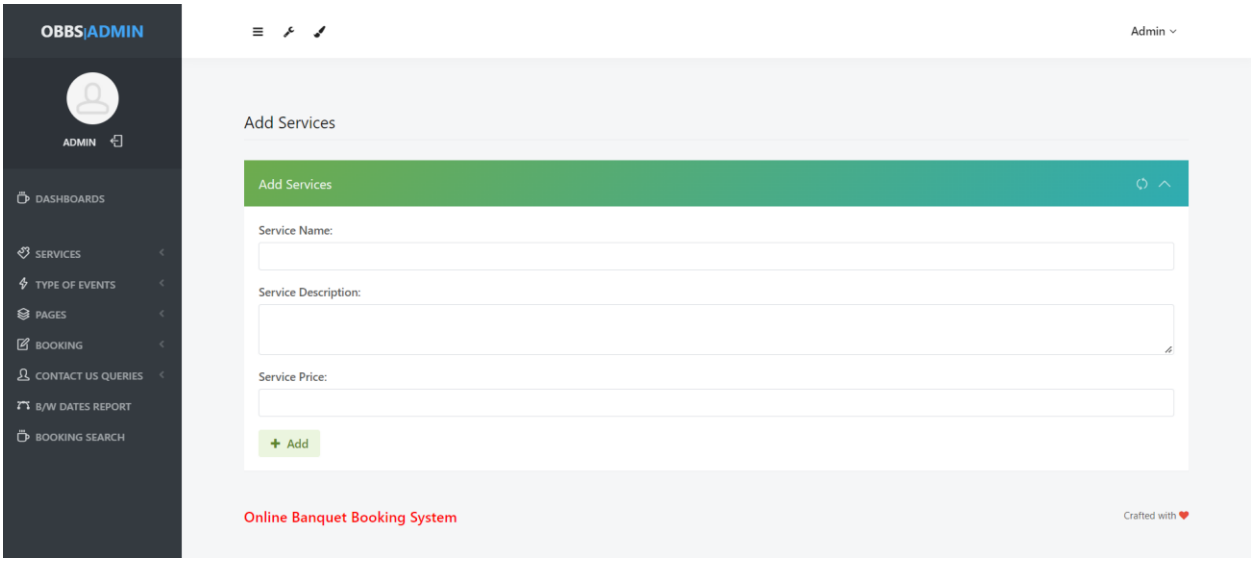
Profile



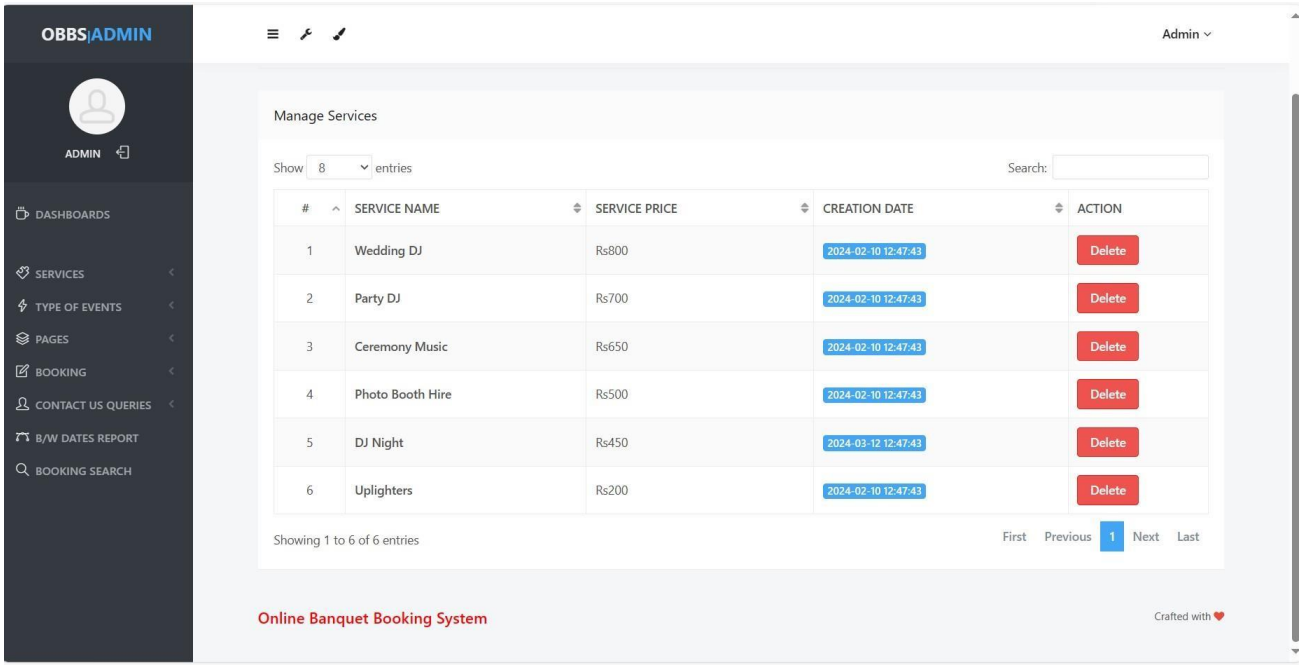
Change Password



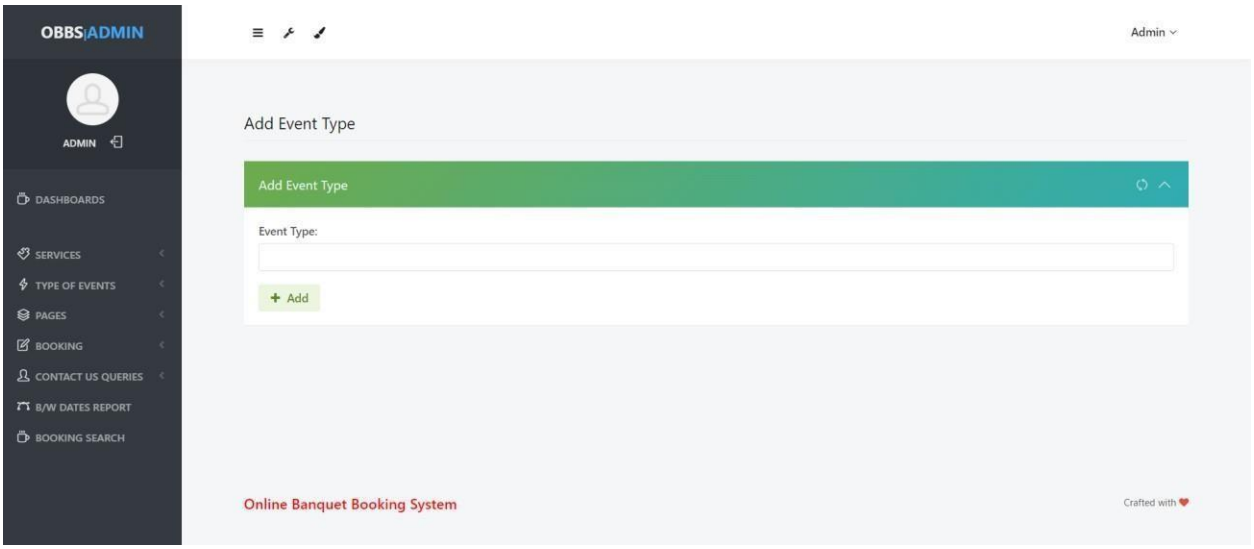
Add Services



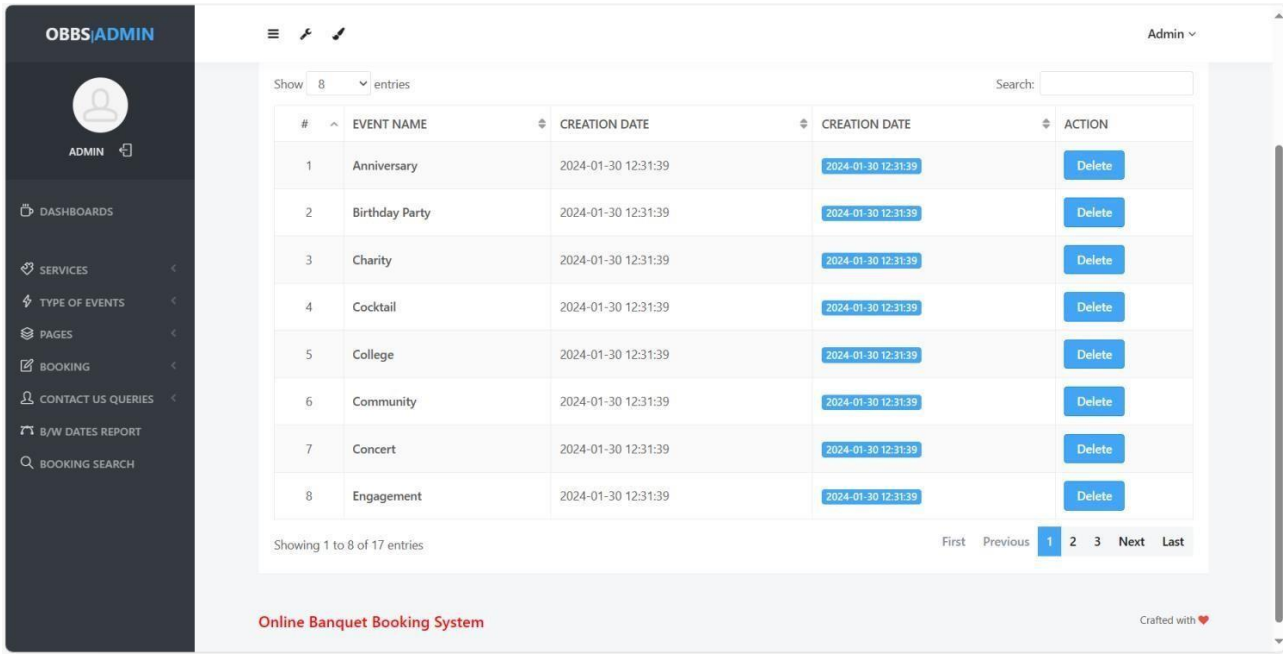
Manage Services



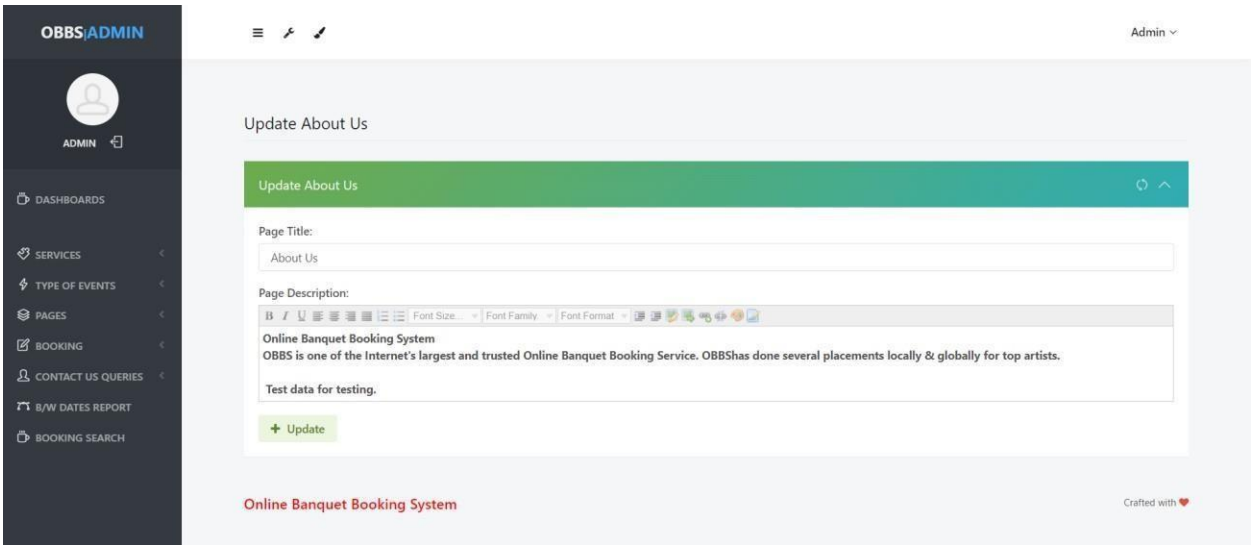
Add Event Type



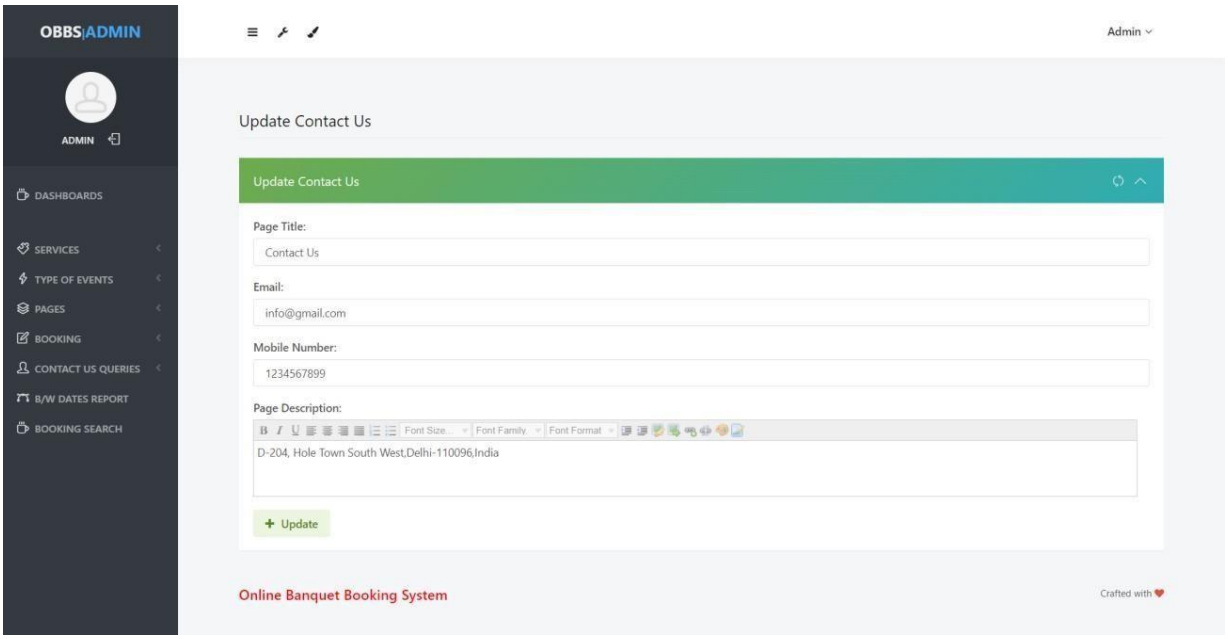
Manage Event Type



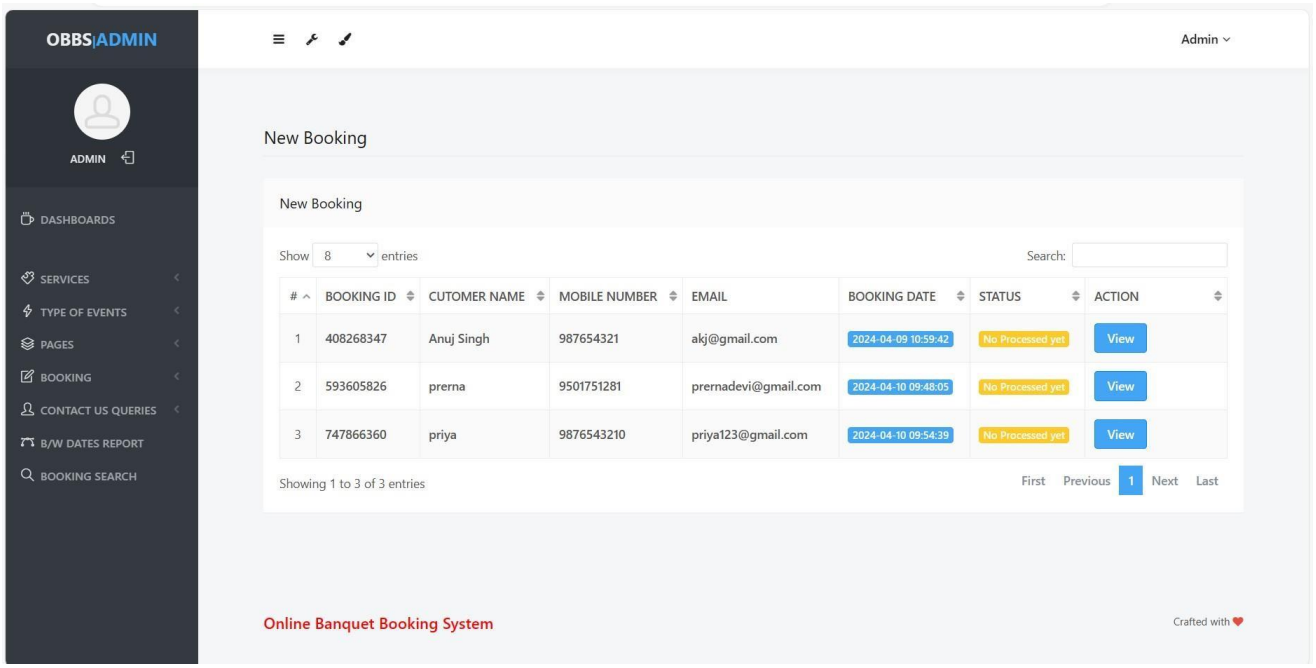
Update about Us



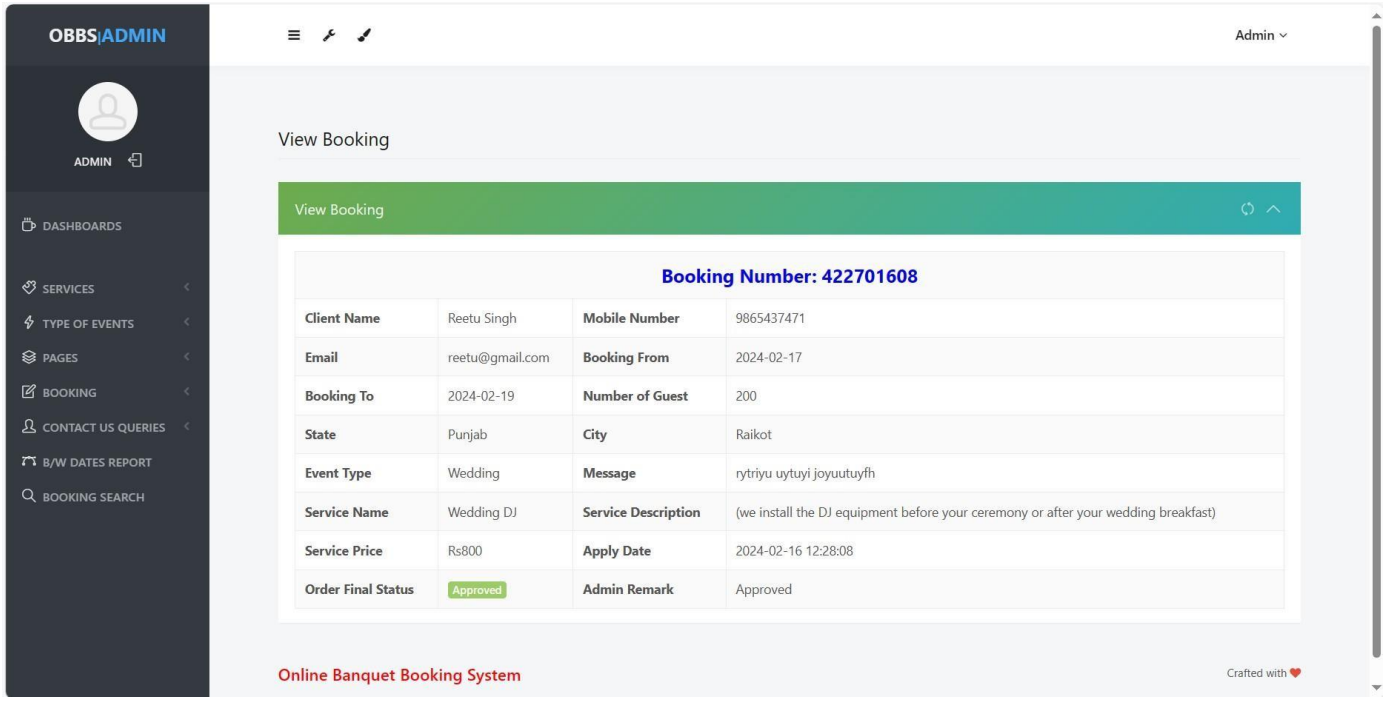
Update Contact Us



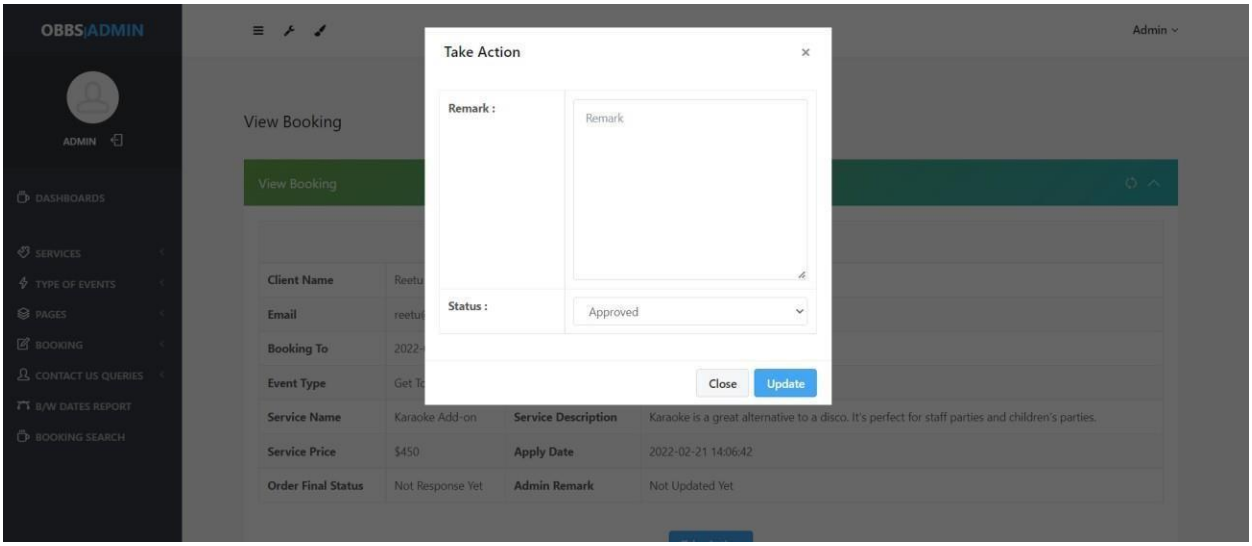
New Booking



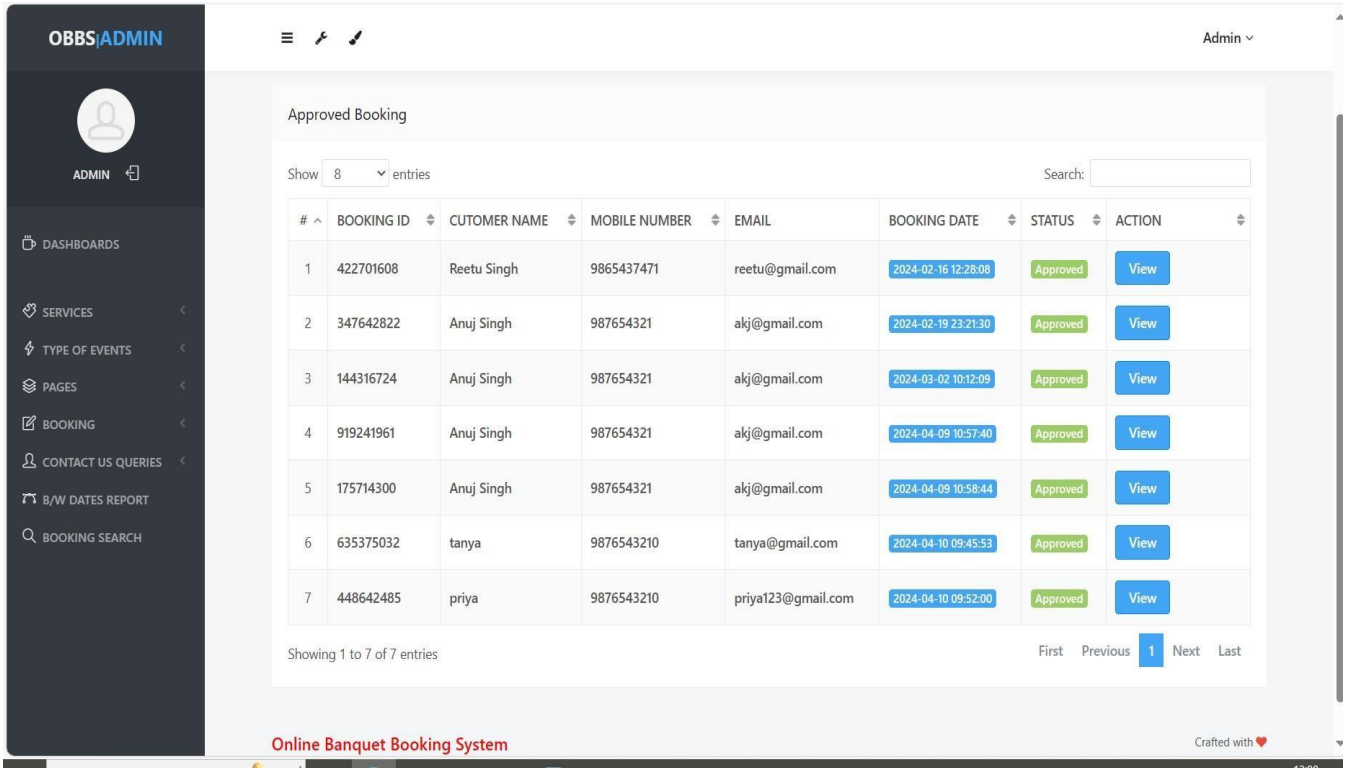
View Booking



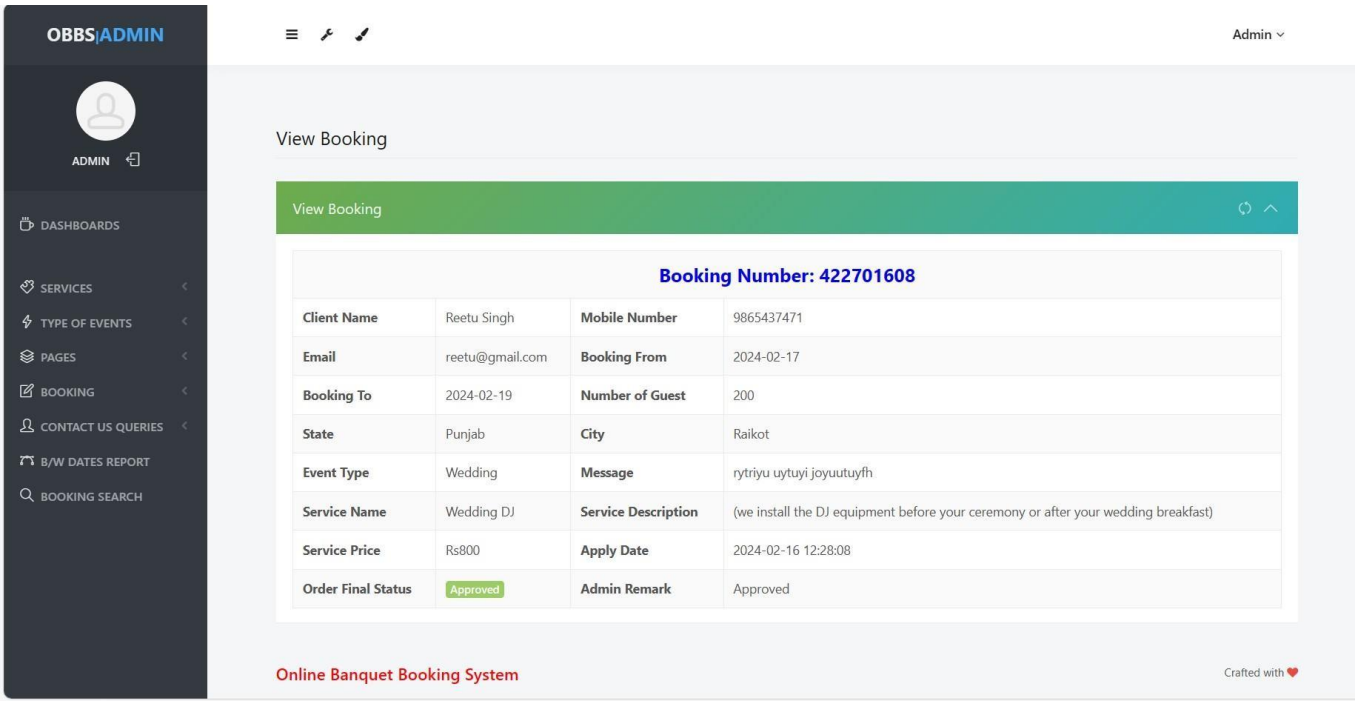
Update Remark



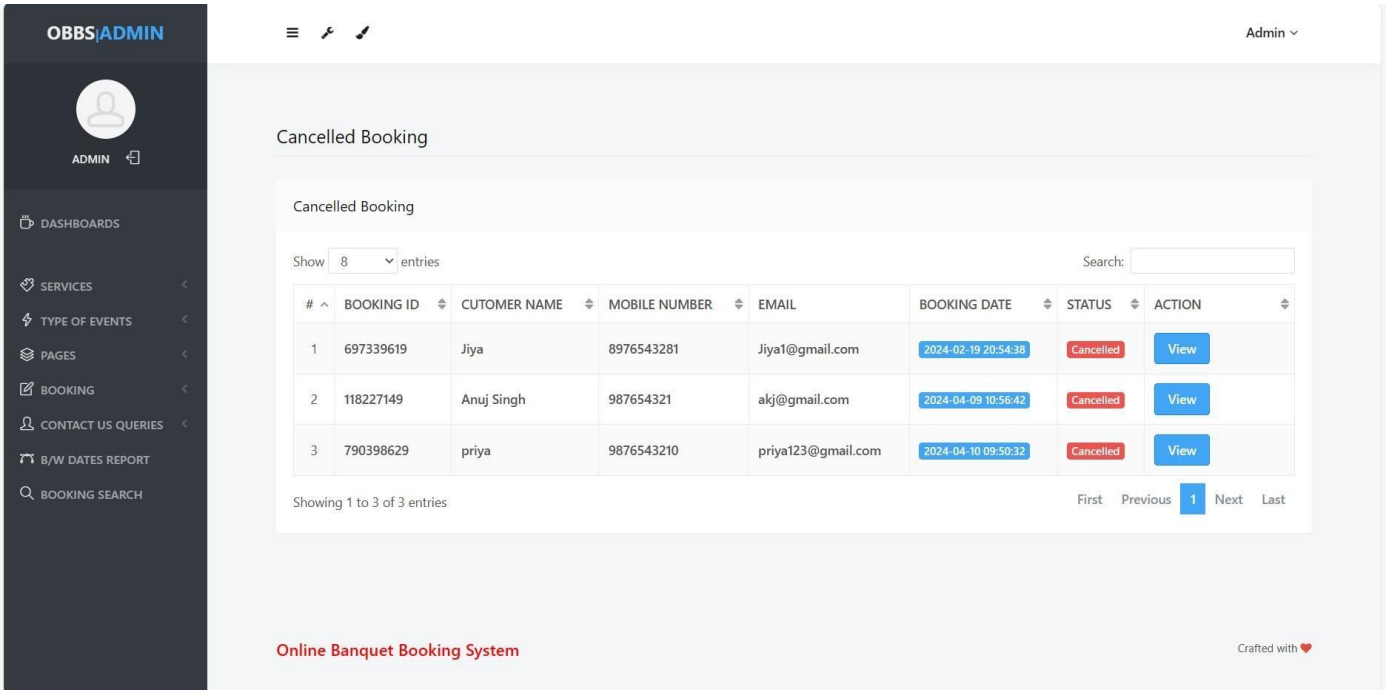
Approved Booking



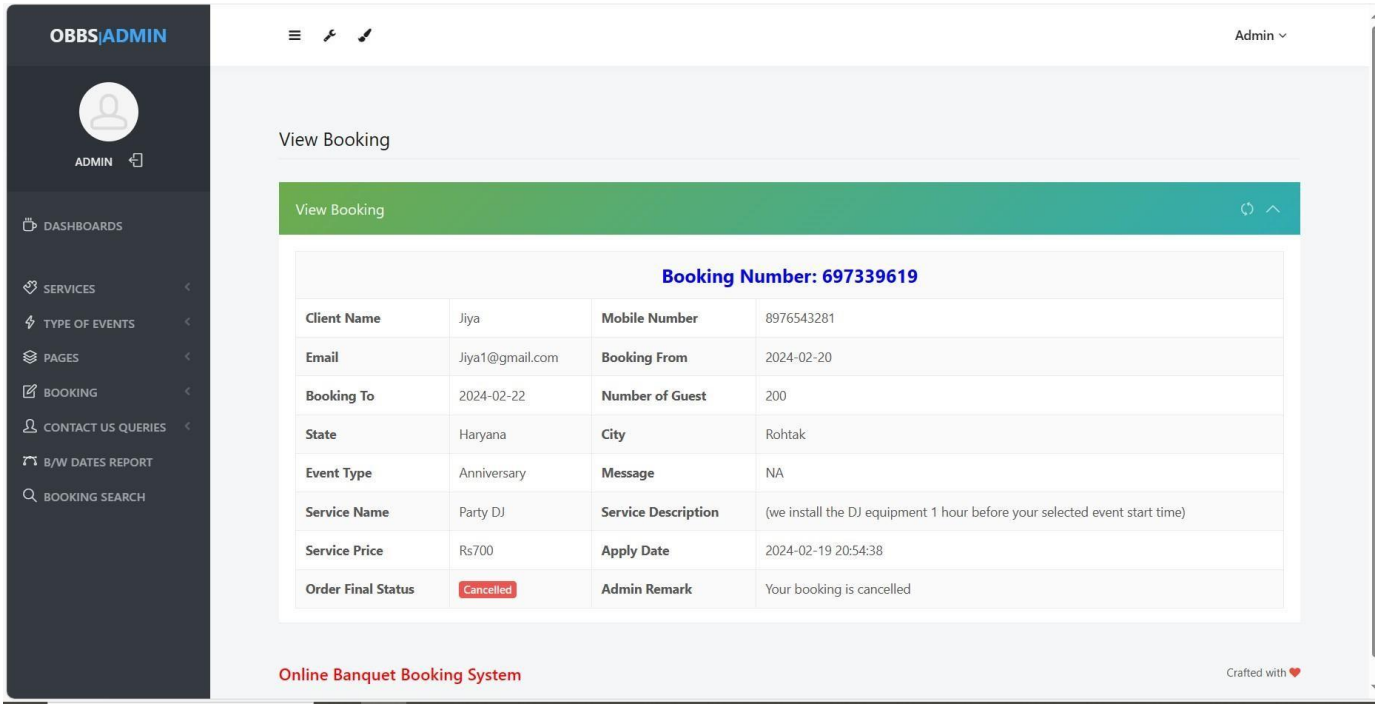
View Approved Booking



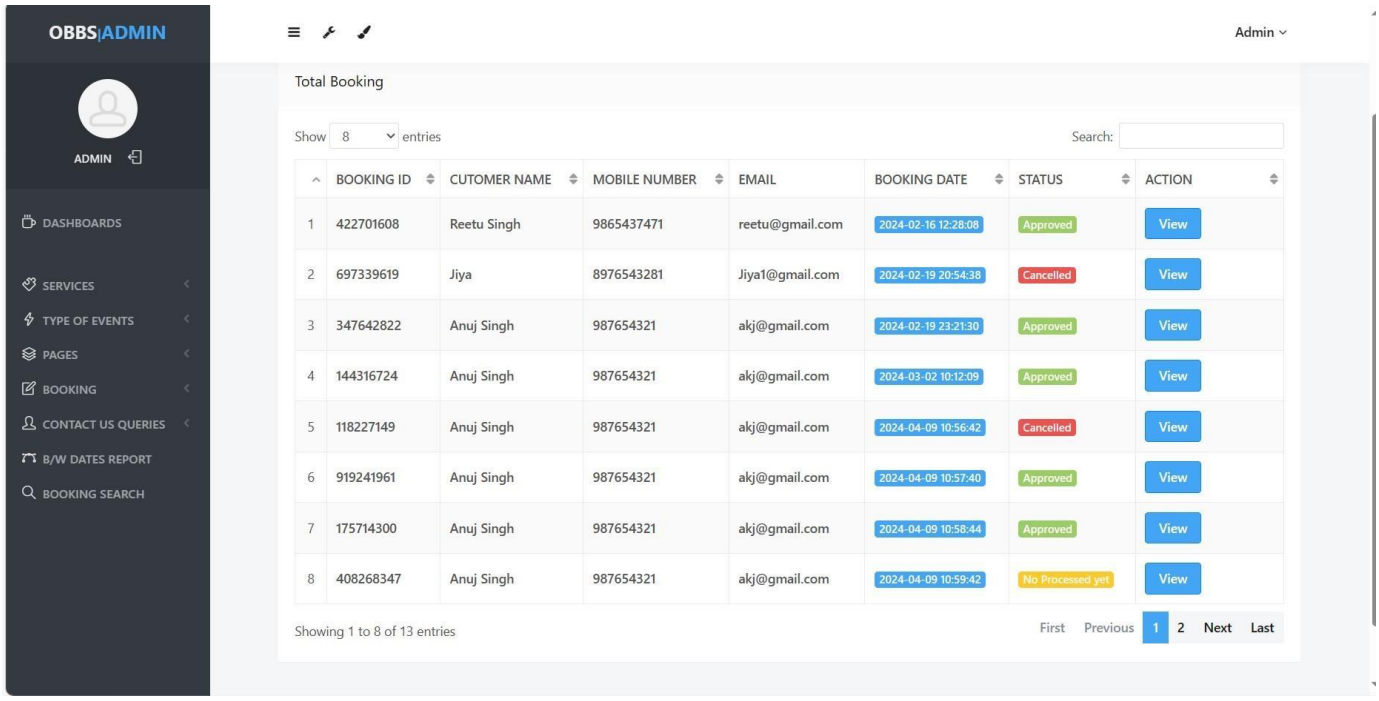
Cancelled Booking



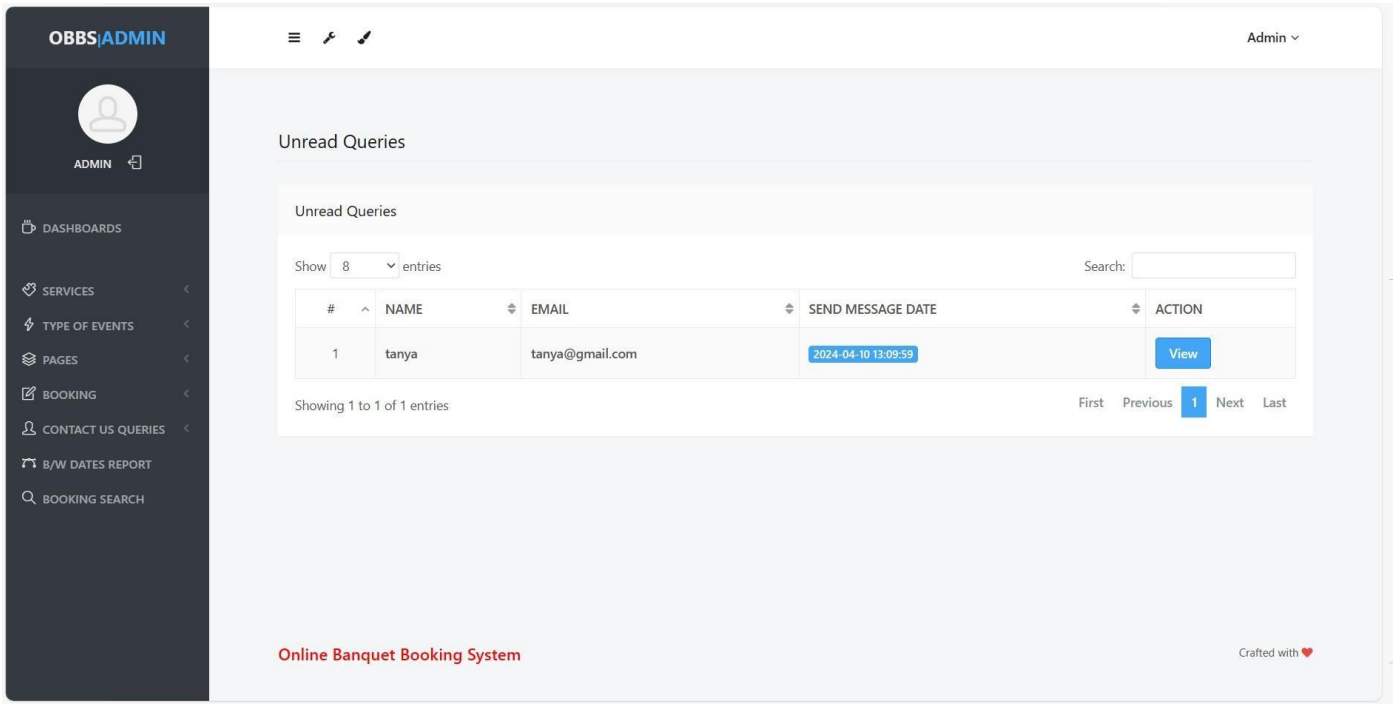
View Cancelled Booking



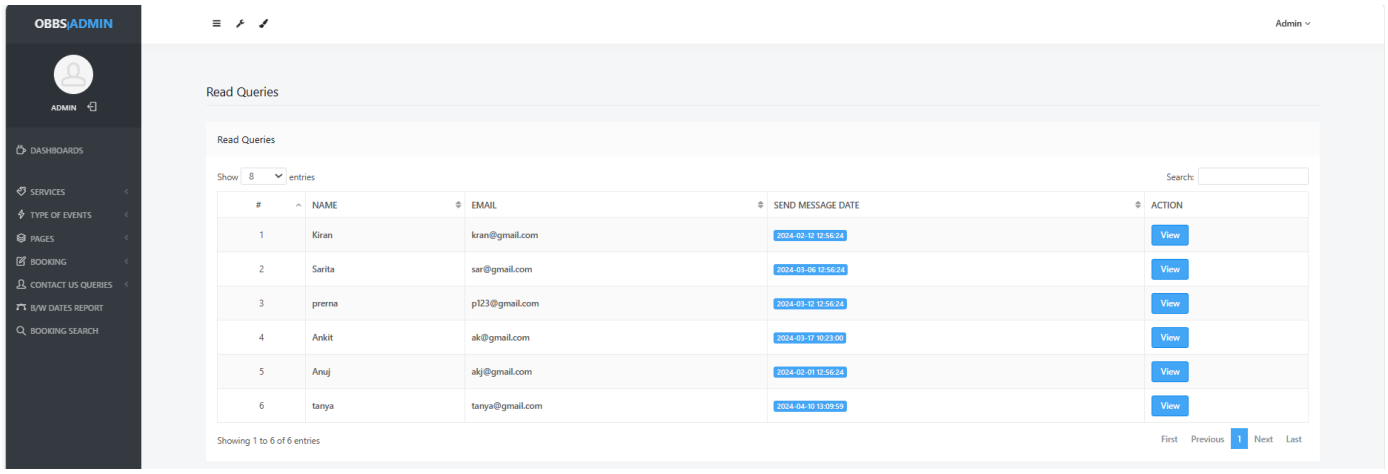
All Booking



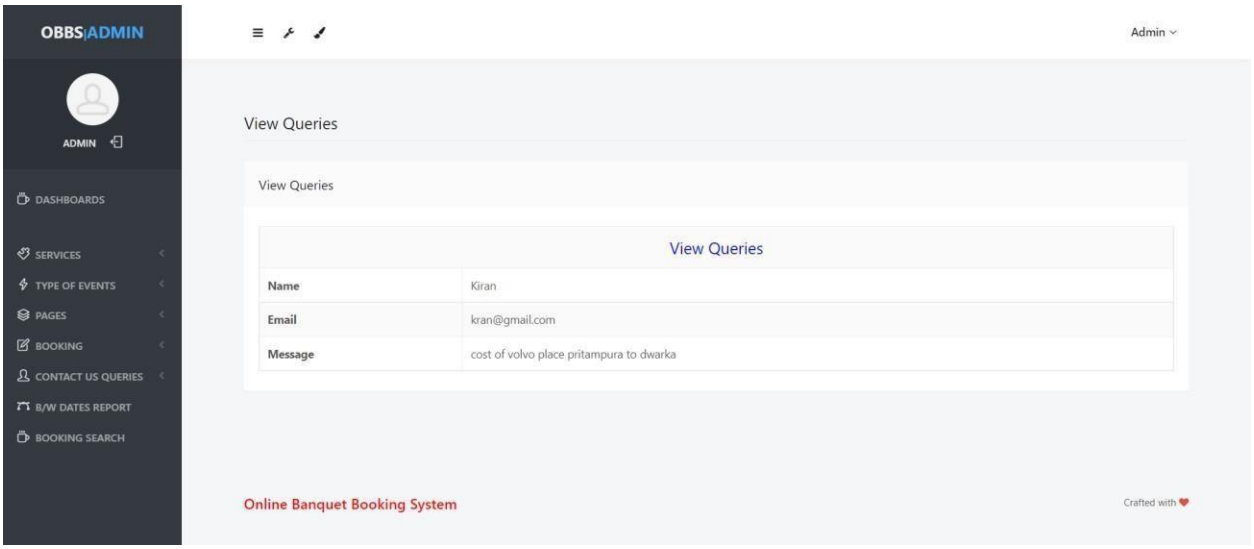
Unread Queries



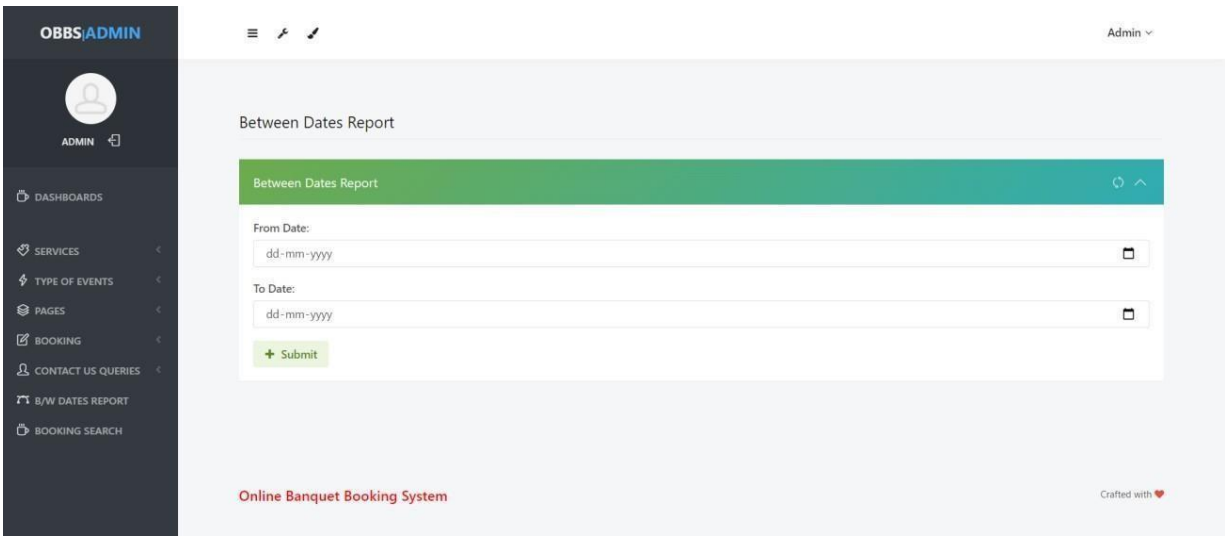
Read Queries



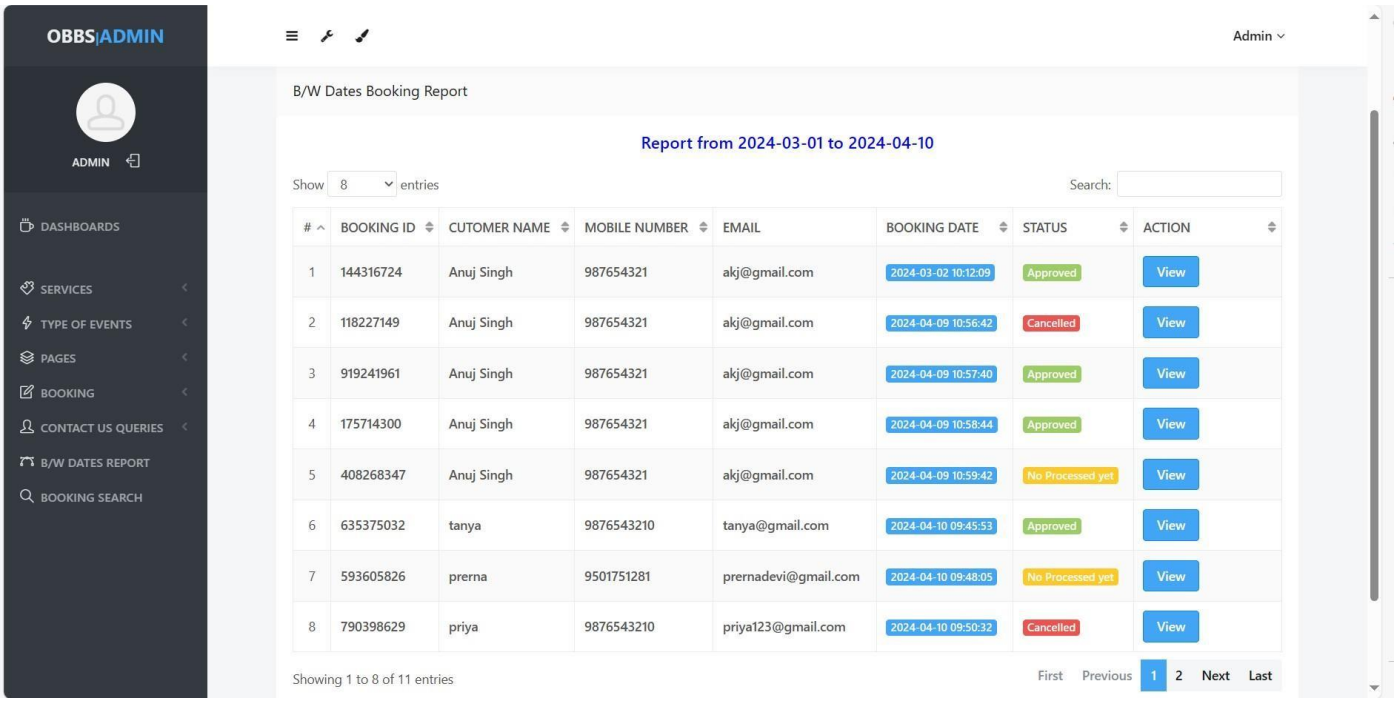
View Queries



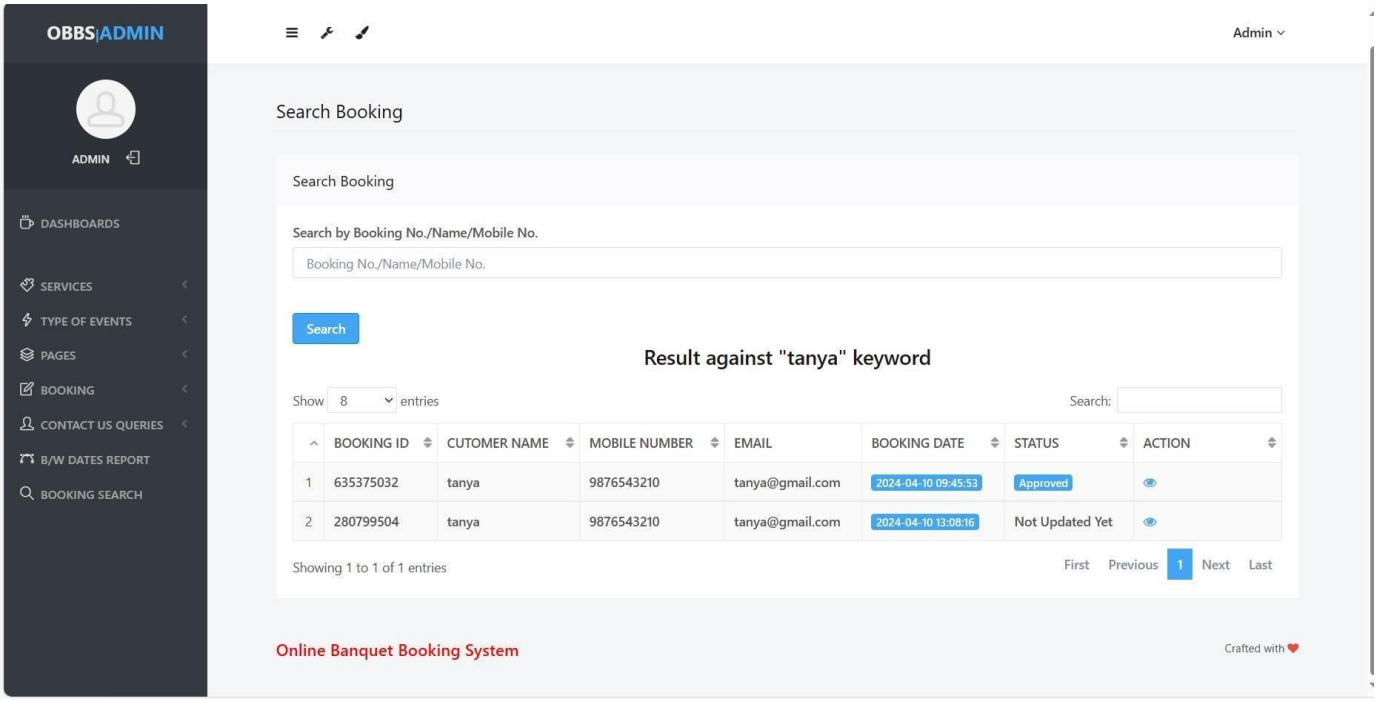
Between Dates Report



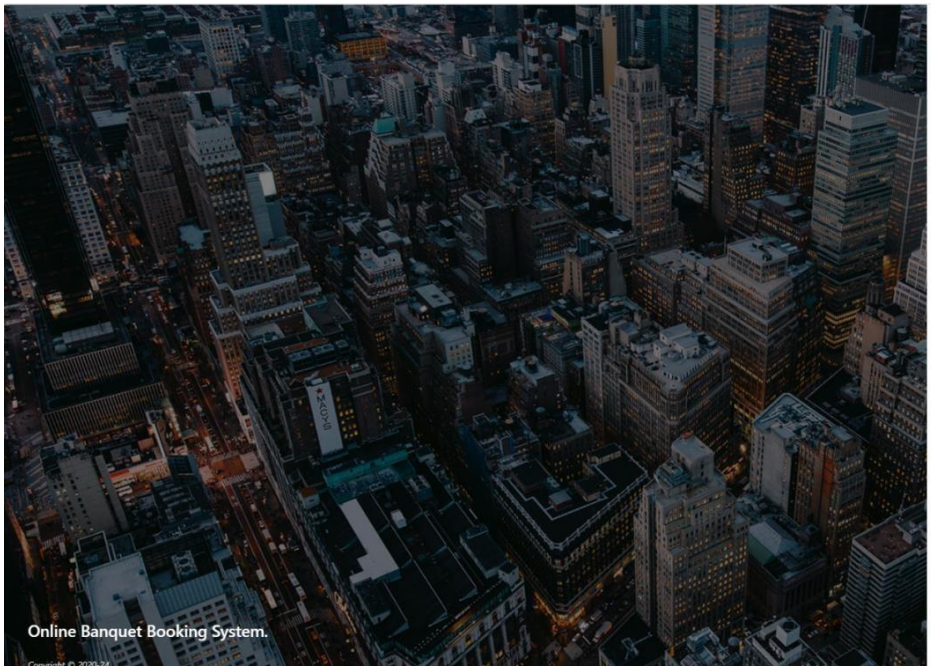
Between Dates Report Details

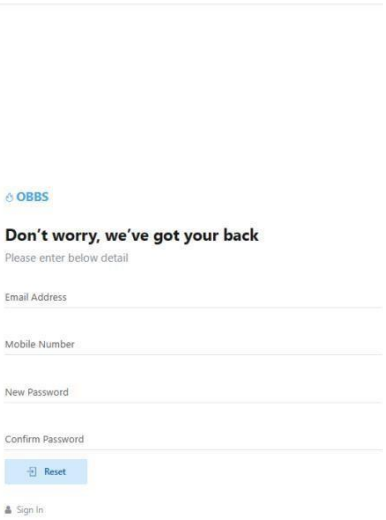


Search Booking



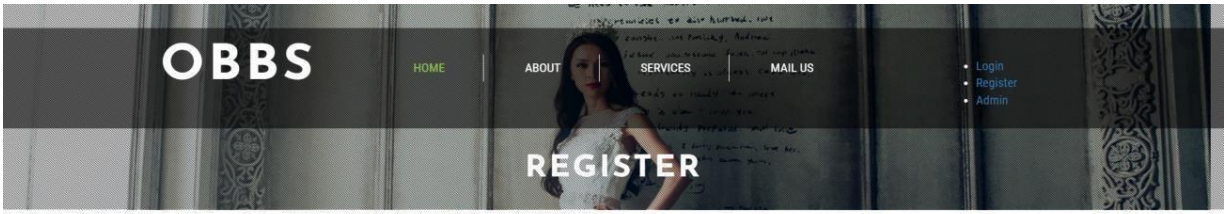
Forgot Password

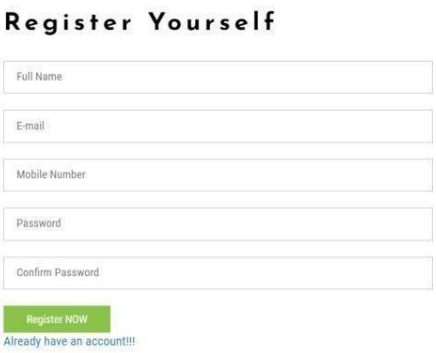




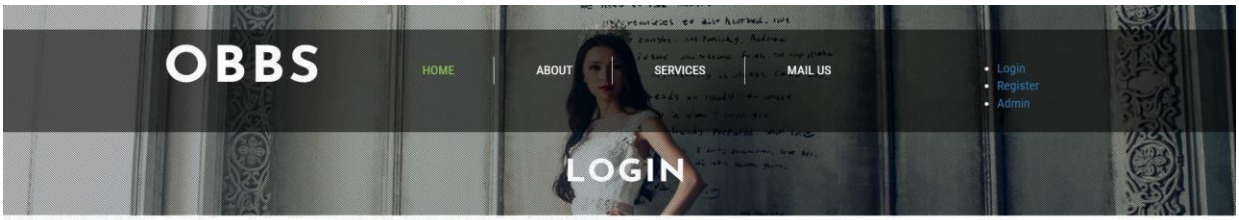
User Module

Registration Page





Login Page



Login to User Panel

E-mail

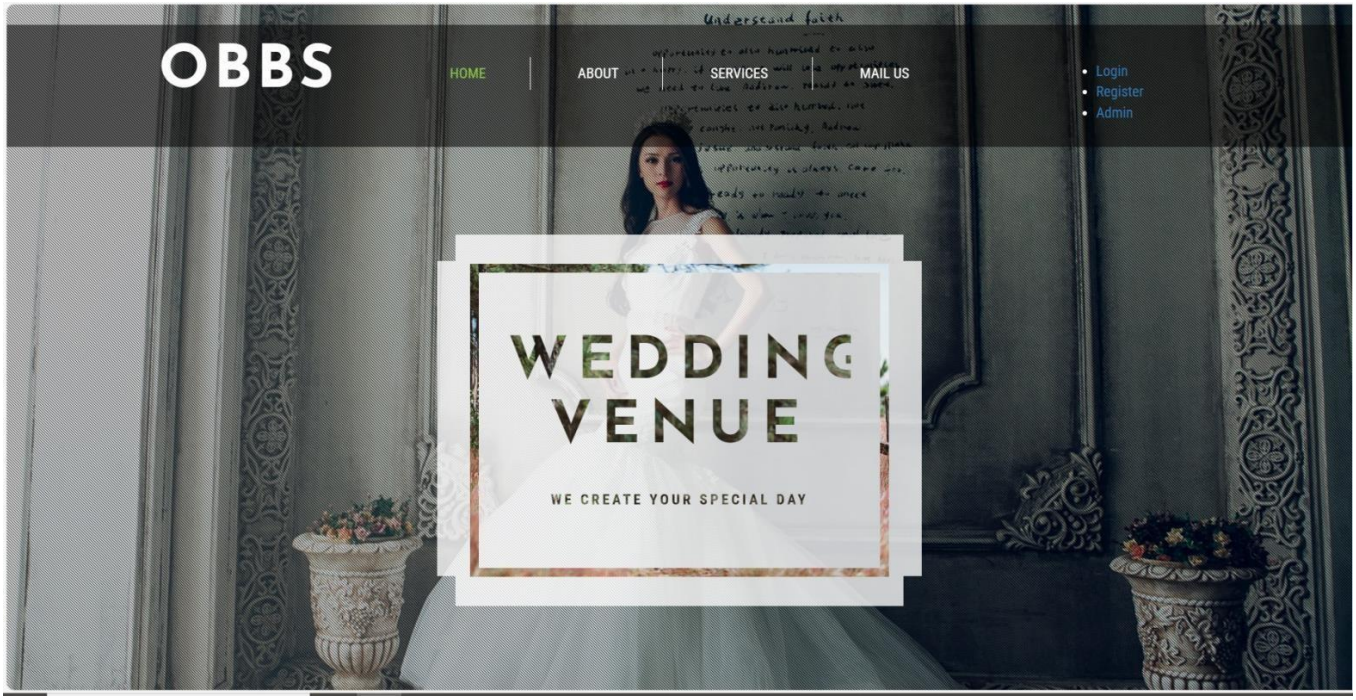
Password

Forgot Password?

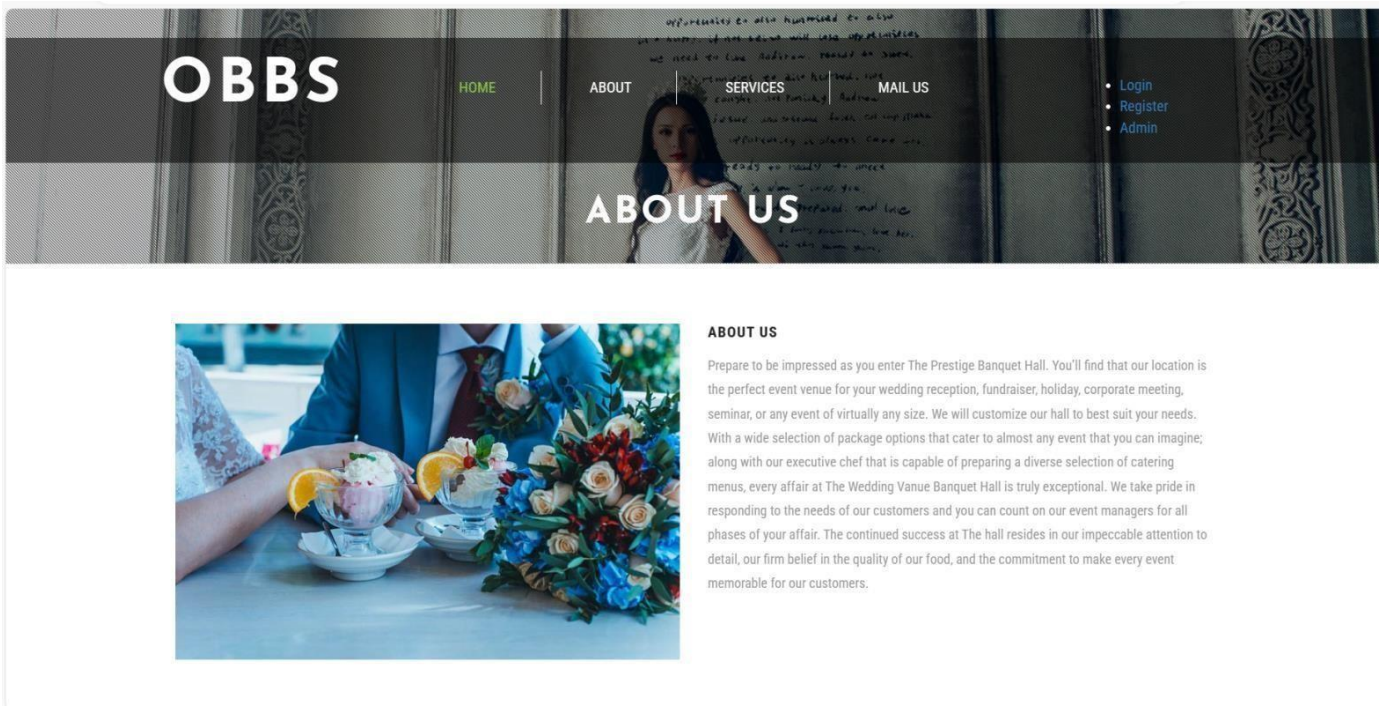
LOGIN NOW

Register Yourself

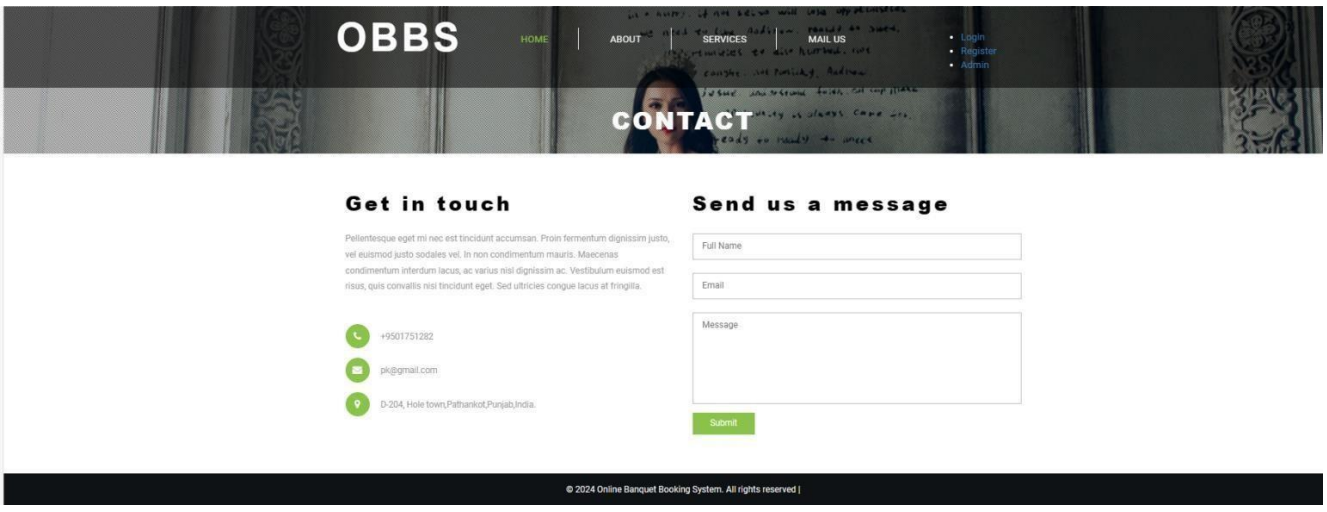
Home Page



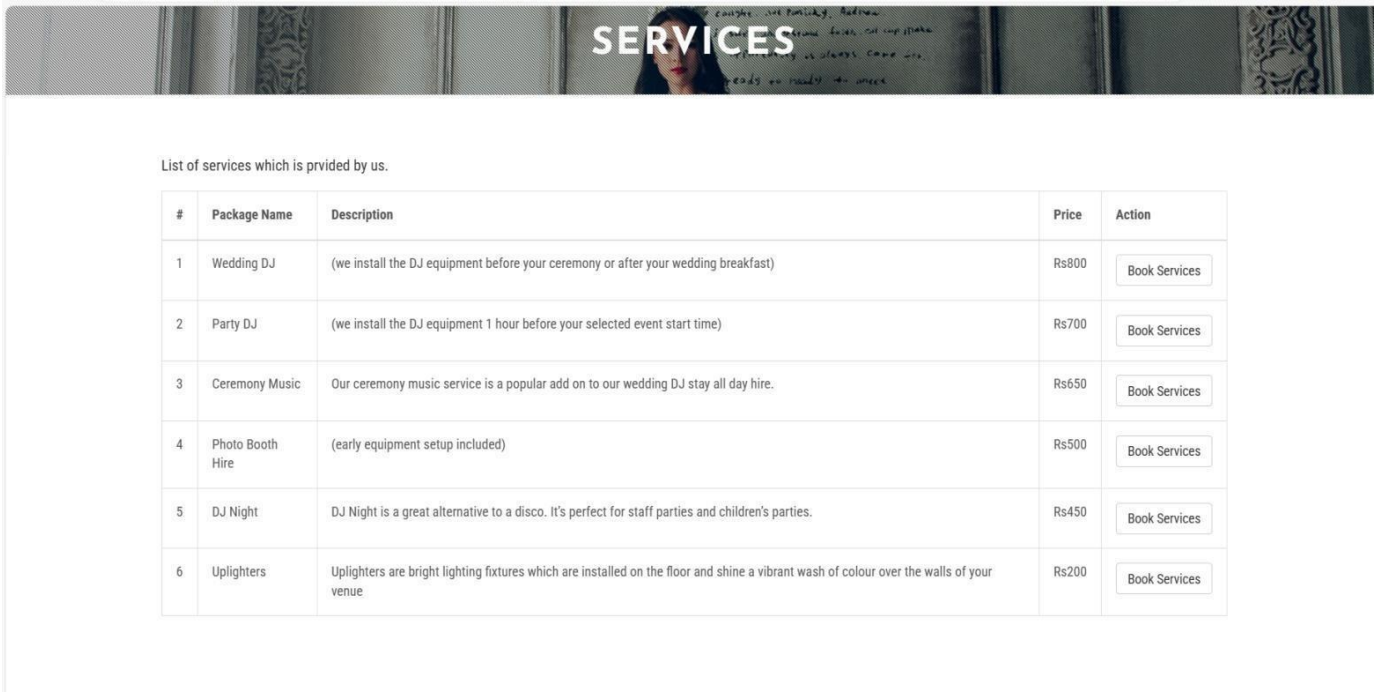
About Us



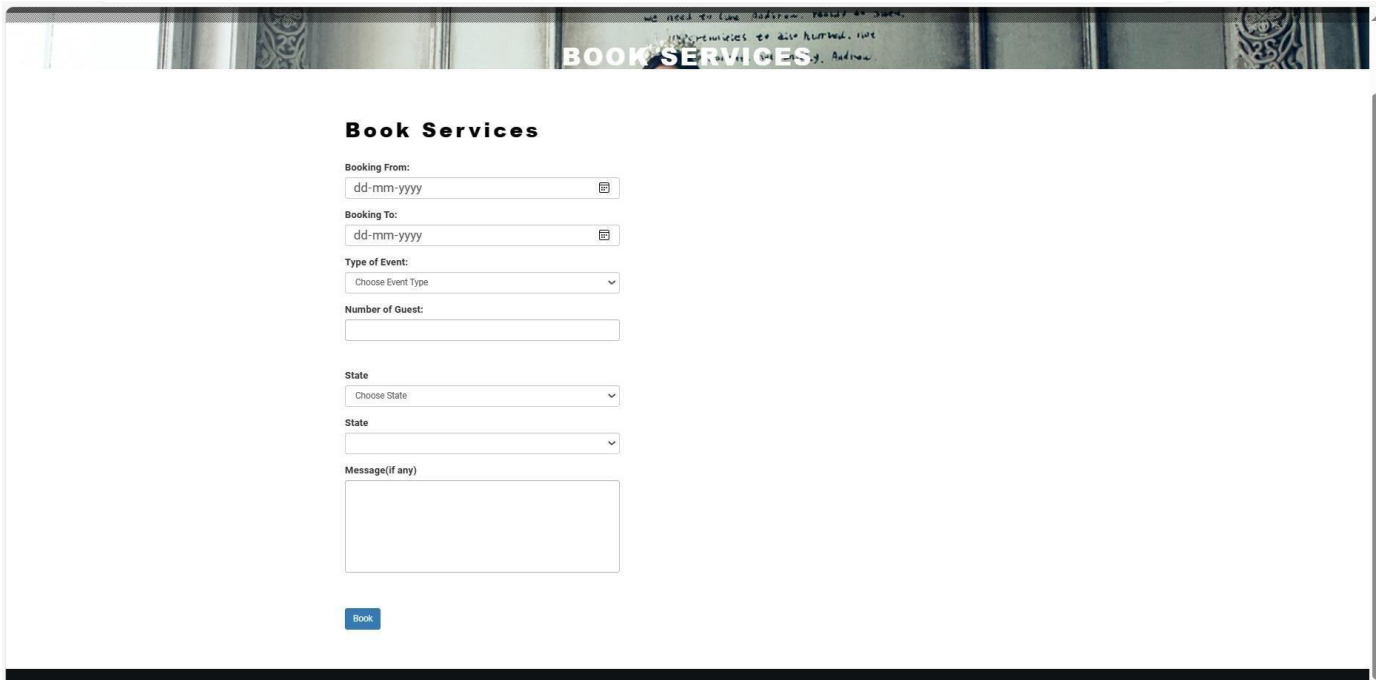
Contact Us



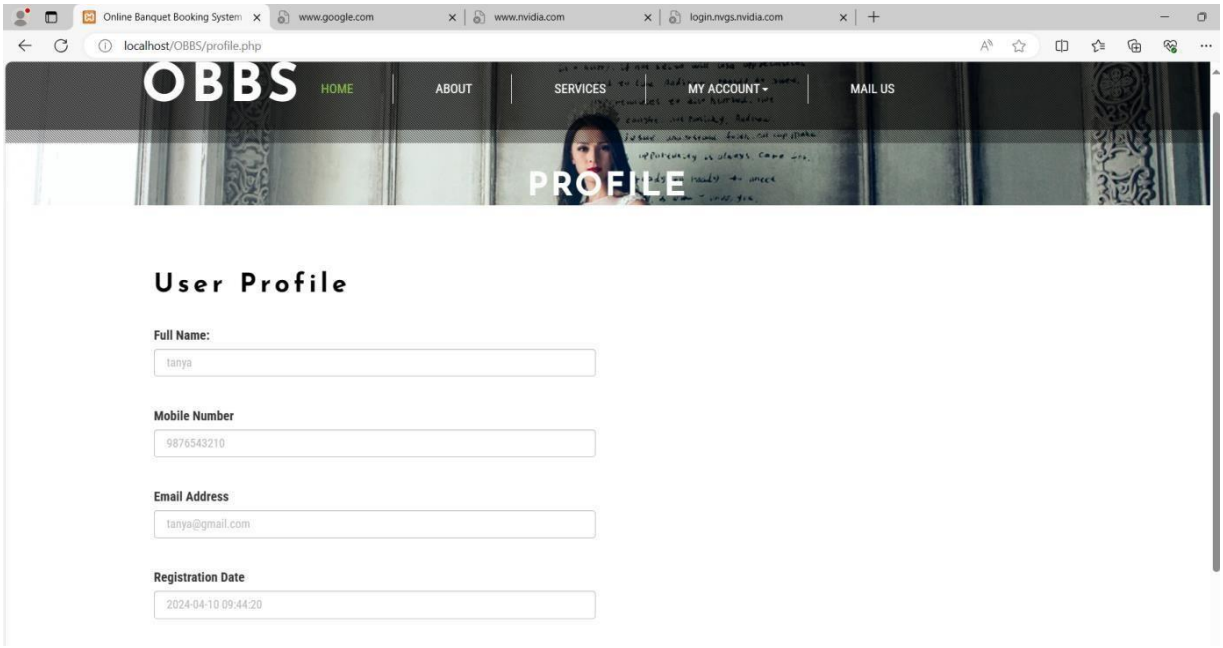
Services Page



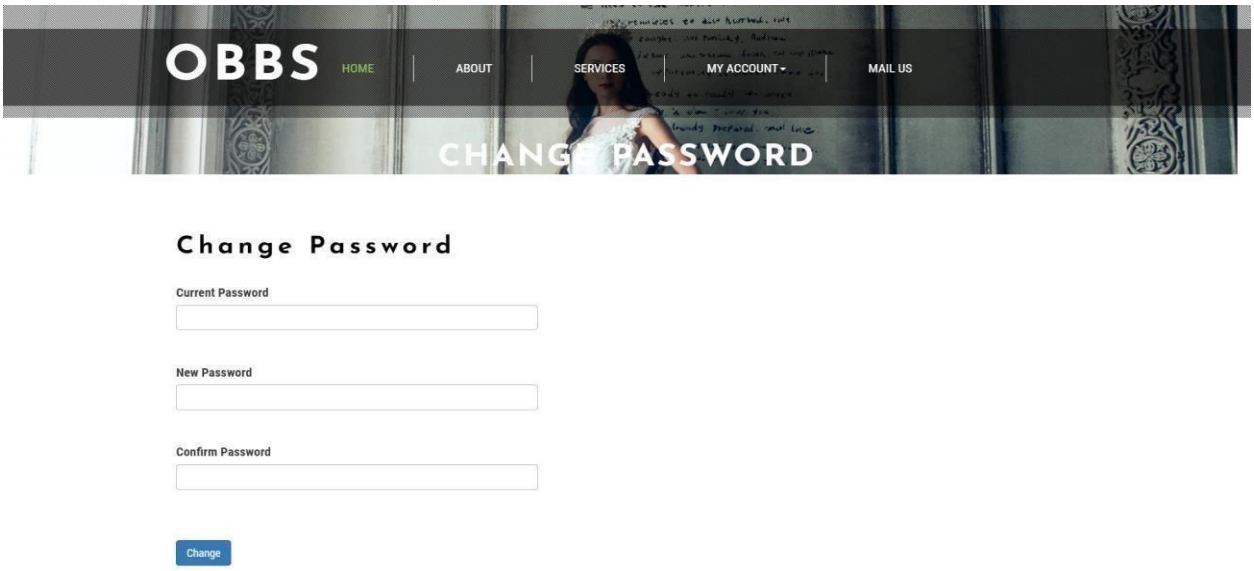
Book Services



User Profile



Change Password



Booking Status

List of booking.

	Booking ID	Cutomer Name	Mobile Number	Email	Booking Date	Status	Action
1	635375032	tanya	9876543210	tanya@gmail.com	2024-04-10 09:45:53	Approved	View
2	280799504	tanya	9876543210	tanya@gmail.com	2024-04-10 12:08:16	Not Updated Yet	View

View Booking

View Your Booking Details.

Booking Number: 635375032

Client Name	tanya	**Mobile Number**	9876543210
Email	tanya@gmail.com	**Booking From**	2024-04-10
Booking To	2024-04-13	**Number of Guest**	51
State	Punjab	**City**	Pathankot
Event Type	Get Together	**Message**	want good arrangement of food
Service Name	Wedding DJ	**Service Description**	(we install the DJ equipment before your ceremony or after your wedding breakfast)
Service Price	Rs800	**Apply Date**	2024-04-10 09:45:53
Order Final Status	Approved	**Admin Remark**	okkkkkk

© 2024 Online Banquet Booking System. All rights reserved |

7. CONCLUSION

While developing the system a conscious effort has been made to create and develop a software package, making use of available tools, techniques and resources – that would generate a proper System While making the system, an eye has been kept on making it as user-friendly, as cost-effective and as flexible as possible. As such one may hope that the system will be acceptable to any user and will adequately meet his/her needs. As in case of any system development processes where there are a number of shortcomings, there have been some shortcomings in the development of this system also. The project is still under modification.

8. FUTURE SCOPE

The scope of the project includes that what all future enhancements can be Done in this system to make it more feasible to us:-

- Databases for different products range and storage can be provided.
- Multilingual support can be provided so that it can be understandable by the person of any language.
- More graphics can be added to make it more user-friendly and understandable.
- Manage & backup versions of documents online.

9. REFERENCES

- ✓ www.w3schools.com
- ✓ ***php**.net*
- ✓ *en.wikipedia.org/wiki/**PHP***
- ✓ www.hotscripts.com/category/**php**/
- ✓ www.**apache**.org
- ✓ www.**mysql**.com/click.php?e=35050

PROJECT REPORT

ON

OLD AGE HOME MANAGEMENT SYSTEM

Submitted in partial fulfillment of the requirements for the award of degree of

M.Sc (COMPUTER SCIENCE)

TO

SHANTI DEVI ARYA MAHILA COLLEGE

DINANAGAR

Submitted To:-

Mrs. Bhanupriya Saini

Assistant Professor

Deptt. Of Computer Science

Submitted By:

Vaishali

(20672225412)

Gurnaj Kaur

(20672225413)

POST GRADUATE DEPARTMENT OF COMPUTER SCIENCE

GURU NANAK DEV UNIVERSITY, AMRITSAR

ACKNOWLEDGEMENT

With deep sense of gratitude We express our sincere thanks and obligation to our esteemed guide Mrs. Bhanupriya Saini (Assistant Professor). It is because of his able and mature guidance and co-operation without which it would not have beenpossible for us to complete our project. We would also like to thank Dr. Deepak Jyoti, HOD,Post Graduate Deptt. of Computer Science , Shanti Devi Arya Mahila College, Dinanagar for providing the institute with an environment where one can use her intellect and creativity to develop something fruitful and also for allowing us the opportunity to experience dynamic professional environment during my Training. This environment facilitated me in pursuing this project. It is my pleasant duty to thank all the staff members of the Computer Department for their time to time suggestions. Finally, We would like to thank the almighty and our parents for their moral support and our friends with whom We shared our day- to-day experience and received lots of suggestions that improved our quality of work.

Vaishali

(20672225412)

Gurnaj Kaur

(20672225413)

CERTIFICATE OF APPROVAL

This is certify that the project report entitled **OLD AGE HOME MANAGEMENT SYSTEM** submitted to Shanti Devi Arya Mahila College, Dinanagar in partial fulfillment of the requirement for the award of Degree of M.Sc (CS) , is an authentic and original work carried out by Vaishali (20672225412) Gurnaj Kaur (20672225413) under our guidance and supervision. The Post Graduate deptt. of Computer Science has accepted the report as the fulfillment of the requirements for the Degree of Master of Computer Science. No part of this report has been submitted to any other College/University for the reward of any Degree to the best of our knowledge.

Mrs. Bhanupriya Saini

Assistant Professor (Comp Sc.)
(Project Supervisor)
Shanti Devi Mahila College

Dinanagar

Dr. Deepak Jyoti

HOD, PG Department of Computer Science
Shanti Devi Arya Mahila College, Dinanagar

DECLARATION

We hereby declare that this project report on " **OLD AGE HOME MANAGEMENT SYSTEM** which is being submitted in partial fulfillment of the Training Programme of M.Sc (CS) to Shanti Devi Arya Mahila College, Dinanagar is the result of thework carried out by us, under the guidance of Mrs. Bhanupriya Saini (Assistant Professor). Shanti Devi Arya College, Dinanagar.

Vaishali

20672225412

Gurnaj Kaur

20672225413

Index

S no.	Topic
1	Abstract
2	Introduction
3	Objective
4	Purpose
5	Scope
6	Requirement Specification
7	Analysis and Design(Use case, ER, Class Diagram and DFDs)
8	Database Design
9	Design Implementation and Results
10	Conclusion
11	Bibliography

Abstract

The last century has witnesses a rapid increase in the population of the elderly people in developed and industrialized countries. This phenomenon is not restricted to the western world only, but many countries such as ours are now feeling the impact of this transaction. This situation leads the uncared of elder people which require extra care and which can be fulfilled by good environment. So, this web application provide interaction between elderly people and good home shelter(old age home).

Introduction

"Old Age Home Management System" is web application which provide the end-to-end smart web application for the old age people and old age home. This application is helpful for old age home for keeping records of senior citizen who live in the old age home. Each elderly people assign a registration number through which person detail find so easily.

Objective

The objective of "Old Age Home Management System" is to allow the administrator of old age home to edit and find out the personal details of an old people. It will also facilitate keeping all the record of old people, such as their registration number, name, mailing address, phone number etc. So all the information about them will be available in a few seconds.

Overall, it will make old people information management an easier job for the administrator and service of the old age home.

The main purpose of this web application is to illustrate the requirement of old age home and is intended to help the organization to maintain and the manage the data of old people.

Purpose

The purpose of developing “Old Age Home Management System” is to computerized the tradition way of recording data of old people in old age home and to generate the report automatically.

Scope

Without an Old Age Home Management System managing and maintaining the details of old people is a tedious job for any old age home. Old Age Home Management System will store all the details of old people and also this project is developed as a web application and it will work over web.

Old Age Home Management System

In this project we use PHP and MySQL database. It has two modules admin and user.

Admin Module

1. **Dashboard:** In this section admin can see all detail in brief like total number of services, Total number of senior citizen , total number of unread enquiry received and total number of unread enquiry.
2. **Pages:** In this section admin can manage about us, contact us pages, rules and eligibility.
3. **Services:** In this section admin can manage services(add/update/delete).
4. **SC(Senior Citizen)Details:** In this section admin can manage the detail of senior citizen(add/update/delete) who lived in old age home.
5. **Enquiry:** In this section admin can read new enquiry(unread enquiry) and view read enquiry(read enquiry).
6. **Search:** In this section admin can search senior citizen details with the help of his/her registration number.
7. **Reports:** In this section admin can view senior citizen details in particular periods.

Admin can also update his profile, change password and recover password.

User Module

In OAHMS user have do following activities.

Home Page: User can visit the home page and view some details of rules, eligibility and about us information.

Services: User views the services which offer by old age home.

Eligibility: User views the eligibility criteria for old age home.

Rules: User views the rules for old age home.

About Us: User sees the detail of old age home.

Contact Us: User can contact with old age home.

Requirement Specification

Hardware Configuration :

Client Side:

RAM	512 MB
Hard disk	10 GB
Processor	1.0 GHz

Server side:

RAM	**1 GB**
Hard disk	**20 GB**
Processor	**2.0 GHz**

Software Requirement:

Client Side:

Web Browser	Google Chrome or any compatible browser
Operating System	Windows or any equivalent OS

Server Side:

Web Server	APACHE
Server side Language	PHP5.6 or above version
Database Server	MYSQL
Web Browser	Google Chrome or any compatible browser
Operating System	Windows or any equivalent OS

APACHE

The Apache HTTP Server Project is an effort to develop and maintain an open-source HTTP server for modern operating systems including UNIX and Windows. The goal of this project is to provide a secure, efficient and extensible server that provides HTTP services in sync with the current HTTP standards.

The Apache HTTP Server ("httpd") was launched in 1995 and it has been the most popular web server on the Internet since April 1996. It has celebrated its 20th birthday as a project in February 2015.

PHP

- ✓ PHP stands for PHP: Hypertext Preprocessor.
- ✓ PHP is a server-side scripting language, like ASP.
- ✓ PHP scripts are executed on the server.
- ✓ PHP supports many databases (MYSQL, Informix, Oracle, Sybase, Solid, Generic ODBC, etc.).
- ✓ PHP is an open source software .
- ✓ PHP is free to download and use.

MYSQL

- ✓ MYSQL is a database server
- ✓ MYSQL is ideal for both small and large applications
- ✓ MYSQL supports standard SQL
- ✓ MYSQL compiles on a number of platforms
- ✓ MYSQL is free to download and use
- ✓ How to access MySQL:

  http://localhost/phpmyadmin

Analysis and Design

Analysis:

In present all work done on the paper. The whole details is stored in the registers. We can't generate reports as per our requirements because its take more time to make report of old people.

Disadvantage of present system:

- **Not user friendly:** The present system not user friendly because data is not stored in structure and proper format.
- **Manual Control:** All report calculation is done manually so there is a chance of error.
- **Lots of paper work:** Attendance maintain in the register so lots of paper require storing attendance.
- **Time consuming**

Design Introduction:

Design is the first step in the development phase for any techniques and principles for the purpose of defining a device, a process or system in sufficient detail to permit its physical realization.

Once the software requirements have been analyzed and specified the software design involves three technical activities - design, coding, implementation and testing that are required to build and verify the software.

The design activities are of main importance in this phase, because in this activity, decisions ultimately affecting the success of the software implementation and its ease of maintenance are made. These decisions have the final bearing upon reliability and maintainability of the system. Design is the only way to accurately translate the customer's requirements into finished software or a system.

Design is the place where quality is fostered in development. Software design is a process through which requirements are translated into a representation of software. Software design is conducted in two steps. Preliminary design is concerned with the transformation of requirements into data.

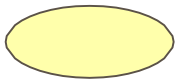
UML Diagrams:

Actor:

A coherent set of roles that users of use cases play when interacting with the use `cases.

Use case:

A description of sequence of actions, including variants, that a system performs that yields an observable result of value of an actor.



UML stands for Unified Modeling Language. UML is a language for specifying, visualizing and documenting the system. This is the step while developing any product after analysis. The goal from this is to produce a model of the entities involved in the project which later need to be built. The representation of the entities that are to be used in the product being developed need to be designed.

USECASE DIAGRAMS:

Use case diagrams model behavior within a system and helps the developers understand of what the user require. The stick man represents what's called an actor.

Use case diagram can be useful for getting an overall view of the system and clarifying who can do and more importantly what they can't do.

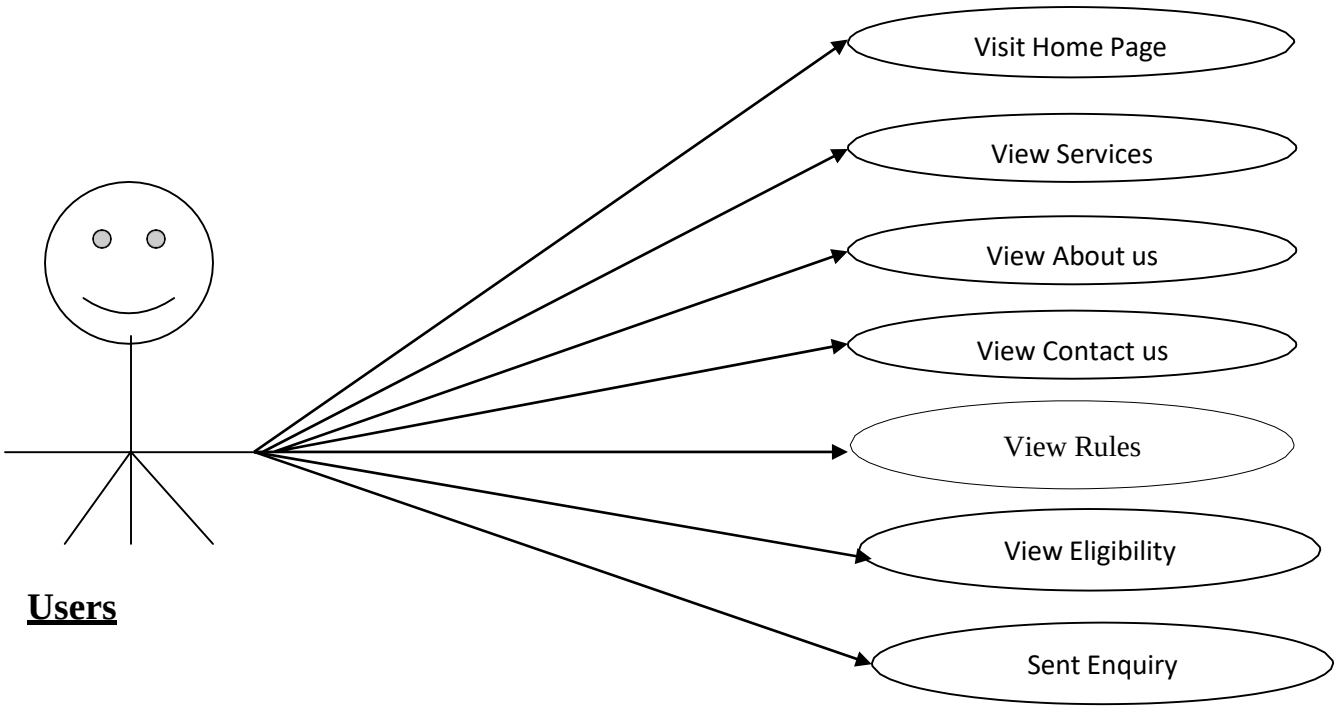
Use case diagram consists of use cases and actors and shows the interaction between the use case and actors.

- The purpose is to show the interactions between the use case and actor.
- To represent the system requirements from user's perspective.
- An actor could be the end-user of the system or an external system.

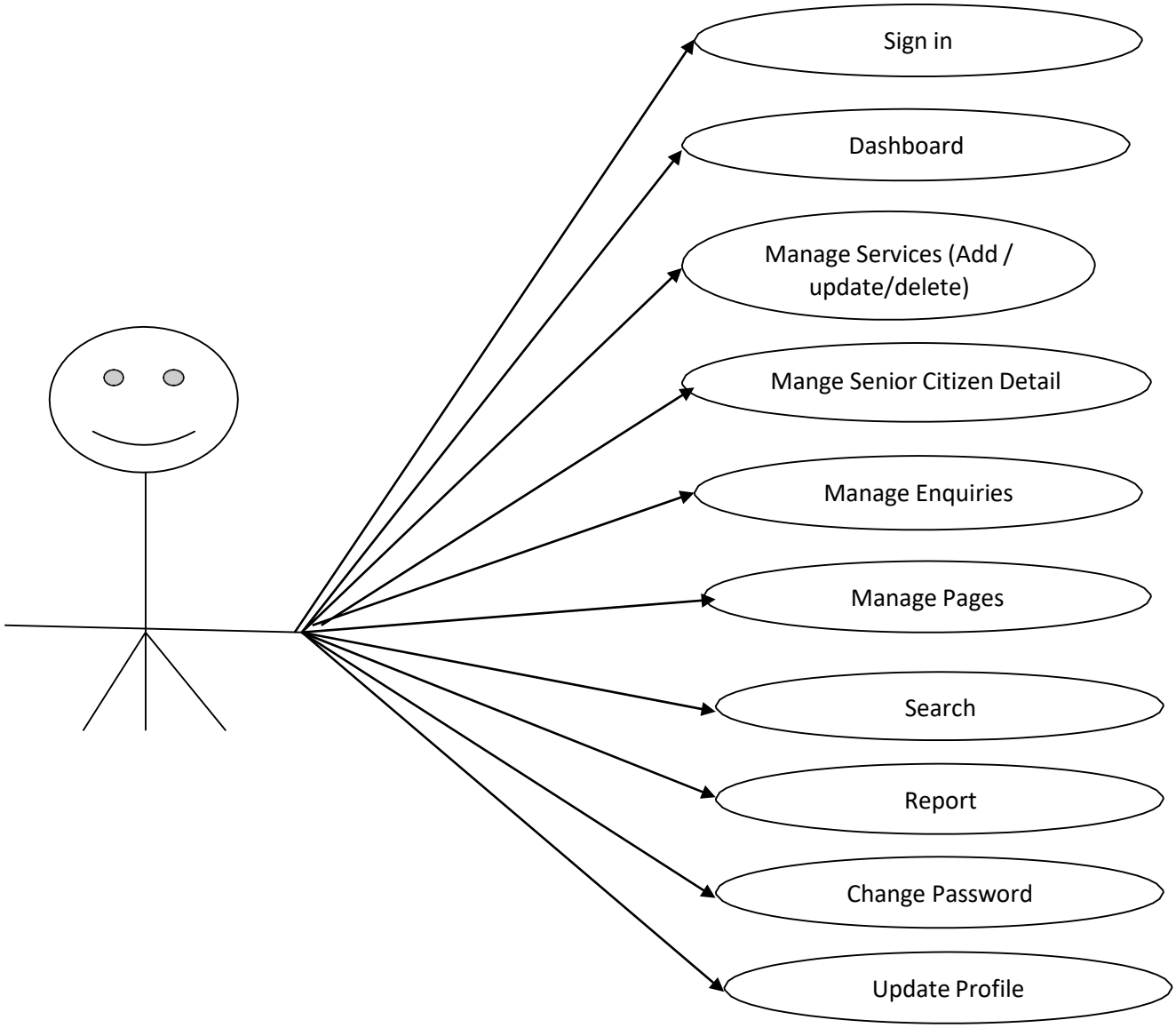
USECASE DIAGRAM:

A Use case is a description of set of sequence of actions. Graphically it is rendered as an ellipse with solid line including only its name. Use case diagram is a behavioral diagram that shows a set of use cases and actors and their relationship. It is an association between the use cases and actors. An actor represents a real-world object. Primary Actor – Sender, Secondary Actor Receiver.

User Use Case Diagram

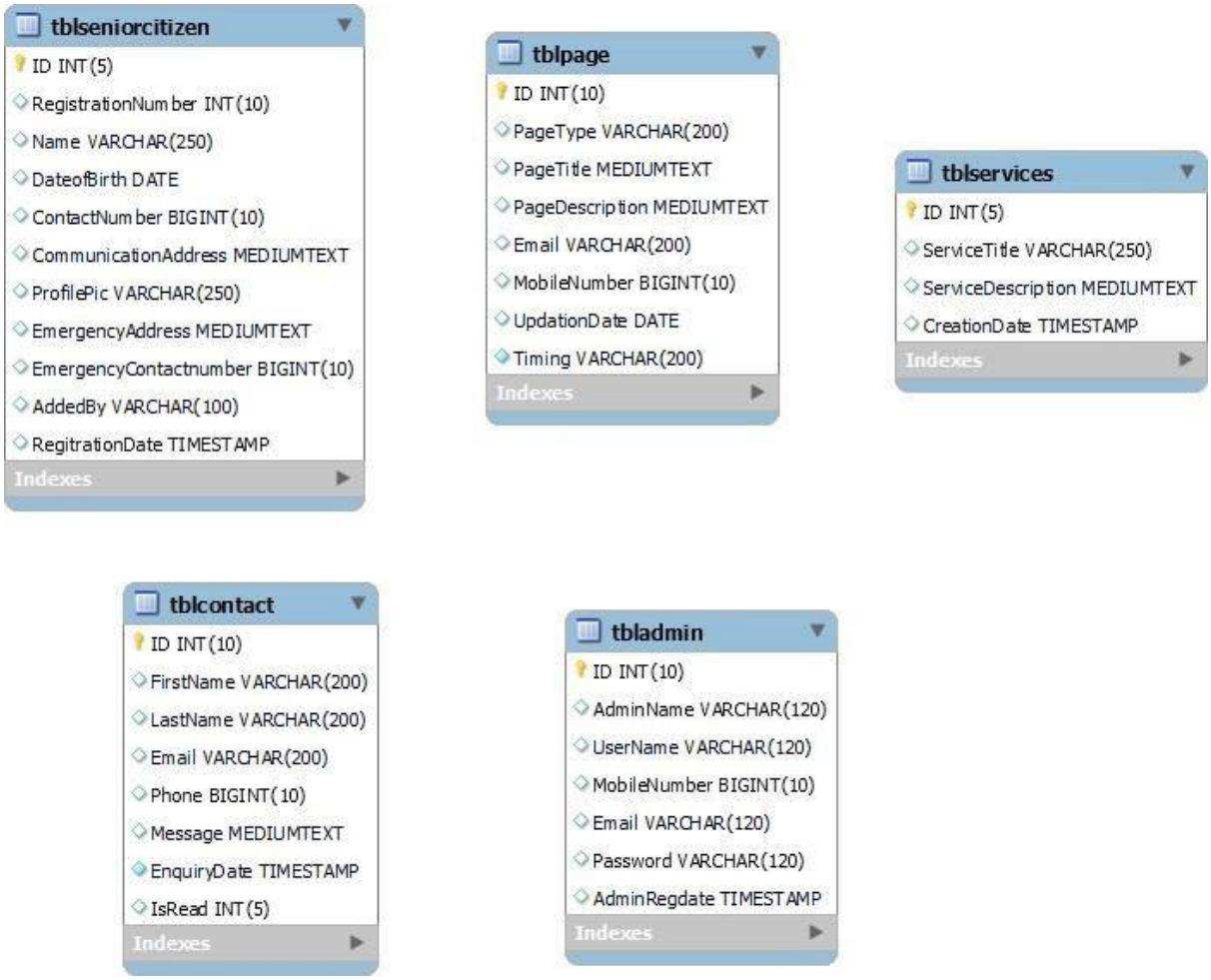


Admin use case diagram



Class Diagram:

A description of set of objects that share the same attributes operations, relationships, and semantics.



ER Diagram:

The Entity-Relationship (ER) model was originally proposed by Peter in 1976 [Chen76] as a way to unify the network and relational database views. Simply stated the ER model is a conceptual data model that views the real world as entities and relationships. A basic component of the model is the Entity-Relationship diagram which is used to visually represent data objects. Since Chen wrote his paper the model has been extended and today it is commonly used for database design for the database designer, the utility of the ER model is:

- It maps well to the relational model. The constructs used in the ER model can easily be transformed into relational tables.
- It is simple and easy to understand with a minimum of training. Therefore, the model can be used by the database designer to communicate the design to the end user.
- In addition, the model can be used as a design plan by the database developer to implement a data model in specific database management software.

ER Notation

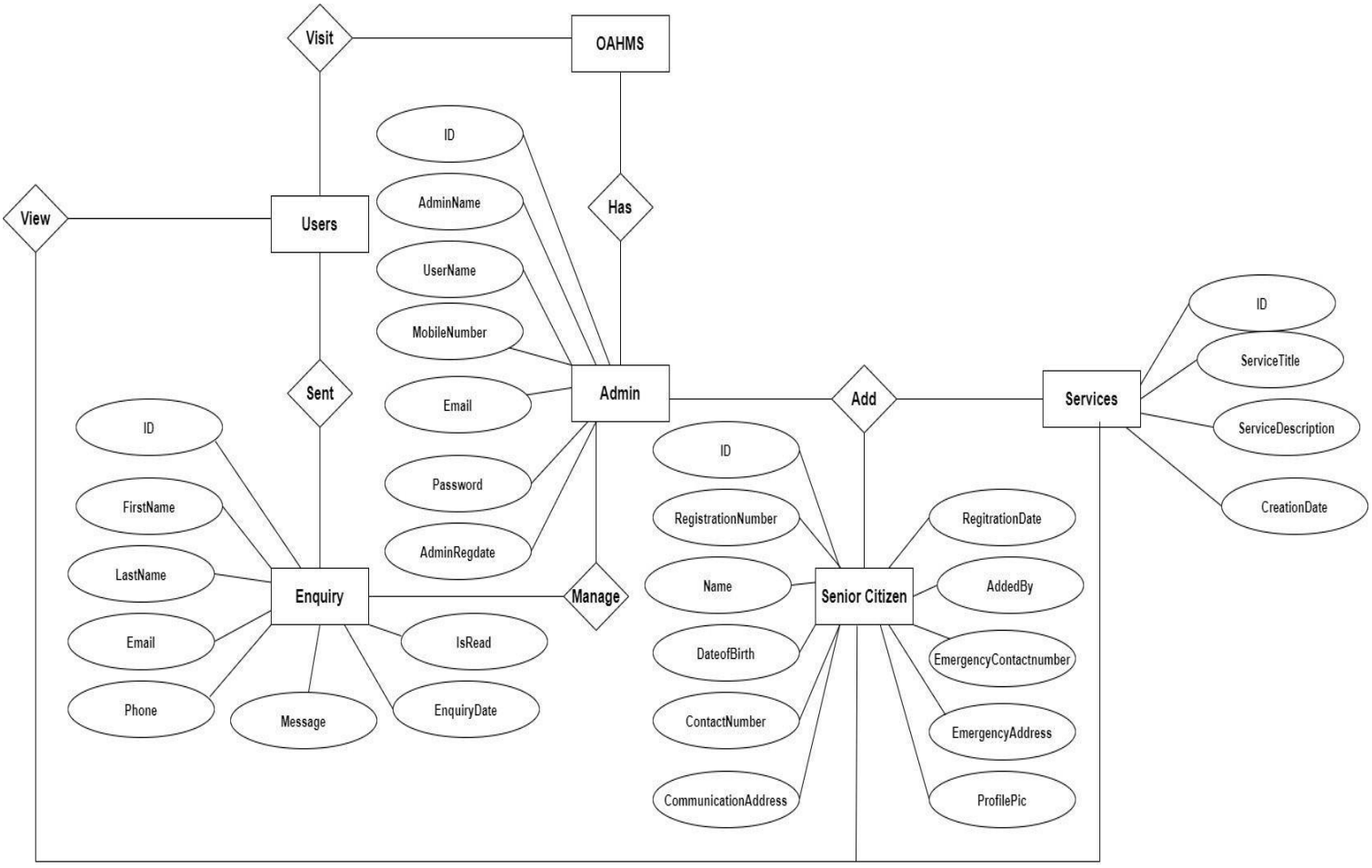
There is no standard for representing data objects in ER diagrams. Each modeling methodology uses its own notation. The original notation used by Chen is widely used in academics texts and journals but rarely seen in either CASE tools or publications by non-academics. Today, there are a number of notations used; among the more common are Bachman, crow's foot, and IDEFIX.

All notational styles represent entities as rectangular boxes and relationships as lines connecting boxes. Each style uses a special set of symbols to represent the

cardinality of a connection. The notation used in this document is from Martin. The symbols used for the basic ER constructs are:

- **Entities** are represented by labeled rectangles. The label is the name of the entity. Entity names should be singular nouns.
- **Relationships** are represented by a solid line connecting two entities. The name of the relationship is written above the line. Relationship names should be verbs
- **Attributes**, when included, are listed inside the entity rectangle. Attributes which are identifiers are underlined. Attribute names should be singular nouns.
- **Cardinality** of many is represented by a line ending in a crow's foot. If the crow's foot is omitted, the cardinality is one.

Existence is represented by placing a circle or a perpendicular bar on the line. Mandatory existence is shown by the bar (looks like a 1) next to the entity for an instance is required. Optional existence is shown by placing a circle next to the entity that is optional.



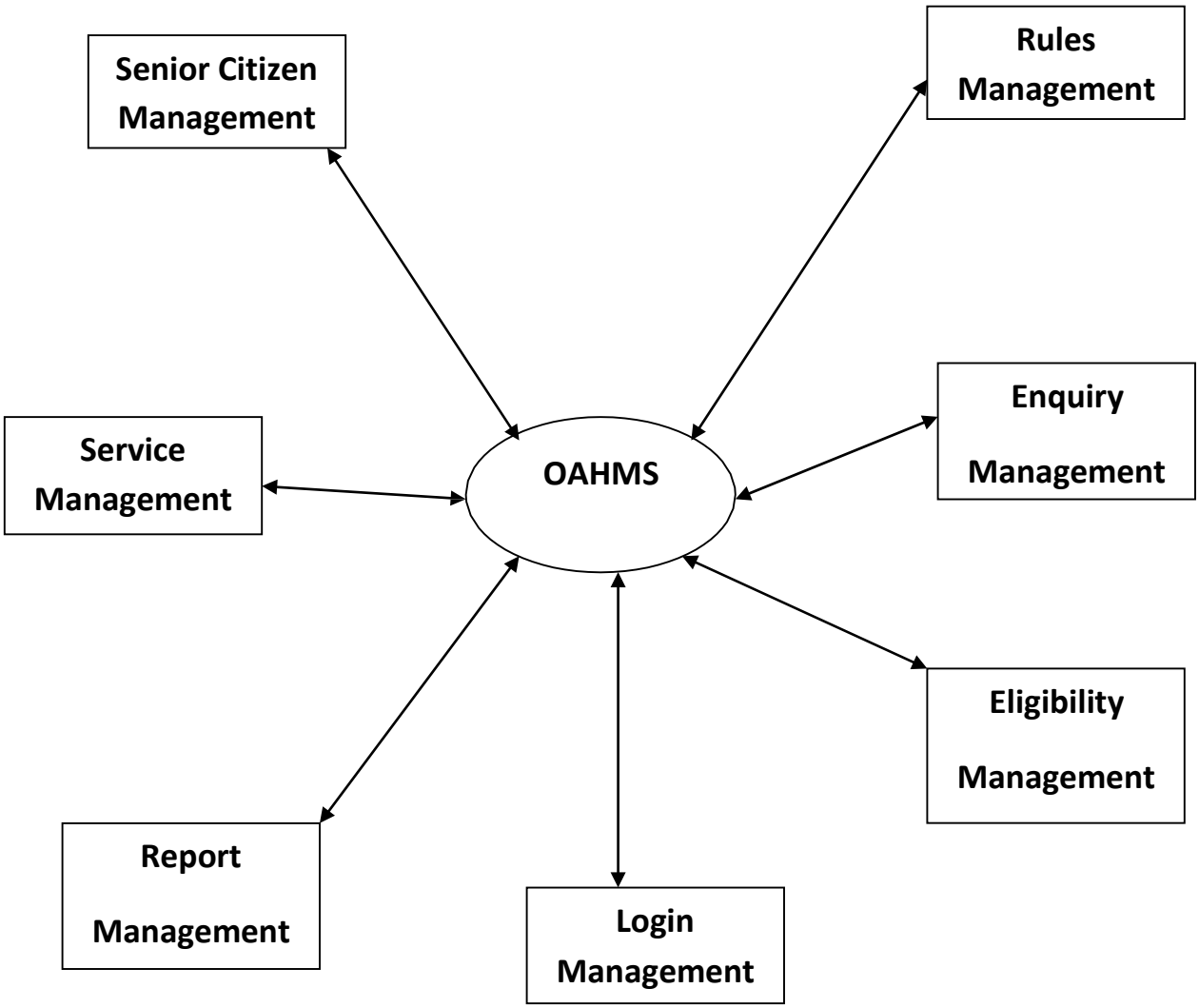
Data Flow diagram

DFD graphically representing the functions, or processes, which capture, manipulate, store, and distribute data between a system and its environment and

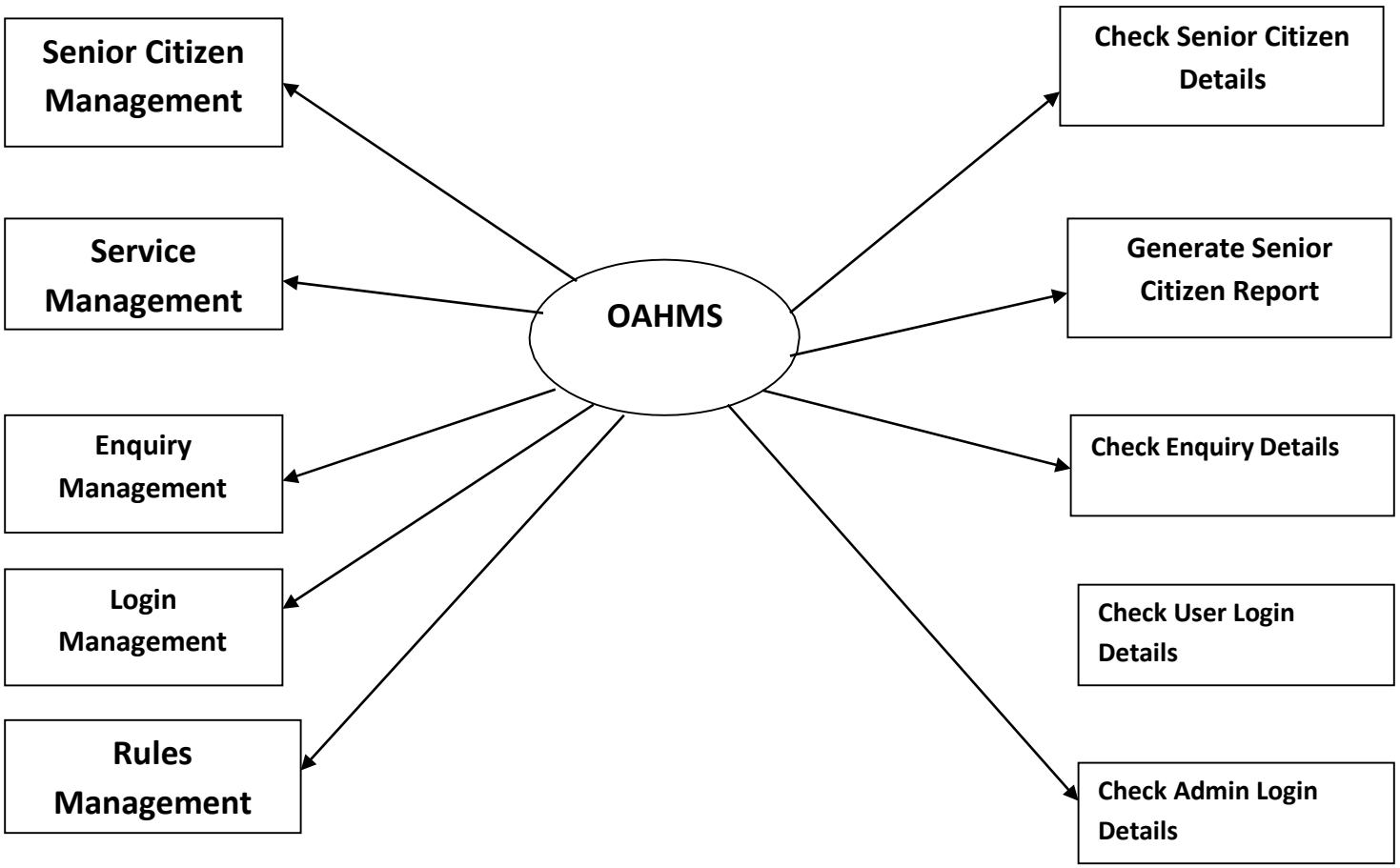
between components of a system. The visual representation makes it a good communication tool between User and System designer. Structure of DFD allows starting from a broad overview and expand it to a hierarchy of detailed diagrams. DFD has often been used due to the following reasons:

- Logical information flow of the system
- Determination of physical system construction requirements
- Simplicity of notation
- Establishment of manual and automated systems requirements

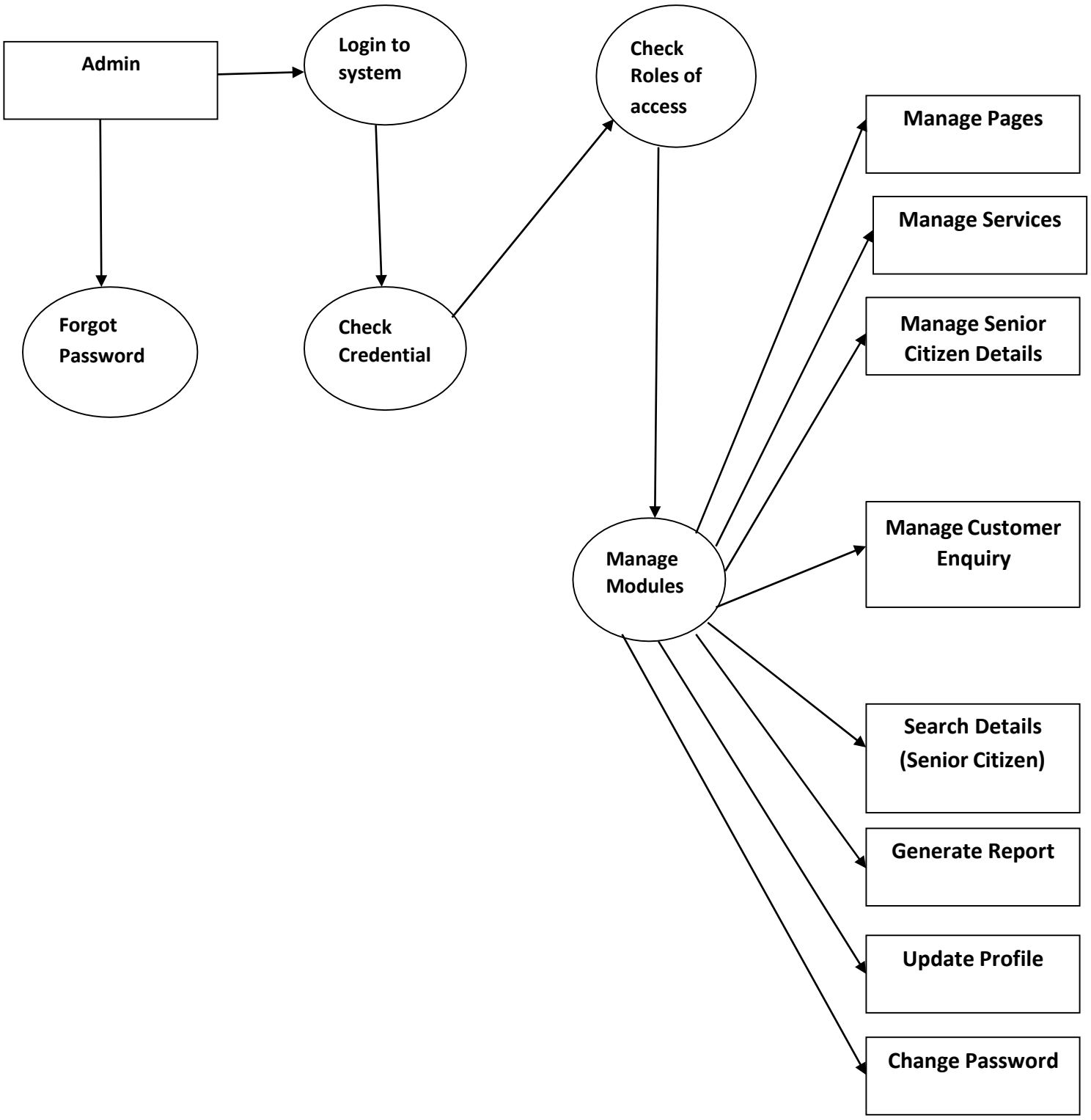
Zero Level DFD



First Level DFD



Second Level DFD



Database Design

The data in the system has to be stored and retrieved from database. Designing the database is part of system design. Data elements and data structures to be stored have been identified at analysis stage. They are structured and put together to design the data storage and retrieval system.

A database is a collection of interrelated data stored with minimum redundancy to serve many users quickly and efficiently. The general objective is to make database access easy, quick, inexpensive and flexible for the user. Relationships are established between the data items and unnecessary data items are removed. Normalization is done to get an internal consistency of data and to have minimum redundancy and maximum stability. This ensures minimizing data storage required, minimizing chances of data inconsistencies and optimizing for updates. The MySQL database has been chosen for developing the relevant databases.

Old Age Home Management System (oahmsdb) contains 5 MySQL tables :

- tbladmin
- tblcontact
- tblpage
- tblseniorcitizen
- tblservices

tbladmin: This tables stores admin login details.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(10)			No	*None*		AUTO_INCREMENT
2	AdminName	varchar(120)	latin1_swedish_ci		Yes	*NULL*		
3	UserName	varchar(120)	latin1_swedish_ci		Yes	*NULL*		
4	MobileNumber	bigint(10)			Yes	*NULL*		
5	Email	varchar(120)	latin1_swedish_ci		Yes	*NULL*		
6	Password	varchar(120)	latin1_swedish_ci		Yes	*NULL*		
7	AdminRegdate	timestamp			Yes	current_timestamp()		

tblcontact : This table stores user enquiry details.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(10)			No	*None*		AUTO_INCREMENT
2	FirstName	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
3	LastName	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
4	Email	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
5	Phone	bigint(10)			Yes	*NULL*		
6	Message	mediumtext	utf8mb4_general_ci		Yes	*NULL*		
7	EnquiryDate	timestamp			No	current_timestamp()		
8	IsRead	int(5)			Yes	*NULL*		

tblpackages: This stores package details.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(5)			No	*None*		AUTO_INCREMENT
2	PackageName	varchar(120)	latin1_swedish_ci		Yes	*NULL*		
3	PackageDec	varchar(250)	latin1_swedish_ci		Yes	*NULL*		
4	PackageDuration	varchar(120)	latin1_swedish_ci		Yes	*NULL*		
5	PackagePrice	varchar(120)	latin1_swedish_ci		Yes	*NULL*		
6	PackageDate	timestamp			Yes	CURRENT_TIMESTAMP		

tblpage: This table stores page information.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(10)			No	*None*		AUTO_INCREMENT
2	PageType	varchar(200)	latin1_swedish_ci		Yes	*NULL*		
3	PageTitle	mediumtext	latin1_swedish_ci		Yes	*NULL*		
4	PageDescription	mediumtext	latin1_swedish_ci		Yes	*NULL*		
5	Email	varchar(200)	latin1_swedish_ci		Yes	*NULL*		
6	MobileNumber	bigint(10)			Yes	*NULL*		
7	UpdationDate	date			Yes	*NULL*		
8	Timing	varchar(200)	latin1_swedish_ci		No	*None*		

tblseniorcitizen: This table store detail of old people who lives in old age home.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(5)			No	*None*		AUTO_INCREMENT
2	RegistrationNumber	int(10)			Yes	*NULL*		
3	Name	varchar(250)	latin1_swedish_ci		Yes	*NULL*		
4	DateofBirth	date			Yes	*NULL*		
5	ContactNumber	bigint(10)			Yes	*NULL*		
6	CommunicationAddress	mediumtext	latin1_swedish_ci		Yes	*NULL*		
7	ProfilePic	varchar(250)	latin1_swedish_ci		Yes	*NULL*		
8	EmergencyAddress	mediumtext	latin1_swedish_ci		Yes	*NULL*		
9	EmergencyContactnumber	bigint(10)			Yes	*NULL*		
10	AddedBy	varchar(100)	latin1_swedish_ci		Yes	*NULL*		
11	RegitrationDate	timestamp			Yes	current_timestamp()		

tblservices: This table store details of services which is provided by old age home.

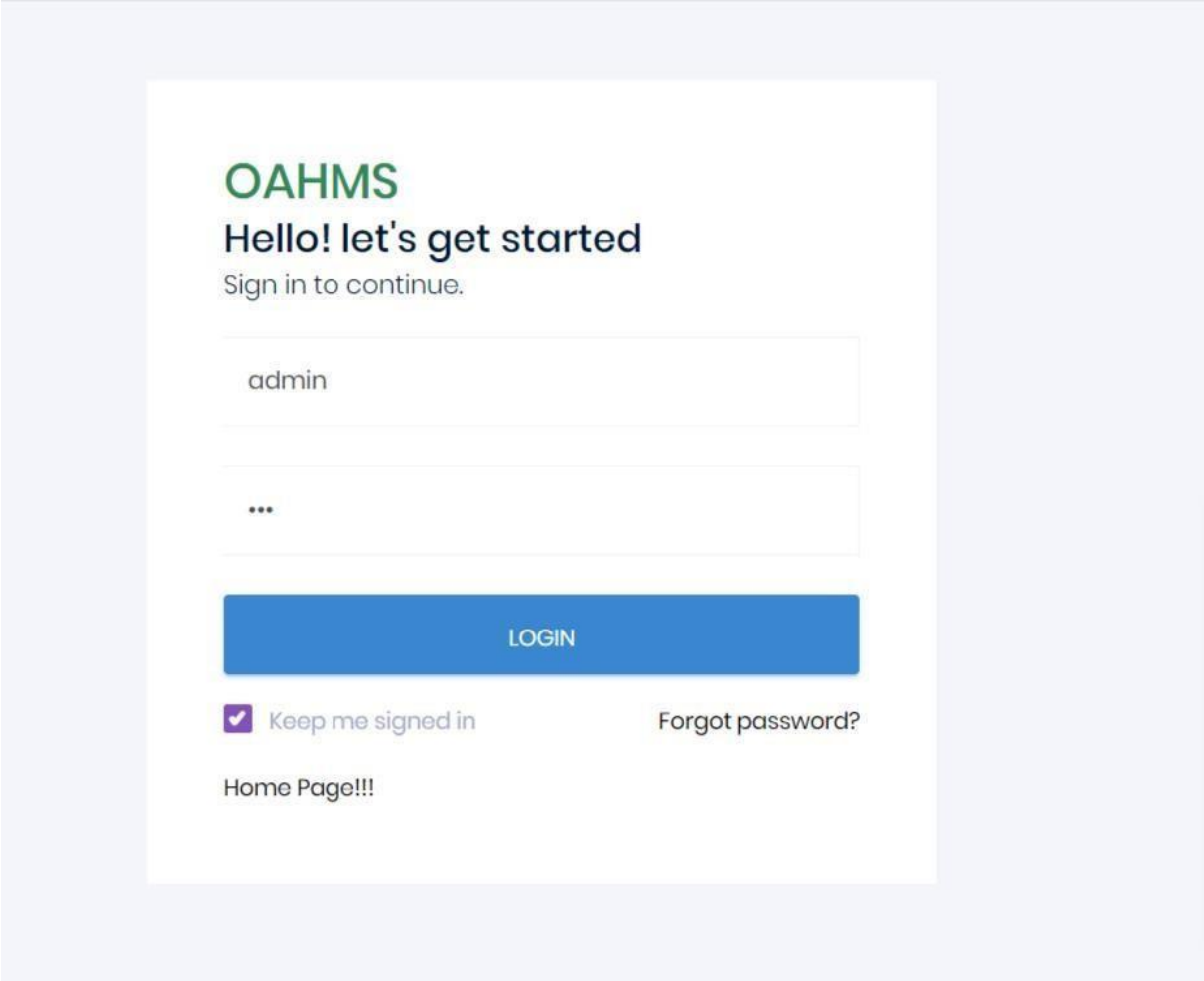
#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(5)			No	*None*		AUTO_INCREMENT
2	ServiceTitle	varchar(250)	latin1_swedish_ci		Yes	*NULL*		
3	ServiceDescription	mediumtext	latin1_swedish_ci		Yes	*NULL*		
4	CreationDate	timestamp			Yes	current_timestamp()		

Design Implementation and Results

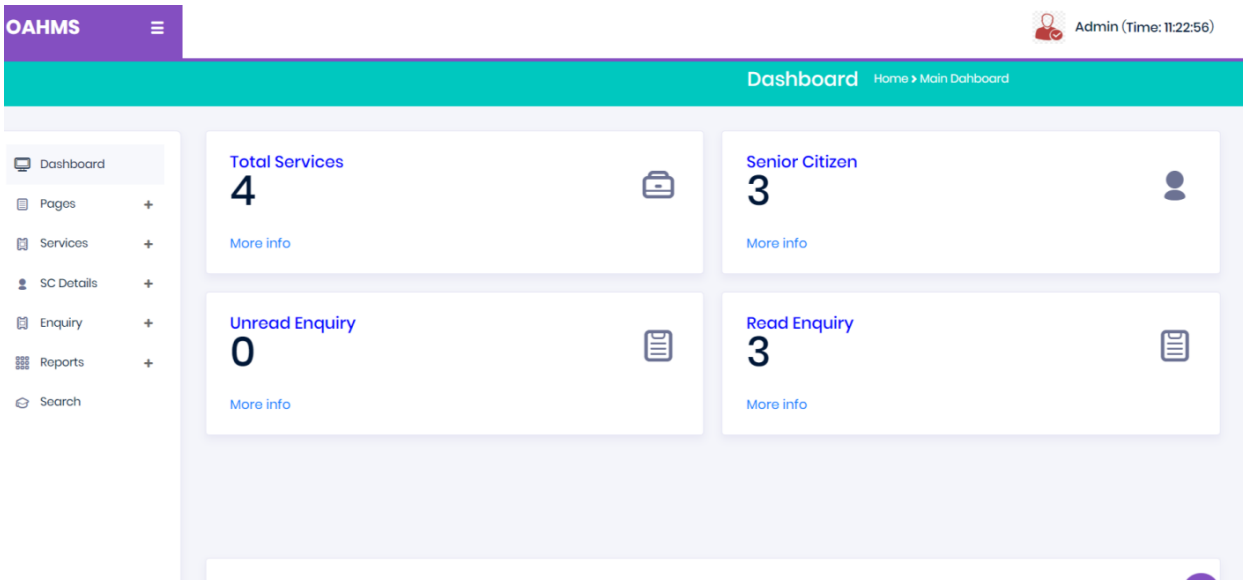
Design implementation refers to the real live running of the designed program. This section consists of the program modules, showing what they do, and how the system can be deployed.

Admin Module

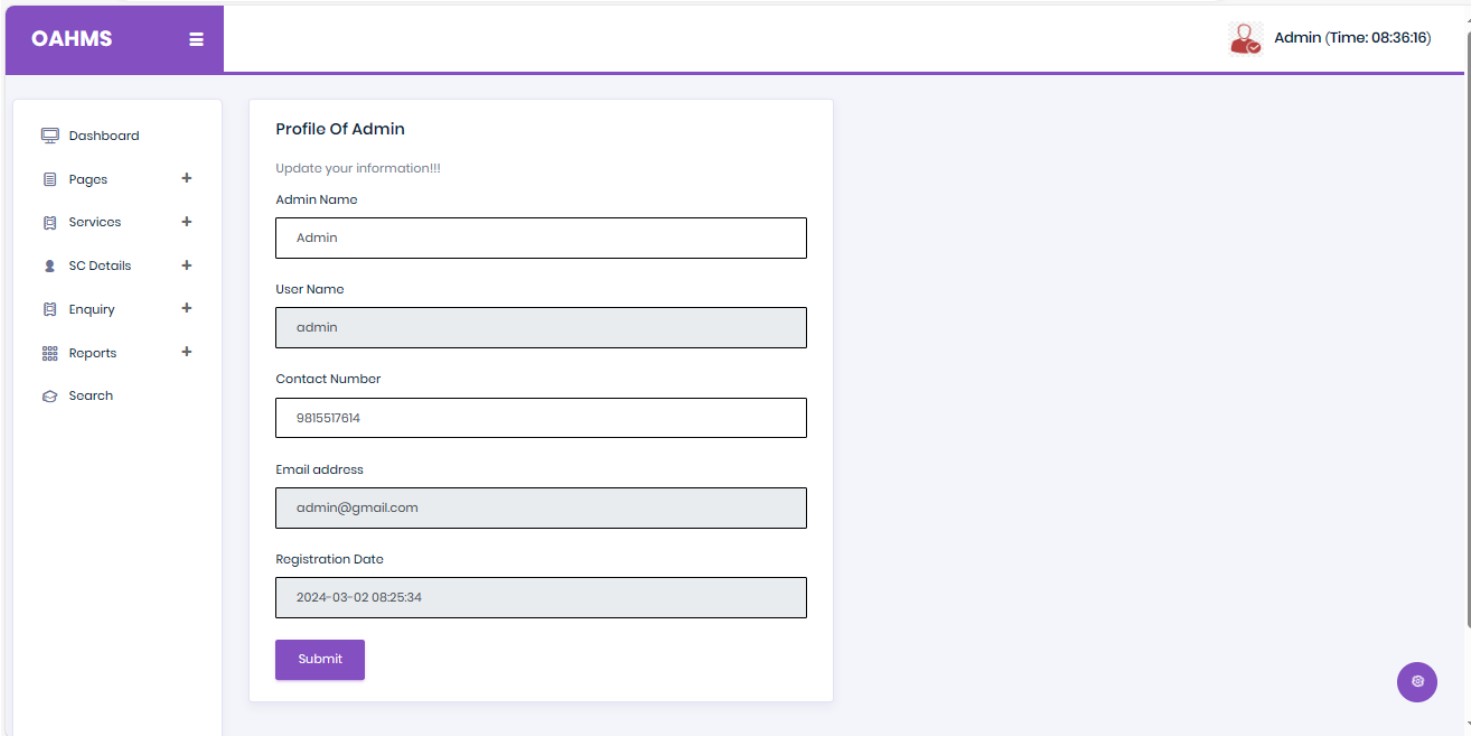
Admin Login



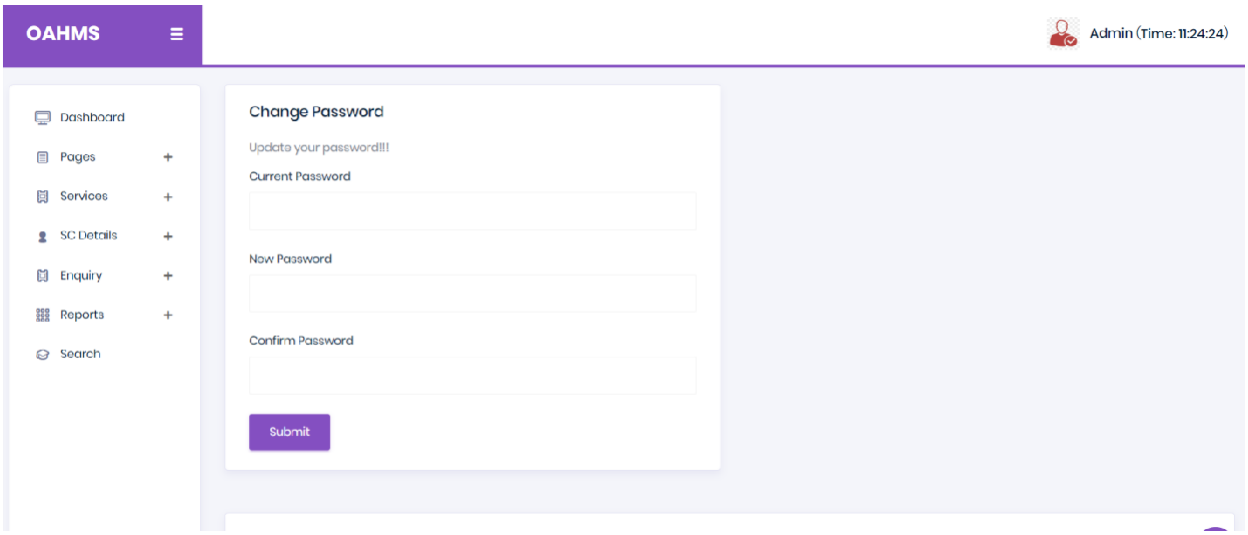
Dashboard



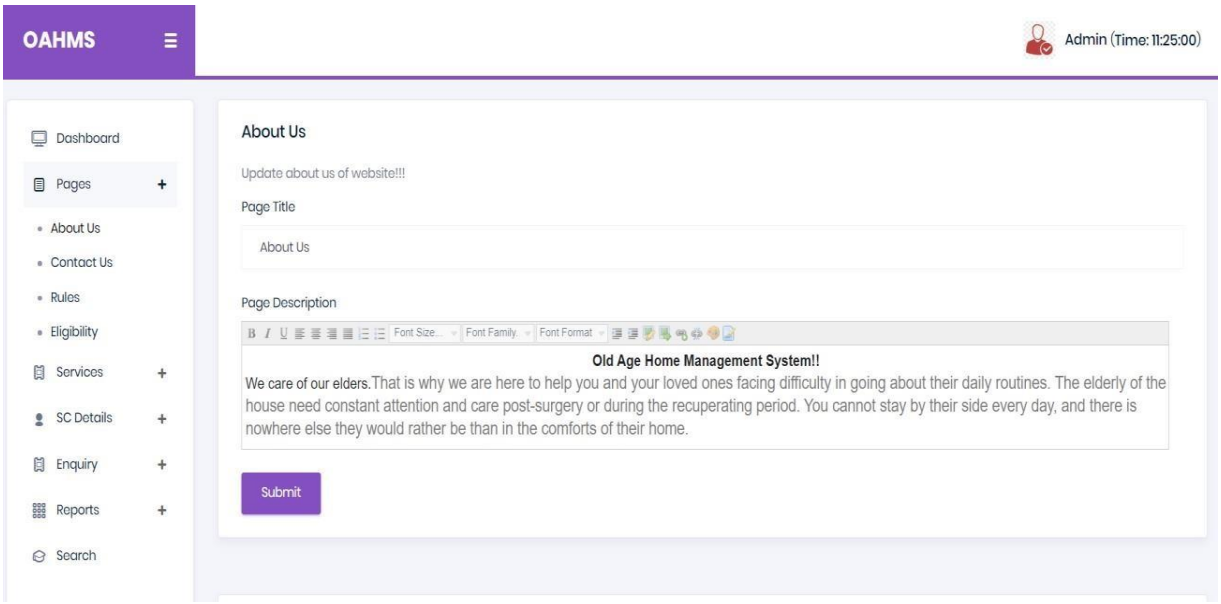
Profile



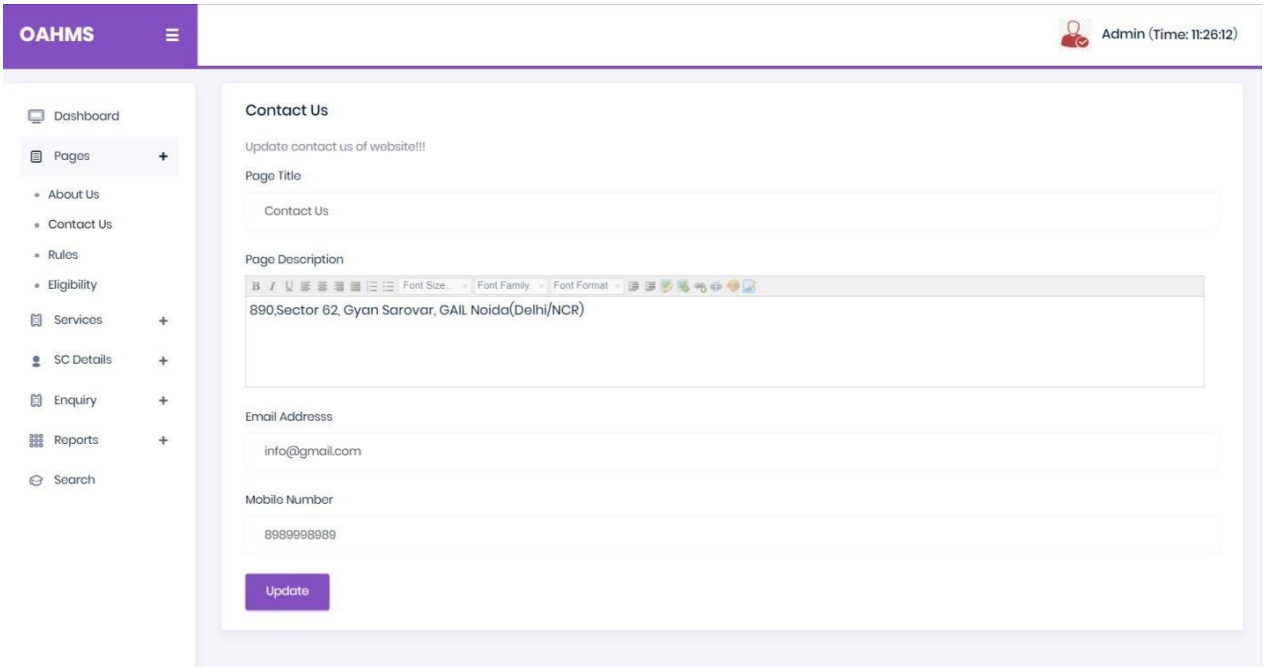
Change Password



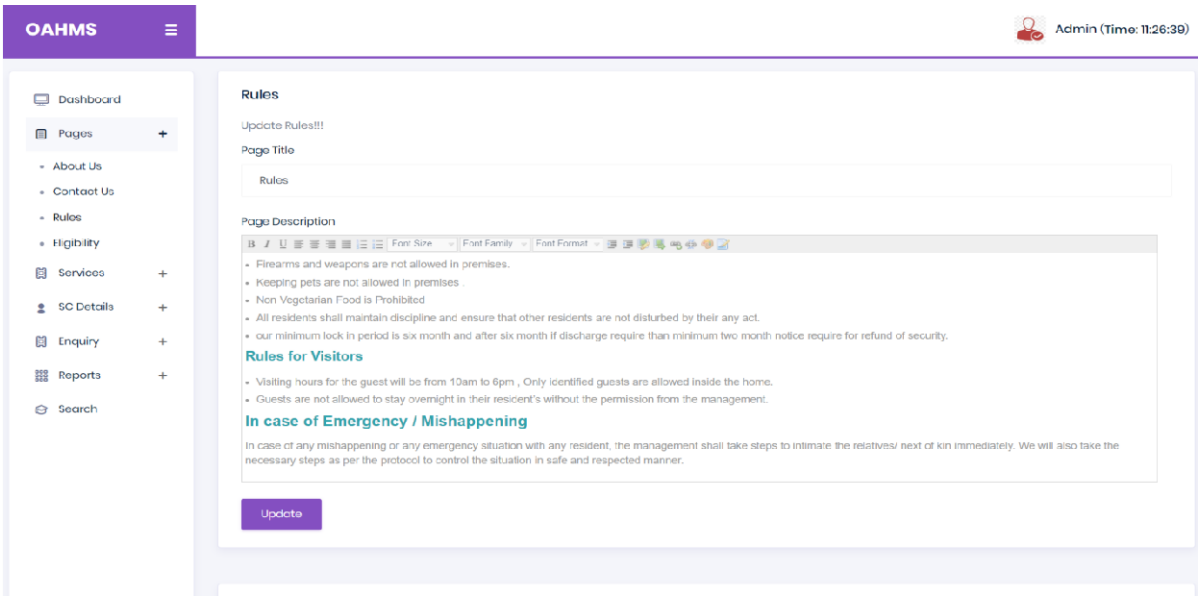
About Us Page



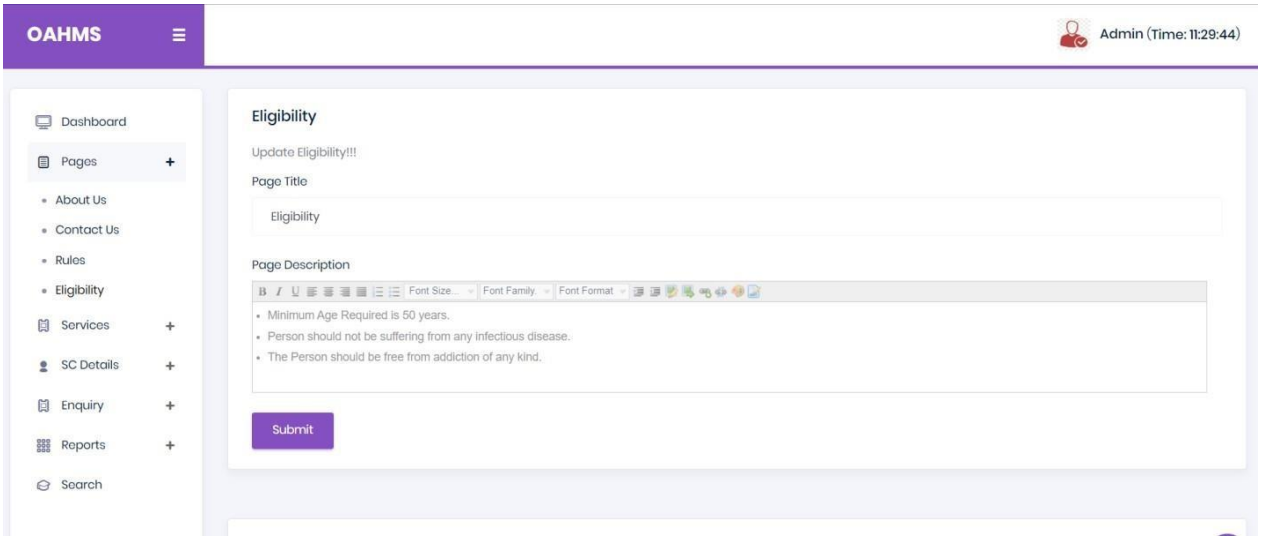
Contact Us Page



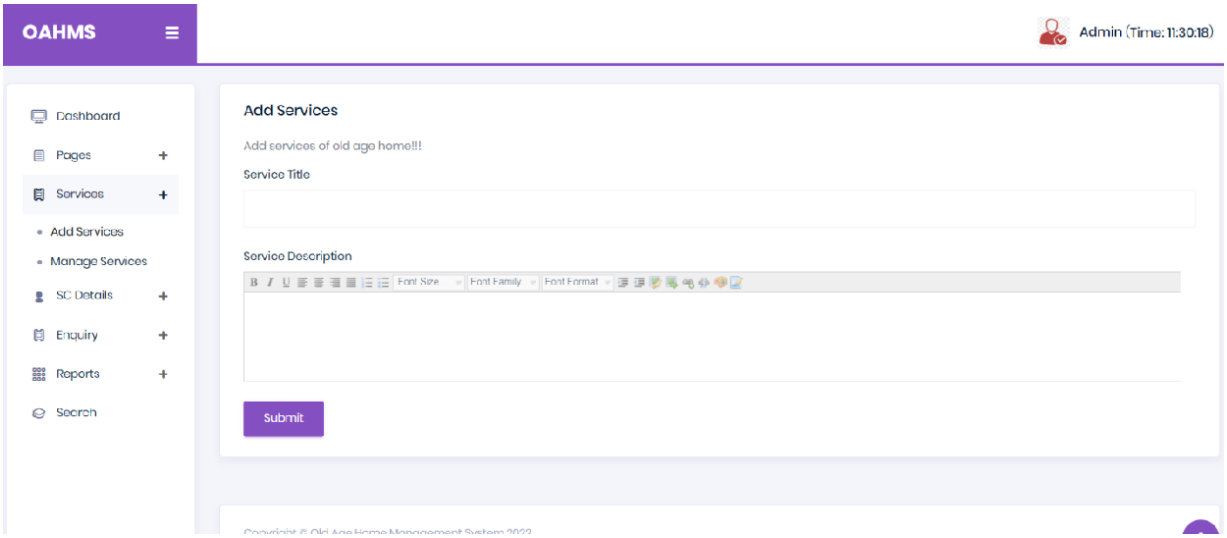
Rules



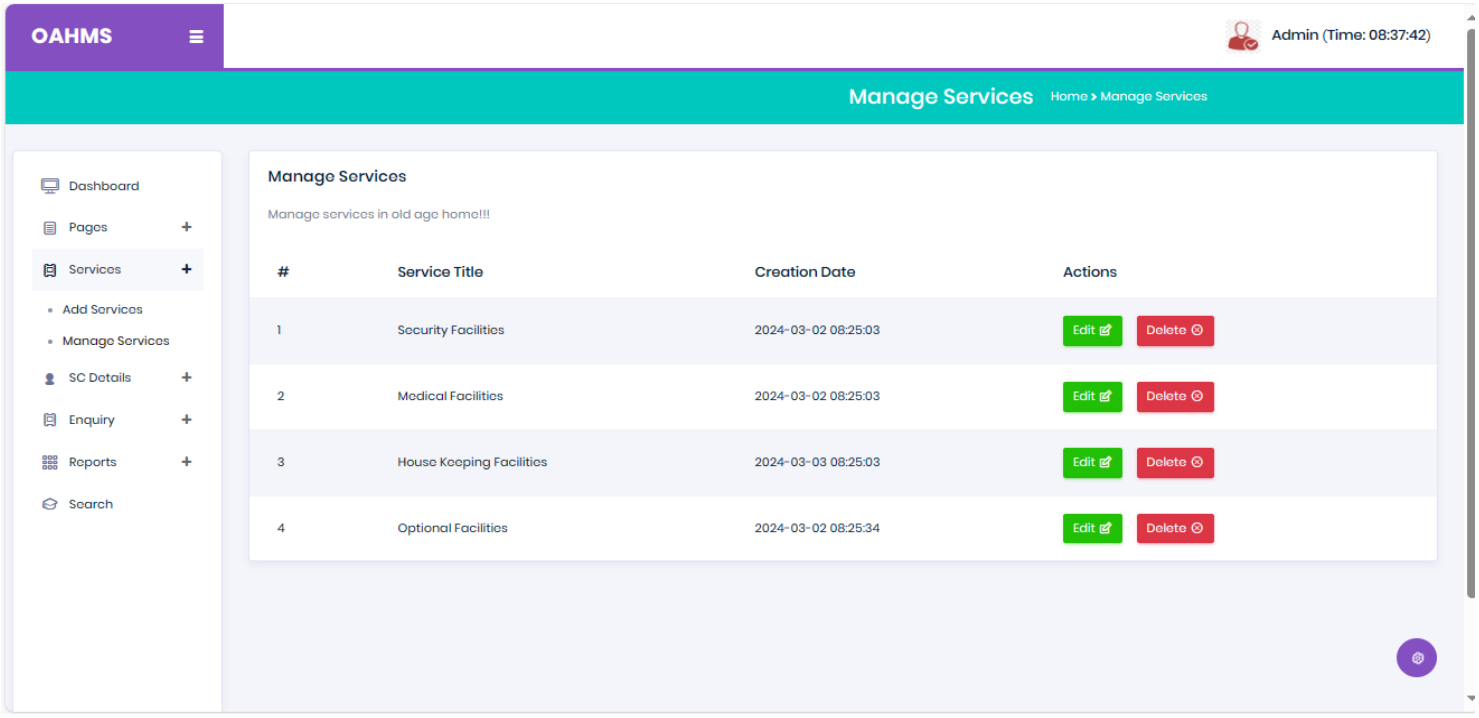
Eligibility



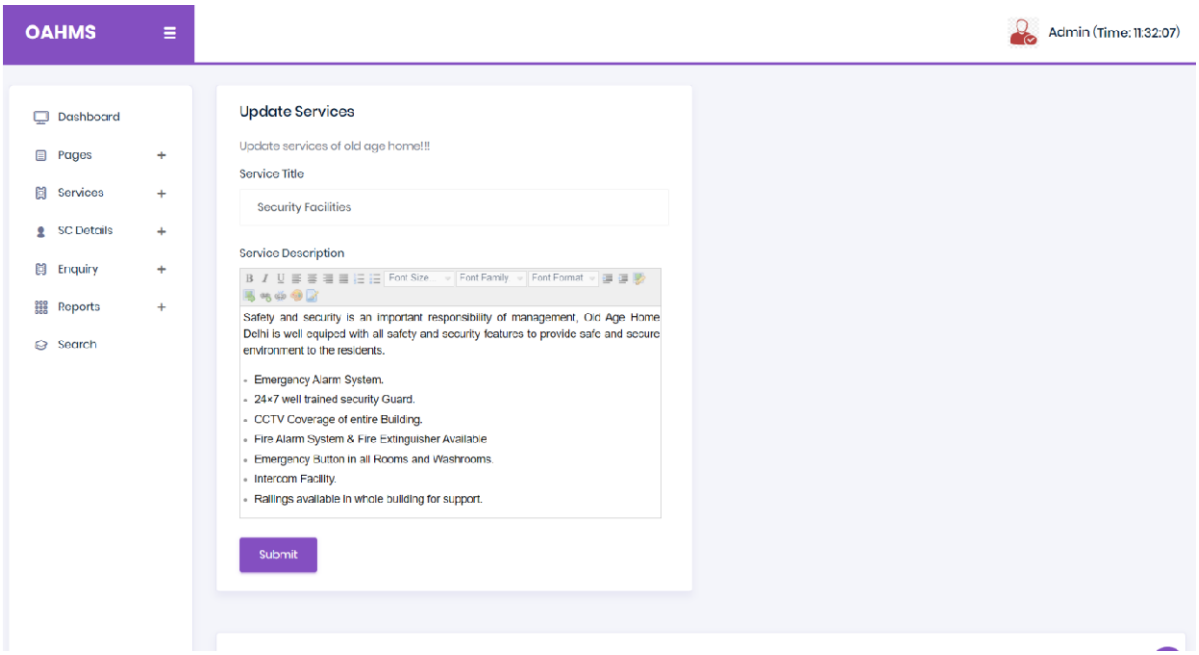
Add Services



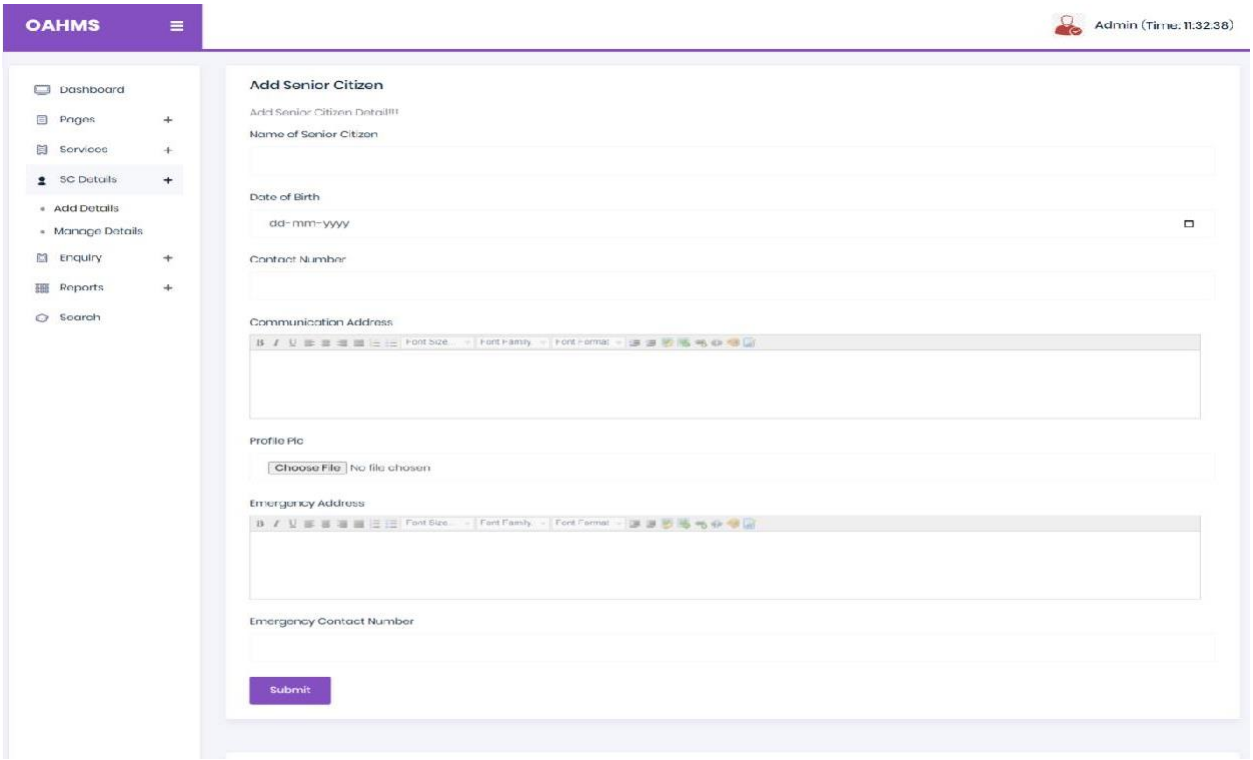
Manage Services



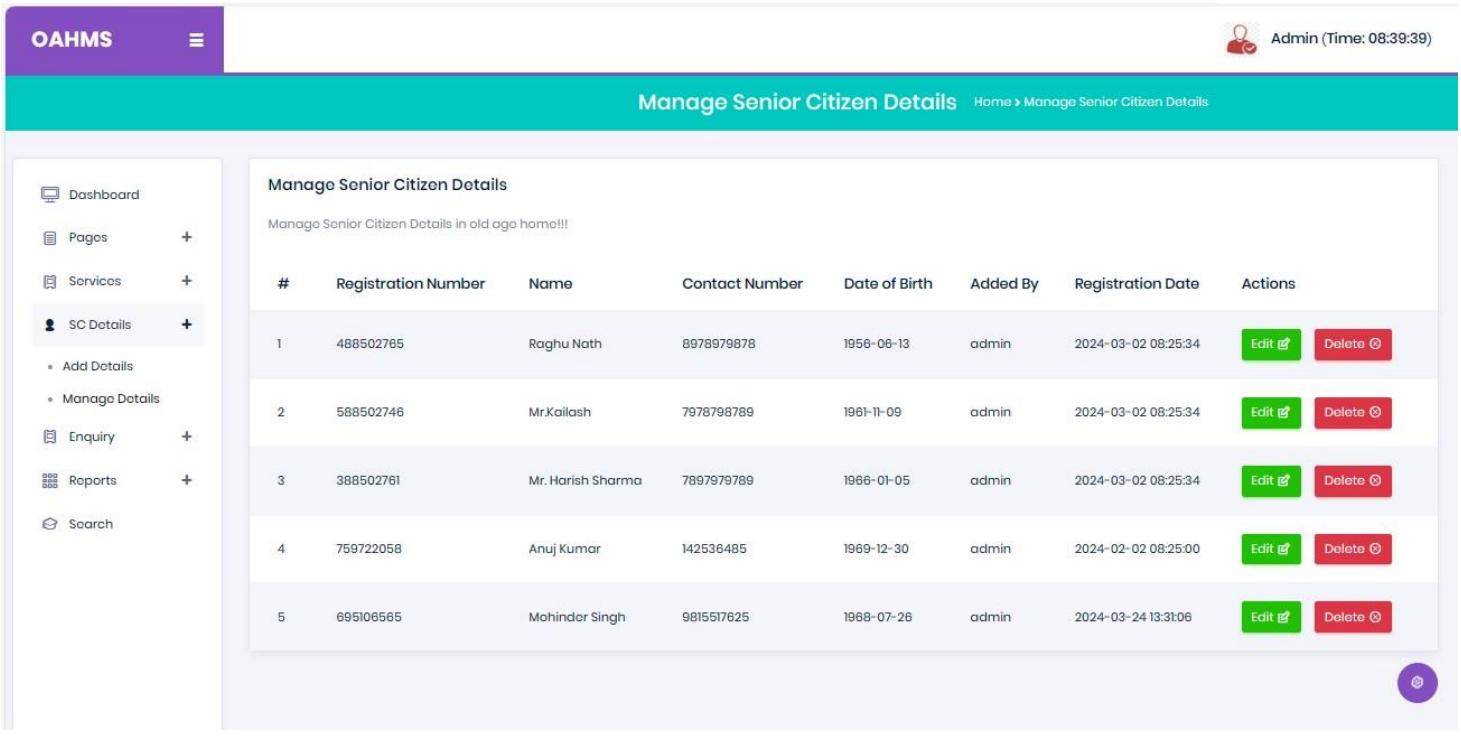
Update Services



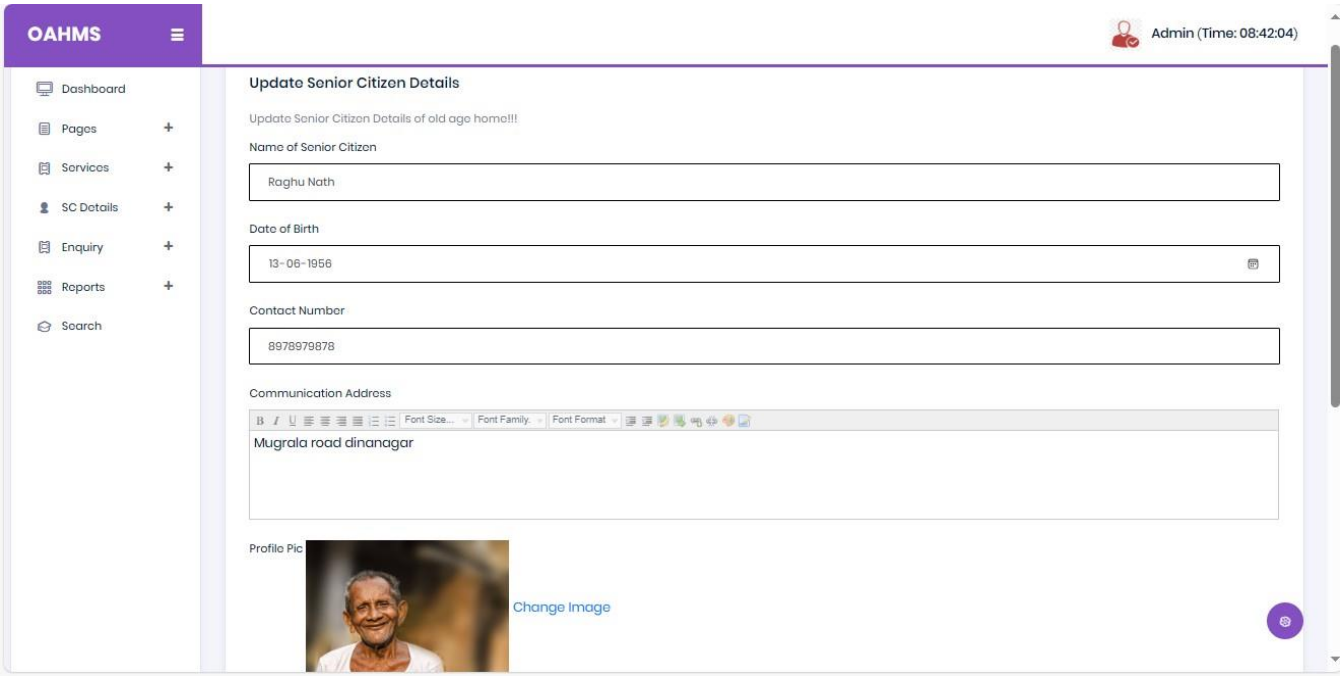
Add Senior Citizen Details



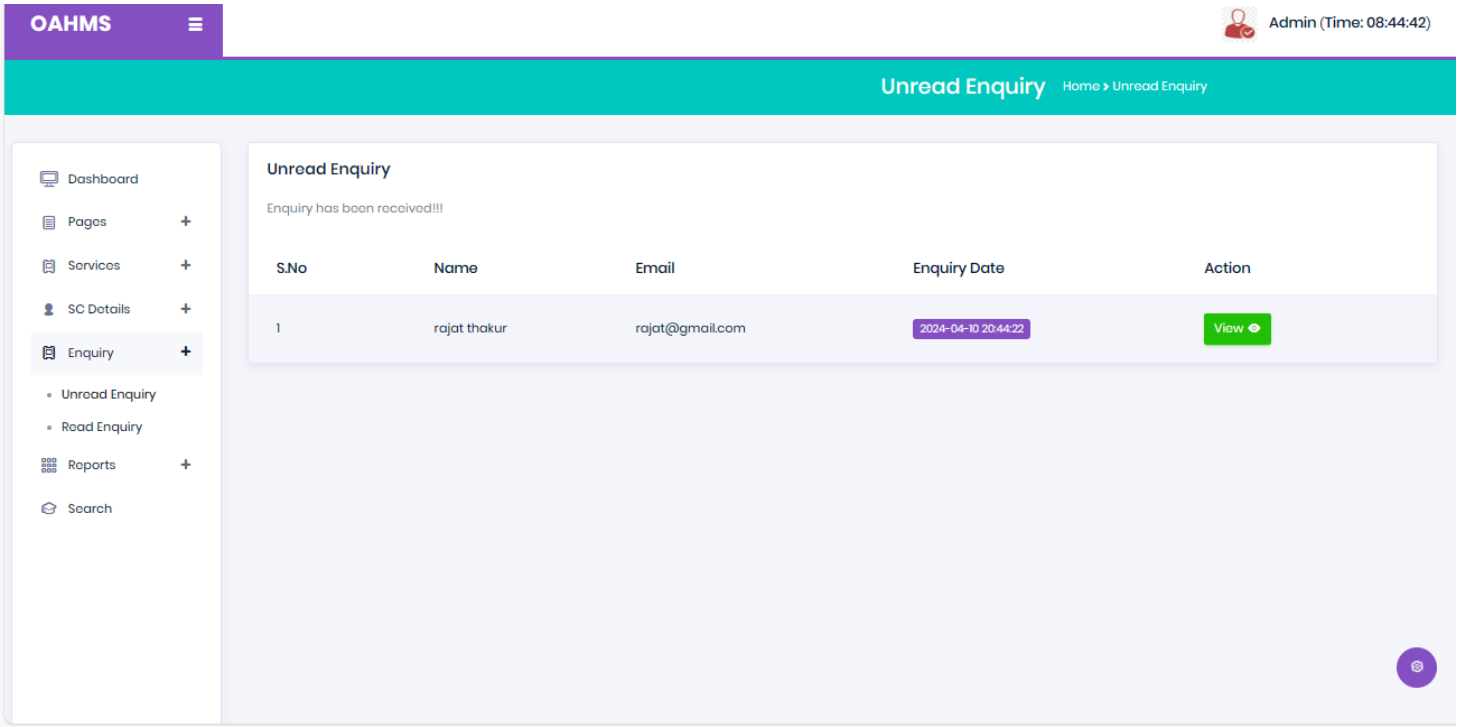
Manage Senior Citizen Details



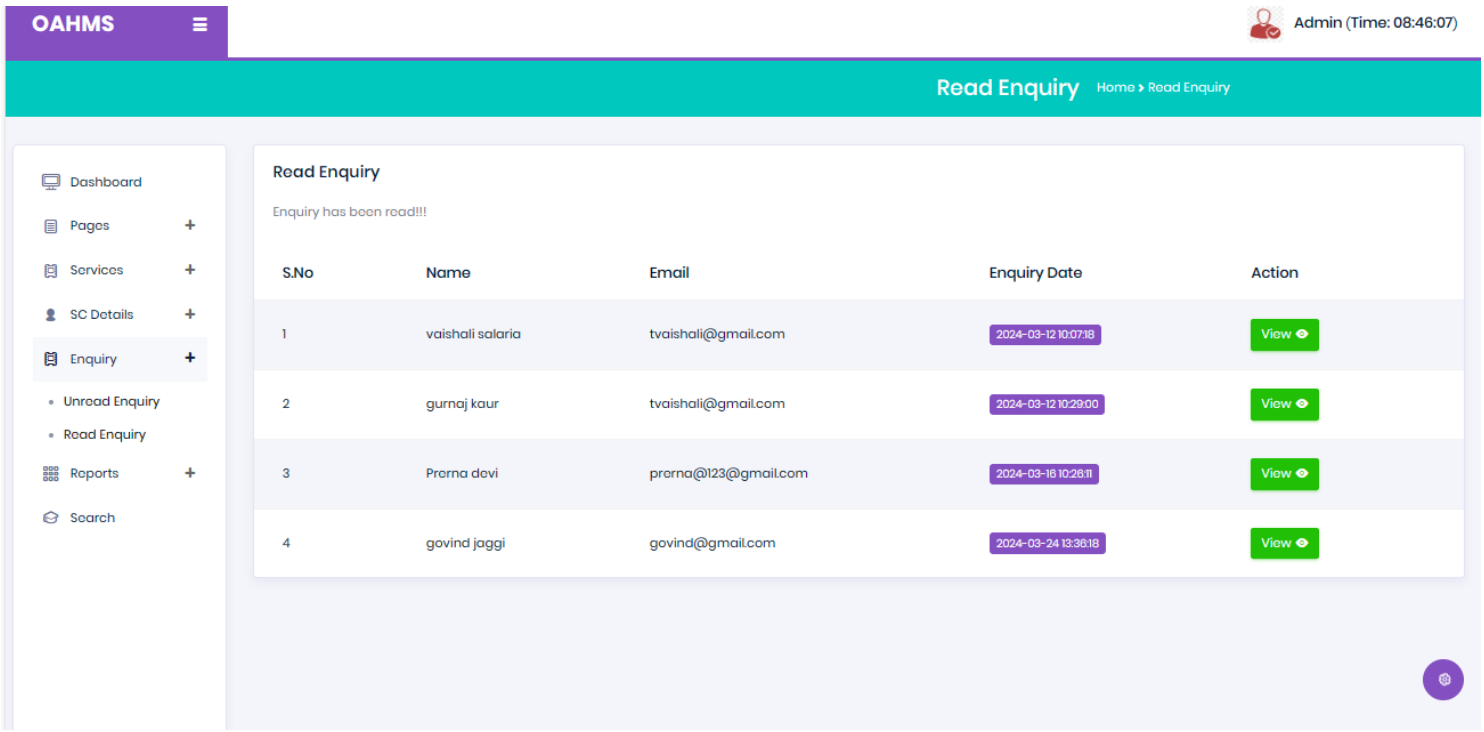
Update Senior Citizen Details



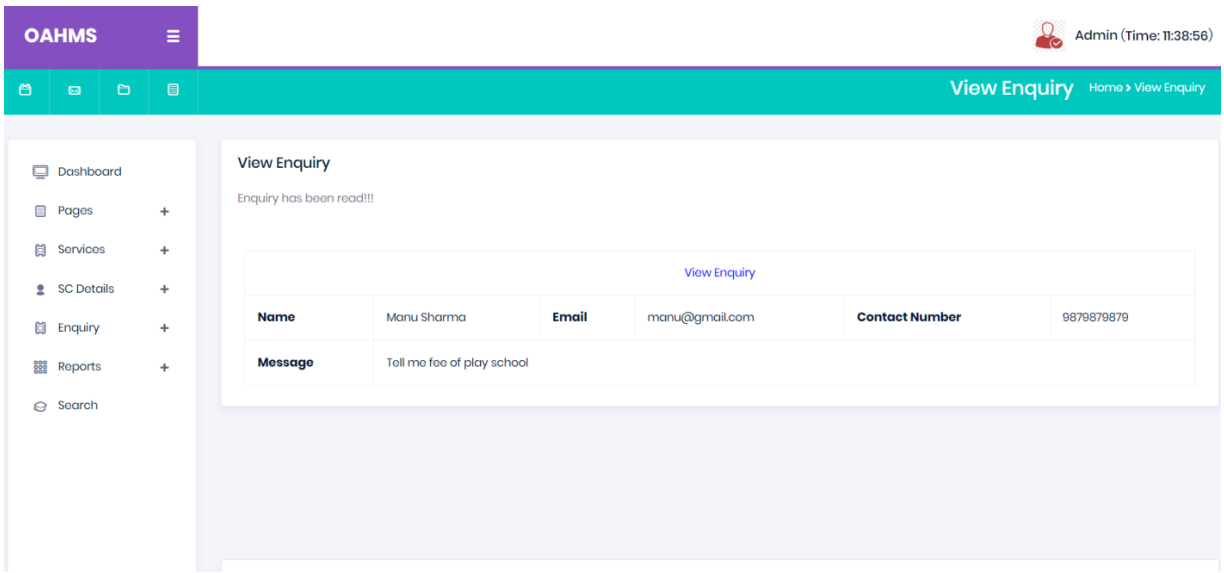
Unread Enquiry



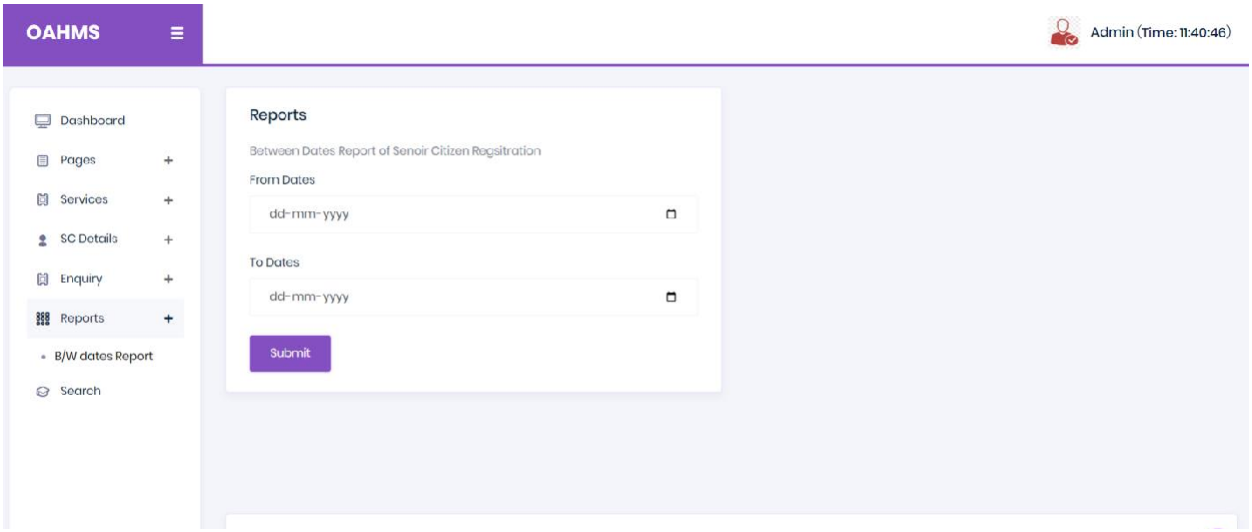
Read Enquires



View Enquiry

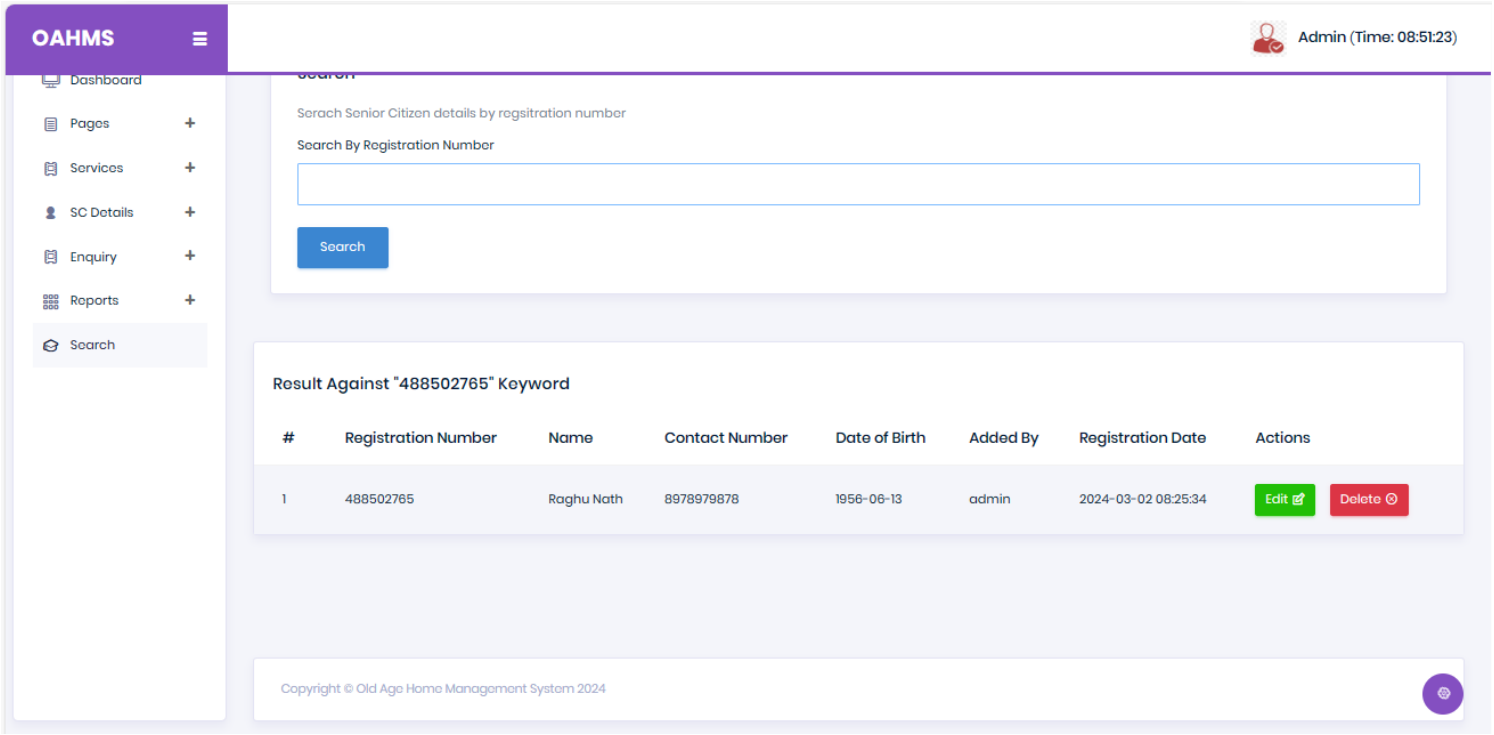


Between Dates Report

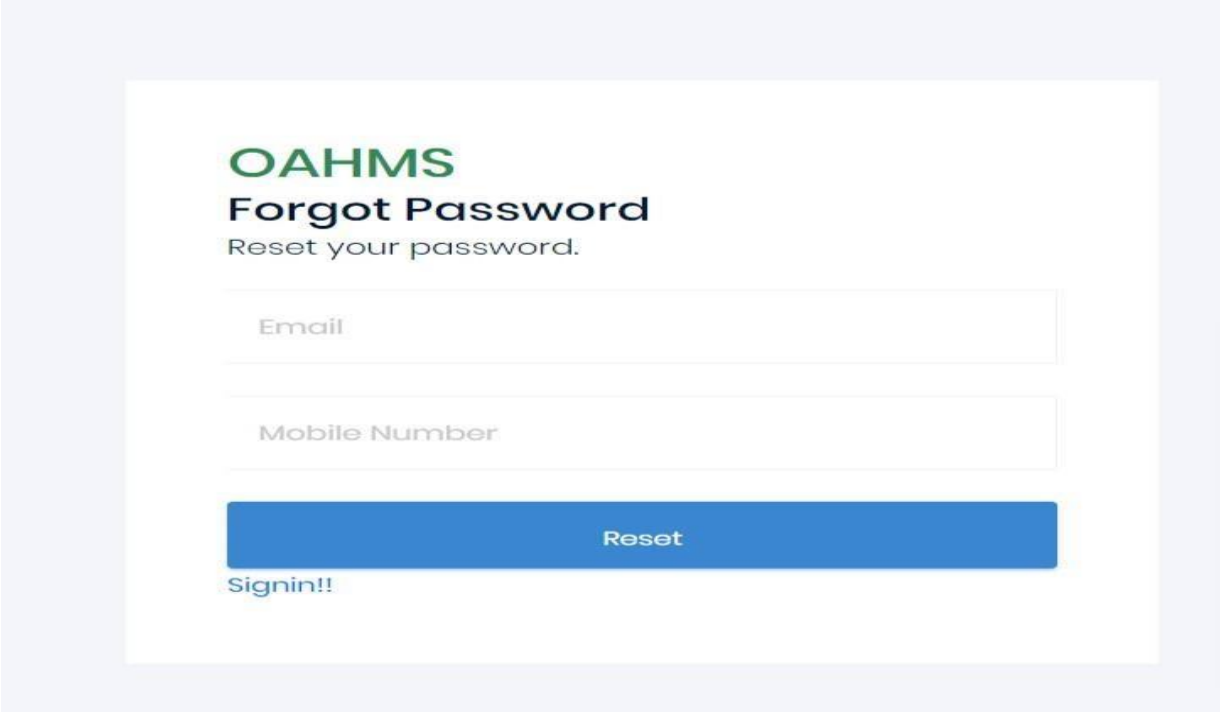


Between Dates Report Details

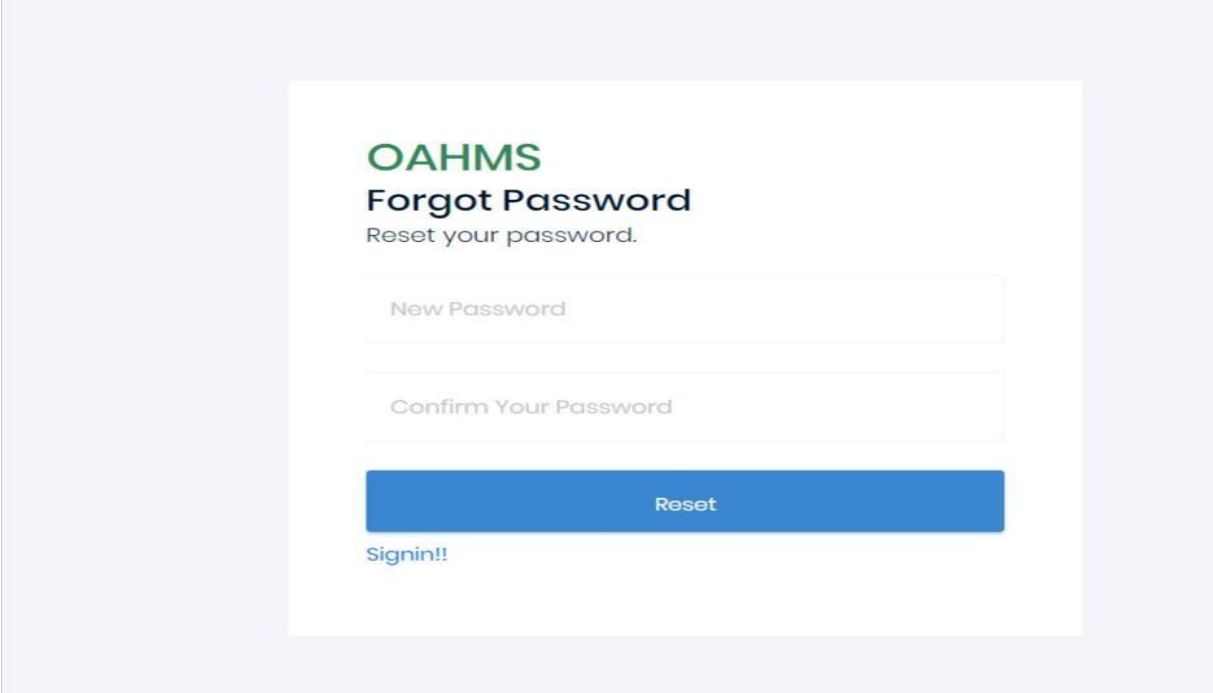
Search



Forgot Password



Reset Password



User Module

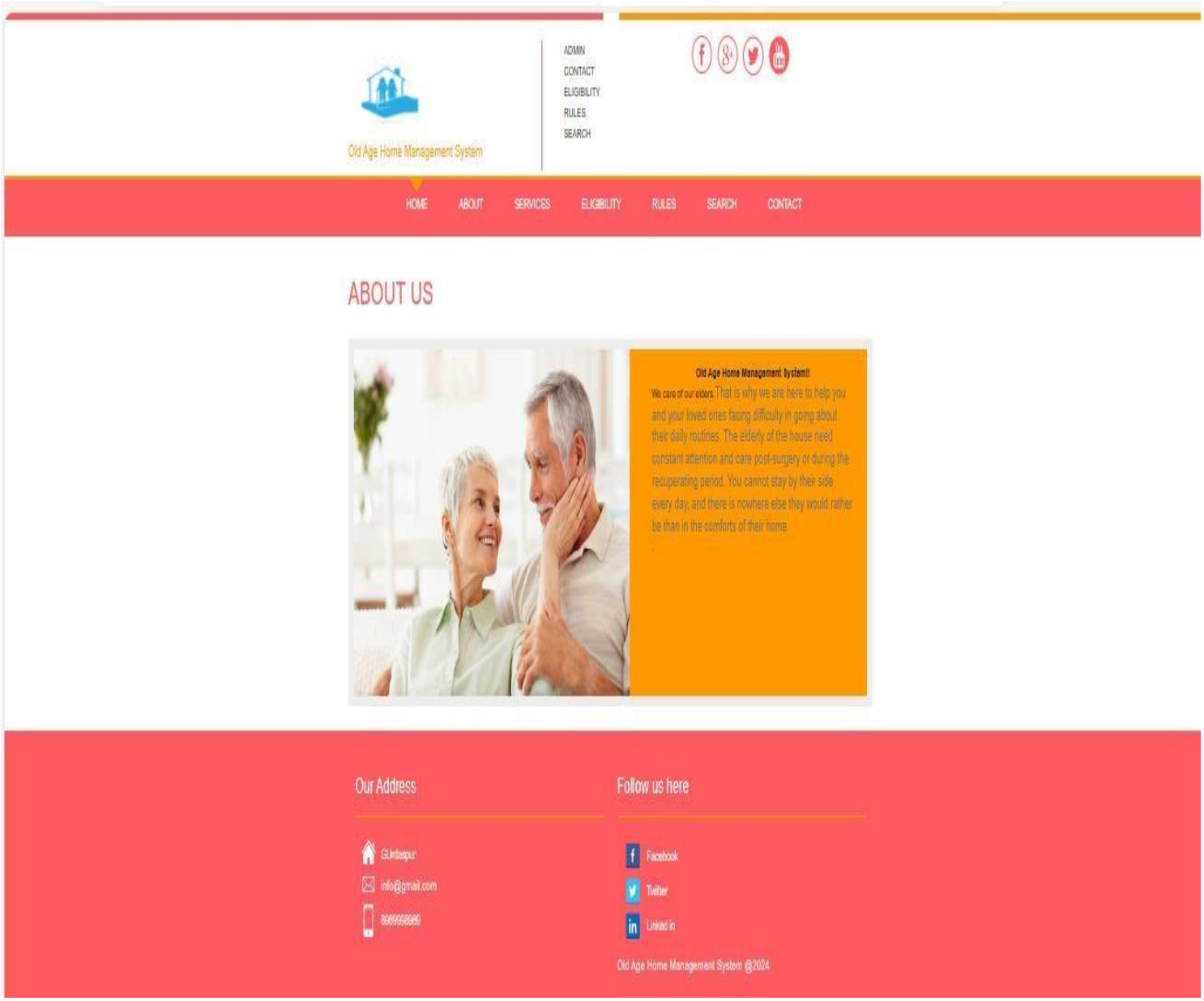
Home Page

ABOUT US

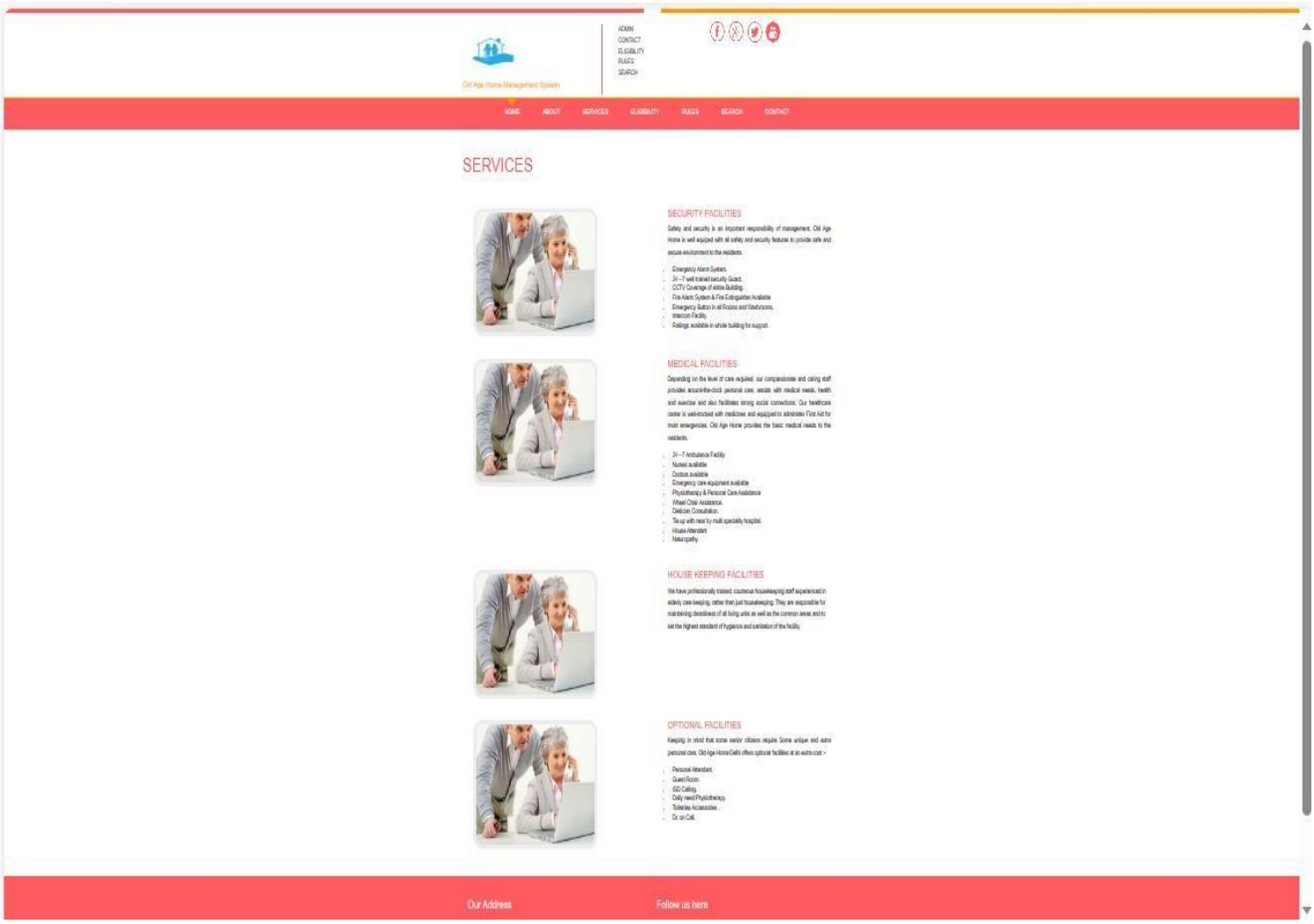
Old Age Home Management System!!

We care of our elders. That is why we are here to help you and your loved ones facing difficulty in going about their daily routines. The elderly of the house need constant attention and care post-surgery or during the recuperating period. You cannot stay by their side every day, and there is nowhere else they would rather be than in the comforts of their home.

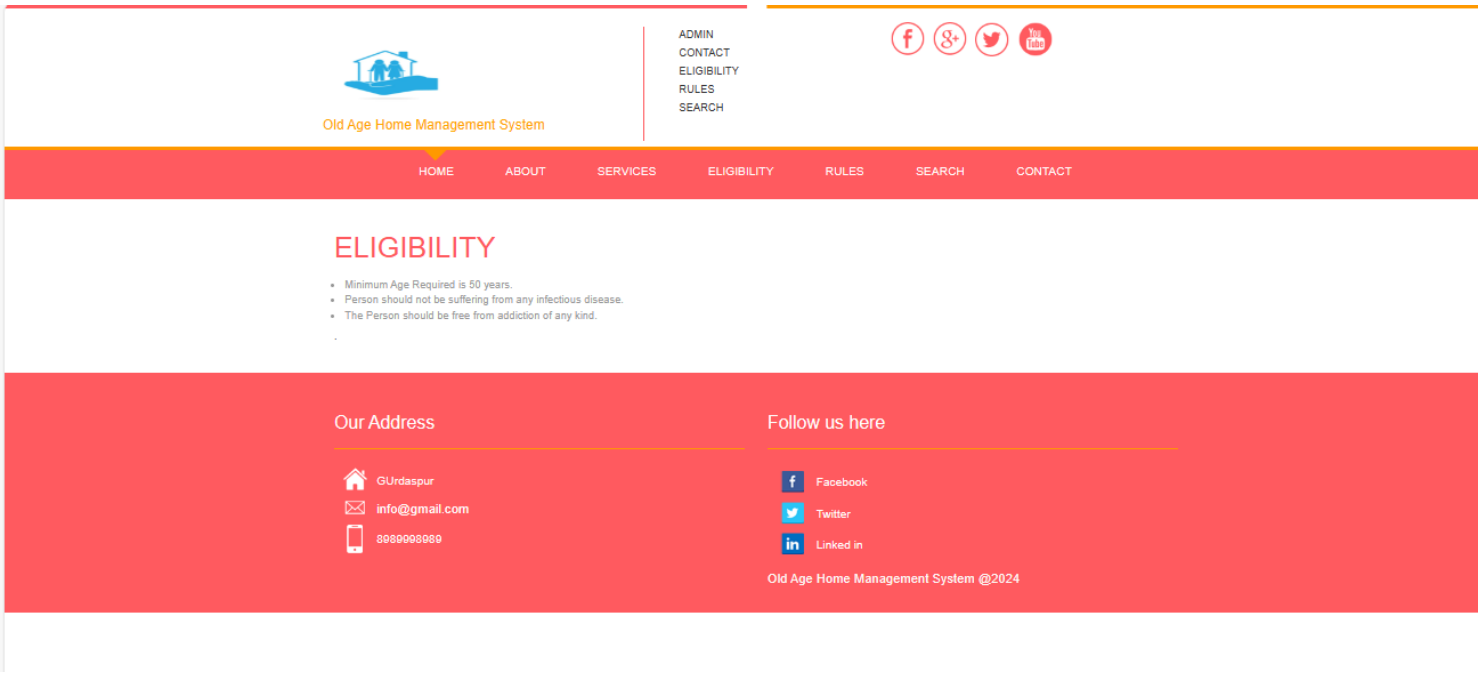
About us


ADMIN
CONTACT
ELIGIBILITY
RULES
SEARCH
Old Age Home Management System
HOME
ABOUT
SERVICES
ELIGIBILITY
RULES
SEARCH
CONTACT
ABOUT US
Old Age Home Management System!!
We care of our elders. That is why we are here to help you and your loved ones facing difficulty in going about their daily routines. The elderly of the house need constant attention and care post-surgery or during the recuperating period. You cannot stay by their side every day, and there is nowhere else they would rather be than in the comforts of their home.
Our Address
GUrdaspur
info@gmail.com
8888888888
Follow us here
Facebook
Twitter
Linked in
Old Age Home Management System @2024

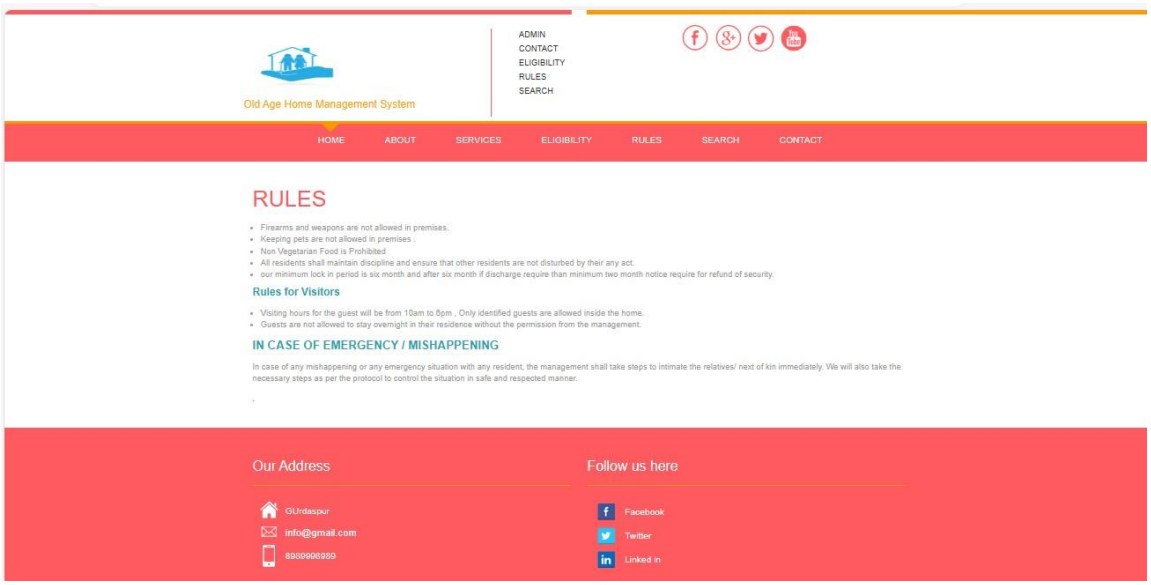
Services


ADMIN
CONTACT
ELIGIBILITY
RULES
SEARCH
Old Age Home Management System
HOME
ABOUT
SERVICES
ELIGIBILITY
RULES
SEARCH
CONTACT
SERVICES
SECURITY FACILITIES
Safety and security is an important responsibility of management. Old Age Home is well equiped with all safety and security features to provide safe and secure environment to the residents.
Emergency Alarm System.
24 – 7 well trained security Guard.
CCTV Coverage of entire Building.
Fire Alarm System & Fire Extinguisher Available
Emergency Button in all Rooms and Washrooms.
Intercom Facility.
Railings available in whole building for support.
MEDICAL FACILITIES
Depending on the level of care required, our compassionate and caring staff provides around-the-clock personal care, assists with medical needs, health and exercise and also facilitates strong social connections. Our healthcare center is well-stocked with medicines and equipped to administer First Aid for most emergencies. Old Age Home provides the basic medical needs to the residents.
24 – 7 Ambulance Facility
Nurses available
Doctors available
Emergency care equipment available
Physiotherapy & Personal Care Assistance
Wheel Chair Assistance.
Dietician Consultation.
Tie-up with near by multi speciality hospital.
House Attendant
Naturopathy.
HOUSE KEEPING FACILITIES
We have professionally trained, courteous housekeeping staff experienced in elderly care keeping, rather than just housekeeping. They are responsible for maintaining cleanliness of all living units as well as the common areas and to set the highest standard of hygience and sanitation of the facility.
OPTIONAL FACILITIES
Keeping in mind that some senior citizens require Some unique and extra personal care, Old Age Home Delhi offers optional facilities at an extra cost :-
Personal Attendant.
Guest Room.
ISD Calling.
Daily need Physiotherapy.
Toiletries Accessories.
Dr on Call.
Our Address
Follow us here

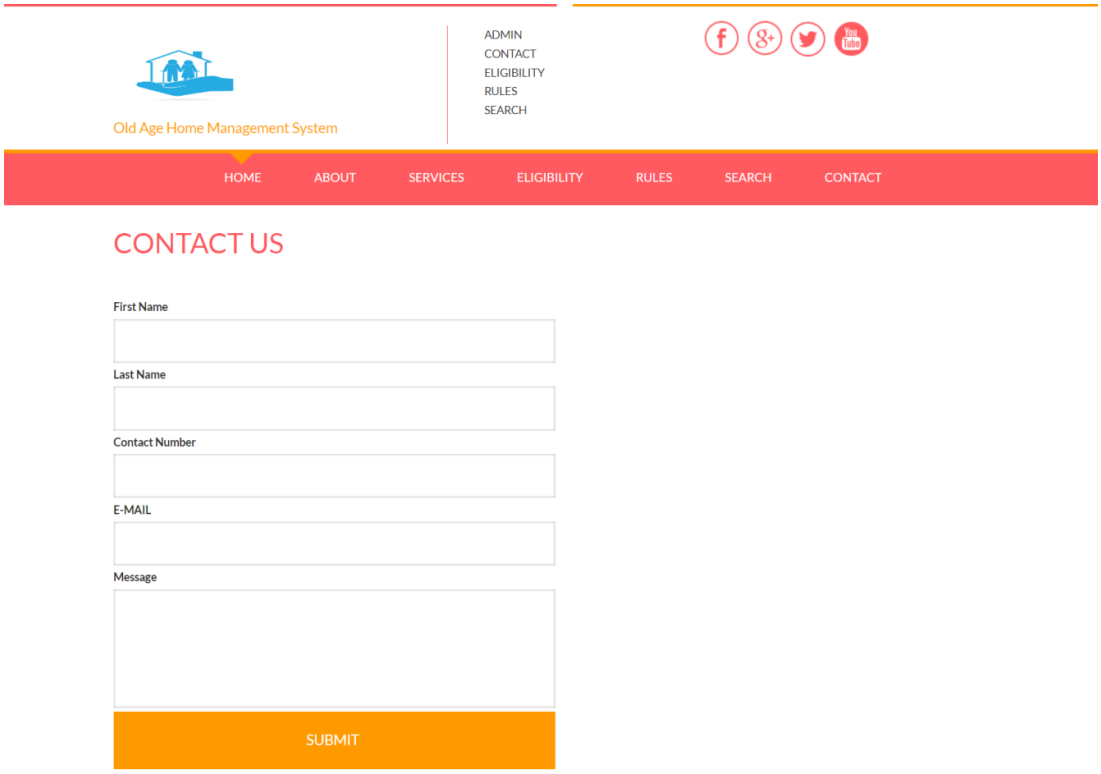
Eligibility



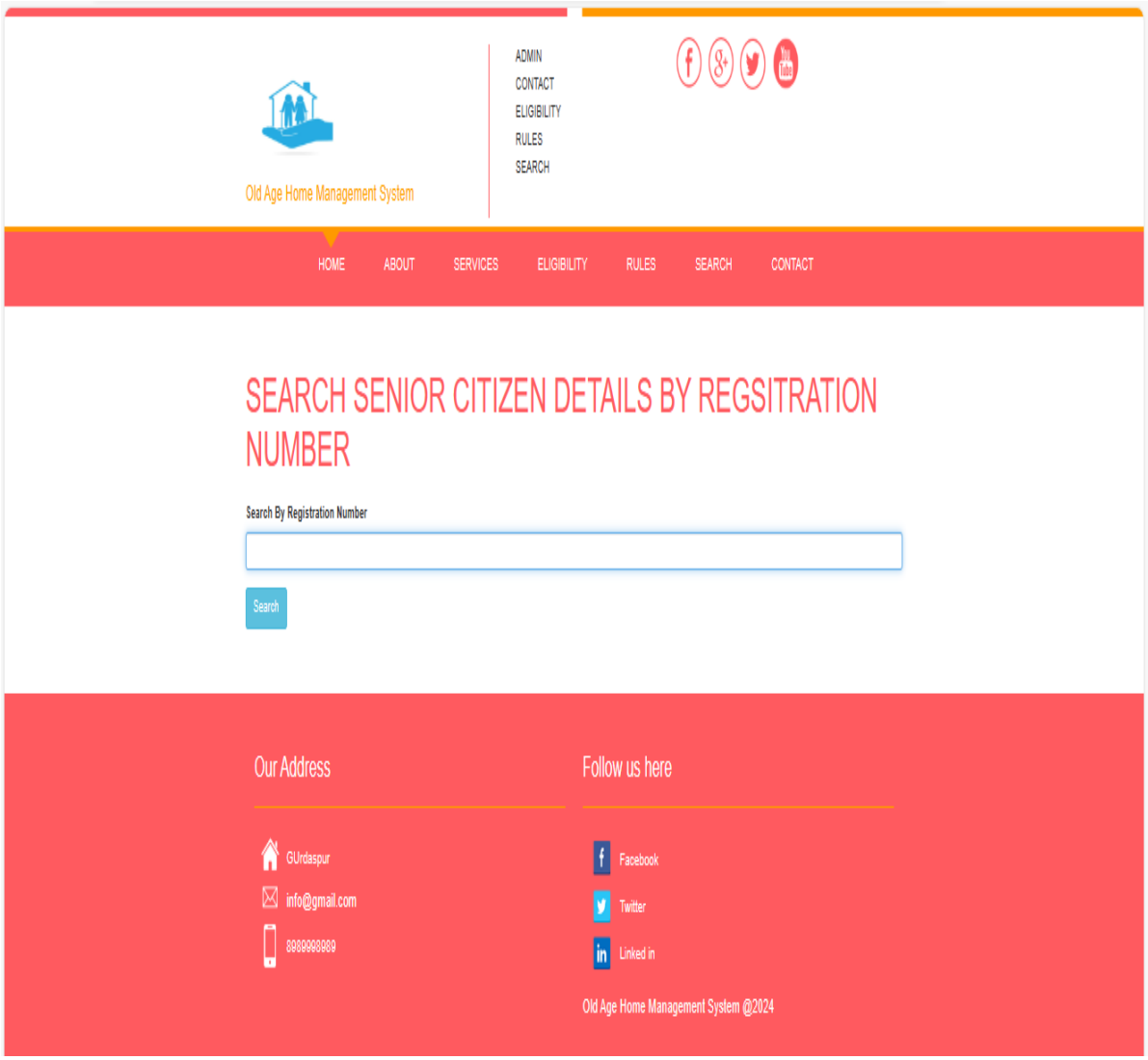
Rules



Contact Us


Old Age Home Management System
ADMIN
CONTACT
ELIGIBILITY
RULES
SEARCH
HOME
ABOUT
SERVICES
ELIGIBILITY
RULES
SEARCH
CONTACT
CONTACT US
First Name
Last Name
Contact Number
E-MAIL
Message
SUBMIT

Search


Old Age Home Management System
ADMIN
CONTACT
ELIGIBILITY
RULES
SEARCH
HOME
ABOUT
SERVICES
ELIGIBILITY
RULES
SEARCH
CONTACT
SEARCH SENIOR CITIZEN DETAILS BY REGSITRATION NUMBER
Search By Registration Number
Search
Our Address
GUrdaspur
info@gmail.com
8889998889
Follow us here
Facebook
Twitter
Linked in
Old Age Home Management System @2024

Conclusion

The application was designed in such a way that future modifications can be done easily. The following conclusion can be deduced from the development of the project.

- Automation of the entire system improves the efficiency.
- It provides a friendly graphical user interface which proves to be better when compared to the existing system.
- It gives appropriate access to the authorized users depending on their permissions.
- It effectively overcomes the delay in communications.
- Updating of information becomes so easier.
- System security, data security and reliability are the striking features.
- The System has adequate scope for modification in future if it is necessary.

Bibliography

- ✓ www.w3schools.com
- ✓ ***php***.*net*
- ✓ *en.wikipedia.org/wiki/**PHP***
- ✓ www.hotscripts.com/category/**php**/
- ✓ www.**apache**.org
- ✓ www.**mysql**.com/click.php?e=35050

PROJECT REPORT

ON

ONLINE EXAMINATION SYSTEM

Submitted in partial fulfillment of the requirements for the award of degree of

M.Sc (Computer Science)

TO

SHANTI DEVI ARYA MAHILA COLLEGE

DINANAGAR

Submitted To:-

Mrs. Neha Saini

Assistant Professor

Deptt. Of Computer Science

Submitted By:

Diksha Sharma

(20672225414)

POST GRADUATE DEPARTMENT OF COMPUTER SCIENCE

GURU NANAK DEV UNIVERSITY, AMRITSAR

Acknowledgement

With deep sense of gratitude I express our sincere thanks and obligation to my esteemed guide Mrs. Neha saini (Assistant Professor). It is because of her able and mature guidance and co-operation without which it would not have been possible for me to complete my project. I would also like to thank Dr. Deepak Jyoti, HOD, Post Graduate Deptt. of Computer Science, Shanti Devi Arya Mahila College, Dinanagar for providing the institute with an environment where one can use her intellect and creativity to develop something fruitful and also for allowing me the opportunity to experience dynamic professional environment during my Training. This environment facilitated me in pursuing this project. It is my pleasant duty to thank all the staff members of the Computer Department for their time to time suggestions. Finally, i would like to thank the almighty and my parents for their moral support and my friends with whom i shared our day-to-day experience and received lots of suggestions that improved my quality of work.

Diksha Sharma

20672225414

CERTIFICATE OF APPROVAL

This is certify that the project report entitled **Online Examination System** submitted to Shanti Devi Arya Mahila College, Dinanagar in partial fulfillment of the requirement for the award of Degree of M.Sc (Computer Science) , is an authentic and original work carried out by Diksha Sharma (20672225414) under our guidance and supervision. The Post Graduate deptt. of Computer Science has accepted the report as the fulfillment of the requirements for the Degree of Master of Computer Science. No part of this report has been submitted to any other College/University for the reward of any Degree to the best of our knowledge.

Mrs. Neha Saini

Assistant Professor (Computer Science)

(Project Supervisor)

Shanti Devi Arya Mahila College

Dinanagar

Dr.Deepak Jyoti

Head of Department

PG Department of Computer Science

Shanti Devi Arya Mahila College

Dinanagar

DECLARATION

I hereby declare that this project report on " **Online Examination System**"which is being submitted in partial fulfillment of the Training Programme of M.Sc(Computer Science) to Shanti Devi Arya Mahila College, Dinanagar is the result of the work carried out by me, under the guidance of Mrs. Neha Saini (Assistant Professor),Shanti Devi Arya Mahila College , Dinanagar.

Diksha Sharma

20672225414

INTR0DUCTI0N :-

Online examinations are an important method of evaluating the success potential of students. This research effort the individuals under consideration were students who would be enrolling in computer courses or Technologies Registrations. A prototype of a web-based placement examination system is described from the standpoint of the research effort, end user, and software development.

An on-line educational system including exam processing and electronic journal features. An instructor builds a course based questions which on-line contain in identification of assignments. Which are compiled into an on-line exam syllabus?

Users enrolled in the platform may access the electronic details they provided and perform various functions with the on-line educational system in order to participate in the on-line examinations. Users can receive an on-line exam, having multimedia content, for the course, and they can electronically provide answers for the exam. And after Completion of their duration of exam they are provided the grade or marks secured in their examinations.

INDEX

S. N CONTENTS

1. INTRODUCTION

2. ANALYSIS

2.1 SYSTEM ANALYSIS

2.2 SYSTEM SPECIFICATIONS

3. DESIGN APPROACH

3.1 INTRODUCTION TO DESIGN

3.2 UML DIAGRAMS

3.3 DATA FLOW DIAGRAMS

3.4 E-R DIAGRAMS

4. PROJECT MODULES

5. IMPLEMENTATION

4.1 CONCEPTS AND TECHNIQUES

4.2 TESTING

4.2.1 TEST CASES

6. OUTPUT SCREENS

7. CONCLUSION

8. FUTURE ENHANCEMENTS

9. BIBILIOGRAPHY

Introduction

INTRODUCTION:

on-line examinations contents providers to focus on creating effective assessment questions and focusing on exam's feedback delivery to students. In the paper we present techniques that are pertinent to the elements of assessment process: answers submission, computerized grading, and feedback after submission.

As the modern organizations are automated and computers are working as per the instructions, it becomes essential for the coordination of human beings, commodity and computers in a modern organization.

The administrators ,instructor,Students who are attending for online examination can communicate with the system through this projects, thus facilitating effective implementation and monitoring of various activities of Online Examinations like conducting Exams as per scheduled basis and delivering result to that particular use or student.And the details of students who attempted Online Examination are maintained at administrator.

Analysis

SYSTEM ANALYSIS:

1. Existing System

Existing system is a manual one in which users are maintaining books to store the information like Student Details,Instructor Details,Schedule Details and feedbacks about students who attempted exam as per schedule.. It is very difficult to maintain historical data.

DISADVANTAGES:

The following drawbacks of existing system emphasize the need for computerization:

1. A lot of copies of question papers have to be made
2. A lot of correction work hence delay in giving the results
3. A lot of tabulation work for each subject results

2. Proposed System

This application is used to conduct online examination. The students can sit at individual terminals and login to write the exam in the given duration. . The questions have to be given to the students.This application will perform correction, display the result immediately and also store it in database. This application provides the administrator with a facility to add new exams.This application provides the Instructor add questions to the exam, modify questions in the exam in a particular exam. This application takes care of authentication of the administrator,Instructor as well as the student.

3. Objective of the System

The objective of the Online Examination Tool is to provide better information for the users of this system for better results for their maintainence in student examination schedule details and grading details.

System Specifications

Hardware Requirements:-

- Pentium-IV(Processor).
- 256 MB Ram
- 512 KB Cache Memory
- Hard disk 10 GB
- Microsoft Compatible 101 or more Key Board

Software Requirements: -

- **Operating System :** Windows
- **Web-Technology:** **PHP**
- **Front-End:** **HTML,CSS,JAVASCRIPT**
- **Back-End:** MySQL
- **Web Server:** Apache SERVER.

Design

INTRODUCTION:

Design is the first step in the development phase for any techniques and principles for the purpose of defining a device, a process or system in sufficient detail to permit its physical realization.

Once the software requirements have been analyzed and specified the software design involves three technical activities - design, coding, implementation and testing that are required to build and verify the software.

The design activities are of main importance in this phase, because in this activity, decisions ultimately affecting the success of the software implementation and its ease of maintenance are made. These decisions have the final bearing upon reliability and maintainability of the system. Design is the only way to accurately translate the customer's requirements into finished software or a system.

Design is the place where quality is fostered in development. Software design is a process through which requirements are translated into a representation of software. Software design is conducted in two steps. Preliminary design is concerned with the transformation of requirements into data.

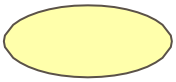
UML Diagrams:

Actor:

A coherent set of roles that users of use cases play when interacting with the use `cases.

Use case:

A description of sequence of actions, including variants, that a system performs that yields an observable result of value of an actor.



UML stands for Unified Modeling Language. UML is a language for specifying, visualizing and documenting the system. This is the step while developing any product after analysis. The goal from this is to produce a model of the entities involved in the project which later need to be built. The representation of the entities that are to be used in the product being developed need to be designed.

There are various kinds of methods in software design:

They are as follows:

- Use case Diagram
- Sequence Diagram

- Collaboration Diagram
- Activity Diagram
- State chat Diagram

USECASE DIAGRAMS:

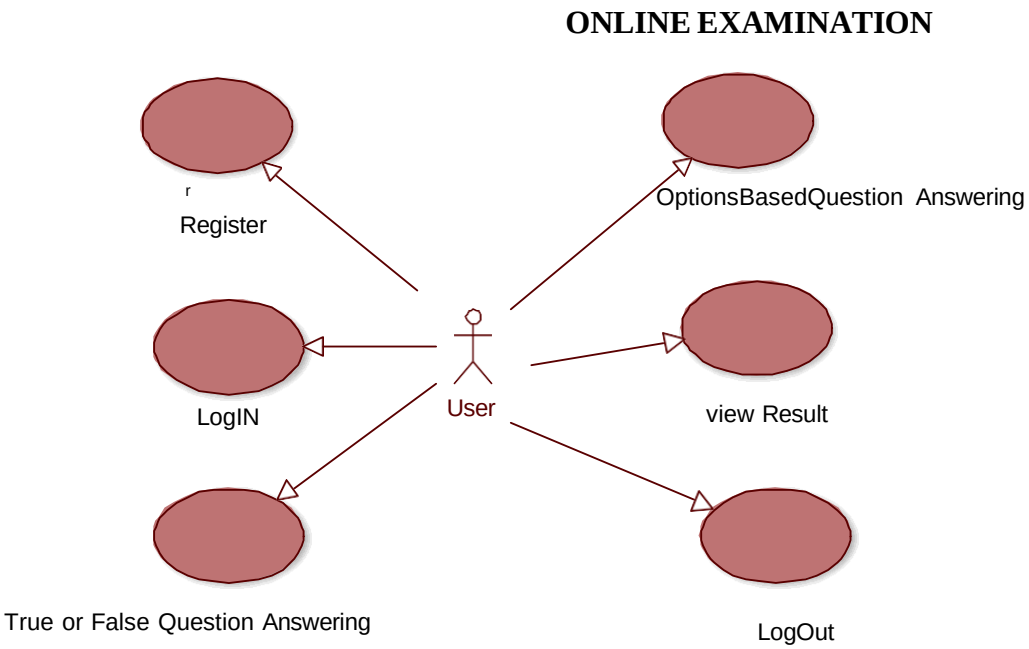
Use case diagrams model behavior within a system and helps the developers understand of what the user require. The stick man represents what's called an actor. Use case diagram can be useful for getting an overall view of the system and clarifying who can do and more importantly what they can't do.

Use case diagram consists of use cases and actors and shows the interaction between the use case and actors.

- The purpose is to show the interactions between the use case and actor.
- To represent the system requirements from user's perspective.
- An actor could be the end-user of the system or an external system.

USECASE DIAGRAM:

A Use case is a description of set of sequence of actions. Graphically it is rendered as an ellipse with solid line including only its name. Use case diagram is a behavioral diagram that shows a set of use cases and actors and their relationship. It is an association between the use cases and actors. An actor represents a real-world object. Primary Actor – Sender, Secondary ActorReceiver.

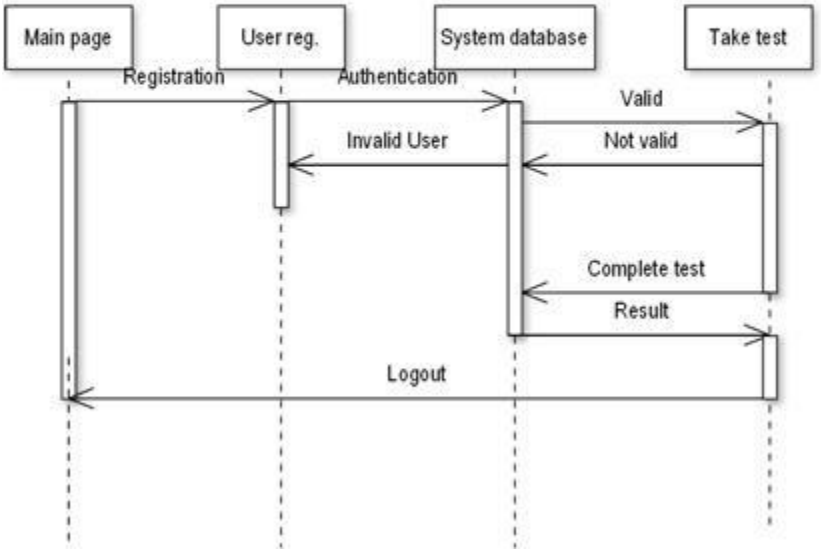


SEQUENCE DIAGRAM:

Sequence diagram and collaboration diagram are called INTERACTION DIAGRAMS. An interaction diagram shows an interaction, consisting of set of objects and their relationship including the messages that may be dispatched among them.

A sequence diagram is an introduction that empathizes the time ordering of messages. Graphically a sequence diagram is a table that shows objects arranged along the X-axis and messages ordered in increasing time along the Y-axis

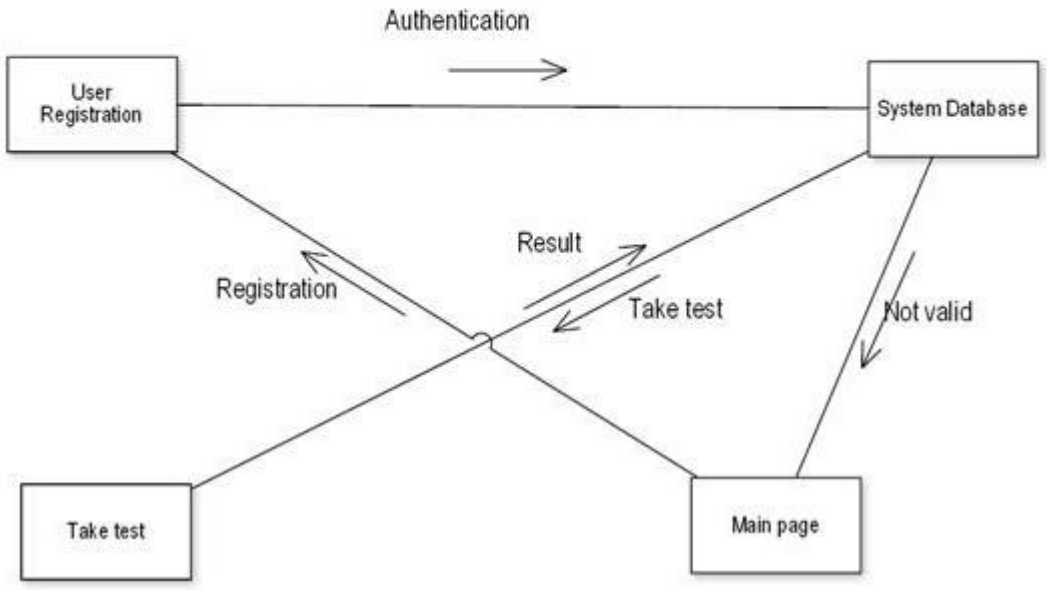
Sequence Diagram



COLLABORATION DIAGRAM:

A collaboration diagram is an introduction diagram that emphasizes the structural organization of the objects that send and receive messages. Graphically a collaboration diagram is a collection of vertices and arcs.

Collaboration Diagram



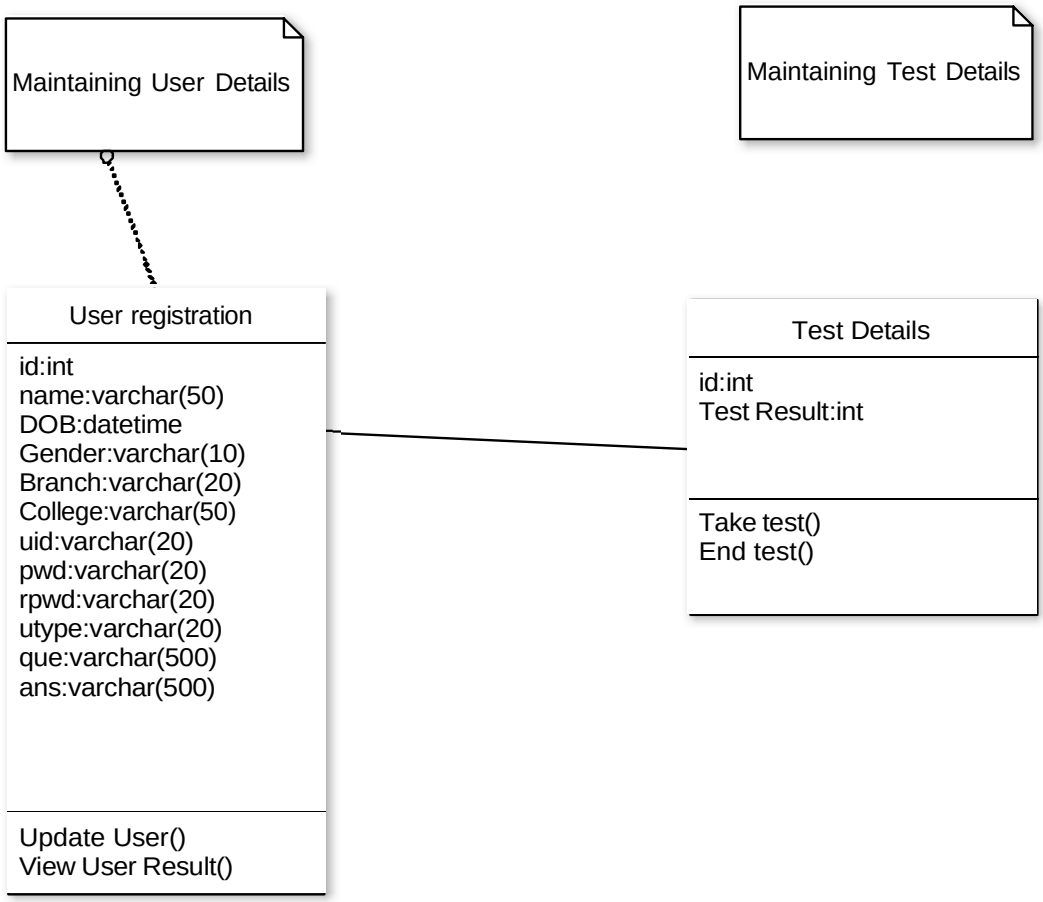
CLASS DIAGRAM:

Class is nothing but a structure that contains both variables and methods. The Class Diagram shows a set of classes, interfaces, and collaborations and their relating ships. There is most common diagram in modeling the object oriented systems and are used to give the static view of a system. It shows the dependency between the classes that can be used in our system.

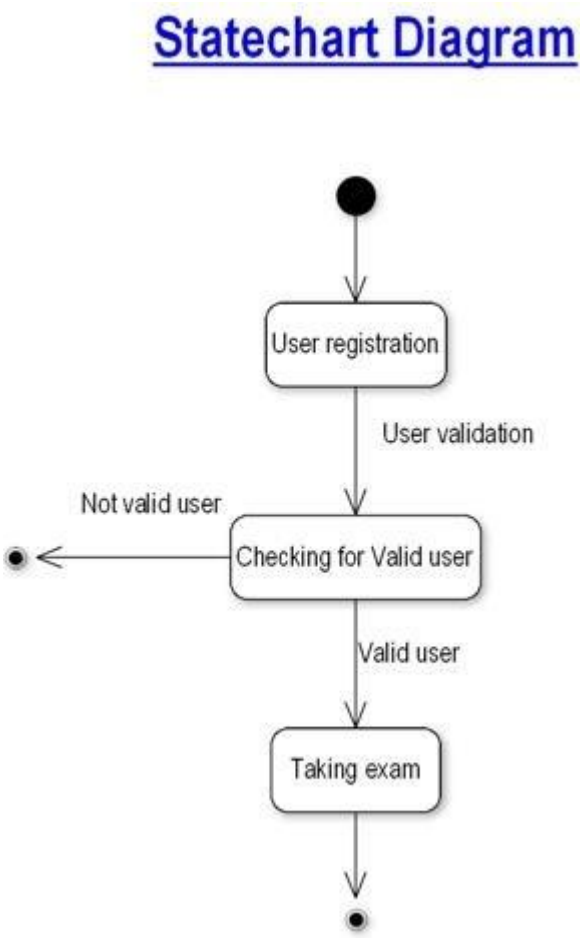
The interactions between the modules or classes of our projects are shown below. Each block contains Class Name, Variables and Methods.

CLASS:

A description of set of objects that share the same attributes, operations, relationships, and semantics



State Chart Diagram



.

DATA FLOW DIAGRAMS:

The DFD takes an input-process-output view of a system i.e. data objects flow into the software, are transformed by processing elements, and resultant data objects flow out of the software.

Data objects represented by labeled arrows and transformation are represented by circles also called as bubbles. DFD is presented in a hierarchical fashion i.e. the first data flow model represents the system as a whole. Subsequent DFD refine the context diagram (level 0 DFD), providing increasing details with each subsequent level.

The DFD enables the software engineer to develop models of the information domain & functional domain at the same time. As the DFD is refined into greater levels of details, the analyst perform an implicit functional decomposition of the system. At the same time, the DFD refinement results in a corresponding refinement of the data as it moves through the process that embody the applications.

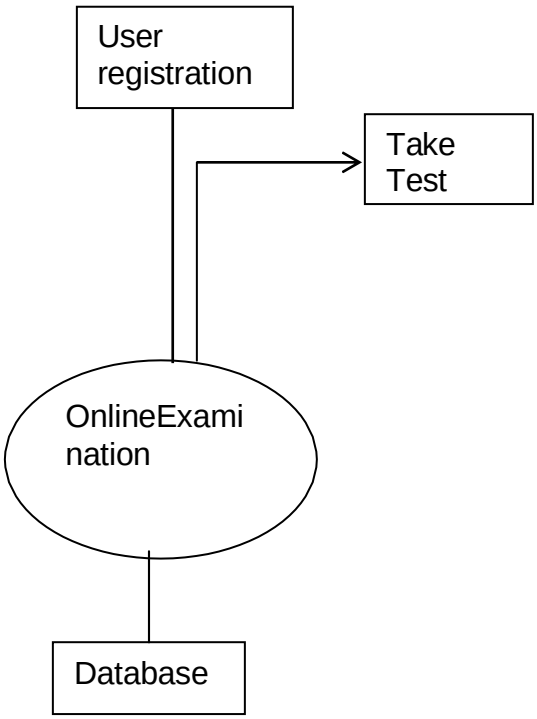
A context-level DFD for the system the primary external entities produce information for use by the system and consume information generated by the system. The labeled arrow represents data objects or object hierarchy.

RULES FOR DFD:

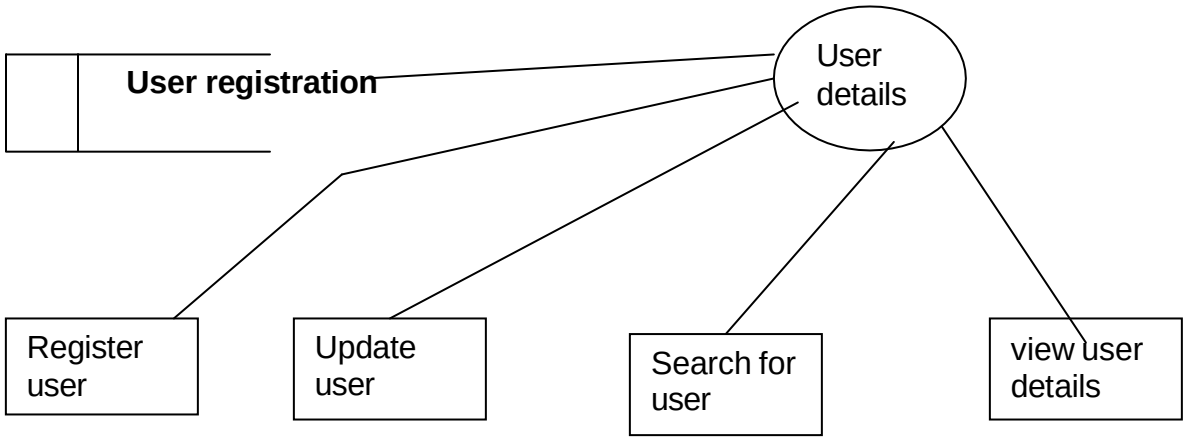
- Fix the scope of the system by means of context diagrams.
- Organize the DFD so that the main sequence of the actions
- Reads left to right and top to bottom.
- Identify all inputs and outputs.
- Identify and label each process internal to the system with Rounded circles.
- A process is required for all the data transformation and Transfers. Therefore, never connect a data store to a data Source or the destinations or another data store with just a Data flow arrow.
- Do not indicate hardware and ignore control information.
- Make sure the names of the processes accurately convey everything the process is done.
- There must not be unnamed process.
- Indicate external sources and destinations of the data, with Squares.
- Number each occurrence of repeated external entities.
- Identify all data flows for each process step, except simple Record retrievals.
- Label data flow on each arrow.
- Use details flow on each arrow.
- Use the details flow arrow to indicate data movements.

DATAFLOW DIAGRAMS:

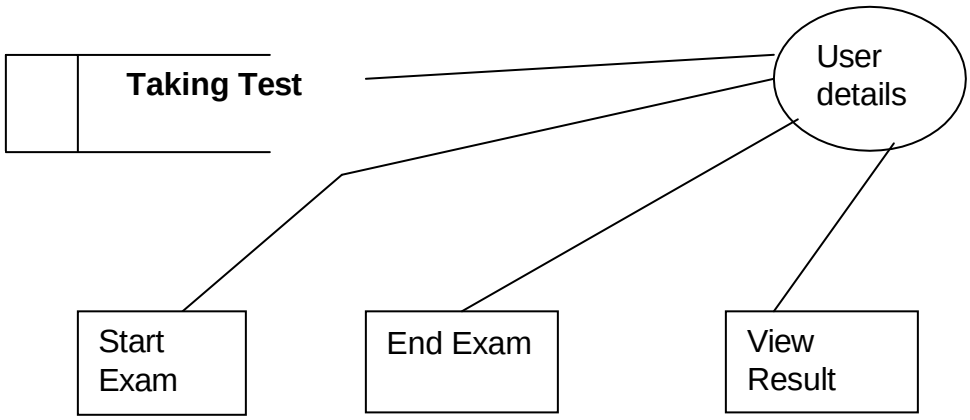
Database:



user registration



Taking Test



E-R Diagrams:

The Entity-Relationship (ER) model was originally proposed by Peter in 1976 [Chen76] as a way to unify the network and relational database views. Simply stated the ER model is a conceptual data model that views the real world as entities and relationships. A basic component of the model is the Entity-Relationship diagram which is used to visually represents data objects. Since Chen wrote his paper the model has been extended and today it is commonly used for database design For the database designer, the utility of the ER model is:

- it maps well to the relational model. The constructs used in the ER model can easily be transformed into relational tables.
- it is simple and easy to understand with a minimum of training. Therefore, the model can be used by the database designer to communicate the design to the end user.
- In addition, the model can be used as a design plan by the database developer to implement a data model in a specific database management software.

Connectivity and Cardinality

The basic types of connectivity for relations are: one-to-one, one-to-many, and many-to-many. A *one-to-one* (1:1) relationship is when at most one instance of a entity A is associated with one instance of entity B. For example, "employees in the company are each assigned their own office. For each employee there exists a unique office and for each office there exists a unique employee.

A *one-to-many* (1:N) relationships is when for one instance of entity A, there are zero, one, or many instances of entity B, but for one instance of entity B, there is only one instance of entity A. An example of a 1:N relationships is

a department has many employees

each employee is assigned to one department

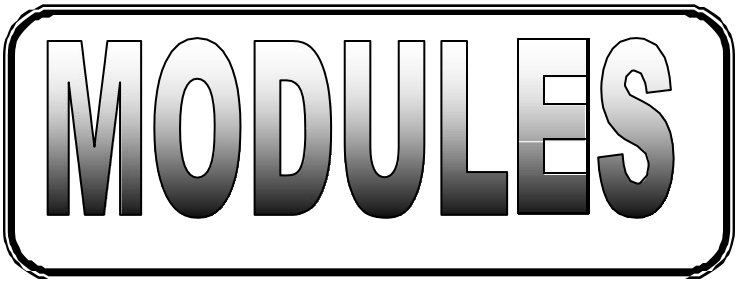
A *many-to-many* (M:N) relationship, sometimes called non-specific, is when for one instance of entity A, there are zero, one, or many instances of entity B and for one instance of entity B there are zero, one, or many instances of entity A. The connectivity of a relationship describes the mapping of associated

ER Notation

There is no standard for representing data objects in ER diagrams. Each modeling methodology uses its own notation. The original notation used by Chen is widely used in academics texts and journals but rarely seen in either CASE tools or publications by non-academics. Today, there are a number of notations used, among the more common are Bachman, crow's foot, and IDEFIX.

All notational styles represent entities as rectangular boxes and relationships as lines connecting boxes. Each style uses a special set of symbols to represent the cardinality of a connection. The notation used in this document is from Martin. The symbols used for the basic ER constructs are:

- **entities** are represented by labeled rectangles. The label is the name of the entity. Entity names should be singular nouns.
- **relationships** are represented by a solid line connecting two entities. The name of the relationship is written above the line. Relationship names should be verbs
- **attributes**, when included, are listed inside the entity rectangle. Attributes which are identifiers are underlined. Attribute names should be singular nouns.
- **cardinality** of many is represented by a line ending in a crow's foot. If the crow's foot is omitted, the cardinality is one.
- **existence** is represented by placing a circle or a perpendicular bar on the line. Mandatory existence is shown by the bar (looks like a 1) next to the entity for an instance is required. Optional existence is shown by placing a circle next to the entity that is optional


MODULES

ONLINE EXAMINATION SYSTEM

MODULES:

1:ADMIN MODULE
2. INSTRUCTOR MODULE
3. STUDENT MODULE

1. ADMIN MODULE:

1. :REGISTER
2. LOGIN
3. CHANGE PASSWORD&FORGOTPASSWORD
4. STUDENT -MODIFING DETAILS
5. DEPARTMENTS-ENTERING/MODIFYING DETAILS
6. INSTRUCTOR DETAILS-MODIFYING DETAILS

1. REGISTER:To be authenticated firest have to be registered.

2. LOGIN:The Registered User Can be Allowed to view inner details for which he Permitted

3. CHANGE PASSWORD&FORGOTPASSWORD:User has rights to modify his login details& also be informed through mails if he is unable to login.

4. STUDENT -MODIFING DETAILS:User can be modified to change status of each User.

5. DEPARTMENTS-ENTERING/MODIFYING DETAILS:New departments adding and old departmentd deletions are spend by this user.

6. INSTRUCTOR DETAILS-MODIFYING DETAILS:According to staff he can add or delete Instructors for specific platforms.

2. INSTRUCTOR MODULE:

1. **REGISTER**
2. **LOGIN**
3. **CHANGE PASSWORD&FORGOT PASSWORD**
4. **ADD QUESTIONS-DEPARTMENTS VERIFING.**
5. **UPDATE QUESTIONS -DEPARTMENTS VERIFING**
6. **CREATE EXAMS**
7. **UPDATE EXAMS**
8. **IEW EXAM DETAILS- VIEW NO OF REGISTERED STUDENTS**
   VIEW NO OF ATTENDED STUDENTS
9. **EVALUATE QUESTION:MULTIPLE CHOICE**
   TUE/FALSE

1. **REGISTER:To be authenticated firest have to be registered.**

2. **LOGIN:The Registered User Can be Allowed to view inner details for which he Permitted**

3. **CHANGE PASSWORD&FORGOTPASSWORD:User has rights to modify his loging details& also be informed through mails if he is unable to login**

4. **ADD QUESTIONS-DEPARTMENTS VERIFING:According to flow of questions & Technology he can add questions into the database.**

5. **UPDATE QUESTIONS -DEPARTMENTS VERIFING:If any corrections in data of questions he can modify them**

6. **CREATE EXAMS:He will be prepared schedule for exams periodically.**

7. **UPDATE EXAMS:He has rights to modify exam schedule.**

8. **IEW EXAM DETAILS- VIEW NO OF REGISTERED STUDENTS, VIEW NO OF ATTENDED STUDENTS:Can view at attended students who has registered.**

9. **EVALUATE QUESTION:MULTIPLE CHOICE TUE/FALSE:Evaluation of marks based on his initiations when adding questions**

3. STUDENT DETAILS:

1. **REGISTER**
2. **LOGIN**
3. **TAKE EXAM- MULTIPLE CHOICE**
   TRUE/FALSE
4. **SEE EXAM RESULTS**
5. **LOGOUT**

1. **REGISTER:To be authenticated firest have to be registered**

2. **LOGIN:The Registered User Can be allowed to view inner details for which he Permitted**

3. **TAKE EXAM- MULTIPLE CHOICE, TRUE/FALSE:The registred student allowed to start the exam**

4. **SEE EXAM RESULTS:After Completion of exam he can view at his result.**

5. **LOGOUT:After the process of examination he turned to Logout page.**

OVERVIEW OF TECHNOLOGIES USED

PHP

PHP: Hypertext Preprocessor, is a widely used, general-purpose scripting language that was originally designed for web development, to produce dynamic web pages. It can be embedded into HTML and generally runs on a web server, which needs to be configured to process PHP code and create web page content from it. It can be deployed on most web servers and on almost every operating system and platform free of charge.

PHP was originally created by Rasmus Lerdorf in 1995 and has been in continuous development ever since. The main implementation of PHP is now produced by The PHP Group and serves as the de facto standard for PHP as there is no formal specification.PHP is free software released under the PHP

License, which is incompatible with the GNU General Public License (GPL) because of restrictions on the use of the term PHP

PHP has evolved to include a command line interface capability and can also be used in standalone graphical applications.

USAGE

PHP is a general-purpose scripting language that is especially suited for web development. PHP generally runs on a web server. Any PHP code in a requested file is executed by the PHP runtime, usually to create dynamic web page content. It can also be used for command-line scripting and client-side GUI applications. PHP can be deployed on most web servers, many operating systems and platforms, and can be used with many relational database management systems. It is available free of charge, and the PHP Group provides the complete source code for users to build, customize and extend for their own use.

PHP primarily acts as a filter, taking input from a file or stream containing text and/or PHP instructions and outputs another stream of data; most commonly the output will be HTML. Since PHP 4, the PHP parser compiles input to produce byte code for processing by the Zend Engine, giving improved performance over its interpreter predecessor

Originally designed to create dynamic web pages, PHP now focuses mainly on server-side scripting, and it is similar to other server-side scripting languages that provide dynamic content from a web server to a client, such as Microsoft's Active Server Pages, Sun Microsystems' JavaServer Pages and mod_perl. PHP has also attracted the development of many frameworks that provide building blocks and a design structure to promote rapid application development (RAD). Some of these include CakePHP, Symfony, CodeIgniter, and Zend Framework, offering features similar to other web application frameworks.

About HTML

HTML, which stands for **Hyper Text Markup Language**, is the predominant markup language for web pages. It provides a means to create structured

documents by denoting structural semantics for text such as headings, paragraphs, lists etc as well as for links, quotes, and other items. It allows images and objects to be embedded and can be used to create interactive forms. It is written in the form of HTML elements consisting of "tags" surrounded by angle brackets within the web page content. It can include or can load scripts in languages such as JavaScript which affect the behavior of HTML processors like Web browsers; and Cascading Style Sheets (CSS) to define the appearance and layout of text and other material. The W3C, maintainer of both HTML and CSS standards, encourages the use of CSS over explicit presentational markup.

Hyper Text Markup Language(HTML) is the encoding scheme used to create and format a web document. A user need not be an expert programmer to make use of HTML for creating hypertext documents that can be put on the internet.

Most graphical e-mail clients allow the use of a subset of HTML (often ill-defined) to provide formatting and semantic markup not available with plain text. This may include typographic information like coloured headings, emphasized and quoted text, inline images and diagrams. Many such clients include both a GUI editor for composing HTML e-mail messages and a rendering engine for displaying them. Use of HTML in e-mail is controversial because of compatibility issues, because it can help disguise phishing attacks, because it can confuse spam filters and because the message size is larger than plain text.

NAMING CONVENTIONS

The most common filename extension for files containing HTML is .html. A common abbreviation of this is .htm, which originated because some early operating systems and file systems, such as DOS and FAT, limited file extensions to three letters.

HTML APPLICATION

An HTML Application is a Microsoft Windows application that uses HTML and Dynamic HTML in a browser to provide the application's graphical interface. A regular HTML file is confined to the security model of the web browser, communicating only to web servers and manipulating only webpage objects and site cookies. An HTA runs as a fully trusted application and therefore has more privileges, like creation/editing/removal of files and Windows Registry entries.

Because they operate outside the browser's security model, HTAs cannot be executed via HTTP, but must be downloaded (just like an EXE file) and executed from local file system

ABOUT JAVASCRIPT

JavaScript is an object-oriented scripting language used to enable programmatic access to objects within both the client application and other applications. It is primarily used in the form of client-side JavaScript, implemented as an integrated component of the web browser, allowing the development of enhanced user interfaces and dynamic websites. JavaScript is a dialect of the ECMAScript standard and is characterized as a dynamic, weakly typed, prototype-based language with first-class functions. JavaScript was influenced by many languages and was designed to look like Java, but to be easier for non-programmers to work with.

PROTOTYPE-BASED

JavaScript uses prototypes instead of classes for inheritance. It is possible to simulate many class-based features with prototypes in JavaScript.

Functions double as object constructors along with their typical role. Prefixing a function call with new creates a new object and calls that function with its local this keyword bound to that object for that invocation. The constructor's prototype property determines the object used for the new object's internal prototype. JavaScript's built-in constructors, such as Array, also have prototypes that can be modified.

Unlike many object-oriented languages, there is no distinction between a function definition and a method definition. Rather, the distinction occurs during function calling; a function can be called as a method. When a function is called as a method of an object, the function's local this keyword is bound to that object for that invocation.

USAGE

The primary use of JavaScript is to write functions that are embedded in or included from HTML pages and interact with the Document Object Model (DOM) of the page.

Because JavaScript code can run locally in a user's browser (rather than on a remote server) it can respond to user actions quickly, making an application feel more responsive. Furthermore, JavaScript code can detect user actions which HTML alone cannot, such as individual keystrokes. Applications such as Gmail take advantage of this: much of the user-interface logic is written in JavaScript, and JavaScript dispatches requests for information (such as the content of an e-mail message) to the server. The wider trend of Ajax programming similarly exploits this strength.

A JavaScript engine (also known as *JavaScript interpreter* or *JavaScript implementation*) is an interpreter that interprets JavaScript source code and executes the script accordingly. The first JavaScript engine was created by Brendan Eich at Netscape Communications Corporation, for the Netscape Navigator web browser. A web browser is by far the most common host environment for JavaScript. Web browsers typically use the public API to create "host objects" responsible for reflecting the DOM into JavaScript.

ABOUT MySQL

MySQL Introduction

There are a large number of database management systems currently available, some commercial and some free.
Some of them : Oracle, Microsoft Access, Mysql and PostgreSQL.
These database systems are powerful, feature-rich software, capable of organizing and searching millions of records at very high speeds.

Understanding Databases, Records, and Primary Keys

Every Database is composed of one or more tables.
These Tables, which structure data into rows and columns, Impose organization on the data.

The records in a table(below) are not arranged in any particular order.
To make it easy to identify a specific record,therefore, it becomes necessary

standing Relationships and Foreign Keys(RDBMS)

You already know that a single database can hold multiple tables.
In a Relational database management system(RDBMS), these tables can be linked to each other by one or more common fields, called foreign keys**.**

What is Database administrator(DBA) ?

Database administrator is the super user of database, he has unrestricted rights and privileges to access database, grant permission to other database users.

What is Database user(DBU) ?

Database user is the person who uses the database in a restricted privileges, provided by database administrator.

Download MySQL Database

If you have installed PHP's WAMP or XAMPP server, then mysql database already exists. if you don't have then download mysql database from herehttp://www.mysql.com

DATABASE TABLES:

USER REG TABLE

NAME	NULL/NOTNULL	TYPE	KEY
ID	NOTNULL	INT	PRIMARYKEY
NAME	NULL	VARCHAR(50)	
DOB	NULL	DATETIME	
GENDER	NULL	VARCHAR(10)	
BRANCH	NULL	VARCHAR(20)	
COLLEGE	NULL	VARCHAR(50)	
UID	NULL	VARCHAR(50)	
PWD	NULL	VARCHAR(20)	
RPWD	NULL	VARCHAR(20)	

UTYPE	NULL	VARCHAR(20)
QUE	NULL	VARCHAR(500)
ANS	NULL	VARCHAR(500)

True/False Based Question Table

NAME	NULL/NOTNULL	TYPE	KEY
ID	NOTNULL	INT	PRIMARYKEY
QUE	NULL	VARCHAR(500)	
AW	NULL	VARCHAR(500)	

True/False Based Answer Table

NAME	NULL/NOTNULL	TYPE	KEY
ID	NOTNULL	INT	FOREIGNKEY
AW	NULL	VARCHAR(500)	

Options Based Question Table

NAME	NULL/NOTNULL	TYPE	KEY
QID	NOTNULL	INT	PRIMARYKEY
QN	NULL	VARCHAR(500)	
OPTIONS1	NULL	VARCHAR(100)	
OPTIONS2	NULL	VARCHAR(100)	
ANSWER	NULL	VARCHAR(100)	

Options Based Answers

NAME	NULL/NOTNULL	TYPE	KEY
QID	NOTNULL	INT	FOREIGNKEY

ANSWER	NULL	VARCHAR(10)

All Student Marks

NAME	NULL/NOTNULL	TYPE	KEY
ID	NULL	INT	
MARKS	NULL	INT	

Exam Schedule

NAME	NULL/NOTNULL	TYPE	KEY
ENAME	NULL	VARCHAR(30)	
EDATE	NULL	DATETIME	

FEASIBILITY STUDY:

Feasibility study is conducted once the problem is clearly understood. Feasibility study is a high level capsule version of the entire system analysis and design process. The objective is to determine quickly at a minimum expense how to solve a problem. The purpose of feasibility is not to solve the problem but to determine if the problem is worth solving.

The system has been tested for feasibility in the following points.

1. Technical Feasibility
2. Economical Feasibility
3. Operational Feasibility.

1. Technical Feasibility

The project entitles "Courier Service System" is technically feasibility because of the below mentioned feature. The project was developed in Java which Graphical User Interface.

It provides the high level of reliability, availability and compatibility. All these make Java an appropriate language for this project. Thus the existing software Java is a powerful

language.

2. Economical Feasibility

The computerized system will help in automate the selection leading the profits and details of the organization. With this software, the machine and manpower utilization are expected to go up by 80-90% approximately. The costs incurred of not creating the system are set to be great, because precious time can be wanted by manually.

3. Operational Feasibility

In this project, the management will know the details of each project where he may be presented and the data will be maintained as decentralized and if any inquires for that particular contract can be known as per their requirements and necessaries.

Implementation:

Implementation is the stage where the theoretical design is turned into a working system. The most crucial stage in achieving a new successful system and in giving confidence on the new system for the users that it will work efficiently and effectively.

The system can be implemented only after thorough testing is done and if it is found to work according to the specification.

It involves careful planning, investigation of the current system and its constraints on implementation, design of methods to achieve the change over and an evaluation of change over methods a part from planning. Two major tasks of preparing the implementation are education and training of the users and

testing of the system.

The more complex the system being implemented, the more involved will be the systems analysis and design effort required just for implementation.

The implementation phase comprises of several activities. The required hardware and software acquisition is carried out. The system may require some software to be developed. For this, programs are written and tested. The user then changes over to his new fully tested system and the old system is discontinued.

TESTING:

The testing phase is an important part of software development. It is the puterized system will help in automate process of finding errors and missing operations and also a complete verification to determine whether the objectives are met and the user requirements are satisfied.

Software testing is carried out in three steps:

1. The first includes unit testing, where in each module is tested to provide its correctness, validity and also determine any missing operations and to verify whether the objectives have been met. Errors are noted down and corrected immediately. Unit testing is the important and major part of the project. So errors are rectified easily in particular module and program clarity is increased. In this project entire system is divided into several modules and is developed individually. So unit testing is conducted to individual modules.

2. The second step includes Integration testing. It need not be the case, the software whose

modules when run individually and showing perfect results, will also show perfect results when run as a whole. The individual modules are clipped under this major module and tested again and verified the results. This is due to poor interfacing, which may results in data being lost across an interface. A module can have inadvertent, adverse effect on any other or on the global data structures, causing serious problems.

3. The final step involves validation and testing which determines which the software functions as the user expected. Here also some modifications were. In the completion of the project it is satisfied fully by the end user.

Maintenance and environment:

AS the number of computer based systems, grieve libraries of computer software began to expand. In house developed projects produced tones of thousand soft program source statements. Software products purchased from the outside added hundreds of thousands of new statements. A dark cloud appeared on the horizon. All of these programs, all of those source statements-had to be corrected when false were detected, modified as user requirements changed, or adapted to new hardware that was purchased. These activities were collectively called software Maintenance.

The maintenance phase focuses on change that is associated with error correction, adaptations required as the software's environment evolves, and changes due to enhancements brought about by changing customer requirements. Four types of changes are encountered during the maintenance phase.

Correction
Adaptation
Enhancement
Prevention

Correction:

ONLINE EXAMINATION

Even with the best quality assurance activities is lightly that the customer will uncover defects in the software. Corrective maintenance changes the software to correct defects.

Maintenance is a set of software Engineering activities that occur after software has been delivered to the customer and put into operation. Software configuration management is a set of tracking and control activities that began when a software project begins and terminates only when the software is taken out of the operation.

We may define maintenance by describing four activities that are undertaken after a program is released for use:

Corrective Maintenance
Adaptive Maintenance
Perfective Maintenance or Enhancement
Preventive Maintenance or reengineering

Only about 20 percent of all maintenance work are spent "fixing mistakes". The remaining 80 percent are spent adapting existing systems to changes in their external environment, making enhancements requested by users, and reengineering an application for use.

ADAPTATION:

Over time, the original environment (E>G., CPU, operating system, business rules, external product characteristics) for which the software was developed is likely to change. Adaptive maintenance results in modification to the software to accommodate change to its external environment.

ENHANCEMENT:

As software is used, the customer/user will recognize additional functions that will provide benefit. Perceptive maintenance extends the software beyond its original function requirements.

PREVENTION :

Computer software deteriorates due to change, and because of this, preventive maintenance, often called software re engineering, must be conducted to enable the software to serve the needs of its end users. In essence, preventive maintenance makes changes to computer programs so that they can be more easily corrected, adapted, and enhanced. Software configuration management (SCM) is an umbrella activity that is applied throughout the software process. SCM activities are developed to

SOFTWARE METHODOLOGY

The software methodology followed in this project includes the object-oriented methodology and the application system development methodologies. The description of these methodologies is given below.

Application System Development – A Life cycle Approach

Although there are a growing number of applications (such as decision support systems) that should be developed using an experimental process strategy such as prototyping, a significant amount of new development work continue to involve major operational applications of broad scope. The application systems are large highly structured. User task comprehension and developer task proficiency is usually high. These factors suggest a linear or iterative assurance strategy. The most common method for this stage class of problems is a system development life cycle modal in which each stage of development is well defined and has straightforward requirements for deliverables, feedback and sign off. The system development life cycle is described in detail since it continues to be an appropriate methodology for a significant part of new development work.

The basic idea of the system development life cycle is that there is a well-defined process by which an application is conceived and developed and implemented. The life cycle gives structure to a creative process. In order to manage and control the development effort, it is necessary to know what should

have been done, what has been done, and what has yet to be accomplished. The phrases in the system development life cycle provide a basis for management and control because they define segments of the

flow of work, which can be identified for managerial purposes and specifies the documents or other deliverables to be produced in each phase.

The phases in the life cycle for information system development are described differently by different writers, but the differences are primarily in the amount of necessity and manner of categorization. There is a general agreement on the flow of development steps and the necessity for control procedures at each stage.

The information system development cycle for an application consists of three major stages.

1) Definition.
2)Development.
3)Installation and operation.

The first stage of the process, which defines the information requirements for a feasible cost effective system. The requirements are then translated into a physical system of forms, procedures, programs etc., by the system design, computer programming and procedure development. The resulting system is test and put into operation. No system is perfect so there is always a need for maintenance changes. To complete the cycle, there should be a post audit of the system to evaluate how well it performs and how well it meets the cost and performance specifications. The stages of definition, development and installation and operation can therefore be divided into smaller steps or phrases as follows.

Definition

Proposed definition : preparation of request for proposed applications.

Feasibility assessment : evaluation of feasibility and cost benefit of proposed system.

Information requirement analysis : determination of information needed.

Design

Conceptual design : User-oriented design of application development.

Physical system design : Detailed design of flows and processes in applications processing system and preparation of program specification.

Development

Program development : coding and testing of computer programs.

Procedure development : design of procedures and preparation of user instructions.

Installation and operation

Conversion : final system test and conversion.

Operation and maintenance : Month to month operation and maintenance

Post audit : Evaluation of development process,application system and results of use at the completion of the each phase, formal approval sign-off is required from the users as well as from the manager of the project development.

Testing

ONLINE EXAMINATION

Testing is a process of executing a program with the indent of finding an error. Testing is a crucial element of software quality assurance and presents ultimate review of specification, design and coding.

System Testing is an important phase. Testing represents an interesting anomaly for the software. Thus a series of testing are performed for the proposed system before the system is ready for user acceptance testing.

A good test case is one that has a high probability of finding an as undiscovered error. A successful test is one that uncovers an as undiscovered error.

Testing Objectives:

1. Testing is a process of executing a program with the intent of finding an error
2. A good test case is one that has a probability of finding an as yet undiscovered error
3. A successful test is one that uncovers an undiscovered error

Testing Principles

1. All tests should be traceable to end user requirements
2. Tests should be planned long before testing begins
3. Testing should begin on a small scale and progress towards testing in large
4. Exhaustive testing is not possible
5. To be most effective testing should be conducted by a independent third party

The primary objective for test case design is to derive a set of tests that has the highest livelihood for uncovering defects in software. To accomplish this objective two different categories of test case design techniques are used. They are

White box testing.

Black box testing.

White-box testing:

White box testing focus on the program control structure. Test cases are derived to ensure that all statements in the program have been executed at least once during testing and that all logical conditions have been executed.

Block-box testing:

Black box testing is designed to validate functional requirements without regard to the internal workings of a program. Black box testing mainly focuses on the information domain of the software, deriving test cases by partitioning input and output in a manner that provides through test coverage. Incorrect and missing functions, interface errors, errors in data structures, error in functional logic are the errors falling in this category.

Testing strategies:

A strategy for software testing must accommodate low-level tests that are necessary to verify that all small source code segment has been correctly implemented as well as high-level tests that validate major system functions against customer requirements.

Testing fundamentals:

Testing is a process of executing program with the intent of finding error. A good test case is one that has high probability of finding an undiscovered error. If testing is conducted successfully it uncovers the errors in the software. Testing cannot show the absence of defects, it can only show that software defects present.

Testing Information flow:

Information flow for testing flows the pattern. Two class of input provided to test the process. The software configuration includes a software requirements specification, a design specification and source code.

Test configuration includes test plan and test cases and test tools. Tests are conducted and all the results are evaluated. That is test results are compared with expected results. When erroneous data are uncovered, an error is implied and debugging commences.

Unit testing:

Unit testing is essential for the verification of the code produced during the coding phase and hence the goal is to test the internal logic of the modules. Using the detailed design description as a guide, important paths are tested to uncover errors with in the boundary of the modules. These tests were carried out during the programming stage itself. All units of ViennaSQL were successfully tested.

Integration testing :

Integration testing focuses on unit tested modules and build the program structure that is dictated by the design phase.

System testing:

System testing tests the integration of each module in the system. It also tests to find discrepancies between the system and it's original objective, current specification and system documentation. The primary concern is the compatibility of individual modules. Entire system is working properly or not will be tested here, and specified path ODBC connection will correct or not, and giving output or not are tested here these verifications and validations are done by giving input values to the system and by comparing with expected output. Top-down testing implementing here.

Acceptance Testing:

This testing is done to verify the readiness of the system for the implementation. Acceptance testing begins when the system is complete. Its purpose is to provide the end user with the confidence that the system is ready for use. It involves planning and execution of functional tests, performance tests and stress tests in order to demonstrate that the implemented system satisfies its requirements.

Tools to special importance during acceptance testing include:

Test coverage Analyzer – records the control paths followed for each test case.

Timing Analyzer – also called a profiler, reports the time spent in various regions of the code are areas to concentrate on to improve system performance.

Coding standards – static analyzers and standard checkers are used to inspect code for deviations from standards and guidelines.

Test Cases:

Test cases are derived to ensure that all statements in the program have been executed at least once during testing and that all logical conditions have been executed.

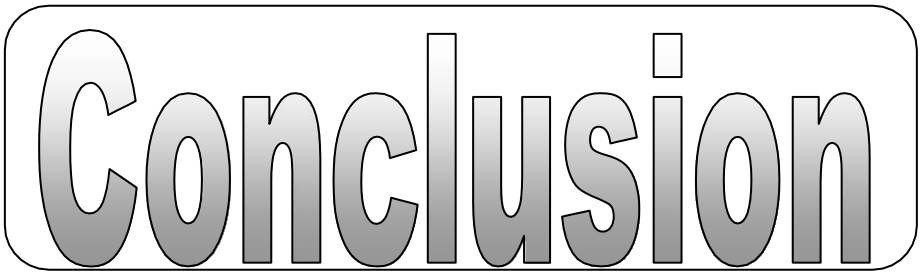
Using White-Box testing methods, the software engineer can drive test cases that

- Guarantee that logical decisions on their true and false sides.
- Exercise all logical decisions on their true and false sides.
- Execute all loops at their boundaries and with in their operational bounds.
- Exercise internal data structure to assure their validity.

The test case specification for system testing has to be submitted for review before system testing commences.

Output screens

You can add Screenshot


Conclusion

CONCLUSION:

The package was designed in such a way that future modifications can be done easily. The following conclusions can be deduced from the development of the project.

- Automation of the entire system improves the efficiency
- It provides a friendly graphical user interface which proves to be better when compared to the existing system.
- It gives appropriate access to the authorized users depending on their permissions.
- It effectively overcomes the delay in communications.
- Updating of information becomes so easier.
- System security, data security and reliability are the striking features.
- The System has adequate scope for modification in future if it is necessary.

Future Enhancements

FUTURE ENHANCEMENTS:

This application avoids the manual work and the problems concern with it. It is an easy way to obtain the information regarding the different scheduled examinations information that are Currently issued.

Well I and my team members have worked hard in order to present an improved website better than the existing one's regarding the information about the various activities. Still ,we found out that the project can be done in a better way. Primarily, when we request information about a particular schedules it just shows the exam date and platform. So, after getting the information we can get access to the onlineexam.

The enhancement that we can add the searching option. We can directly search to the particular student details from this site.

Bibliography

BIBLIOGRAPHY

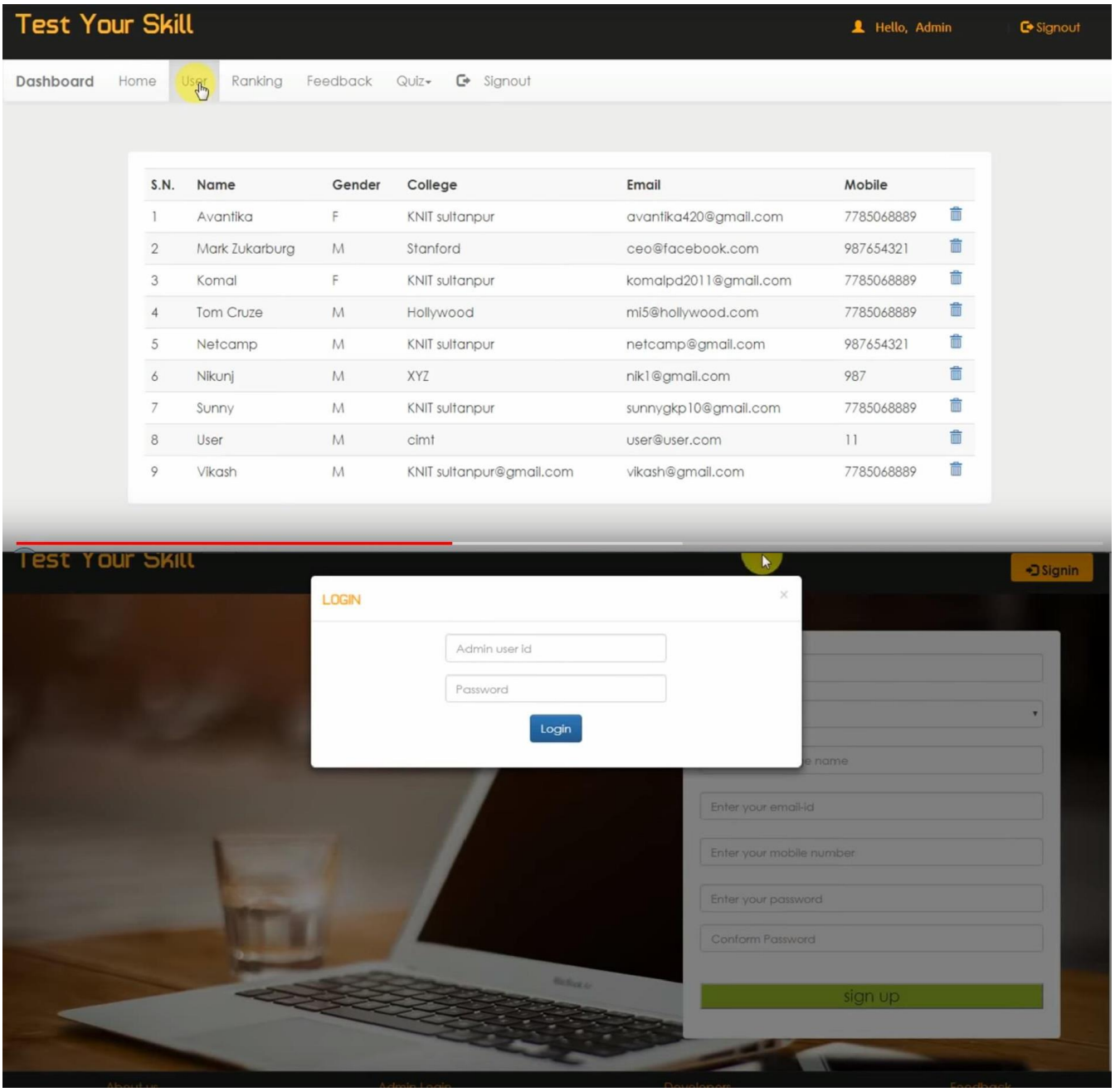
The following books were referred during the analysis and execution phase of the project

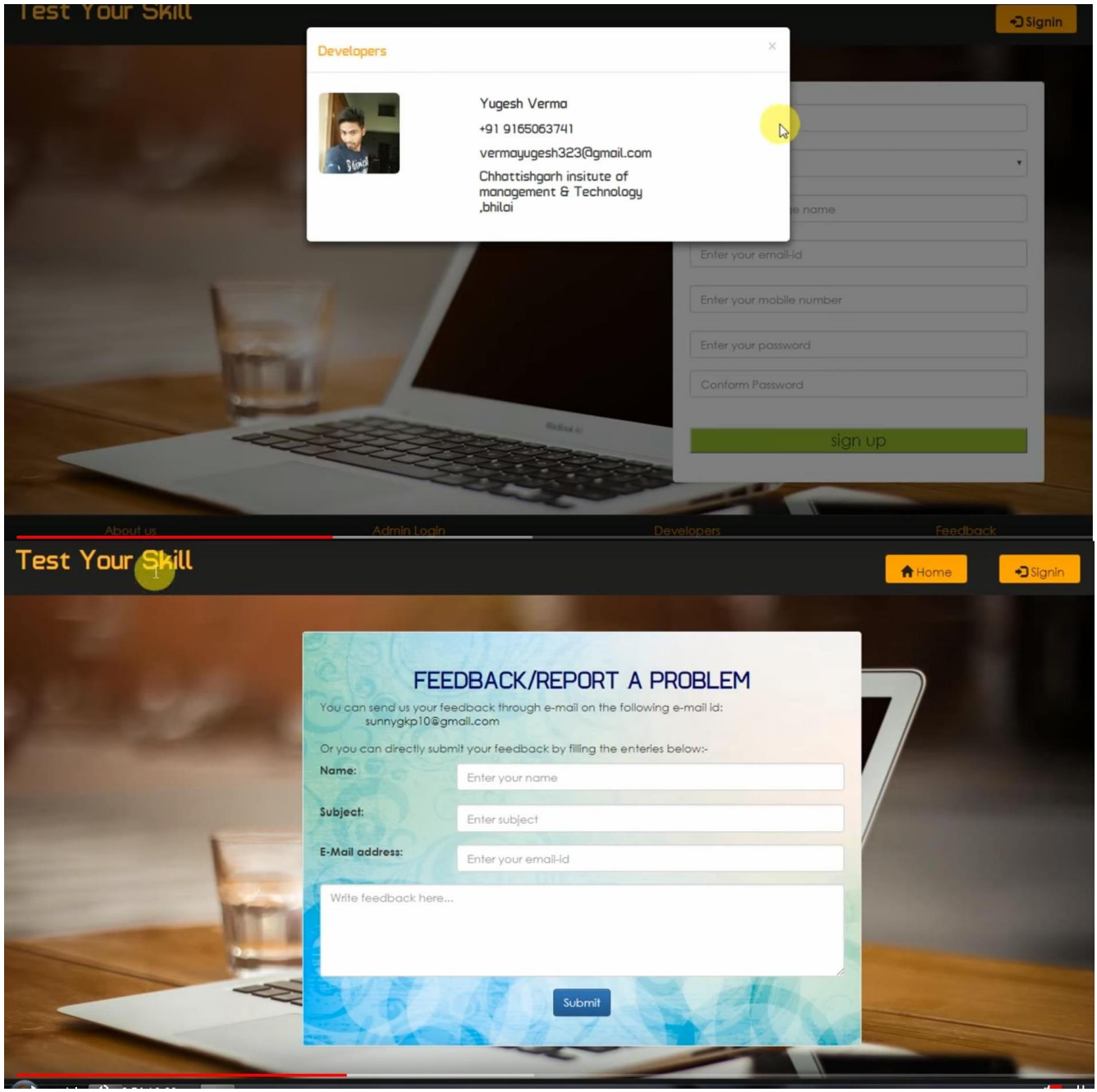
- ✓ **Books Referred:**

- BEGINNING PHP 5 ---DAVE MERCER
- BLACK BOOK HTML ---WILEY DREAMTECH
- PHP AND MYSQL WEB DEVELOPMENT --- LUKEWELLING,LAURA
- MICROSOFT SQL SERVER-2000 ---RANKIN, PAUL & JENSEN
- SQL SERVER-2000 ---DUSAN PETKOVIC
- PHP IN A NUTSHELL --- PAUL HUDSON

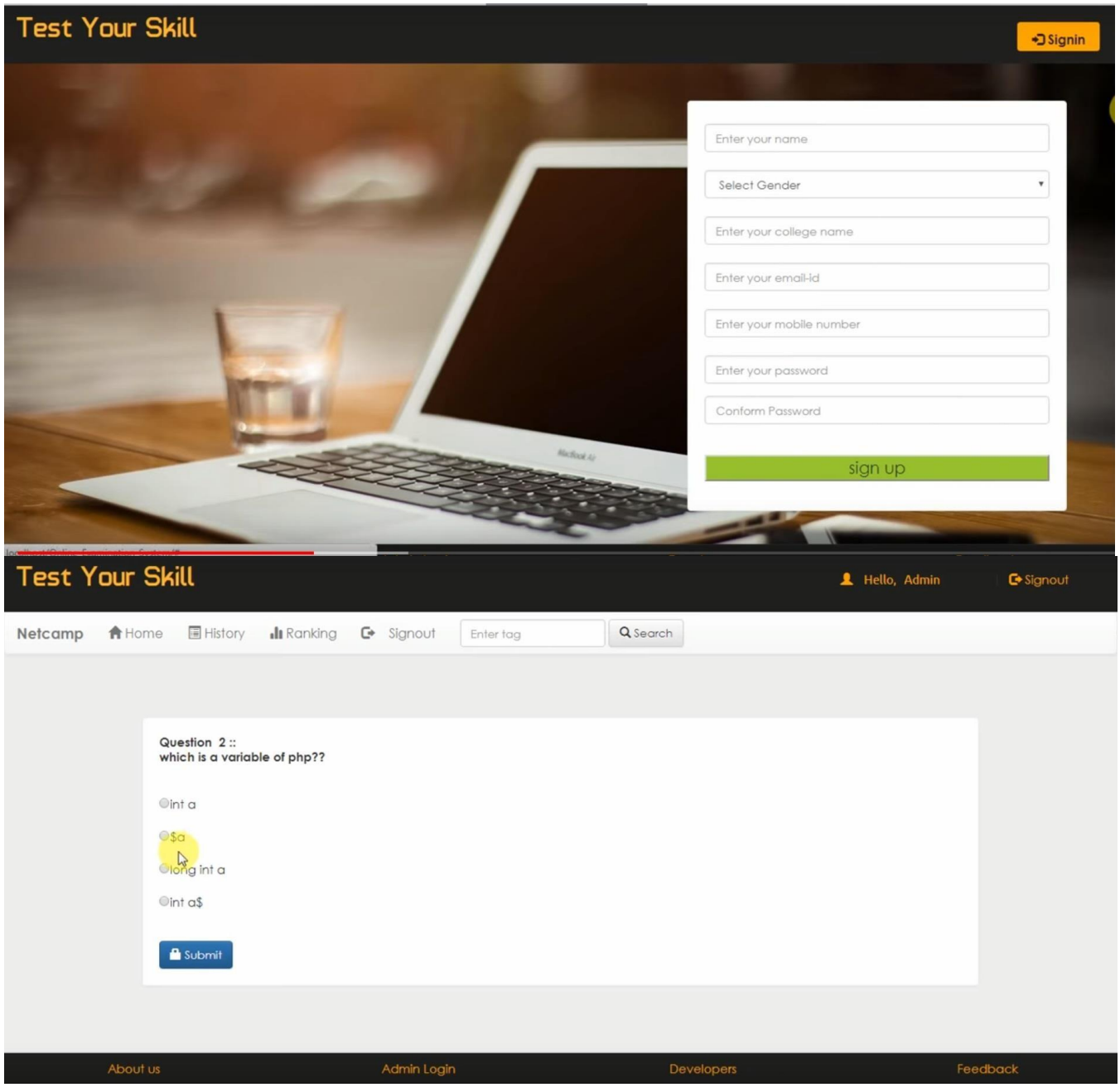
- ✓ **Websites Referred:**

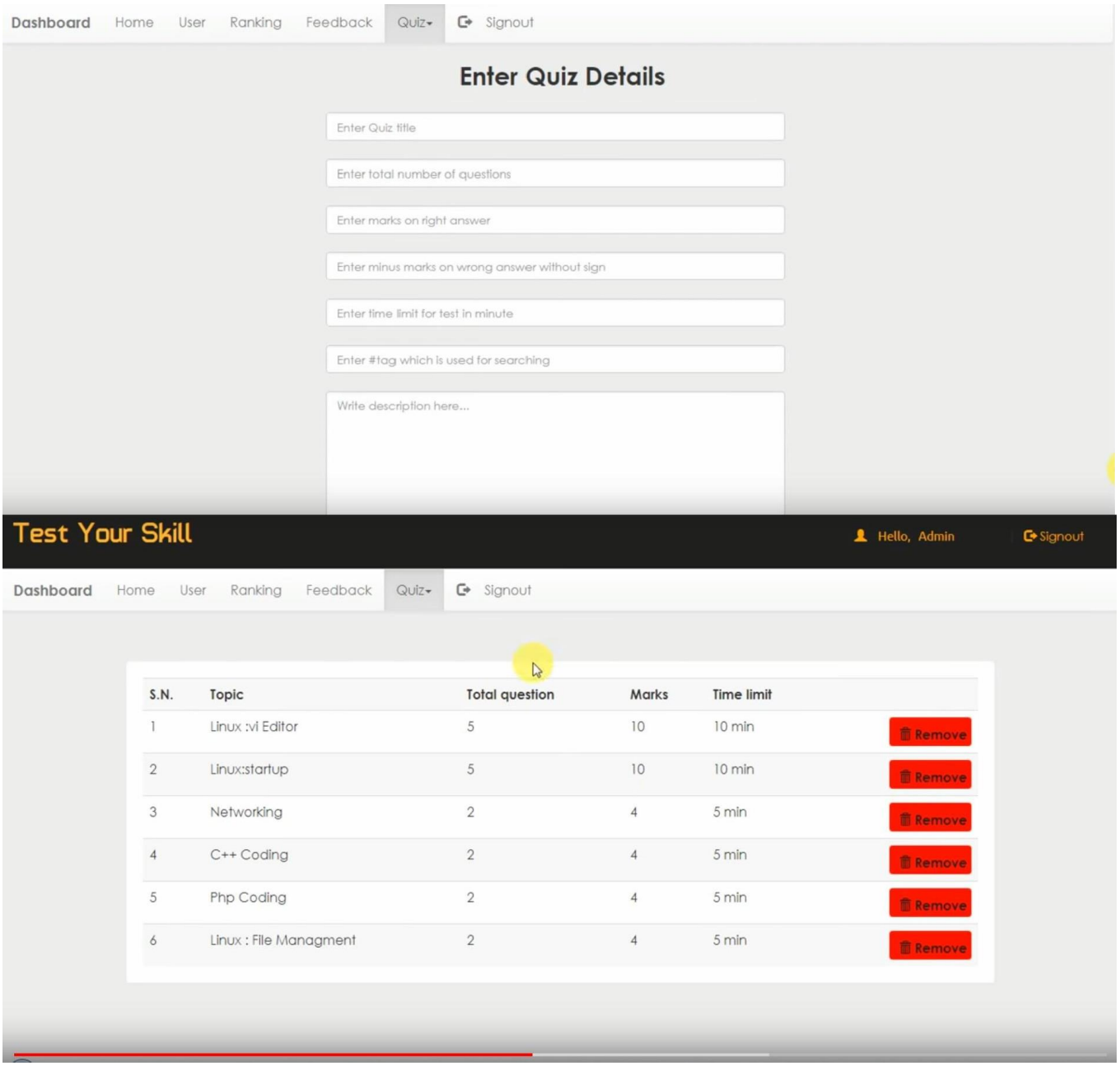
http://www.projectworlds.in

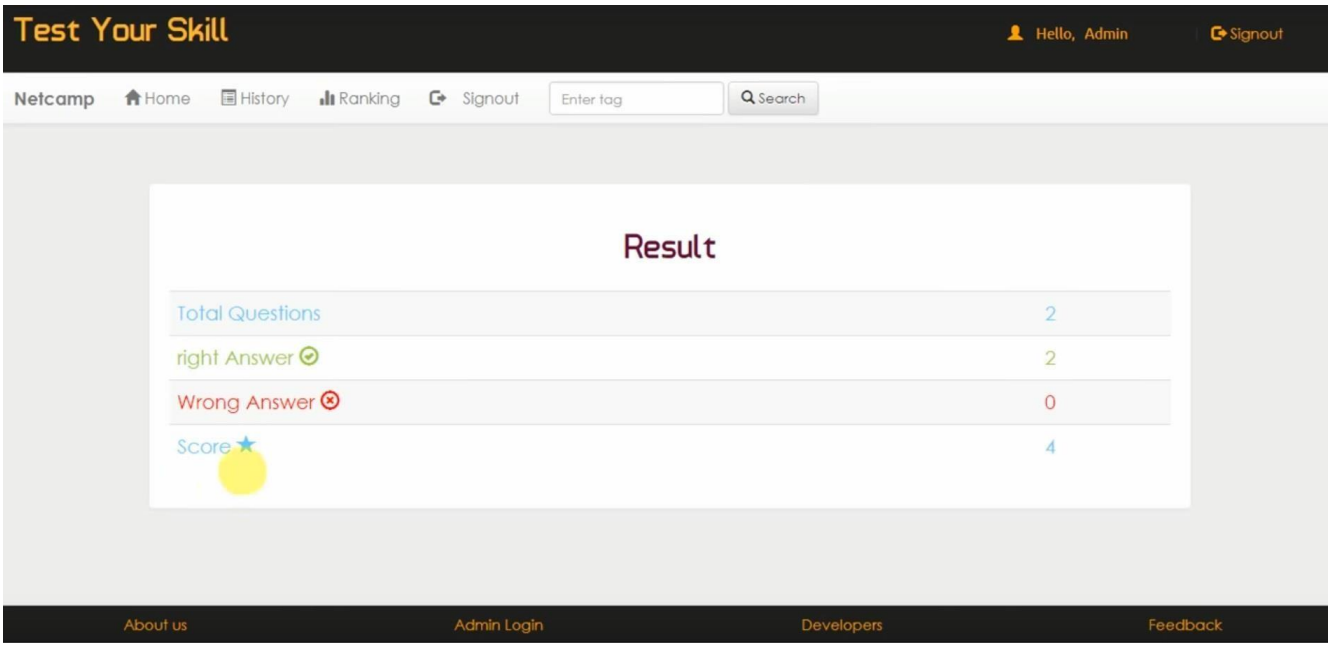

Test Your Skill
Hello, Admin
Signout
Dashboard
Home
User
Ranking
Feedback
Quiz
Signout
S.N. Name Gender College Email Mobile
1 Avantika F KNIT sultanpur avantika420@gmail.com 7785068889
2 Mark Zukarburg M Stanford ceo@facebook.com 987654321
3 Komal F KNIT sultanpur komalpd2011@gmail.com 7785068889
4 Tom Cruze M Hollywood mi5@hollywood.com 7785068889
5 Netcamp M KNIT sultanpur netcamp@gmail.com 987654321
6 Nikunj M XYZ nik1@gmail.com 987
7 Sunny M KNIT sultanpur sunnygkp10@gmail.com 7785068889
8 User M cimt user@user.com 11
9 Vikash M KNIT sultanpur@gmail.com vikash@gmail.com 7785068889
Test Your Skill
Signin
LOGIN
Admin user id
Password
Login
Enter your email-id
Enter your mobile number
Enter your password
Conform Password
sign up


Test Your Skill
Signin
Developers
Yugesh Verma
+91 9165063741
vermayugesh323@gmail.com
Chhattishgarh insitute of management & Technology ,bhilai
Enter your email-id
Enter your mobile number
Enter your password
Conform Password
sign up
About us
Admin Login
Developers
Feedback
Test Your Skill
Home
Signin
FEEDBACK/REPORT A PROBLEM
You can send us your feedback through e-mail on the following e-mail id:
sunnygkp10@gmail.com
Or you can directly submit your feedback by filling the enteries below:-
Name:
Enter your name
Subject:
Enter subject
E-Mail address:
Enter your email-id
Write feedback here...
Submit

ONLINE EXAMINATION




Dashboard
Home
User
Ranking
Feedback
Quiz
Signout
Enter Quiz Details
Enter Quiz title
Enter total number of questions
Enter marks on right answer
Enter minus marks on wrong answer without sign
Enter time limit for test in minute
Enter #tag which is used for searching
Write description here...
Test Your Skill
Hello, Admin
Signout
Dashboard
Home
User
Ranking
Feedback
Quiz
Signout
S.N.
Topic
Total question
Marks
Time limit
1
Linux :vi Editor
5
10
10 min
Remove
2
Linux:startup
5
10
10 min
Remove
3
Networking
2
4
5 min
Remove
4
C++ Coding
2
4
5 min
Remove
5
Php Coding
2
4
5 min
Remove
6
Linux : File Managment
2
4
5 min
Remove


Test Your Skill
Hello, Admin
Signout
Netcamp
Home
History
Ranking
Signout
Enter tag
Search
Result
Total Questions 2
right Answer 2
Wrong Answer 0
Score 4
About us
Admin Login
Developers
Feedback

PROJECT REPORT

ON

PARK TICKETING MANAGEMENT SYSTEM

Submitted in partial fulfillment of the requirements for the award of degree of

M.Sc (COMPUTER SCIENCE)

TO

SHANTI DEVI ARYA MAHILA COLLEGE

DINANAGAR

Submitted To:-

Mrs.Amita

Assistant Professor

Deptt. Of Computer Science

Submitted By:

Kavita

(20672225416)

Amandeep Kaur

(20672225415)

POST GRADUATE DEPARTMENT OF COMPUTER SCIENCE

GURU NANAK DEV UNIVERSITY, AMRITSAR

ACKNOWLEDGEMENT

With deep sense of gratitude we express our sincere thanks and obligation to our esteemed guide Mrs. Amita (Assistant Professor). It is because of her able and mature guidance and co-operation without which it would not have been possible for us to complete our project. We would also like to thank Dr. Deepak Jyoti, HOD, Post Graduate Deptt. of Computer Science, Shanti Devi Arya Mahila College, Dinanagar for providing the institute with an environment where one can use her intellect and creativity to develop something fruitful and also for allowing us the opportunity to experience dynamic professional environment during our Training. This environment facilitated us in pursuing this project.It is our pleasant duty to thank all the staff members of the Computer Department for their time to time suggestions. Finally, we would like to thank the almighty and our parents for their moral support and our friends with whom we shared our day-to-day experience and received lots of suggestions that improved our quality of work.

Kavita
(20672225416)

Amandeep Kaur
(20672225415)

CERTIFICATE OF APPROVAL

This is certify that the project report entitled **Park Ticketing Management System** submitted to Shanti Devi Arya Mahila College, Dinanagar in partial fulfillment of the requirement for the award of Degree of M.Sc (CS), is an authentic and original work carried out by Kavita (20672225416) Amandeep kaur (20672225415) under our guidance and supervision. The Post Graduate deptt. of Computer Science has accepted the report as the fulfillment of the requirements for the Degree Master of Computer Science. No part of this report has been submitted to any other College/University for the reward of any Degree to the best of our knowledge.

Mrs. Amita

Assistant Professor (Computer Science)

(Project Supervisor)
Shanti Devi Arya Mahila College,Dinanagar

Dr. Deepak jyoti

HOD, PG Department of (Computer Science)
Shanti Devi Arya Mahila College Dinanagar

DECLARATION

We hereby declare that this project report on " **Park Ticketing Management System** " which is being submitted in partial fulfillment of the Training Programme of M.Sc (Master of Computer Science) to Shanti Devi Arya Mahila College, Dinanagar is the result of the work carried out by us, under the guidance of Amita (Assistant Professor). Shanti Devi Arya College, Dinanagar.

Kavita

20672225416

Amandeep Kaur

20672225415

Abstract

This project manages people and provides ticket to the person who comes to visits in park with his/her family. With this project admin is able to see how many people is visiting in park and also see how many ticket is generating in particular period.

Introduction

Park Ticketing Management System is a web based technology which manages people and provides ticket to the person who comes to visits in park with his/her family. This web application provides a way to effectively control record & track the people who visit to park.

A park Ticketing Management system effectively manages and handles all the functioning of a park. The software system can store the data of people tickets that came to visit in the park. The system also maintains and calculates the price of ticket. The system needs an administrator to input the detail of ticket like how many are adult and how many are child and print the ticket and give it to person.

In this project we use PHP and MySQL database and it has only one module i.e. Admin.

Advantages:

- It helps the park admin to handle and manage ticket data.
- Reduce time consumption.
- Reduce error scope.
- All system managements are automated.
- Centralized database management.
- Easy operations for operator of the system.
- No paper work requirement

Disadvantages:

- The system can only handle Single Park.
- The system does not include bank payment, dd, cheque status.

Applications:

- To be used in park ticket.

Feasibility study

Whenever we design a new system, normally the management will ask for a feasibility report of the new system. The management wants to know the technicalities and cost involved in creation of new system.

- Technical feasibility
- Economic feasibility
- Physical feasibility

Technical feasibility:

Technical feasibility involves study to establish the technical capability of the system being created to accomplish all requirements to the user. The system should be capable of handling the proposed volume of data and provide users and operating environment to increase their efficiency.

For example, system should be capable of handling the proposed volume of data and provide users.

Economic feasibility:

Economic feasibility involves study to establish the cost benefit analysis. Money spent on the system must be recorded in the form of benefit from the system. The benefits are of two types:

Tangible benefits:

- Saving man labor to do tedious tasks saves time.
-

Intangible benefits:

- Improves the quality of organization.

Physical feasibility:

It involves study to establish the time responses of the new system being created. For e.g., if the new system takes more than one day to prepare crucial finance statement for the management, wherever it was required in an hour, the system fails to provide the same.

It should be clearly establish that the new system requirements in the form of time responses would be completely met with. It may call for increase in cost. If the required cost is sacrificed then the purpose of the new system may not be achieved even if it was found to be technically feasible.

Scope of the Project

The proposed system will affect or interface with the person who visits in the park and administrator.

The system works and fulfills all the functionalities as per the proposed system.

It will provide reduced response time against the queries made by different users.

This project is based on PHP language with MYSQL database which manages people and provides ticket to the person who comes to visits in park with his/her family.

All possible features such as verification, validation, security, user friendliness etc have been considered.

In this project there is one module i.e.

Admin

Admin:

1. **Dashboard**: In this section, admin can see how many foreigner and Indian ticket is generating today and yesterday.
2. **Manage Ticket**: In this section, admin can update price and ticket type of ticket.
3. **Indian Ticket**: In this section, admin can add the detail of number of adult and number of child and print the ticket with their total cost.
4. **Foreigner Ticket:** In this section, admin can add the detail of number of adult and number of child and print the ticket with their total cost.
5. **Search:** In this section admin, can search ticket by ticket id.
6. **Reports:** In this section admin can view how many ticket has been generate in particular period

   Admin can also update his profile, change the password and recover the password.

Software & Hardware requirements

- ✓ Any Version of browser after Mozilla Firefox 4.0, Internet Explorer 6.0,chrome

Hardware requirements:

- ✓ Any processor after Pentium 4.
- ✓ Any version of Windows XP or later.
- ✓ Processor speed: 2.0 GHz
- ✓ RAM : 1GB
- ✓ Hard disk: 40GB to 80 GB

Software requirements:

- ✓ Database : MySQL
- ✓ Server : Apache
- ✓ Frontend : HTML
- ✓ Scripting Language : JavaScript
- ✓ IDE : Sublime
- ✓ Technology : PHP

System Design

Design is the first step in the development phase for any techniques and principles for the purpose of defining a device, a process or system in sufficient detail to permit its physical realization.

Once the software requirements have been analyzed and specified the software design involves three technical activities - design, coding, implementation and testing that are required to build and verify the software.

The design activities are of main importance in this phase, because in this activity, decisions ultimately affecting the success of the software implementation and its ease of maintenance are made. These decisions have the final bearing upon reliability and maintainability of the system. Design is the only way to accurately translate the customer's requirements into finished software or a system.

Design is the place where quality is fostered in development. Software design is a process through which requirements are translated into a representation of software. Software design is conducted in two steps. Preliminary design is concerned with the transformation of requirements into data

Unified Modelling Language Diagrams (UML):

- The unified modelling language allows the software engineer to express an analysis model using the modelling notation that is governed by a set of syntactic semantic and pragmatic rules.
- A UML system is represented using five different views that describe the system from distinctly different perspective. Each view is defined by a set of diagram, which is as follows.

User Model View

i. This view represents the system from the users perspective.

ii. The analysis representation describes a usage scenario from the end-users perspective**.**

Structural model view

- In this model the data and functionality are arrived from inside the system.
- This model view models the static structures.

Behavioural Model View

- It represents the dynamic of behavioural as parts of the system, depicting the interactions of collection between various structural elements described in the user model and structural model view.

Implementation Model View

- In this the structural and behavioural as parts of the system are represented as they are to be built.

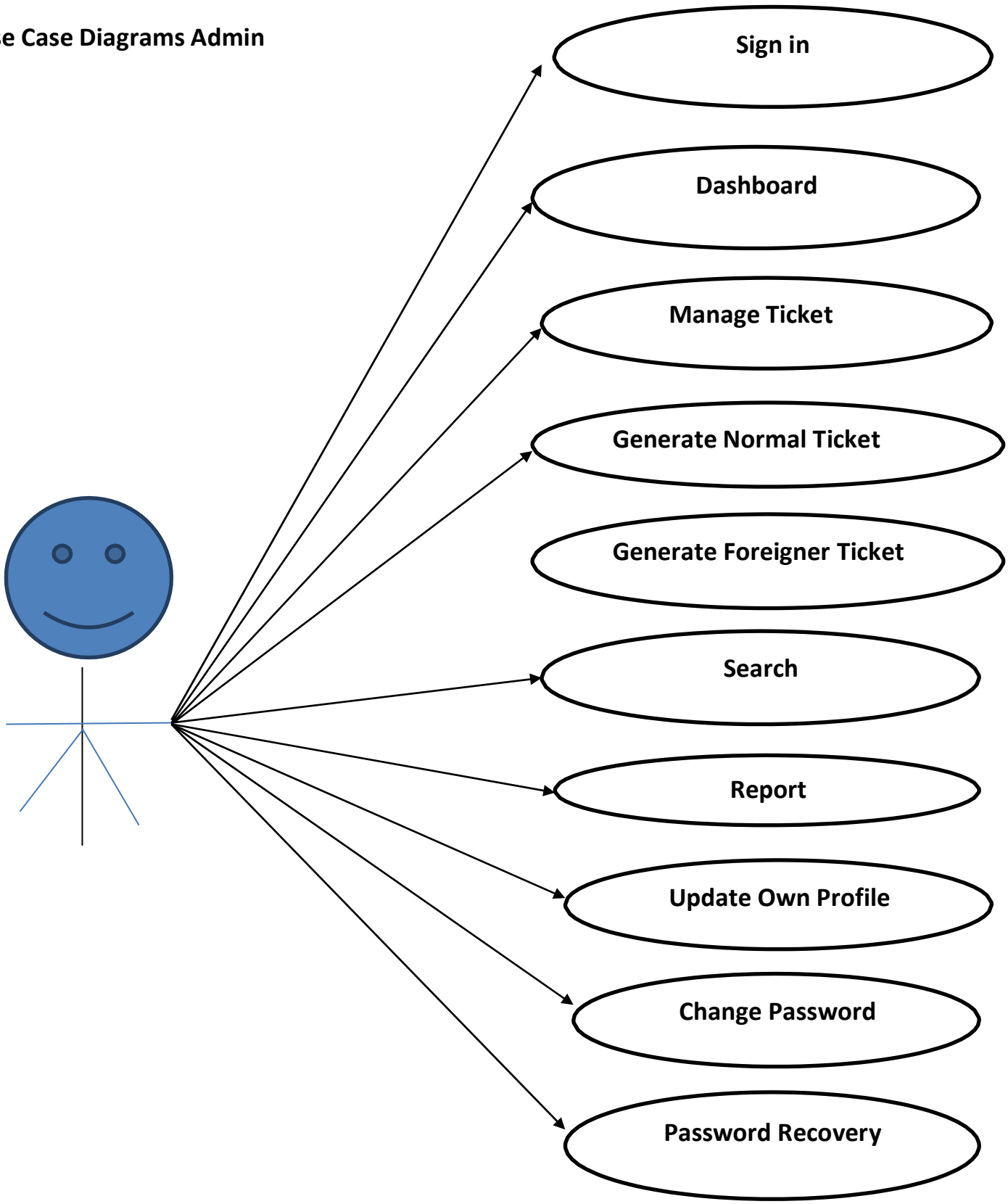
Environmental Model View

In this the structural and behavioural aspects of the environment in which the system is to be implemented are represented.

UML is specifically constructed through two different domains they are

- UML Analysis modelling, which focuses on the user model and structural model views of the system?
- UML design modelling, which focuses on the behavioural modelling, implementation modelling and environmental model views.

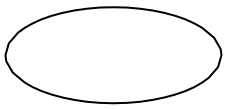
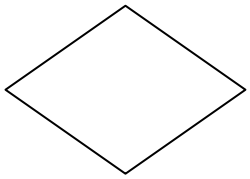
Use Case Diagrams Admin



ENTITY-RELATIONSHIP Diagrams

E-R (Entity-Relationship) Diagram is used to represents the relationship between entities in the table.

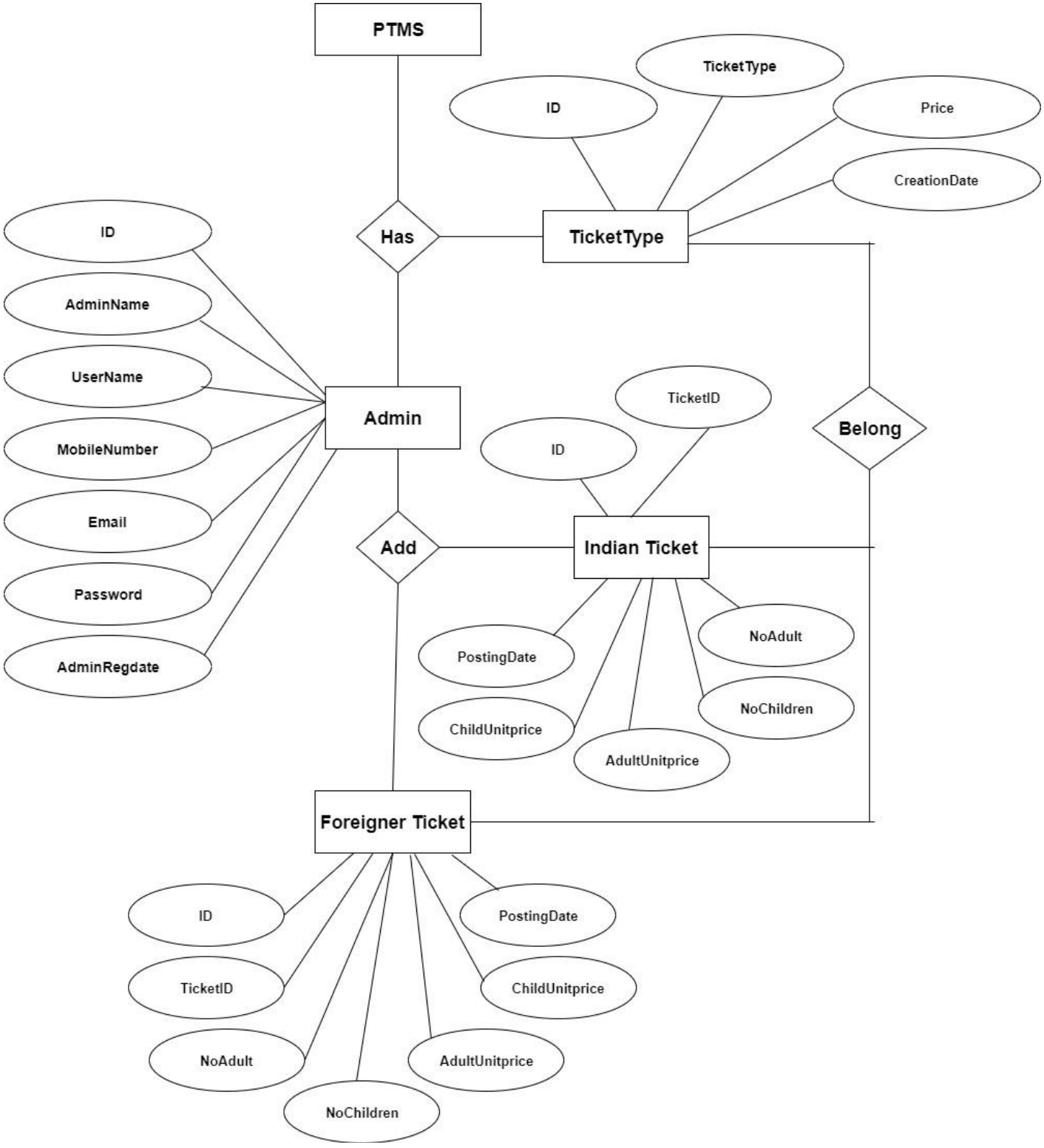
The symbols used in E-R diagrams are:

SYMBOL	PURPOSE
	Represents Entity sets.
	Represent attributes.
	Represent Relationship Sets.
	Line represents flow

Structured analysis is a set of tools and techniques that the analyst.

To develop a new kind of a system:

The traditional approach focuses on the cost benefit and feasibility analysis, Project management, and hardware and software selection a personal considerations.


PTMS
TicketType
ID
Price
CreationDate
Has
TicketType
ID
AdminName
UserName
MobileNumber
Email
Password
AdminRegdate
Admin
TicketID
ID
Belong
Add
Indian Ticket
PostingDate
ChildUnitprice
AdultUnitprice
NoAdult
NoChildren
Foreigner Ticket
ID
TicketID
NoAdult
NoChildren
AdultUnitprice
ChildUnitprice
PostingDate

DATABASE DESIGN

The data in the system has to be stored and retrieved from database. Designing the database is part of system design. Data elements and data structures to be stored have been identified at analysis stage. They are structured and put together to design the data storage and retrieval system.

A database is a collection of interrelated data stored with minimum redundancy to serve many users quickly and efficiently. The general objective is to make database access easy, quick, inexpensive and flexible for the user. Relationships are established between the data items and unnecessary data items are removed. Normalization is done to get an internal consistency of data and to have minimum redundancy and maximum stability. This ensures minimizing data storage required, minimizing chances of data inconsistencies and optimizing for updates. The MS Access database has been chosen for developing the relevant databases.

Park Ticket Management System (PTMS) contains 4 MySQL tables :

tbladmin table Structure : This table store the admin login and personal Details.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(10)			No	*None*		AUTO_INCREMENT
2	AdminName	varchar(120)	utf8mb4_general_ci		Yes	*NULL*		
3	UserName	varchar(120)	utf8mb4_general_ci		Yes	*NULL*		
4	MobileNumber	bigint(10)			Yes	*NULL*		
5	Email	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
6	Password	varchar(200)	utf8mb4_general_ci		Yes	*NULL*		
7	AdminRegdate	timestamp			Yes	current_timestamp()		

tblticindian table Structure : This table store ticket detail of Normal(Indian) people.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(10)			No	*None*		AUTO_INCREMENT
2	TicketID	varchar(100)	latin1_swedish_ci		No	*None*		
3	NoAdult	int(10)			Yes	*NULL*		
4	NoChildren	int(10)			Yes	*NULL*		
5	AdultUnitprice	varchar(50)	latin1_swedish_ci		Yes	*NULL*		
6	ChildUnitprice	varchar(50)	latin1_swedish_ci		Yes	*NULL*		
7	PostingDate	timestamp			Yes	current_timestamp()		

tblticforeigner table Structure : This table store ticket detail of Foreign people.

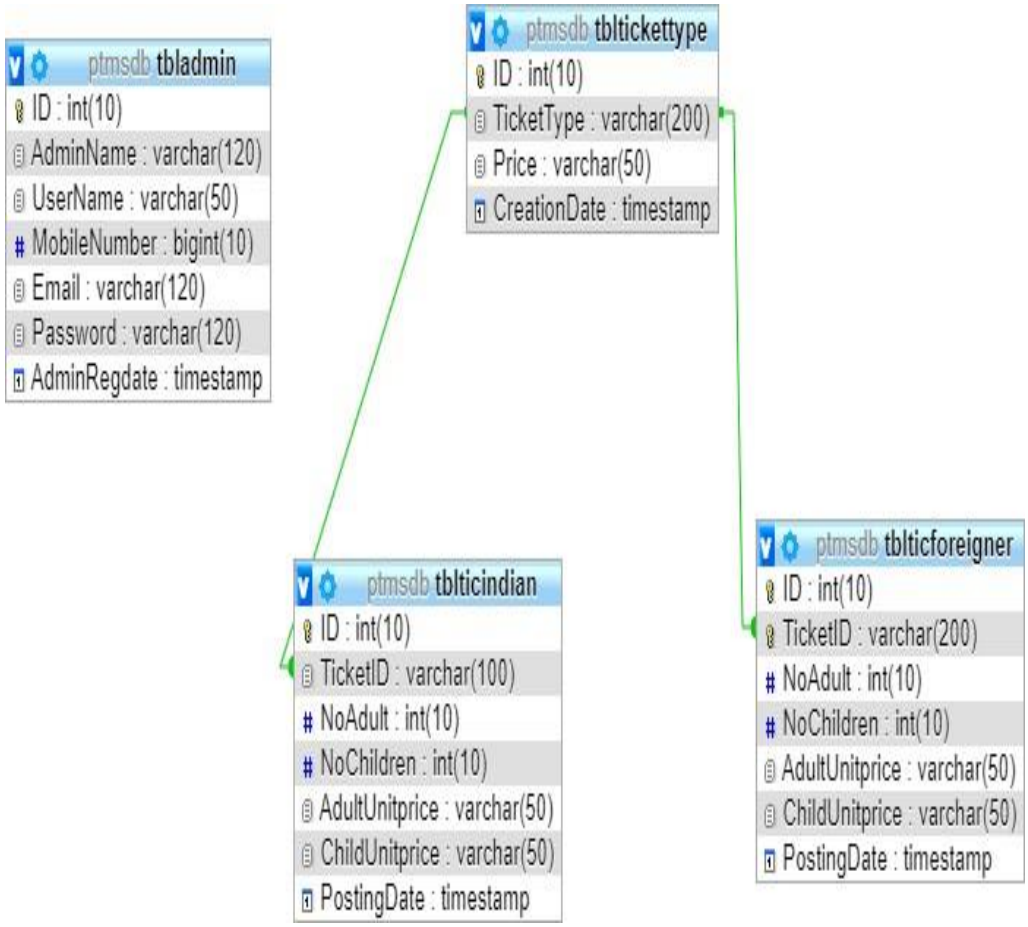
#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(10)			No	*None*		AUTO_INCREMENT
2	TicketID	varchar(200)	latin1_swedish_ci		Yes	*NULL*		
3	NoAdult	int(10)			Yes	*NULL*		
4	NoChildren	int(10)			Yes	*NULL*		
5	AdultUnitprice	varchar(50)	latin1_swedish_ci		Yes	*NULL*		
6	ChildUnitprice	varchar(50)	latin1_swedish_ci		Yes	*NULL*		
7	PostingDate	timestamp			Yes	current_timestamp()		

tbltickettype table Structure : This table store the ticket type.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID	int(10)			No	*None*		AUTO_INCREMENT
2	TicketType	varchar(200)	latin1_swedish_ci		Yes	*NULL*		
3	Price	varchar(50)	latin1_swedish_ci		Yes	*NULL*		
4	CreationDate	timestamp			Yes	current_timestamp()		

Class Diagram:

The class diagram shows a set of classes, interfaces, collaborations and their relationships.



SYSTEM TESTING

SOFTWARE TESTING TECHNIQUES:

Software testing is a critical element of software quality assurance and represents the ultimate review of specification, designing and coding.

TESTING OBJECTIVES:

1. Testing is process of executing a program with the intent of finding an error.
2. A good test case design is one that has a probability of finding an as yet undiscovered error.
3. A successful test is one that uncovers an as yet undiscovered error.

These above objectives imply a dramatic change in view port.
Testing cannot show the absence of defects, it can only show that software errors are present.

There are three types of testing strategies

1. Unit test
2. Integration test
3. Performance test

Unit Testing:

Unit testing focuses verification efforts on the smallest unit of software design module. The unit test is always white box oriented. The tests that occur as part of unit testing are testing the module interface, examining the local data structures, testing the boundary conditions, execution all the independent paths and testing error-handling paths.

Integration Testing:

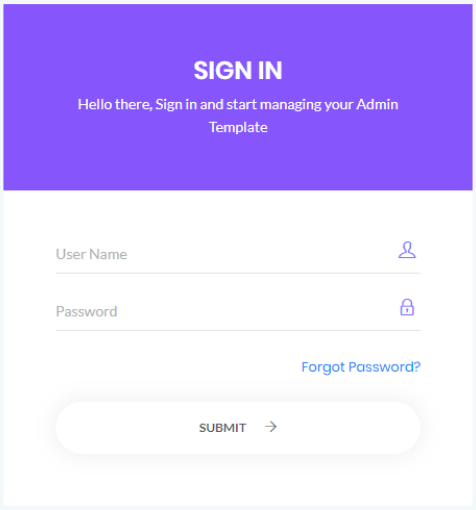
Integration testing is a systematic technique or construction the program structure while at the same time conducting tests to uncover errors associated with interfacing. Scope of testing summarizes the specific functional, performance, and internal design characteristics that are to be tested. It employs top-down testing and bottom-up testing methods for this case.

Performance Testing:

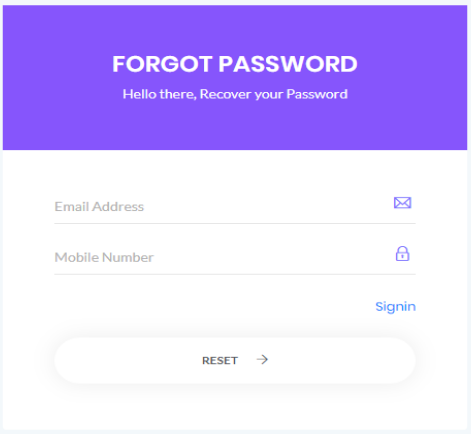
Timing for both read and update transactions should be gathered to determine whether system functions are being performed in an acceptable timeframe.

Output Screen of Project

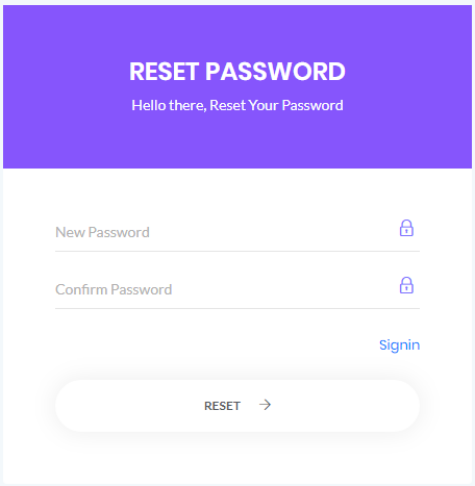
Admin Login



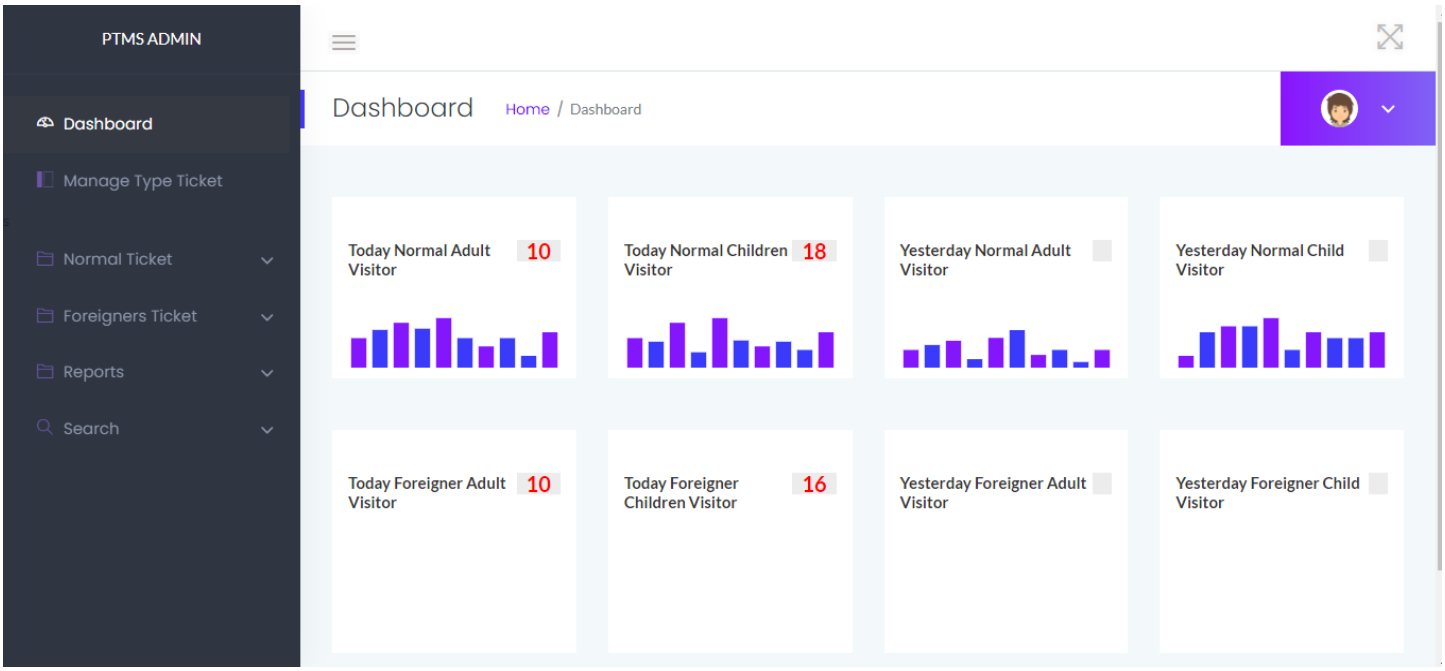
Forgot Password



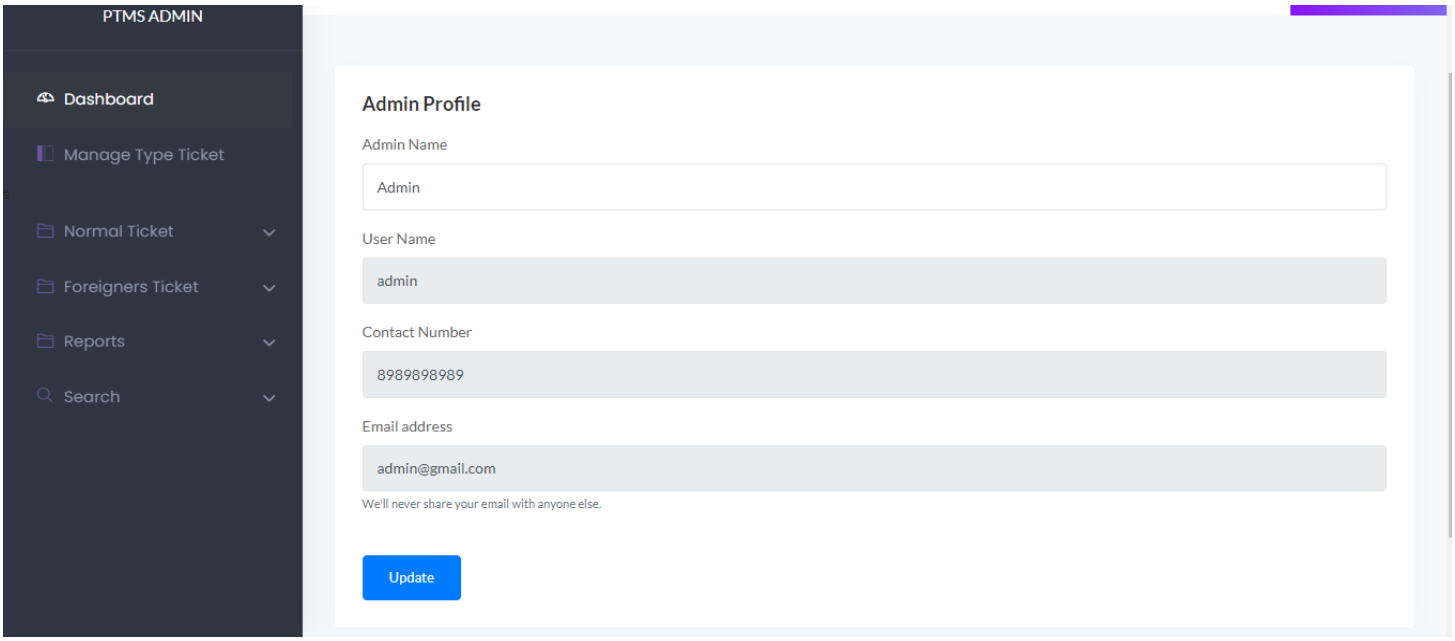
Reset Password



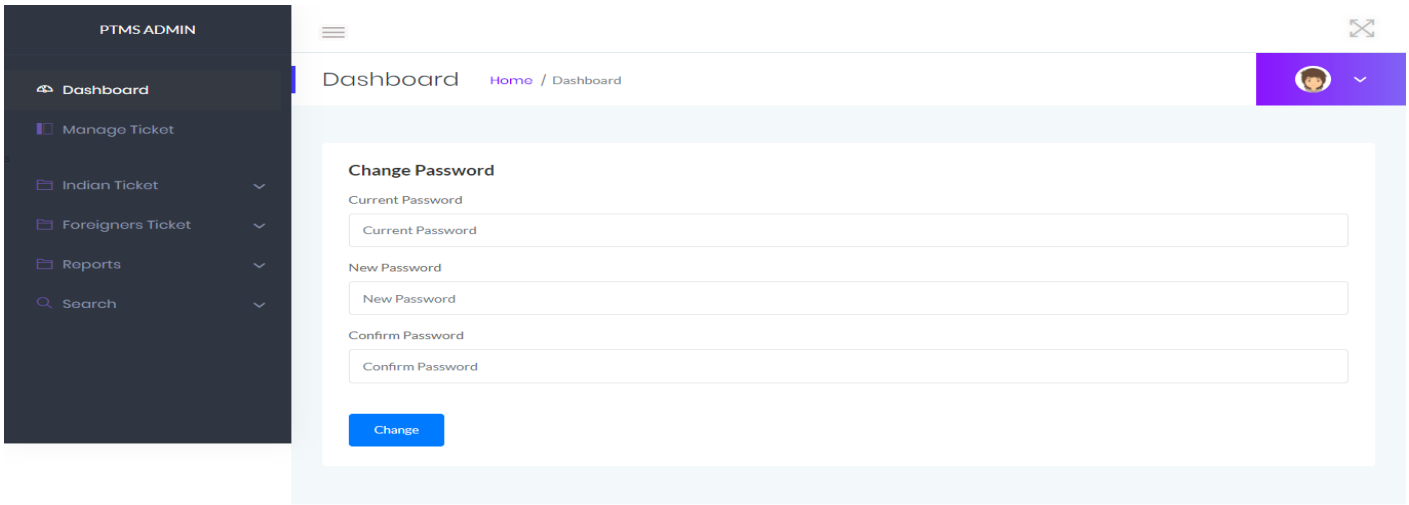
Dashboard



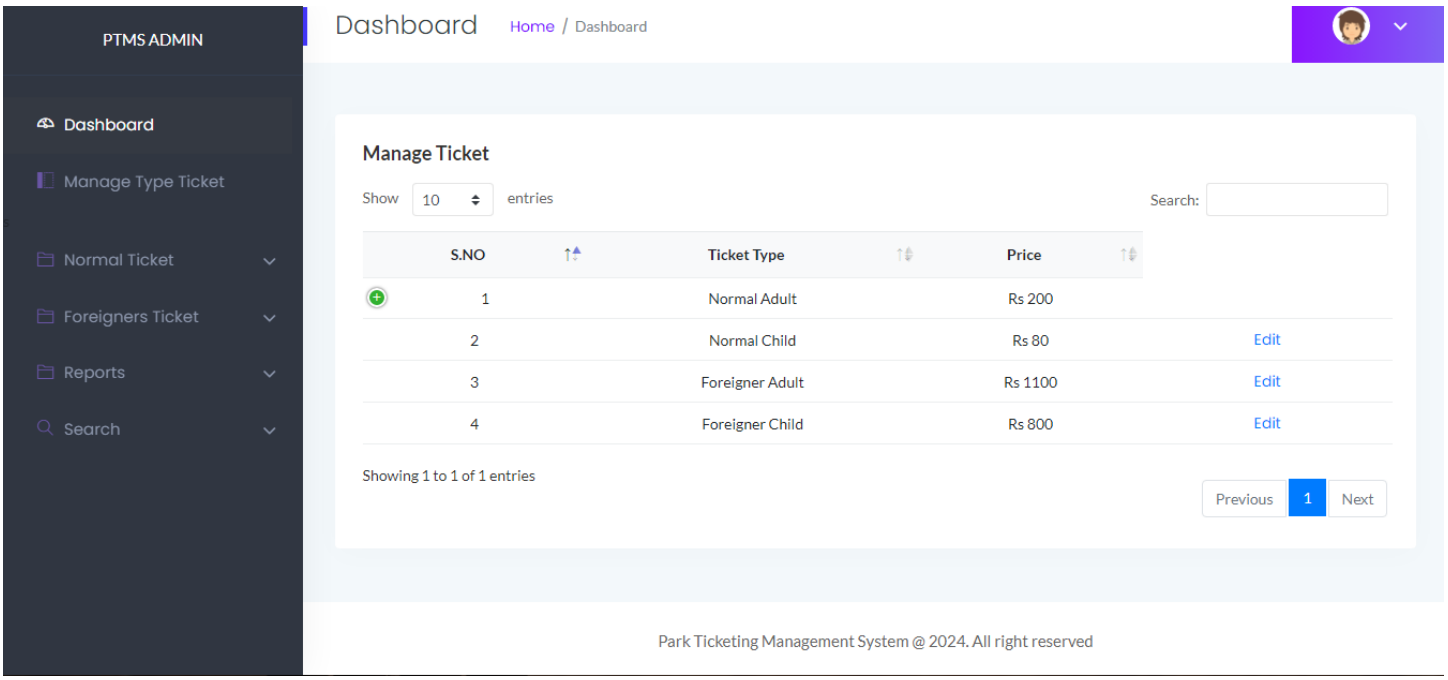
Admin Profile



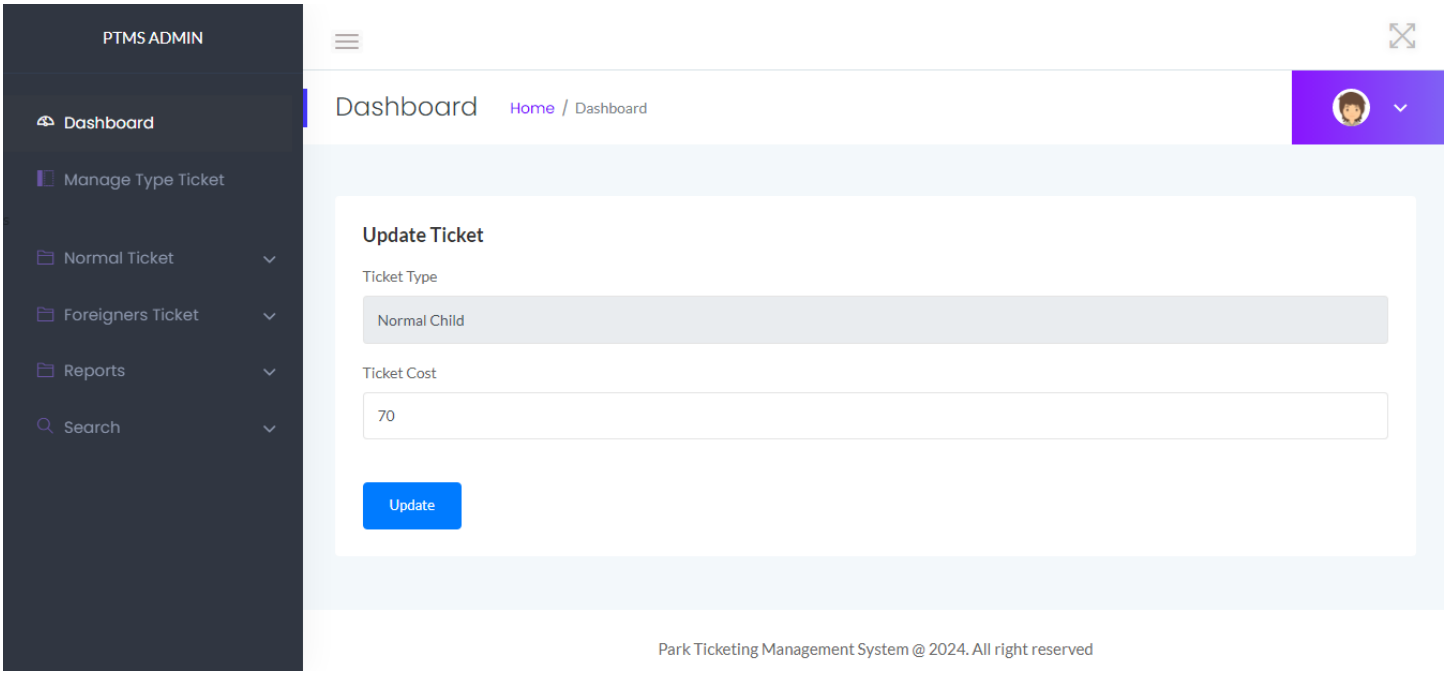
Change Password



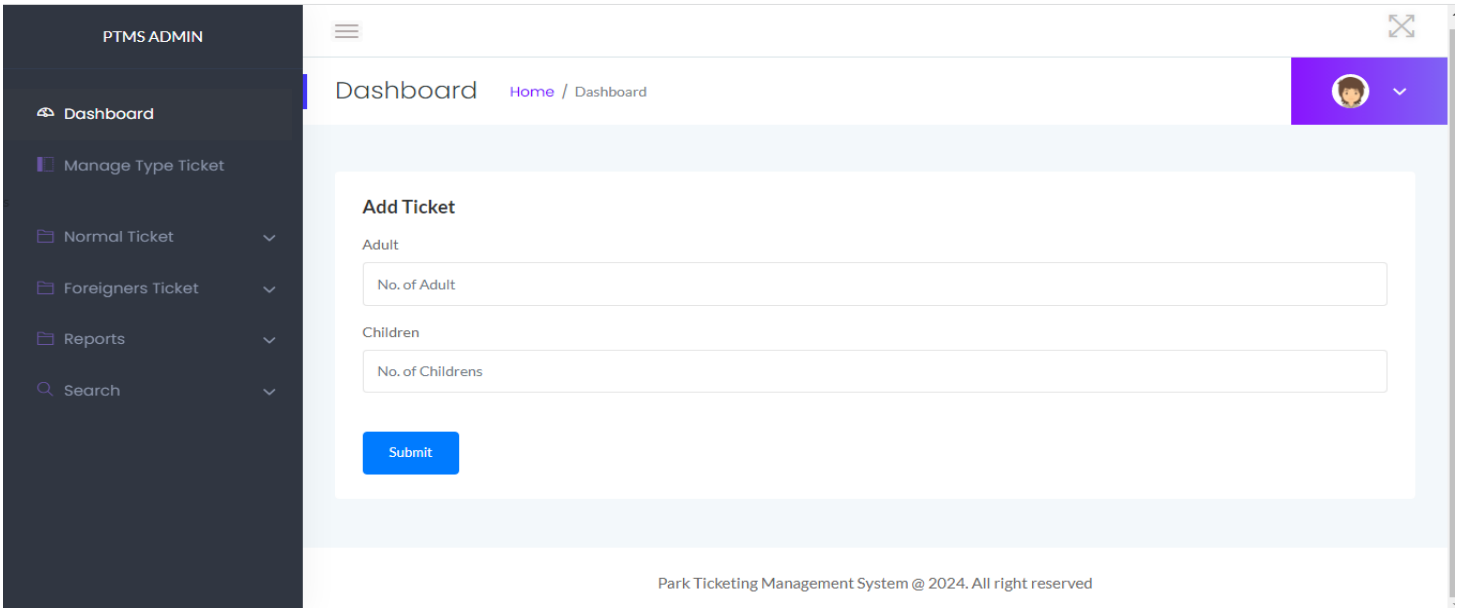
Manage Ticket



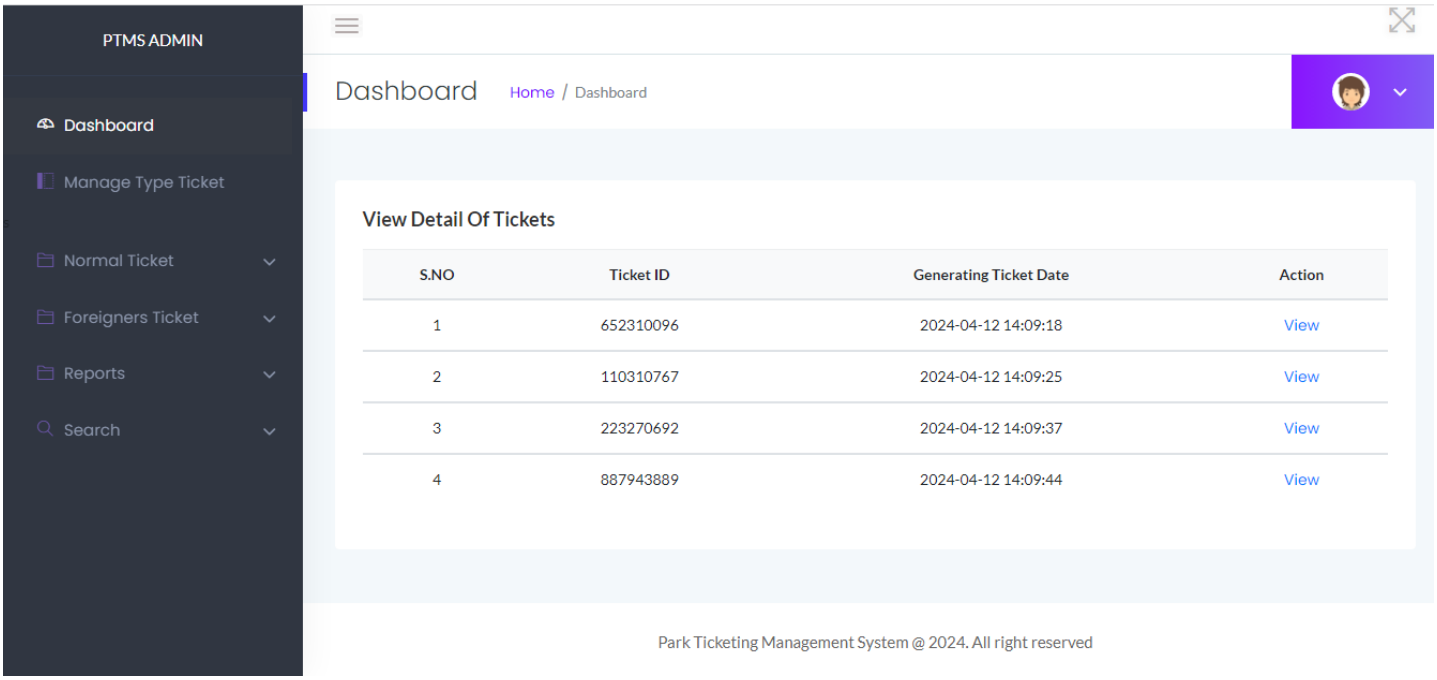
Update Ticket Type

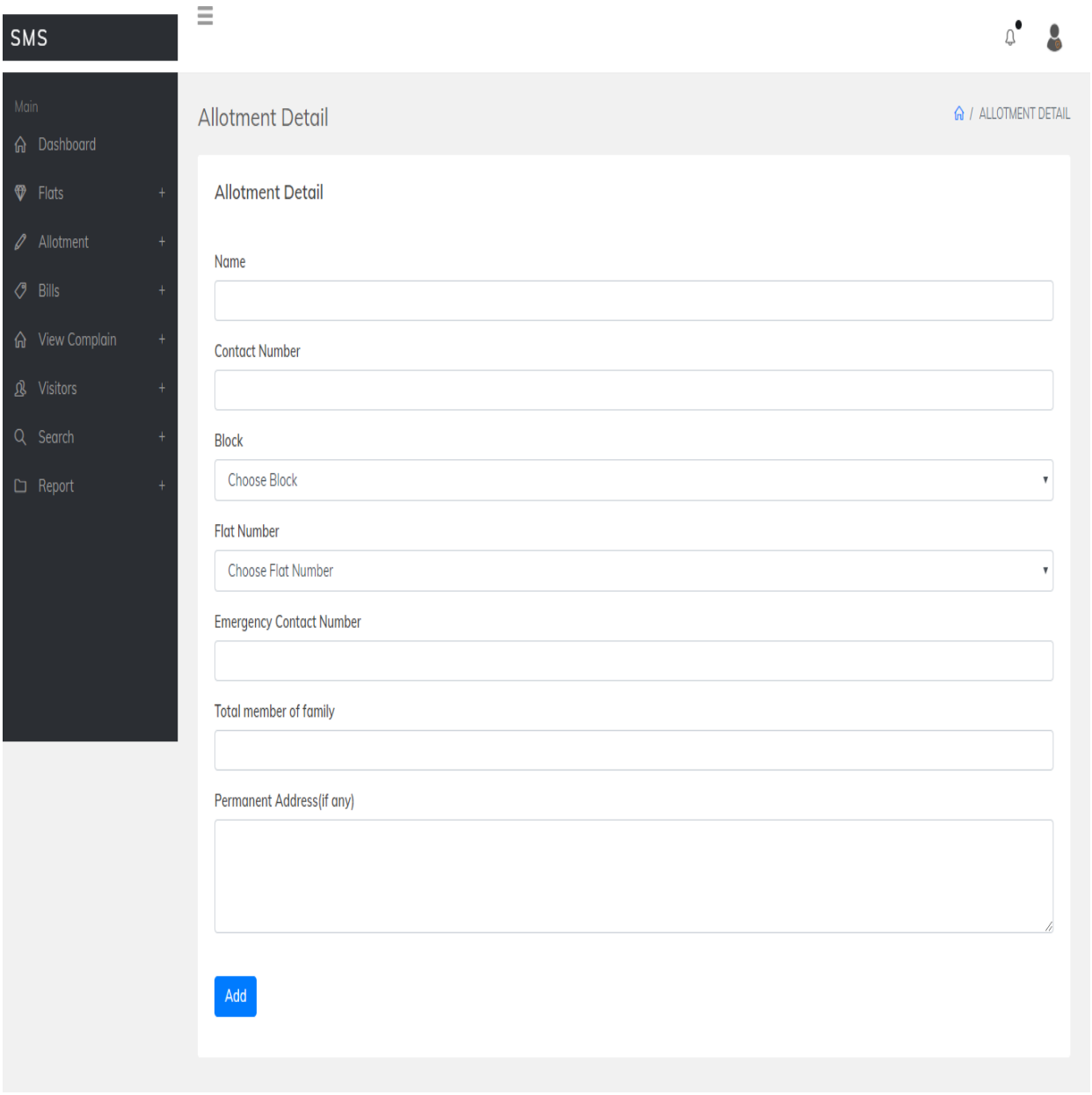


Add Normal Ticket

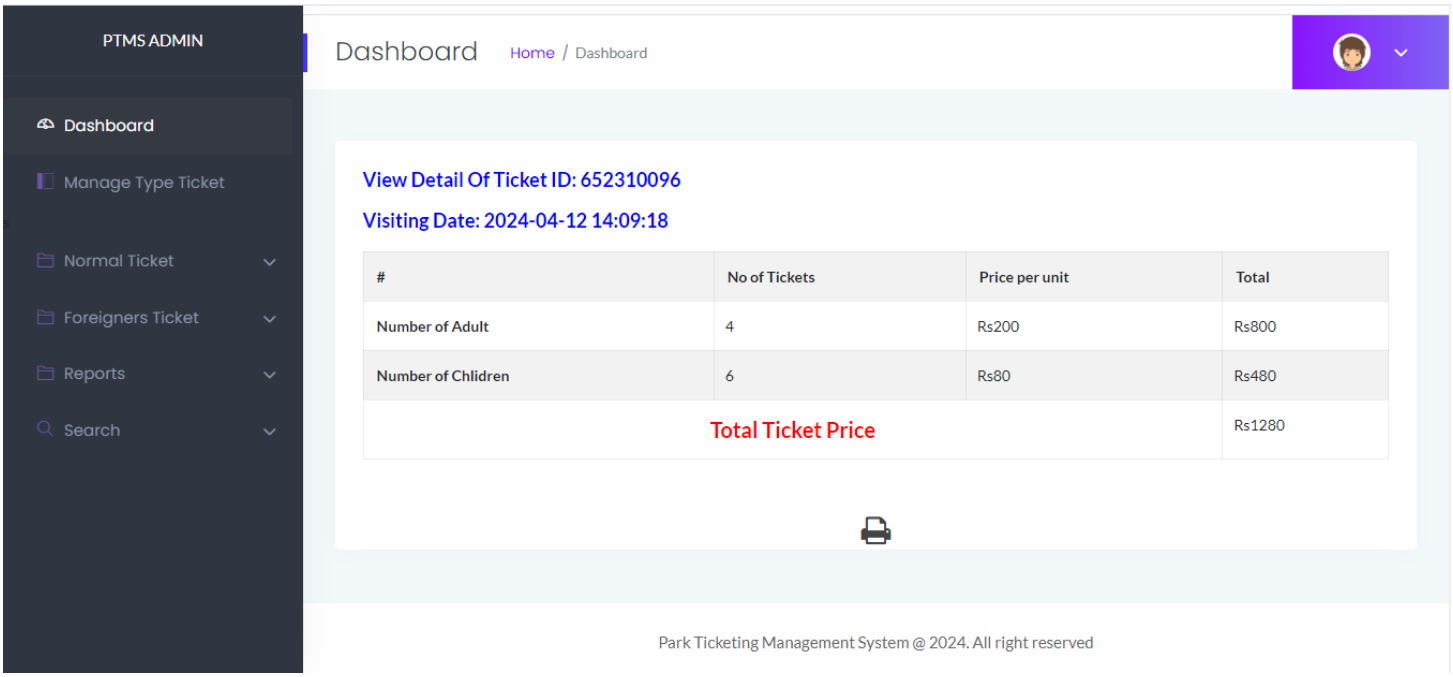


Manage Normal Ticket

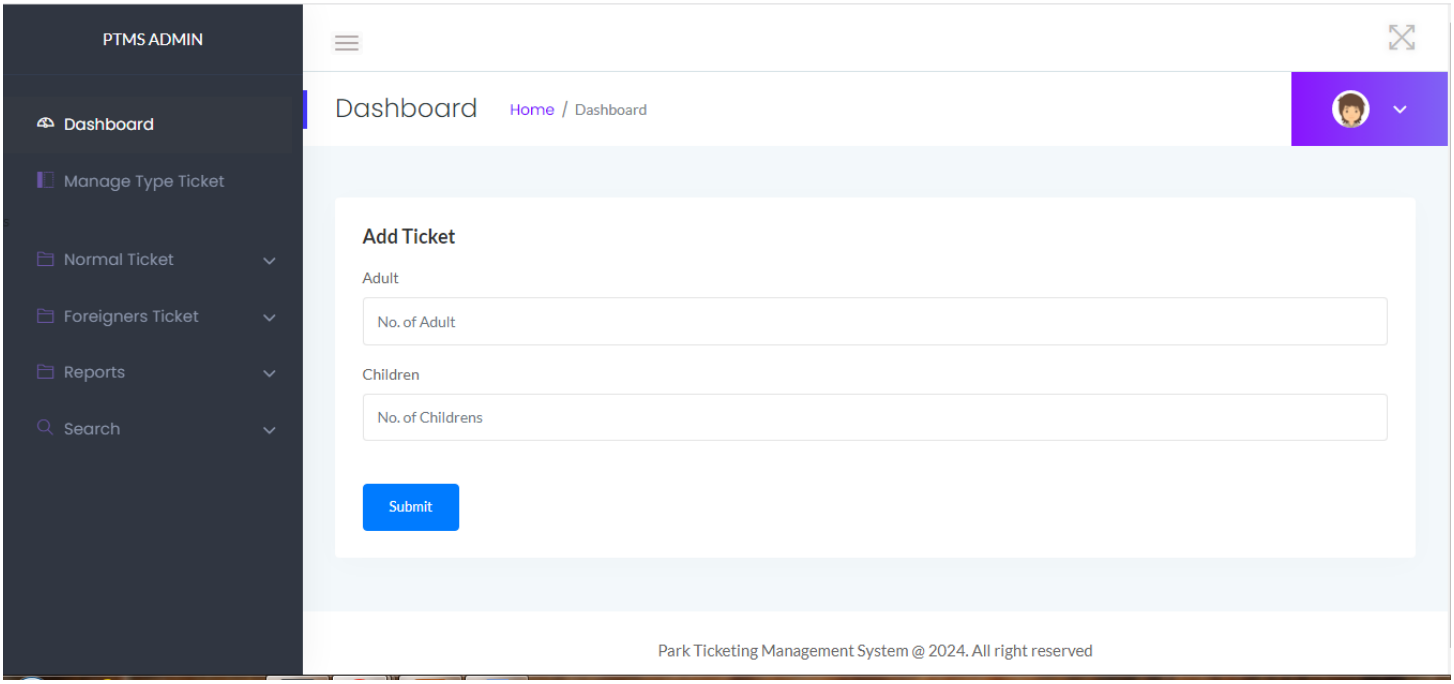



SMS
Main
Dashboard
Flats
Allotment
Bills
View Complain
Visitors
Search
Report
Allotment Detail
/ ALLOTMENT DETAIL
Allotment Detail
Name
Contact Number
Block
Choose Block
Flat Number
Choose Flat Number
Emergency Contact Number
Total member of family
Permanent Address(if any)
Add

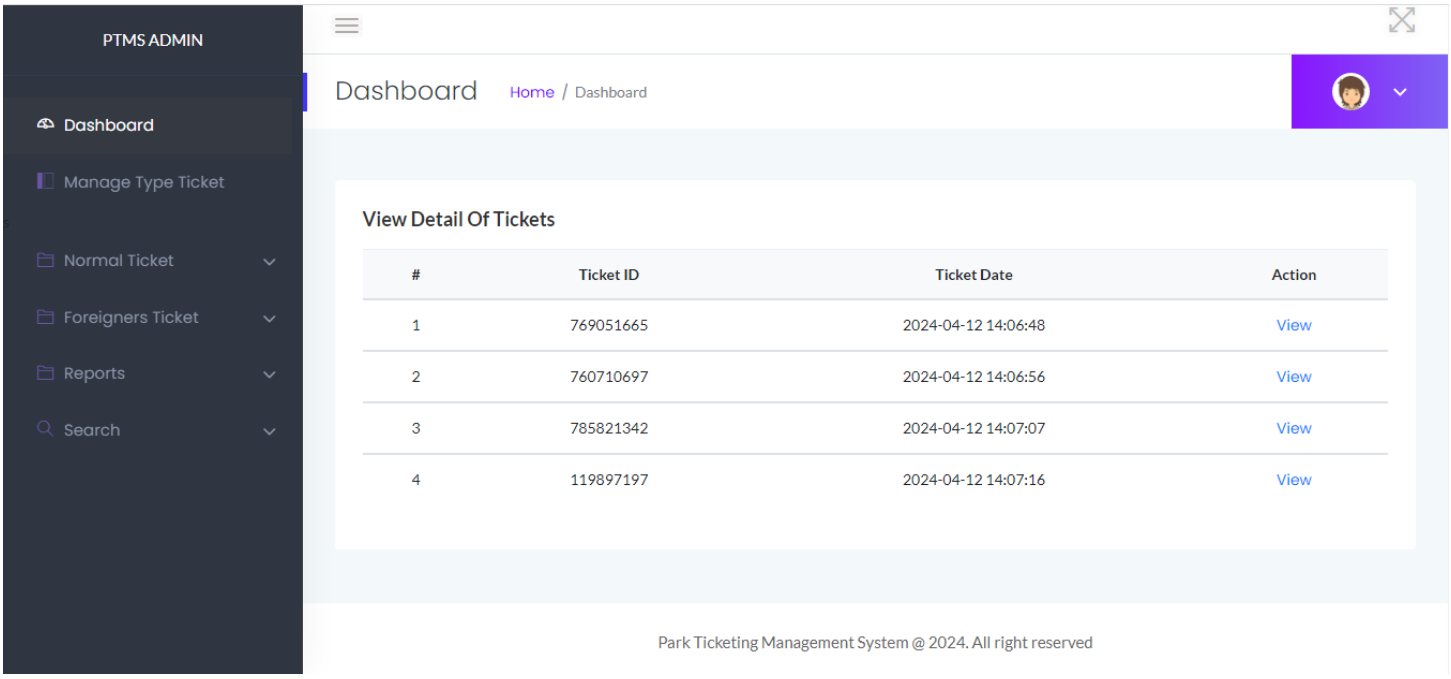
View Normal Ticket



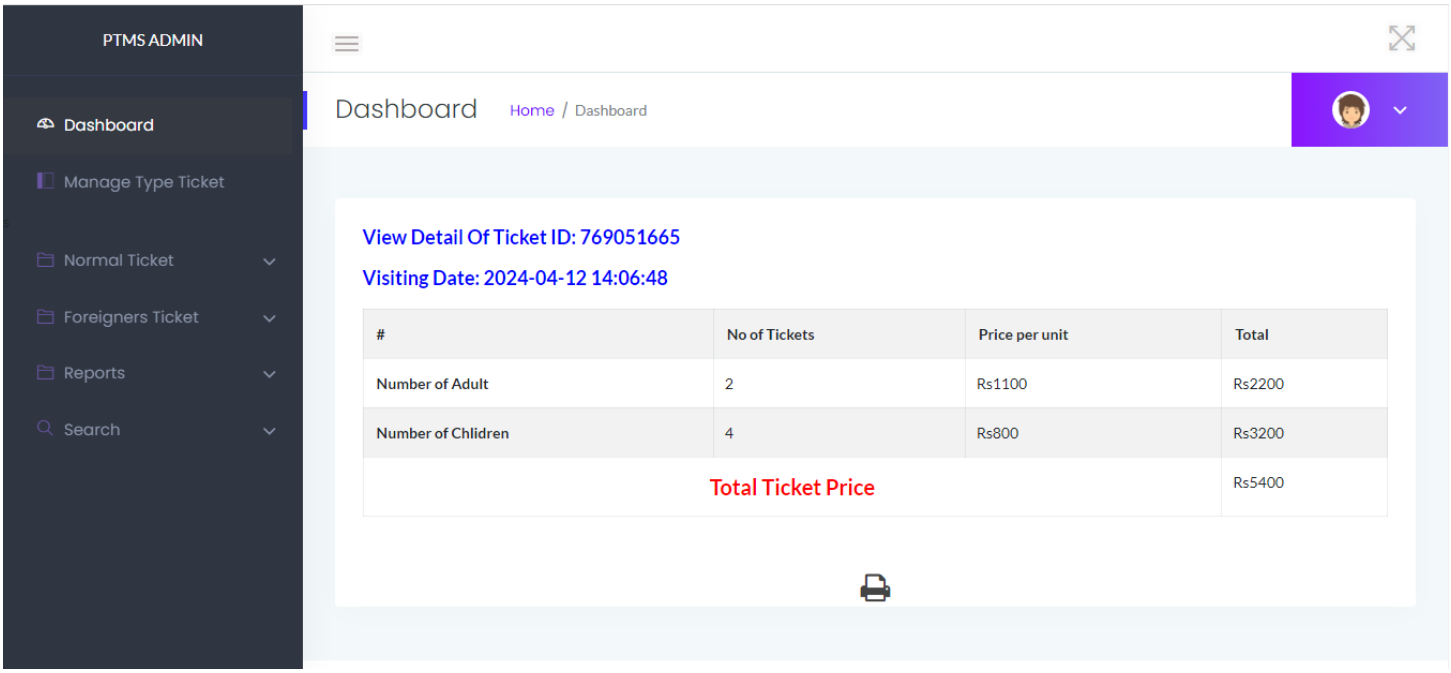
Add Foreigner Ticket

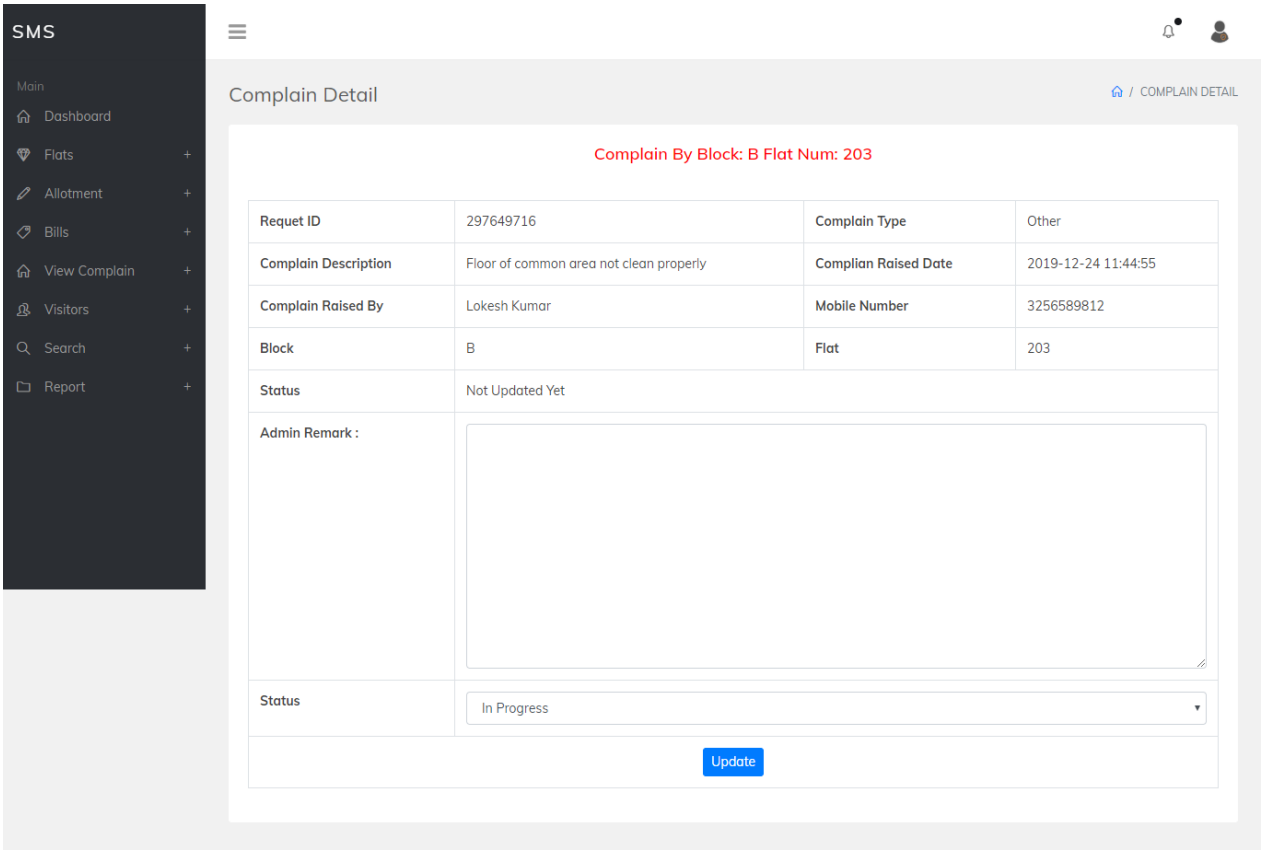


Manage Foreigner Ticket

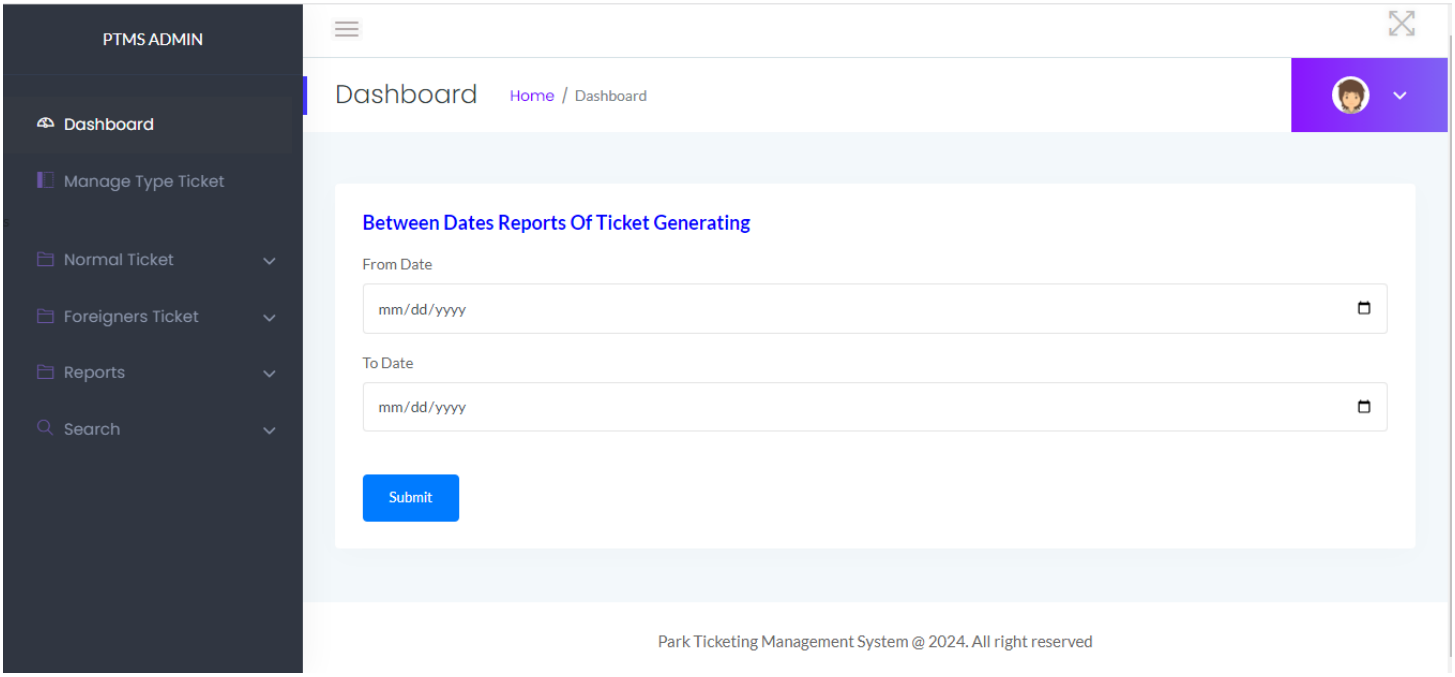


View Foreigner Ticket

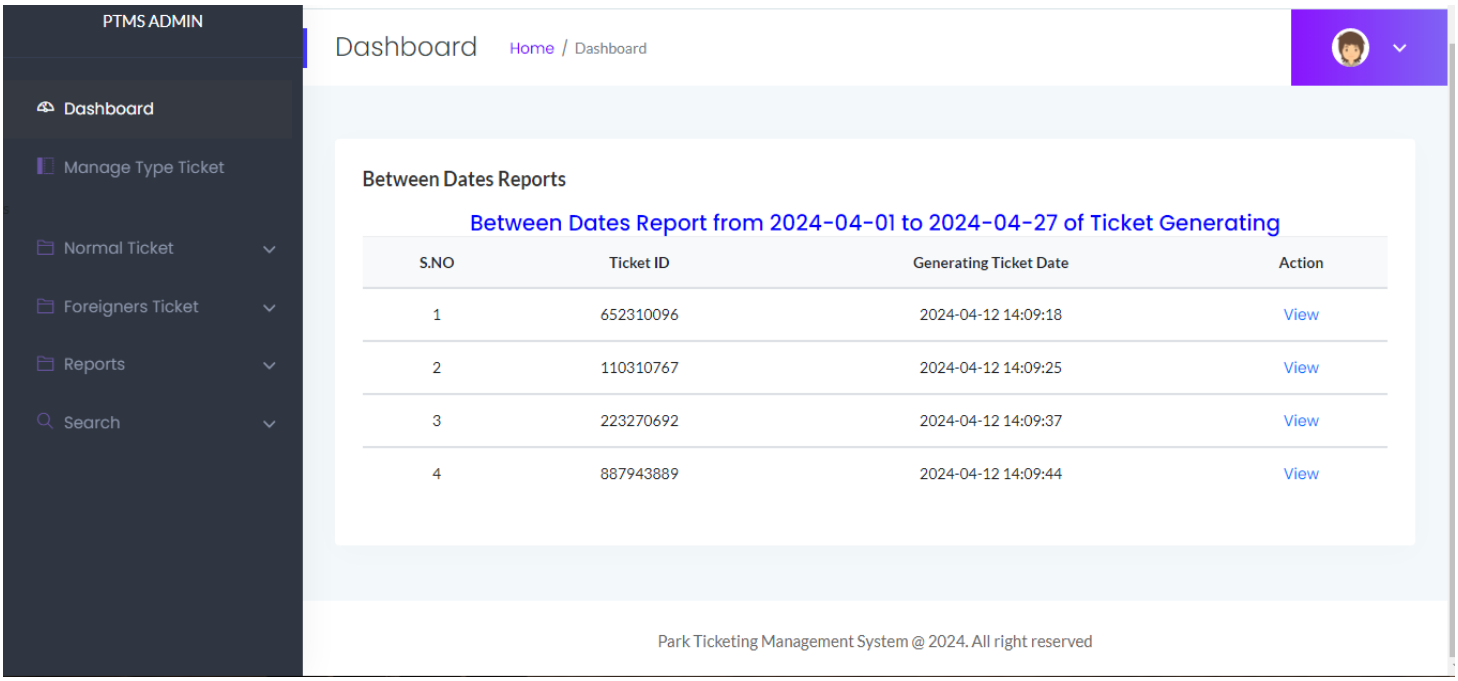




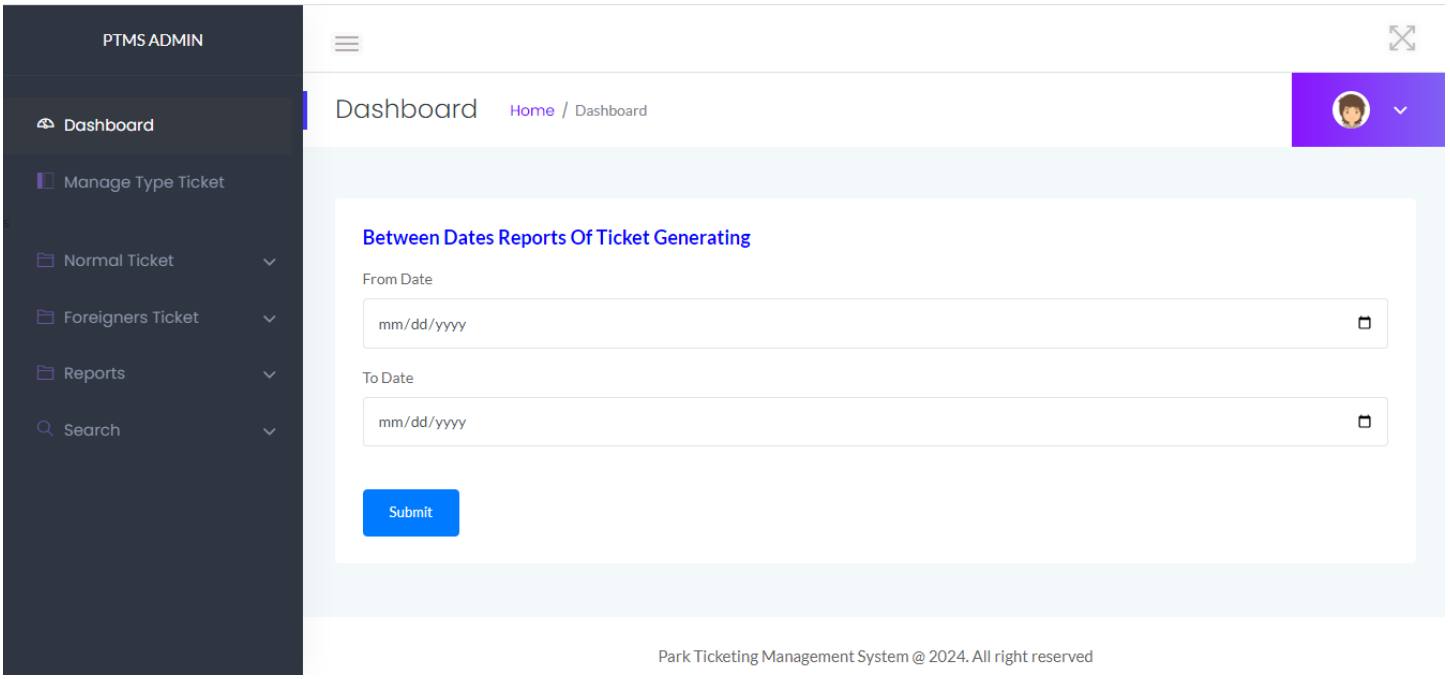
Normal Reports



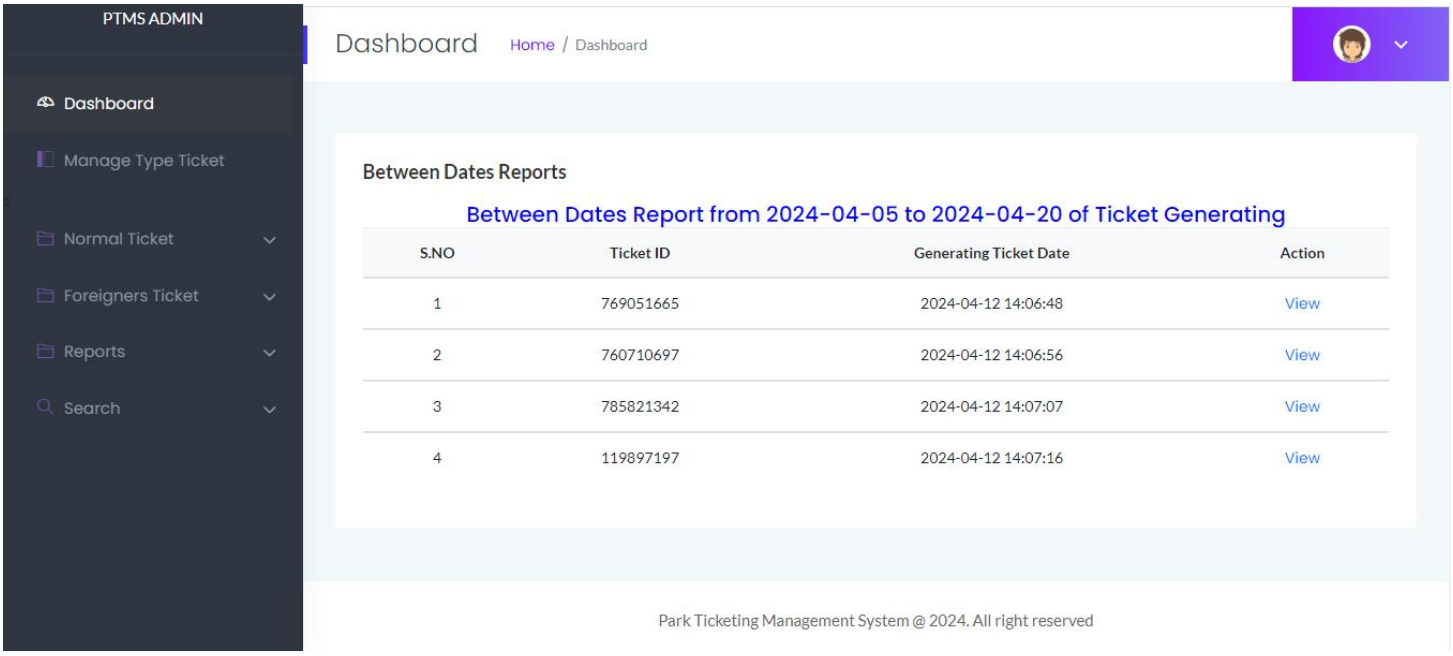
View Between Dates Report of ticket generating (Normal)



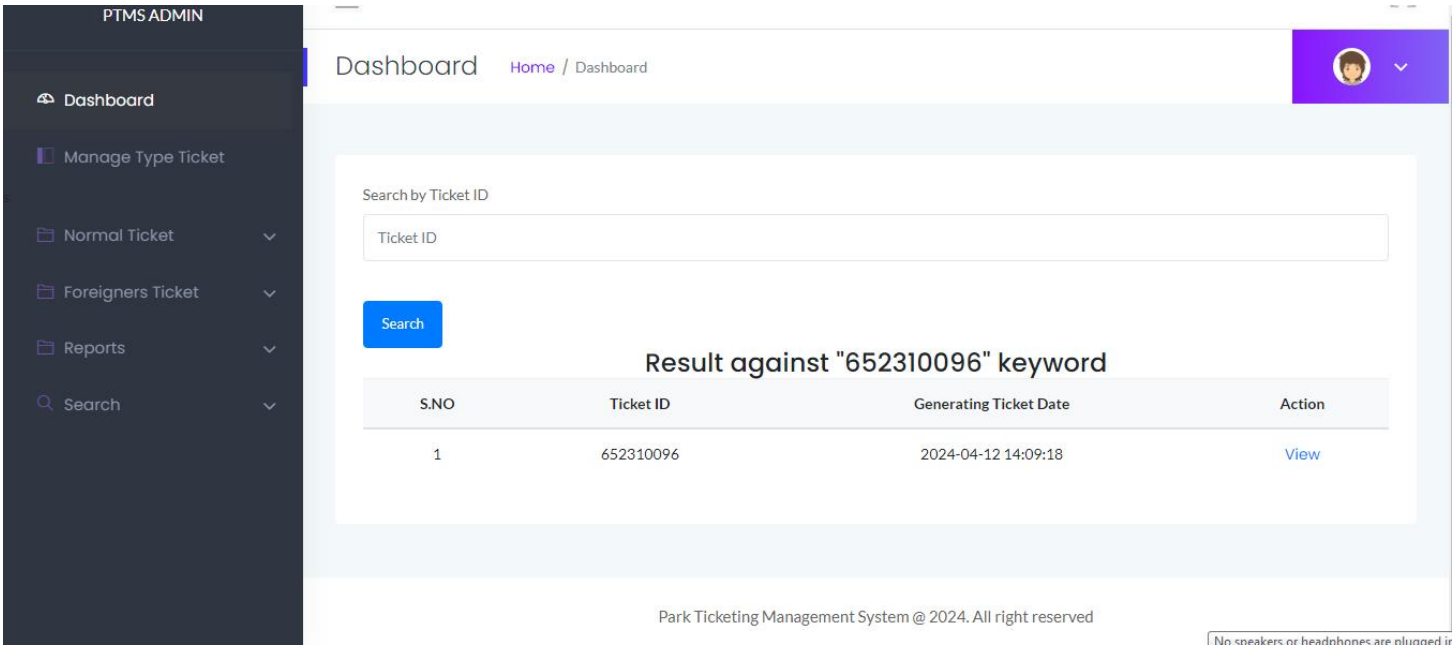
Foreigner Report



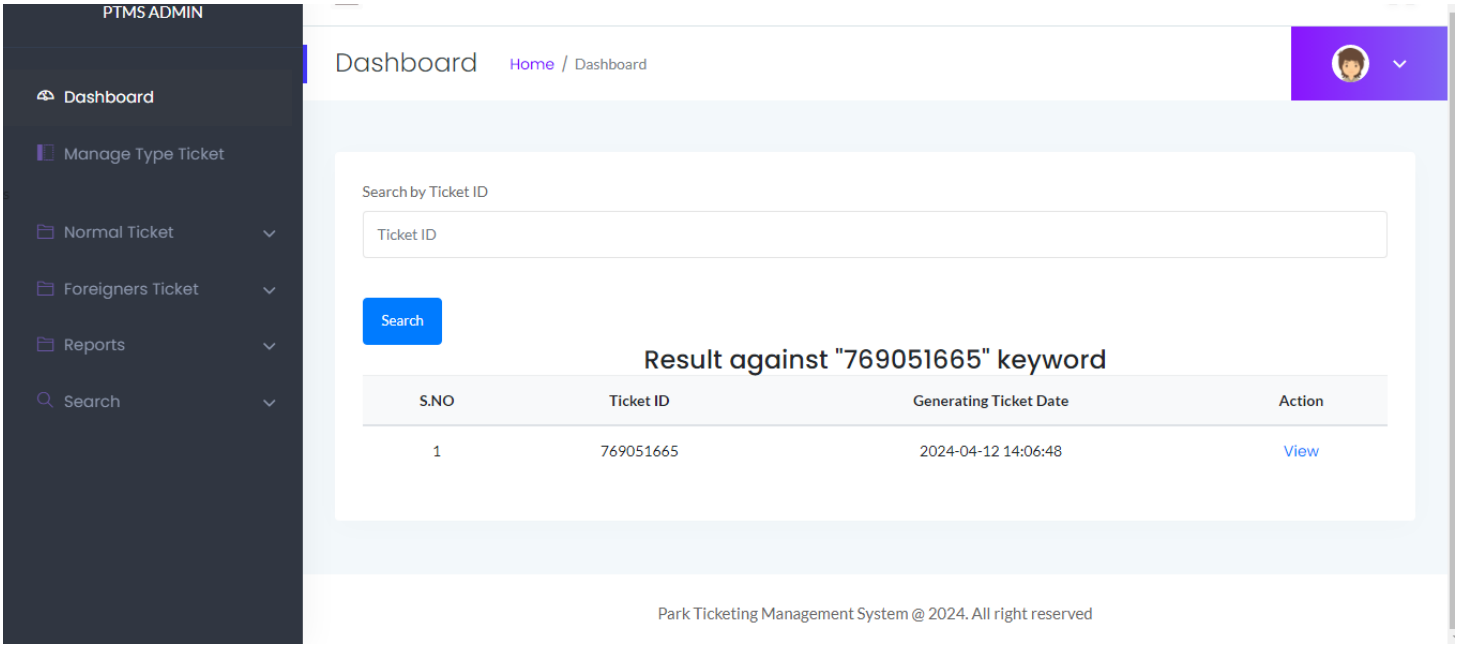
View Between Dates Report of ticket generating (Foreigner)



Ticket Search (Normal)



Ticket Search (Foreigner)



Conclusion

The project titled as **Park Ticketing Management System** was deeply studied and analyzed to design the code and implement. It was done under the guidance of the experienced project guide. All the current requirements and possibilities have been taken care during the project time.

Park Ticketing Management System is a web based application which manages and handles the people ticket who visited in the park.

Bibliography

For PHP

- https://www.w3schools.com/php/default.asp
- https://www.sitepoint.com/php/
- https://www.php.net/

For MySQL

- https://www.mysql.com/
- http://www.mysqltutorial.org

For XAMPP

- https://www.apachefriends.org/download.html