G.M.D. ARTS, B.W. COMMERCE & SCIENCE COLLEGE, SINNAR.

DEPARTMENT OF COMPUTER SCIENCE

A PROJECT REPORT ON

"ELECTRICAL SHOP MANAGEMENT"

Submitted by:

Mr. Arote Akash Bhagwan

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Guided by:

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Savitribai Phule Pune University
2022-2023

M.V.P. Samaj's
G.M.D. ARTS, B.W. COMMERCE & SCIENCE
COLLEGE, SINNAR.

This is to certify that,
Mr. Arote Akash Bhagwan
Mr. Gadakh Ritesh Kiran
Mr. Golesar Suraj Shankar
Student of B.Sc. Computer Science has satisfactory completed Project work on "Electrical Shop Management", towards partial fulfillment of degree course affiliated to Savitribai Phule Pune University for the Academic Year 2022-2023 at G.M.D. ARTS, B.W. COMMERCE & SCIENCE COLLEGE, SINNAR.

Project Guide
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1. Abstract

Electrical Shop Management : This report is conducted in order to set the foundations upon which the Second project of our SE Students in Information Technology will be built. The title of the project is: "Website Development Project: SS Electrical Shopee e-Business Website" . The main target of this report is to conduct a thorough and in-depth analysis of the vast field of e-Business and at the same time explore the opportunities and the conditions that could lead into building a successful e-Business website on Information Technology employment.

2. Introduction

1.Web programming, also known as web development, is the creation of Static web applications.

2.Examples of web applications are social networking sites like Facebook or E-Business sites like Advert add.

3.The good news is that learning web development is not that hard!

2.1 Motivation

We observe that in college it's a tedious task to keep up with the Shop data and doing manual data backup is also not easy. You can't easily duplicate data or modify it. So we come up with this Electrical Shop Management to ease the collection and maintenance of Electrical shop data.

Motivation:

Day to day processes with these systems can be managed in a much efficient way. These systems give a unified view that helps the user to perform activities. It also helps remind which activities an individual needs to perform and which of them are already done

It's quite easy to review the performances of teachers with the help of automated reports and analytics. These systems help teachers keep a record of their own performance but also work on the areas or subjects they are at.

Motivation:

The electrical shop management system has constantly been evolving, hence to keep up with new channels of education we need to evolve our system to store information by automating the traditional ways and bringing more structure to the curriculum because today the world is on the verge of continuous evolution and so are we. The education systems all over the world are getting better along with getting complex. These systems are growing in size as well as scope, therefore it needs to be defined management for smooth functioning to keep up with new modes of information and new channels of education.

2.1 Problem Statement

Develop an application which facilitates creation of web pages having a need to show Services and Product and also which can be used by any user. Who need a Electrical Services and Product. Services Should get more cleared for users.

Visited User Should feel more user friendly ui and can send feedback or make inquiry or query about Services.

2.2 Purpose / Objective & Goals

- The Basic Building Blocks of a Web Development Proposal Every website proposal (similar to web design proposals) should include:

Executive Summary - A one-page summarization of the whole project, including all necessary specifics such as important timeline points and budget.

- Marketing– drive traffic, engage prospects, generate leads and re-engage existing customers.
- Sales– help close sales by validating and supporting sales team communications.
- Customer Support – improve customer satisfaction through better service.
- Webmasters– simplify and optimize content updates and website management.

2.4 Literature survey

This is one of the most widely accepted statements and applies for every aspect of human activity. Internet is an unlimited pool of information and benefits anyone who uses it properly.

According to Porter and Millar (1985) information gives competitive advantage to a company in three different ways:

a) By changing industry structure and changing the rules of competition.
b) By providing companies with new ways to outperform their competitors.
c) By creating new businesses, even from within a company's existing operations.

2.5 Project Scope and limitation

- **Scope:**

A future website is not only beautiful but is highly functional, and has longevity built-in. I use only the latest web technologies design methodologies such as responsive web design, HTML5, and progressive enhancement through CSS3 to craft your business's online presence.

- **Limitation:**

Runs on any OS: It's programmed to run on any OS .

Runs using easy URL: These apps run on the device's own browser through an easy URL.

Need not be downloaded: They don't got to be downloaded and installed from app stores like Google Play or Apple's App Store.

Cost Efficient: The most important benefit you'll draw faraway from it's its price. Web development is that the cheaper quite Web development.

3. System Analysis

3.1 Existing System

Currently our college has manual system of putting notices on notice board. Its outdated now. As nobody
has a time to stand in rush in order to read the notices on noticeboard.

Limitations of Existing System:

1. Order of Data: Notice can get out of order in traditional notice board system. If someone accidentally puts some data in the wrong place, it can lead to lost data. Automated notice management systems allow users to quickly check whether information already exists somewhere in the system, which helps avoid problems like redundant data.

2. Complexity: Automated system is less complex than manual system of handling notices, which can make it easier for untrained people to access and manipulate data. Anyone having the basic knowledge of mobiles can work on the automated system.

3. Inconsistency of data: There will be an unavailability for future use, since notice might get mis-placed during manual notices management. So notice won't be preserved properly for future use.

4. Damage: Manual notices stack are vulnerable to damage, destruction and theft in ways that digital databases are not. A company may back up its digital data both on site and at offsite locations, ensuring its security if the office building suffered a fire or similar disaster. A manual database, however, may only exist in one place without any copies. As a result, a manual database would be very vulnerable to a fire or other natural disaster. In addition, while access time in a manual database system, information must be found by hand rather than electronically. While a digital database will typically allow users to search the entire database for specific information in seconds, someone looking for information in a manual system may have to spend hours searching for a particular piece of data.

5. Editing and Communication: Manual notices do not allow users to easily edit data or information. Manual notices often cannot be edited directly, forcing users to

make new copies. To circulate notice on paper, users must require peons and other staff. e-Notice app allows users to edit information fields directly, and because data is stored digitally, it is already in a form that can be easily transmitted.

3.2 Scope and limitation of existing systems

This product has great future scope. Online shopping Internet software developed on and for the Windows and later versions environments and Linux OS. This project also provides security with the use of Login-id and Password, so that any unauthorized users cannot use your account. The only Authorized that will have proper access authority can access the software.

3.2 Project perspective

To overcome the drawbacks of the existing system, the proposed system has been evolved. This project aims to reduce the paper work and saving time to generate accurate results. The system provides
with the best user interface. The efficient reports can be generated by using this proposed system.

Features

The future scope of the project is that it can be used as any news giving application or it can be used to advertise your products, telling the customers about new schemes and products coming to your shop. This application of e-Notice can be further extended to include the following features

3.3 Stakeholder

- Admin
- Client / Customer

3.4 Requirement analysis

1. **Functional requirements**
   User registration:

   Given that a user has downloaded the mobile application, then the user should be able to register through the mobile application. The user must provide user-name, password, and e-mail address. The user can choose to provide a regularly used phone number.

2. **Security Requirements**
   Communication Security:

   There should be security of the communication between the system and server. The messages should be encrypted for log-in communications, so others cannot get user-name and password from those messages. Every exchanged of information between client and server should be encrypted so that no one can track it.

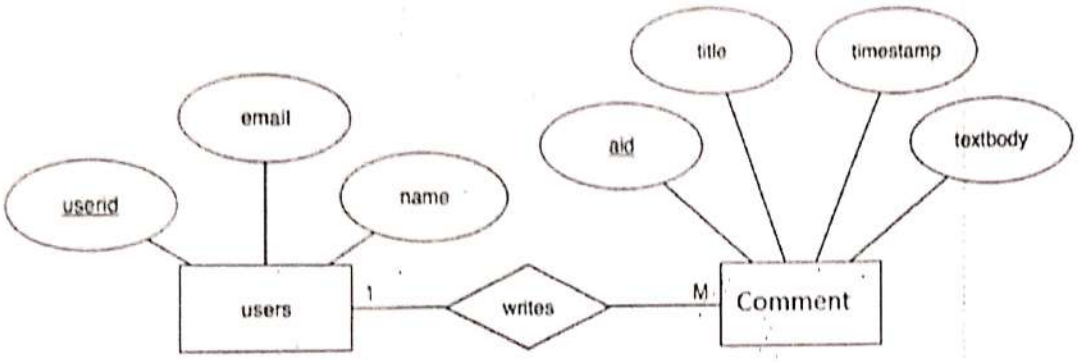
4. System Design

4.1 Design Constraints

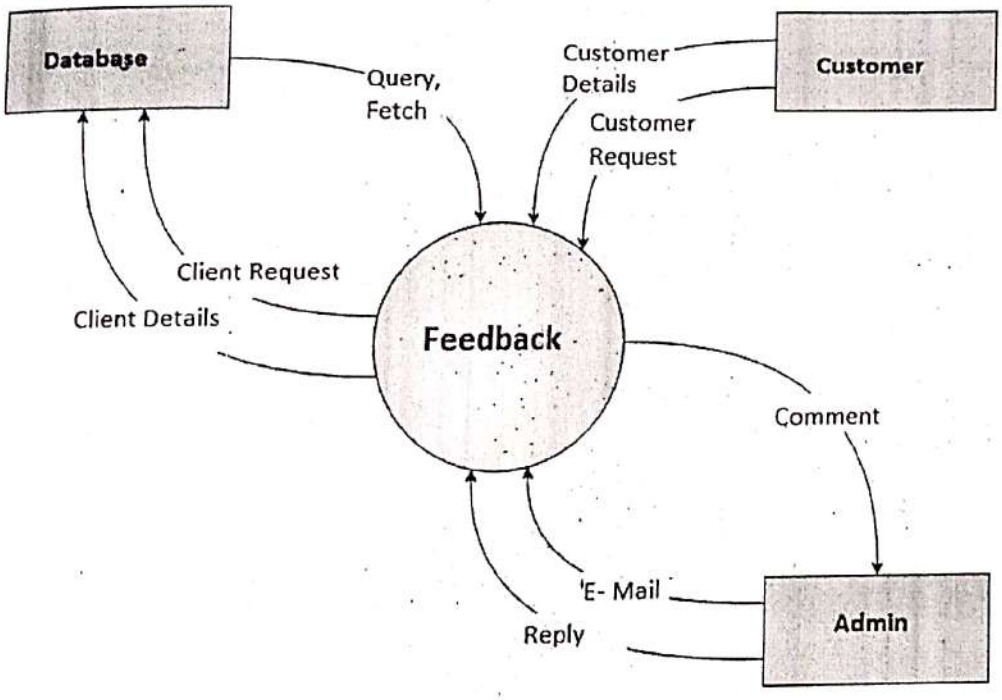
Common Diagram Containing Following - The Symbols used in ER diagram are as follow: ER Diagram describes data at rest, data being stored. Data relationship is the relation between the entities. Entity is an object that exist and it's distinguishable from other objects. ER diagram shows data at rest. This means ER diagram does not show data flow.

4.2 System Model

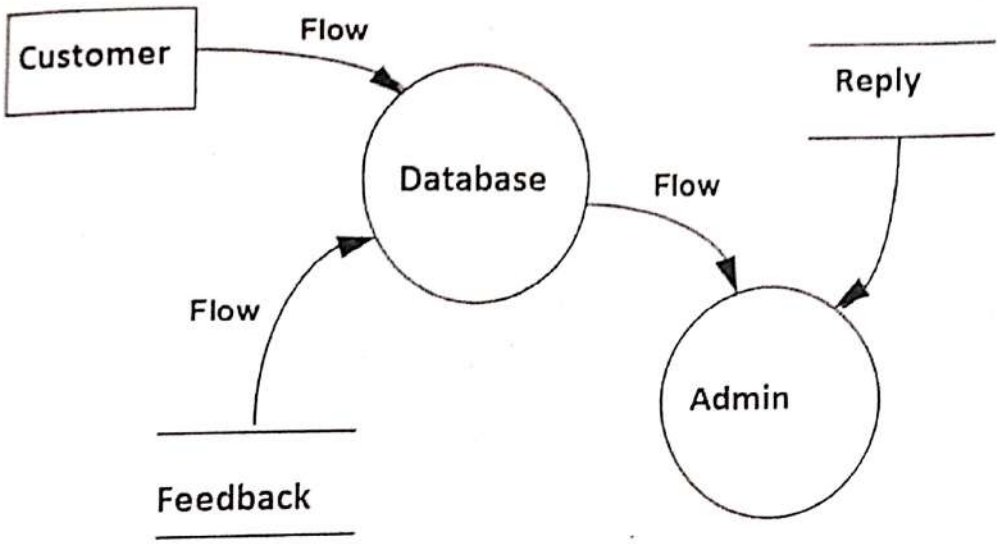
ER Diagram



Context Level Diagram



Data Flow Diagram



4.3 User Interface:

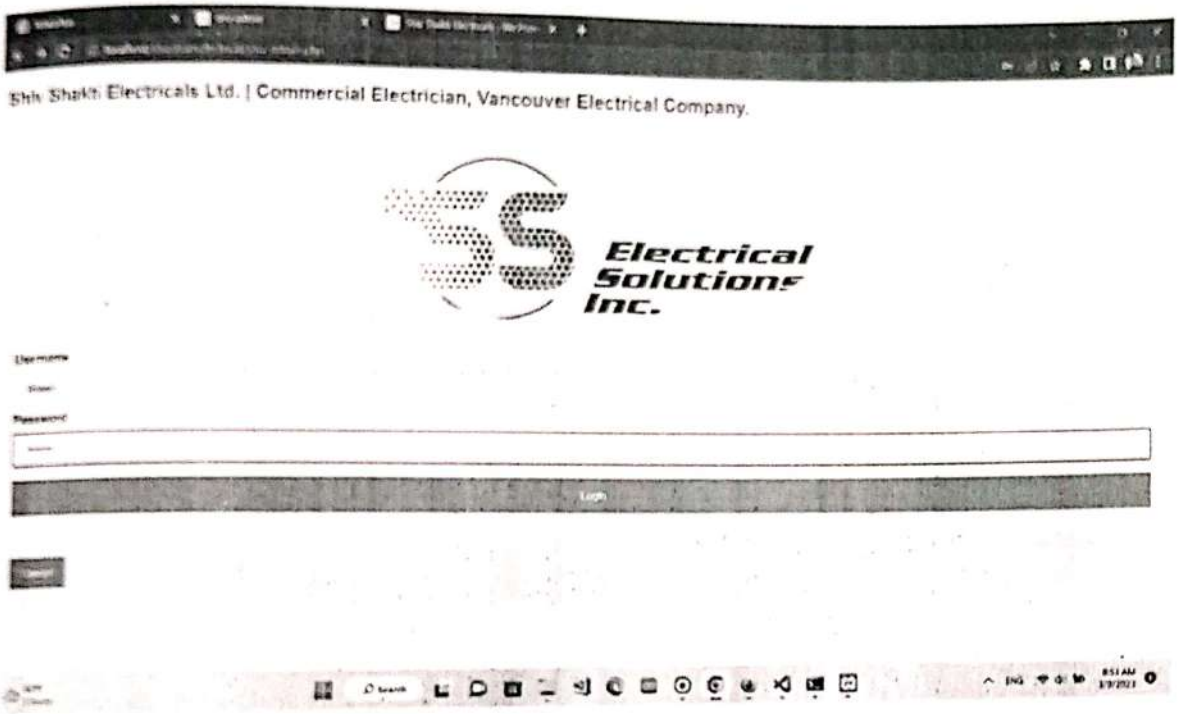
There are following User Interface:

- Client User Interface:

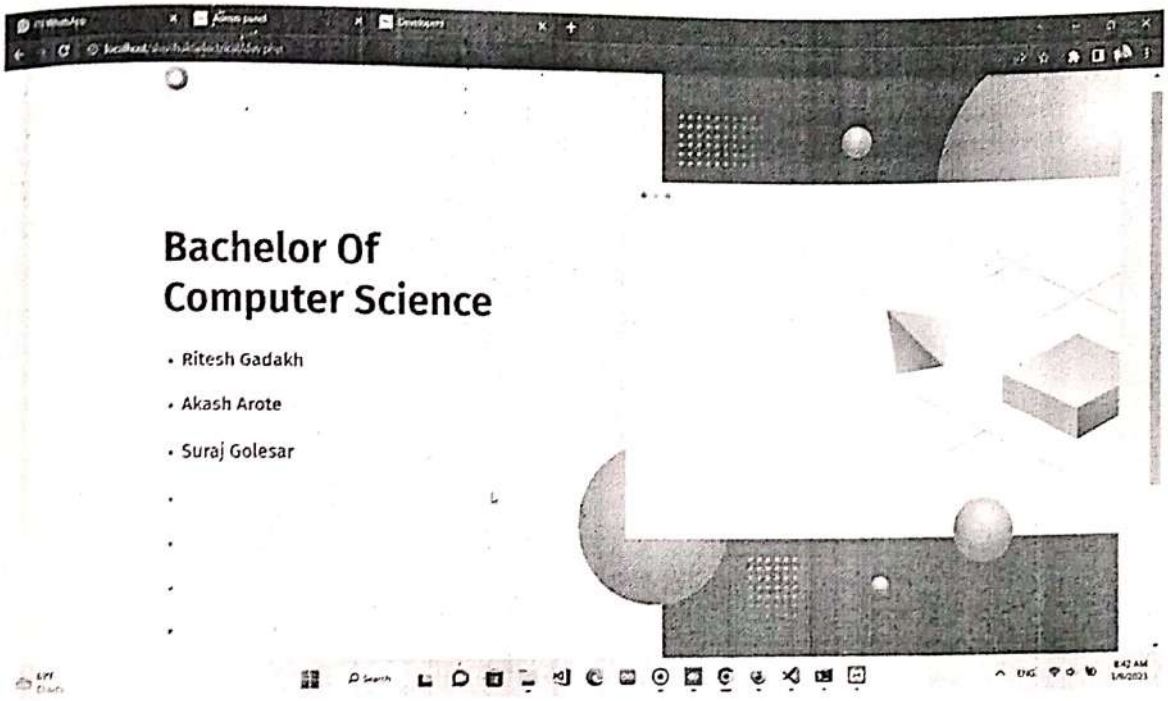
A User Interface, which is also called as "UI" or simply an "interface". Is the means in which a person controls a software application or hardware device. A good User Interface provides a "User friendly" experience, allowing the user to interact with the software or hardware in a natural and intuitive way.

Output Screen:

- Admin – Login Page

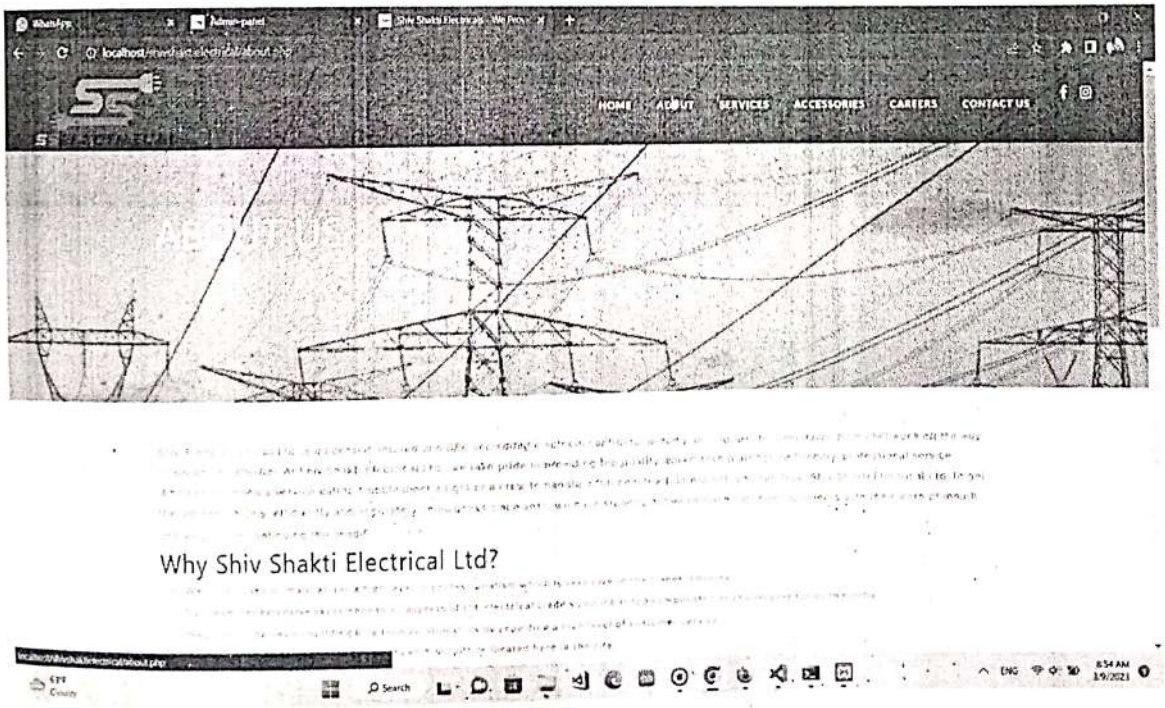


- Admin – Devloper Name

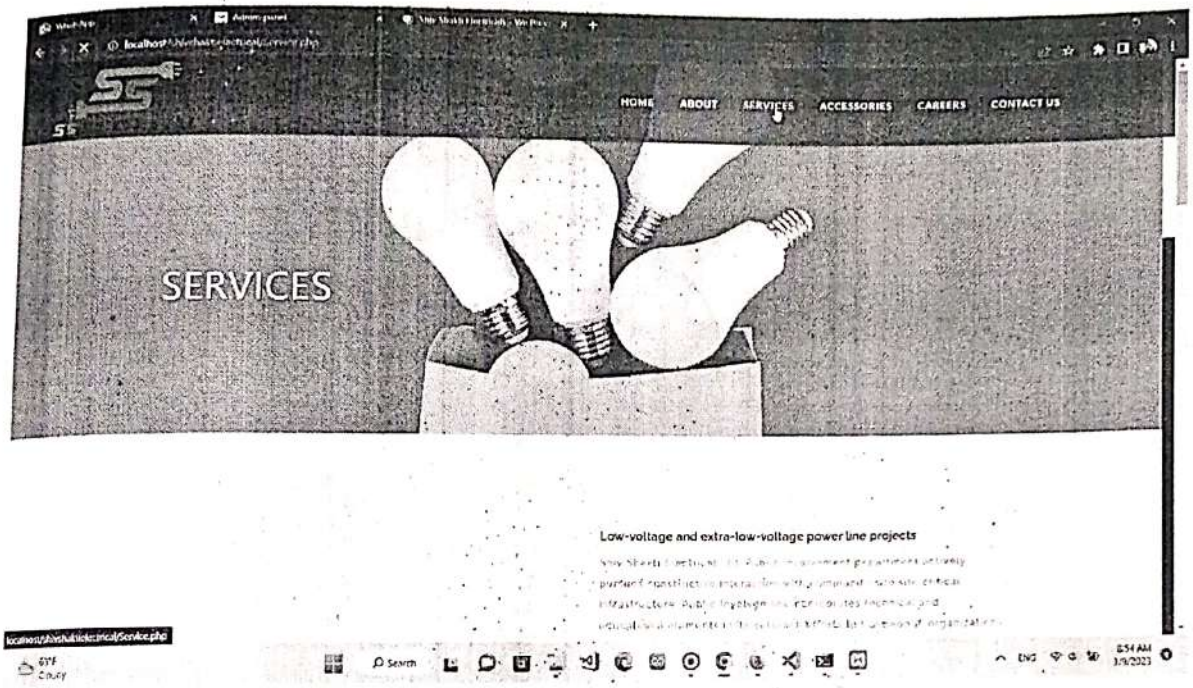


- Admin – DashBoard

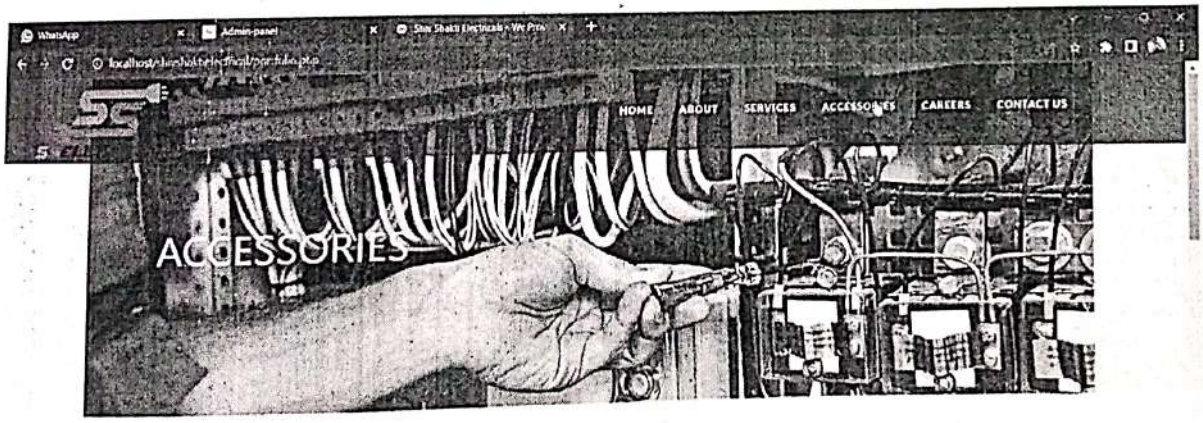
- Admin – About Us



- Admin – Services

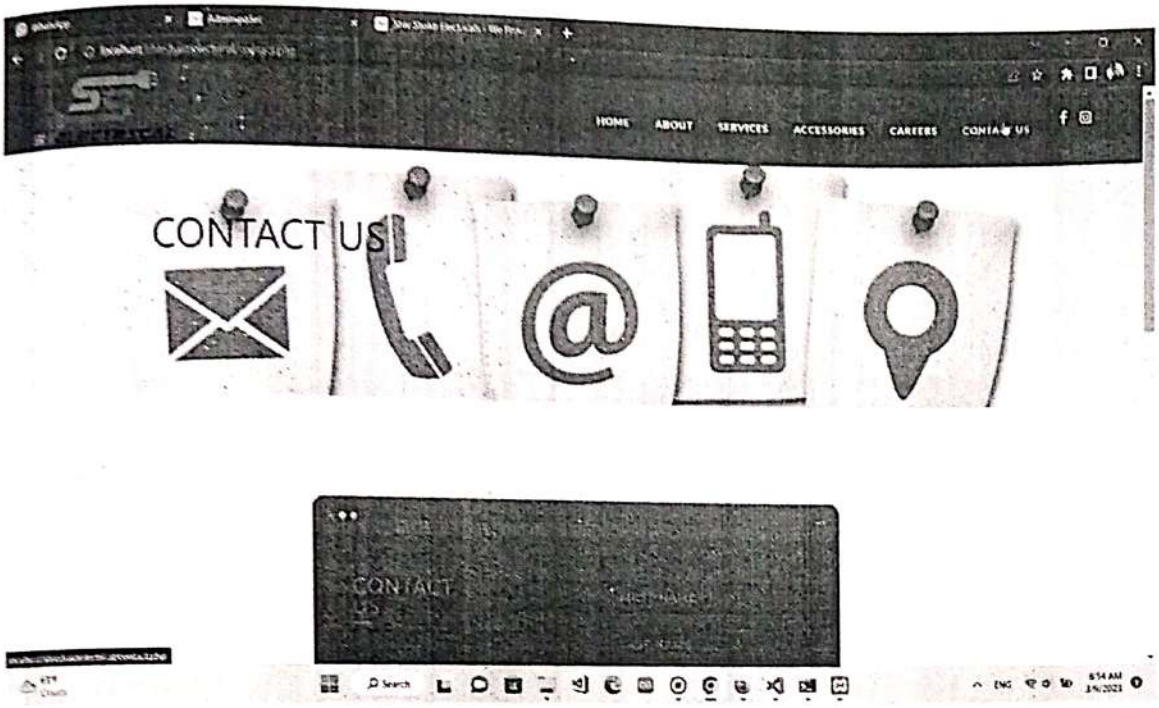


- Admin - Accessories



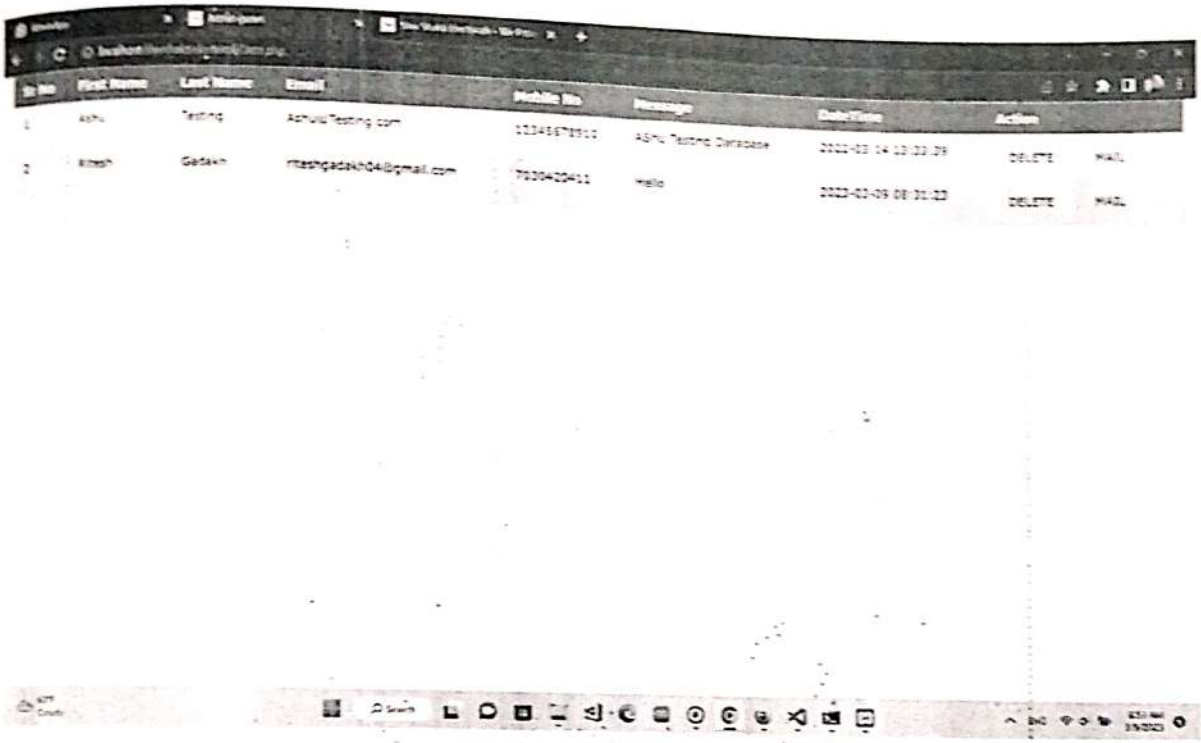
ALL WORK BY SHIV SHAKTI ELECTRICALS

Admin – Contact Us

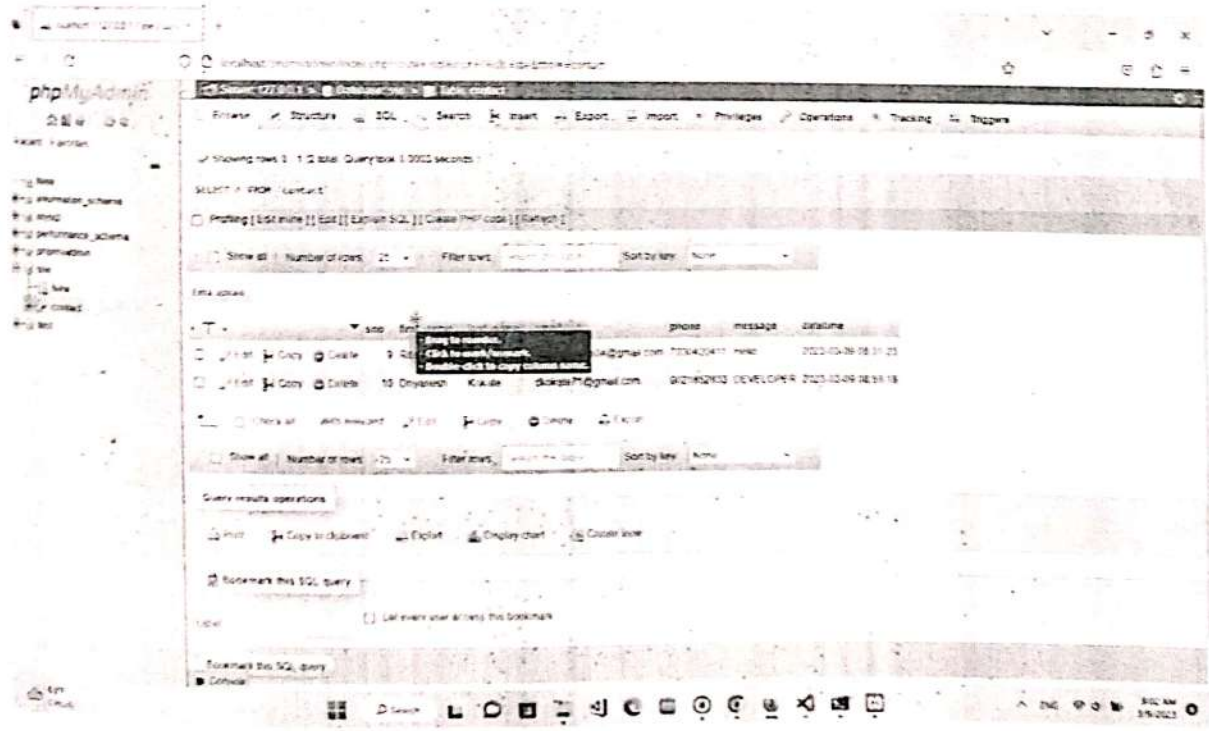


- Admin - Careers

Admin – Background databse



- Admin – Server Database



5. Implementation details

- PHP programming language
- MySQL database server
- HTML
- BOOTSTRAP

5.1 Software and hardware specification

Software:

Operating System :-	Windows , Linux , Unix, etc.
Front End :-	Javascript , Jquery ,Bootstrap HTML CSS (Cascading Style sheet)
Back End :-	MySQL , PHP
Browser :-	Chrome and others browser

Hardware:

Client side	Server Side
Browser Any Browser	Processor Pentium 2.0 and above
Processor Pentium 2.0 and above	RAM 1 GB
RAM 256 MB	Hard Disk Space 4 GB

6. Outputs and Report Testing

Test plan:

The project test plan is a document that outlines for project stakeholders the product functions to be tested, what specific tests will be performed, the approach to be taken for those tests, what to test and what not to test, how the tests will be performed, who will be responsible for performing each test, what results are expected. Testing is vital to the success of the system. Testing is the process of executing a program with the explicit intention of finding errors that is making the program fail. The tester maybe an analyst, programmer or a specialist trained for software testing.

Black box testing:

The black box is a powerful technique to check the application under test from the user's perspective. Black box testing is used to test the system against external factors responsible for software failures. This testing approach focuses on the input that goes into the software, and the output that is produced. The testing team does not cover the inside details such as code, server logic, and development method. Black box testing is based on the requirements and checks the system to validate against predefined requirements.

White box testing:

White box testing refers to a scenario where (as opposed to black box testing), the tester deeply understands the inner workings of the system or system component being tested. White box testing is a type of testing where the tester can see the

code. The main purposes of this type of testing are to test the inner workings of the software, as well as strengthen its security, and improve its usability and design. This is also known as structural testing as the tester chooses which inputs to test and follows their paths through the software to reach their expected outputs. White box testing is used in the unit, integration and systems phases of software testing.

7. Conclusion and Recommendation

In today's Web development, a good page design is essential. A bad design will lead to the loss of visitors and that can lead to a loss of business. In general, a good page layout has to satisfy the basic elements of a good page design.

8. Future Scope

A future website is not only beautiful but is highly functional, and has longevity built-in. I use only the latest web technologies design methodologies such as responsive web design, HTML5, and progressive enhancement through CSS3 to craft your business's online presence.

9. Bibliography and References

Design and implementation of an online self-training system for the Computer System Platform course

- W3School.com
- sourcecode.in.
- bootrap.com
- www.tutorialspoint.com
- www.google.com
- www.youtube.com

THANK-YOU

G.M.D. ARTS, B.W. COMMERCE
& SCIENCE COLLEGE,
SINNAR.

DEPARTMENT OF COMPUTER SCIENCE

A PROJECT REPORT ON

"Electronic Shop System"

Submitted by:
Jaju Vinayak Sudarshan
Daware Saurabh Satish

Guided by:
(SMT.N.V. LAHAMAGE)

G.M.D. ARTS, B.W. COMMERCE & SCIENCE COLLEGE, SINNAR.

CERTIFICATE

This is to certify that,

Jaiu Vinavak Sudarshan
Daware Saurabh Satish

Student of B.Sc. Computer Science has satisfactory completed Project work on **"Electronic Shop System",** towards partial fulfilment of degree course affiliated to Savitribai Phule Pune University for the Academic Year 2022-2023 at G.M.D. ARTS, B.W. COMMERCE & SCIENCE COLLEGE, SINNAR.

Project Guide
(Smt.N.V.Lahamage)

Head of Department
(Smt.N.V.Lahamage)

G.M.D.ARTS, B.W. COMMERCE & SCIENCE COLLEGE SINNAR 422 103

Internal Examiner

15/5/23

External Examiner

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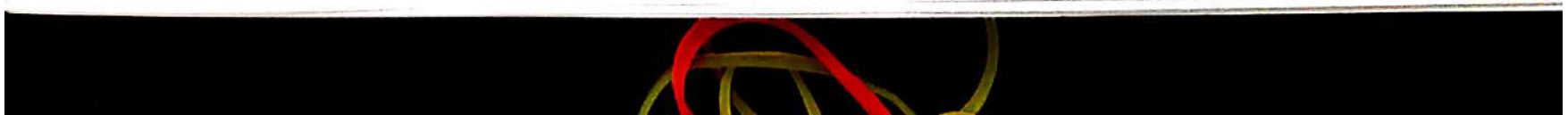

Introduction

Electronic Shop Management System

The main purpose for creating this Electronic Shop Management System software application is to automate all management and works of the electronic shop. This maintains the purchasing, sales, stocks, service, employee payroll and reports. This application will reduce the manual operation required to maintain all the records of purchasing, sales and service.

This Electronic Shop Management System Software application allows you to search a number of items available in stocks and also generates sales and purchasing reports. It also keeps the track of servicing Hence its main intension is to computerize all the transaction of electronic shop. There is no need of internet connection since it will be a offline project.

Customer, Products, Billing Generation: Automate the current manual bill generation system and maintain the searchable customer, products database and product invoice.

Report Generation: A Report Generation system will be developed for the user and management of Invoicing System. This system will have both details and summary type reports for analysis the sales volume, sales trend, and service records.

1. Abstract

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• Scope:

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Acknowledgements

It gives me immense pleasure to express my gratitude to all those individuals who were associated with project.

I would like to express my sincere thanks, firstly Principal Navnath Pawar, and to project guide Savita Kurkute for their valuable guidance in completion ELECTRONIC SHOPEE SYSTEM

The people at Queue deserve a large measure of praise for their patience, perseverance , and hard work . I would especially like thank Komal Daware and Arti Navale for their on-going support, guidance, and impressive technical skills. Many other people at Queue have also worked very hard on this project, and they are to be congratulated on the outcome.

This project would not have been possible without the strenuous efforts and prodigious technical knowledge of the entire working team. I am grateful for their individual contributions, each of which was indispensable.

1.PROBLEM DEFINITION:

- ✓ System security is password dependent, if security about password information is not maintained, system could be in great danger.
- ✓ System can not provide validity to system printed papers as in manual system signed and stamped papers have.
- ✓ If system is not protected from computer viruses ,infection may result in permanent data loss or total system failure which may cause extensive damage to the organization.

2.EXISTING SYSTEM:

- Electronic shop has to provide the required product types to the customer.
- The sales person gives various details about the electronic product then customer analyzed and finally select the product. He/She paid payment to the accountant and take bill.
- Manager gives order to the supplier and supplier provides product of various companies to the electronic shop.
- Accountant pay bill to the supplier.

• Disadvantages of the present system:

- ✓ Customer details have to be stored in register which is written manually. There are possibility of being mistake.
- ✓ There is a problem if record has to be change or to be search.

3.Proposed System:

- Advantages of the system:
  - ✓ It is less time consuming.
  - ✓ User can maintain records of the available stock very easily.
  - ✓ User can maintain all the records of all the transaction.

Scope of the System:

- ✓ Help to organized the problems available in the shop.
- ✓ To maintain the details of the stock.
- ✓ Very easy to handle and user friendly system to save time and efforts.
- ✓ Provides better services to the customer.
- ✓ Generation of printed bill.

4.Fisibility study:

The main purpose of feasibility study is to determine whether the software system request is feasible or not.

1.Feasibility study:

A computerized system will be technically more effective than the existing manual system .'Electronic Shop' system has all the requires hardware and software needed for the development of the proposed system.

2.Ecomical Feasibility study:

It is a important because management must approve the budget of the system and this feasibility determines cost and benefits of the system.

3.Operational Feasibility study:

In this case operational implementation cost is considered. This system is being develop for the 'Electronic Shop' management.

System Specification

Programming Language:

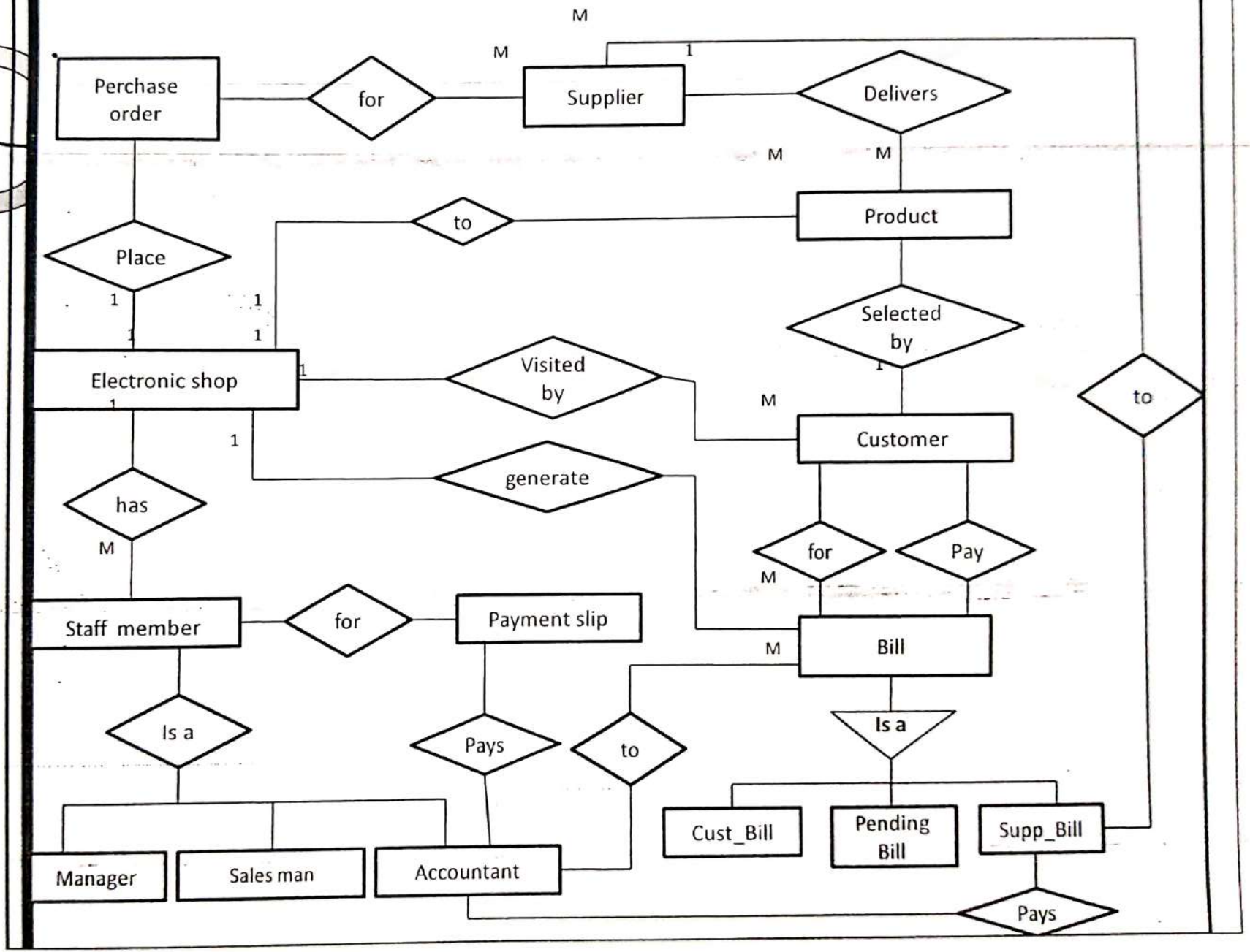
Front End : Java

Back End : My SQL WorkBench

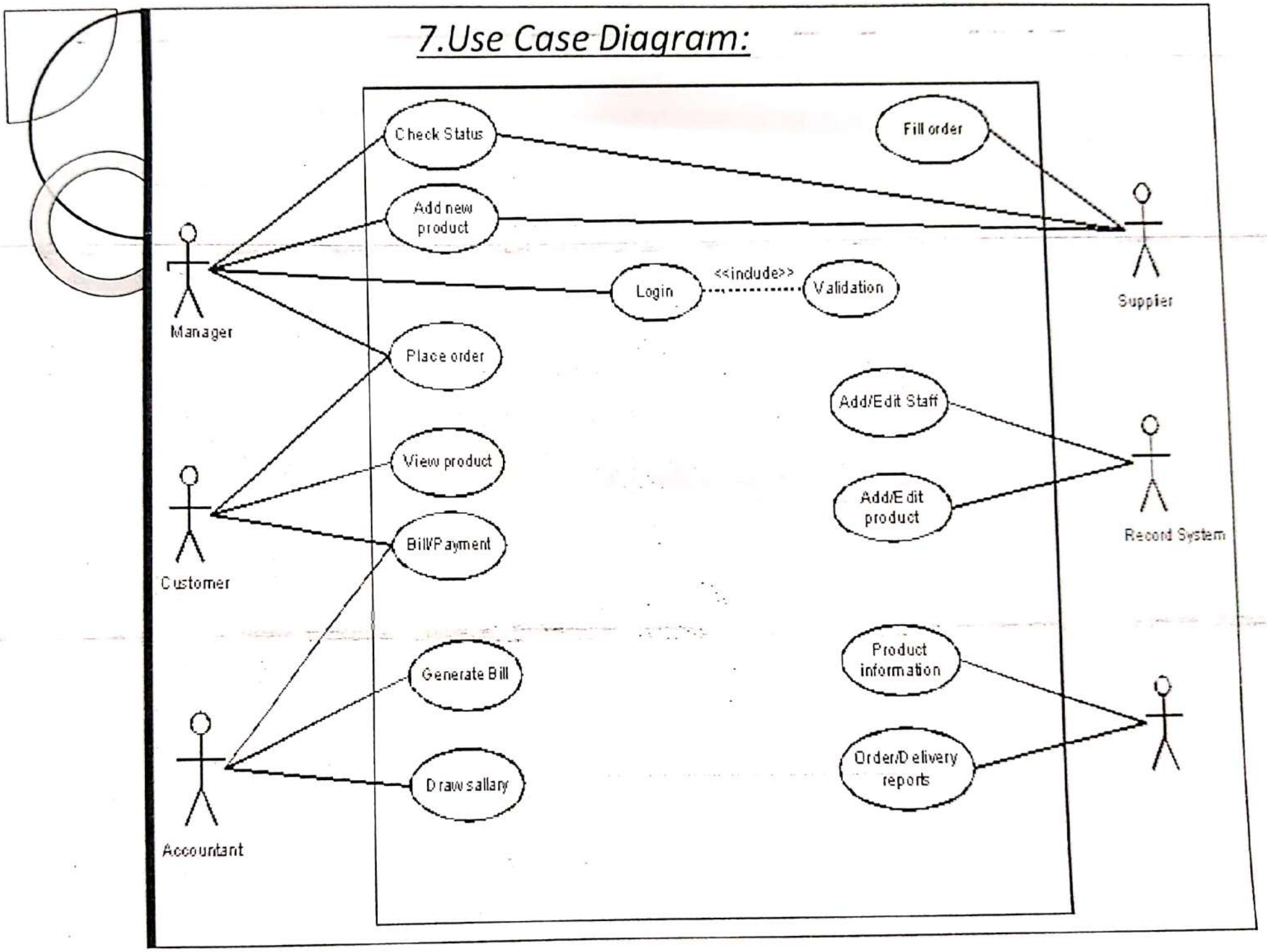
Project Category : Stand Alone/Software Application/Java project

Modules of Electronic Shop Management System

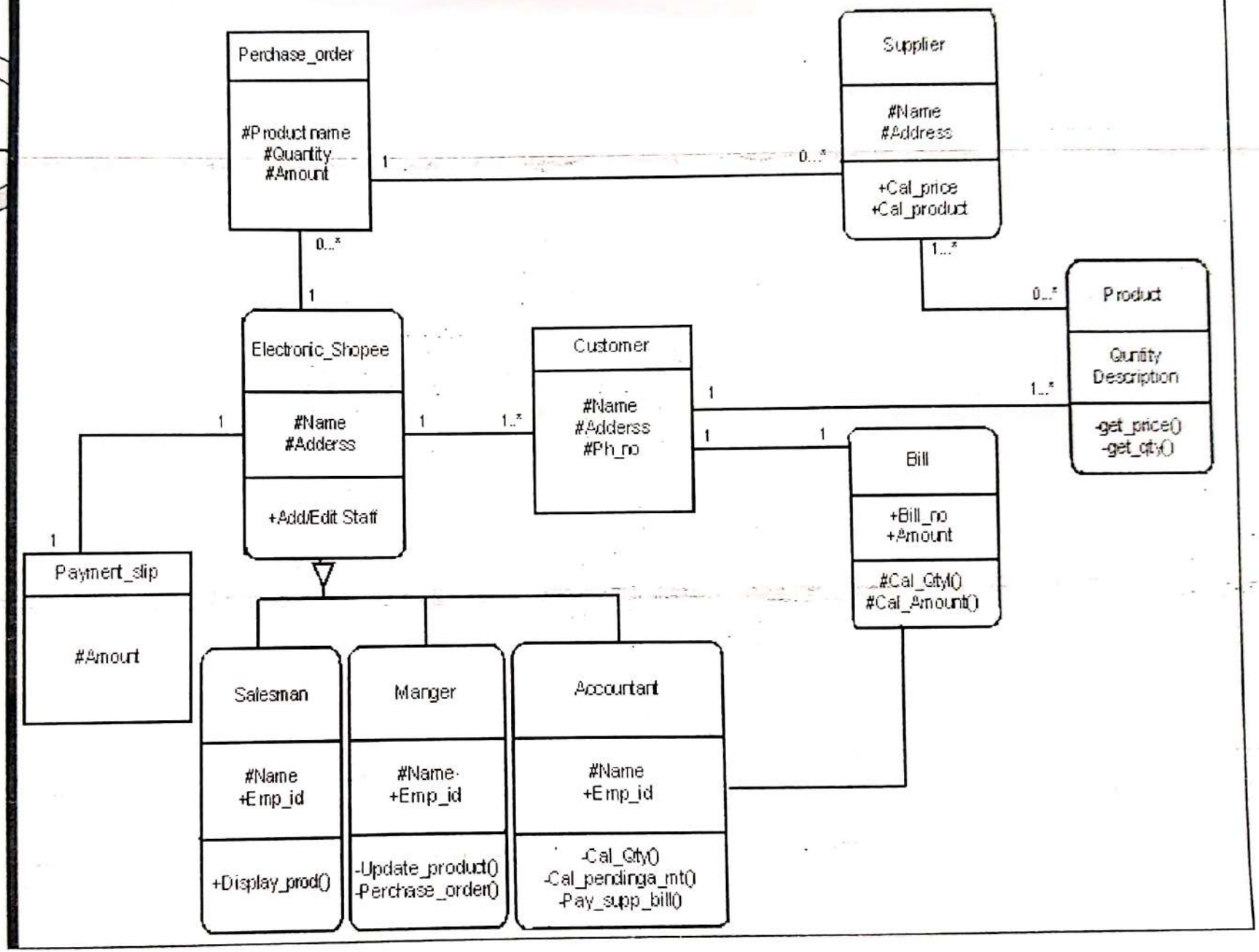
6.Entity Relationship Diagram



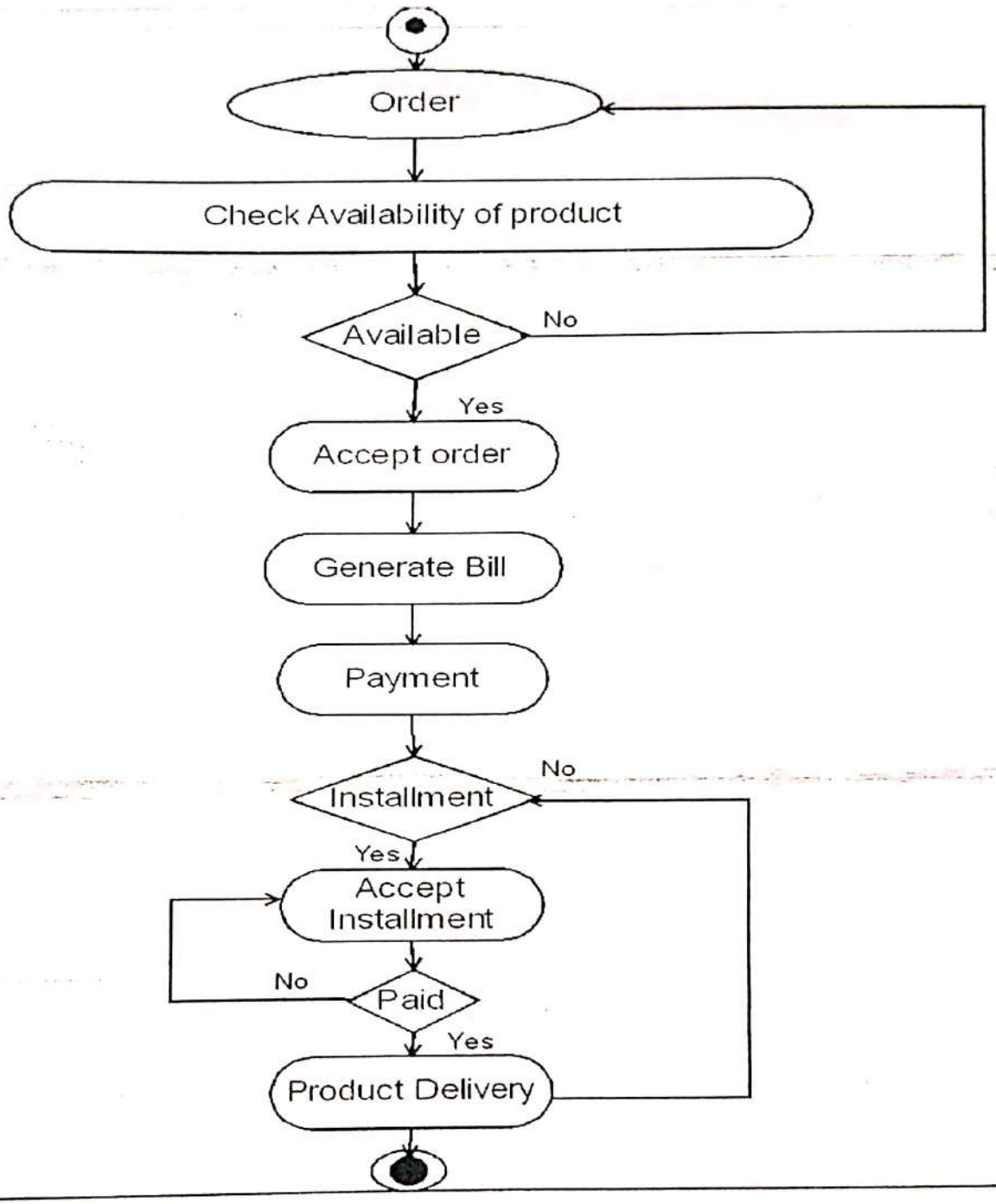
7.Use Case Diagram:



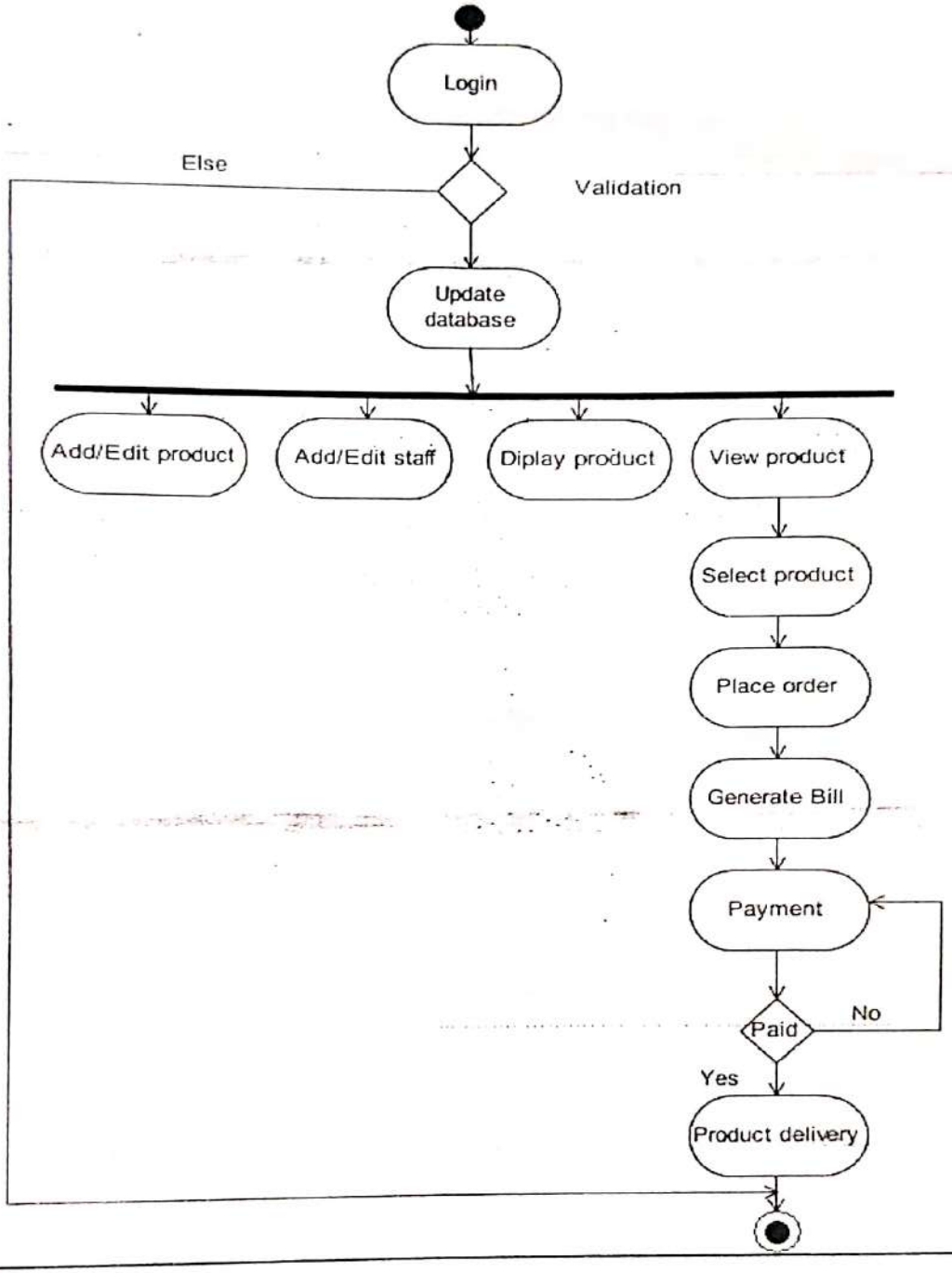
8.Class Diagram:



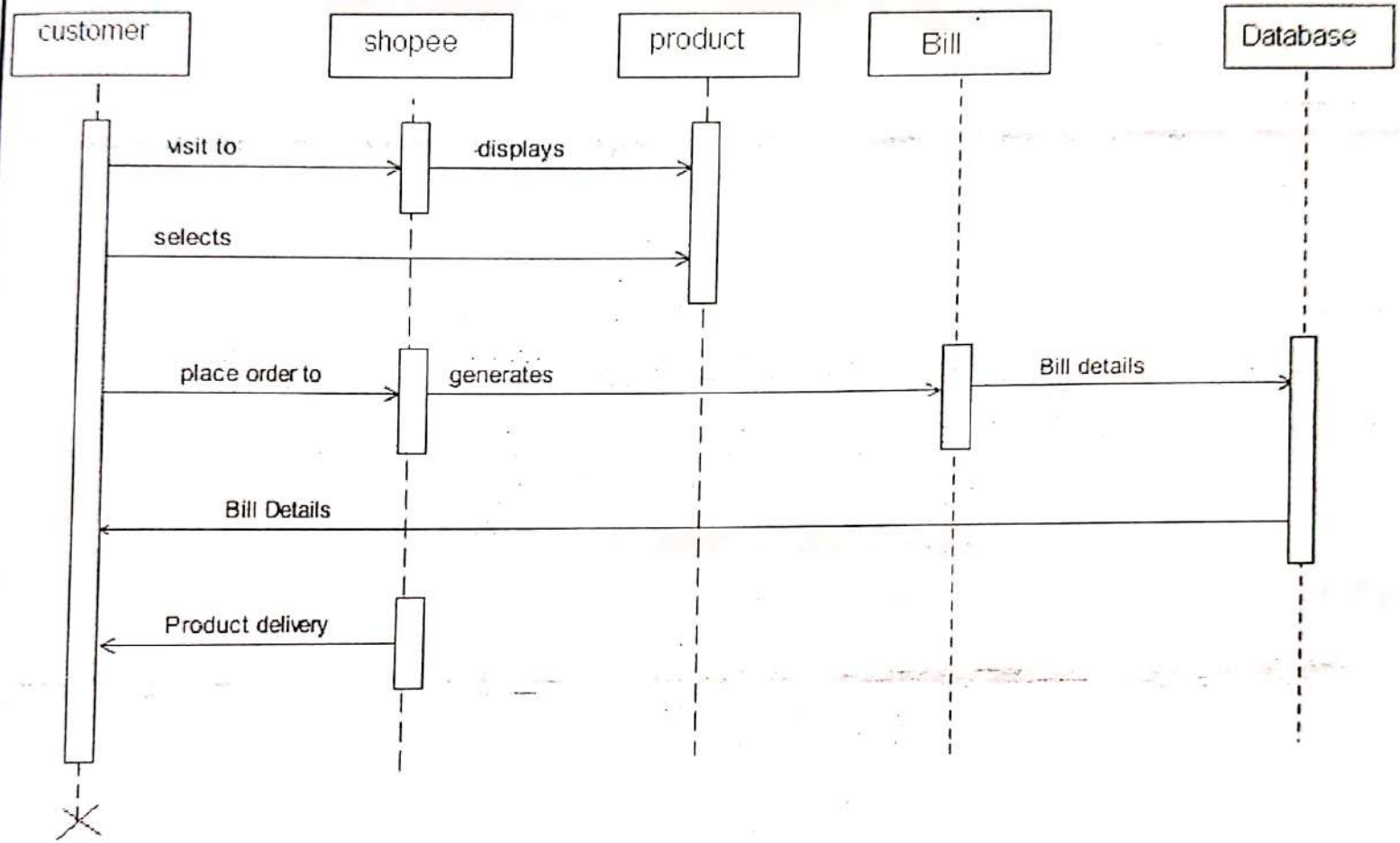
9.Activity Diagram : Supplier



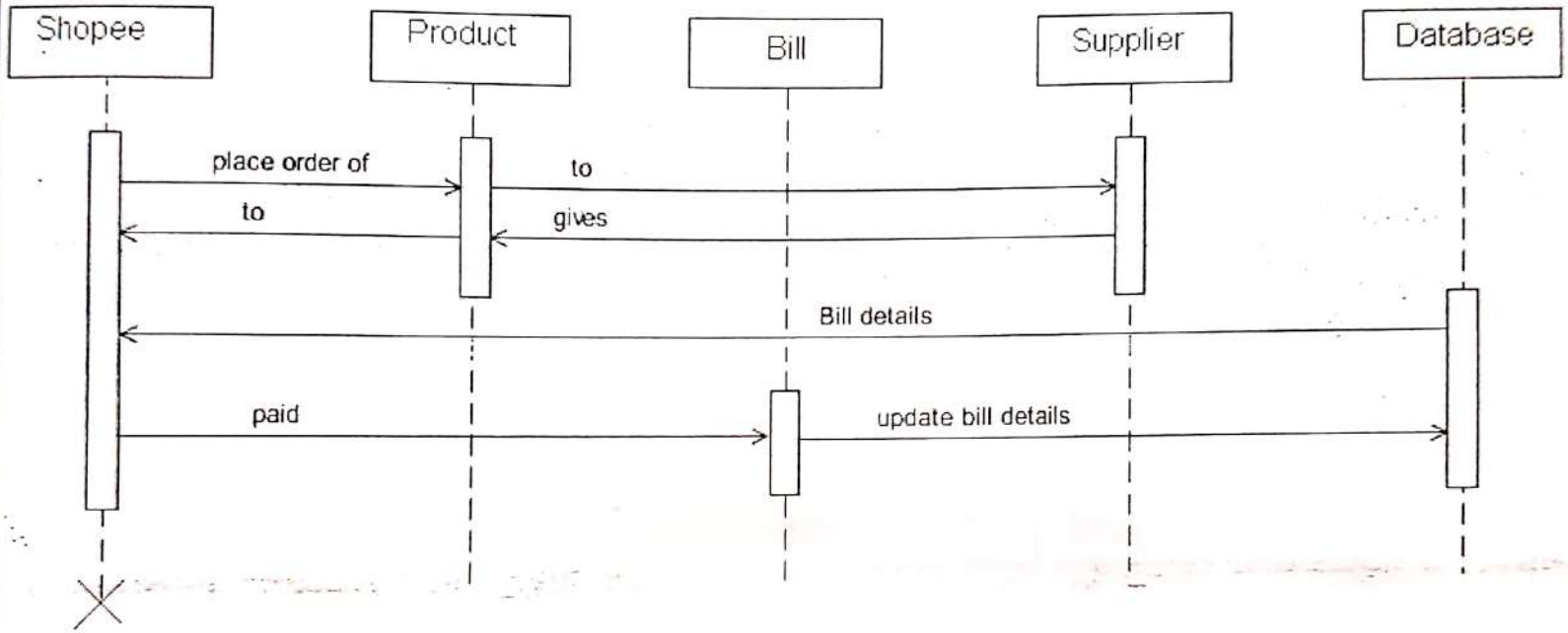
10.Activity Diagram : Customer



11.Sequence Diagram : Customer Order



12.Sequence Diagram : Supplier Order



13.Data Dictionary

Login:

Field	Datatype	Discription	Keys	Size
Username	Text	Name of User	-	5
Password	Text	Password	-	5

Customer:

Field	Datatype	Discription	Keys	Size
Cust_id	Number	Customer id	PK	5
Cust_name	Text	Customer name	-	15
Cust_addr	Text	Customer address	-	35
Cust_phno.	Number	Customer phone no.	-	10

Product:

Field	Datatype	Discription	Keys	Size
Prd_id	Number	Product id	PK	5
Prd_name	Text	Product name	-	25
Unit _price	Number	Price of product	-	6
Man_date	Date	Manufacture date of Product	-	8
Company	Text	Company name of Product	-	15
Model_type	Text	Model of Product	-	15

Employee:

Field	Datatype	Discription	Keys	Size
Emp_id	Number	Employee id	PK	5
Emp_name	Text	Employee name	-	25
Emp_addr	Text	Employee address	-	35
Emp_phno	Number	Employee phone no.	-	10
Emp_Type	Text	Employee type	-	10

Supplier:

Field	Datatype	Discription	Keys	Size
Supp_id	Number	Supplier id	PK	5
Supp_name	Text	Supplier name	-	25
Supp_addr	Text	Supplier address	-	35
Supp_phno	Number	Supplier phone no.	-	10

Purchase Order:

Field	Datatype	Discription	Keys	Size
PO_id	Number	Purchase order id	PK	5
Prd_id	Number	Product id	FK	5
SO_id	Number	Sales Order id	FK	5
Qty	Number	Quantity of Product	-	3
PO_date	Date	Purchase order date	-	8

Customer_Bill:

Field	Datatype	Discription	Keys	Size
Bill_no	Number	Customer bill no.	FK	5
Cust_name	Text	Customer name	FK	15
Date	Date	Date of delivery	-	8
Company	Text	Company name of product	FK	10
Model_type	Text	Product model	FK	15
Qty	Number	Product quantity	-	3
Amount	Number	Total amount of product	-	6
Tax	Number	Tax on product	-	2

Supplier Bill:

Field	Datatype	Discription	Keys	Size
Bill_no	Number	Supplier bill no.	FK	5
Supp_name	Text	Supplier name	FK	15
Date	Date	Date of delivery	-	10
Company	Text	Company name of product	FK	10
Model_type	Text	Product model	FK	15
Qty	Number	Product quantity	-	3
Amount	Number	Total amount of product	-	6
Tax	Number	Tax on product	-	2

Pending_Bill:

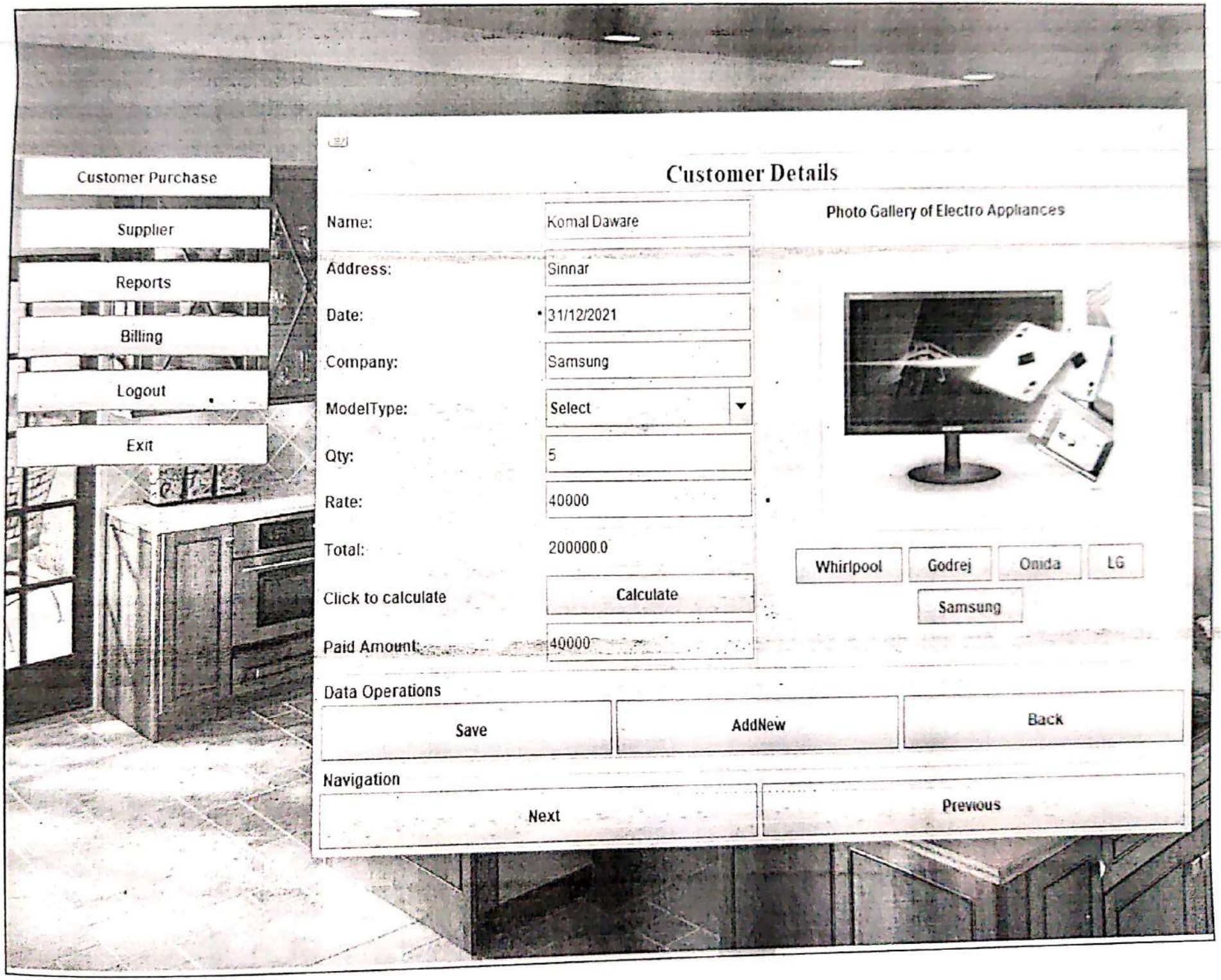
Field	Datatype	Discription	Keys	Size
Bill_no	Number	Customer bill no.	FK	5
Cust_name	Text	Customer name	FK	15
Date	Date	Date of delivery	-	8
Company	Text	Company name of product	FK	10
Model_type	Text	Product model	FK	15
Qty	Number	Product quantity	-	3
Total Amount	Number	Total amount of product	-	6
Pend_amt	Number	Pending amount	-	5
Tax	Number	Tax on product	-	2

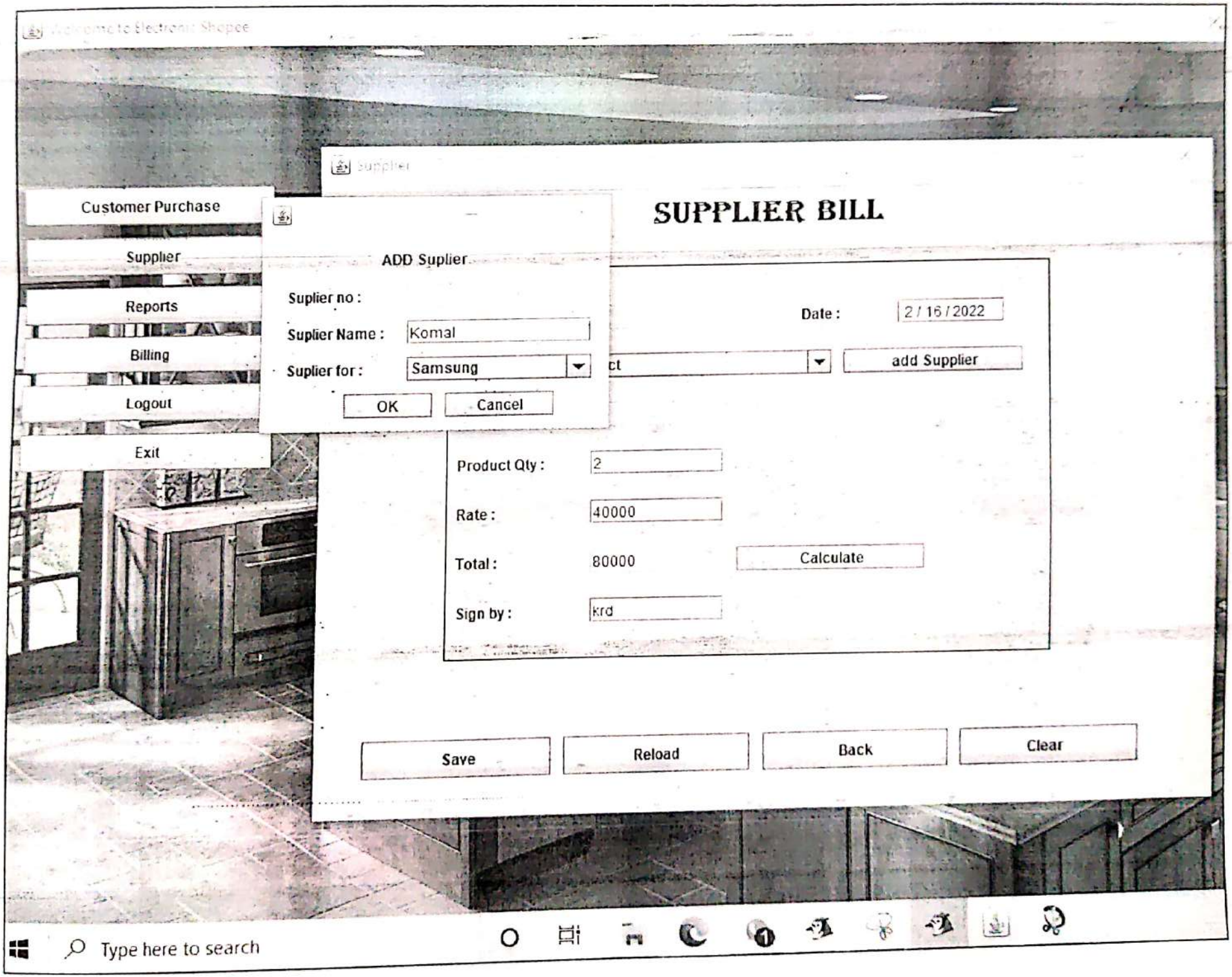
ELECTRONIC SHOPEE SYSTEM

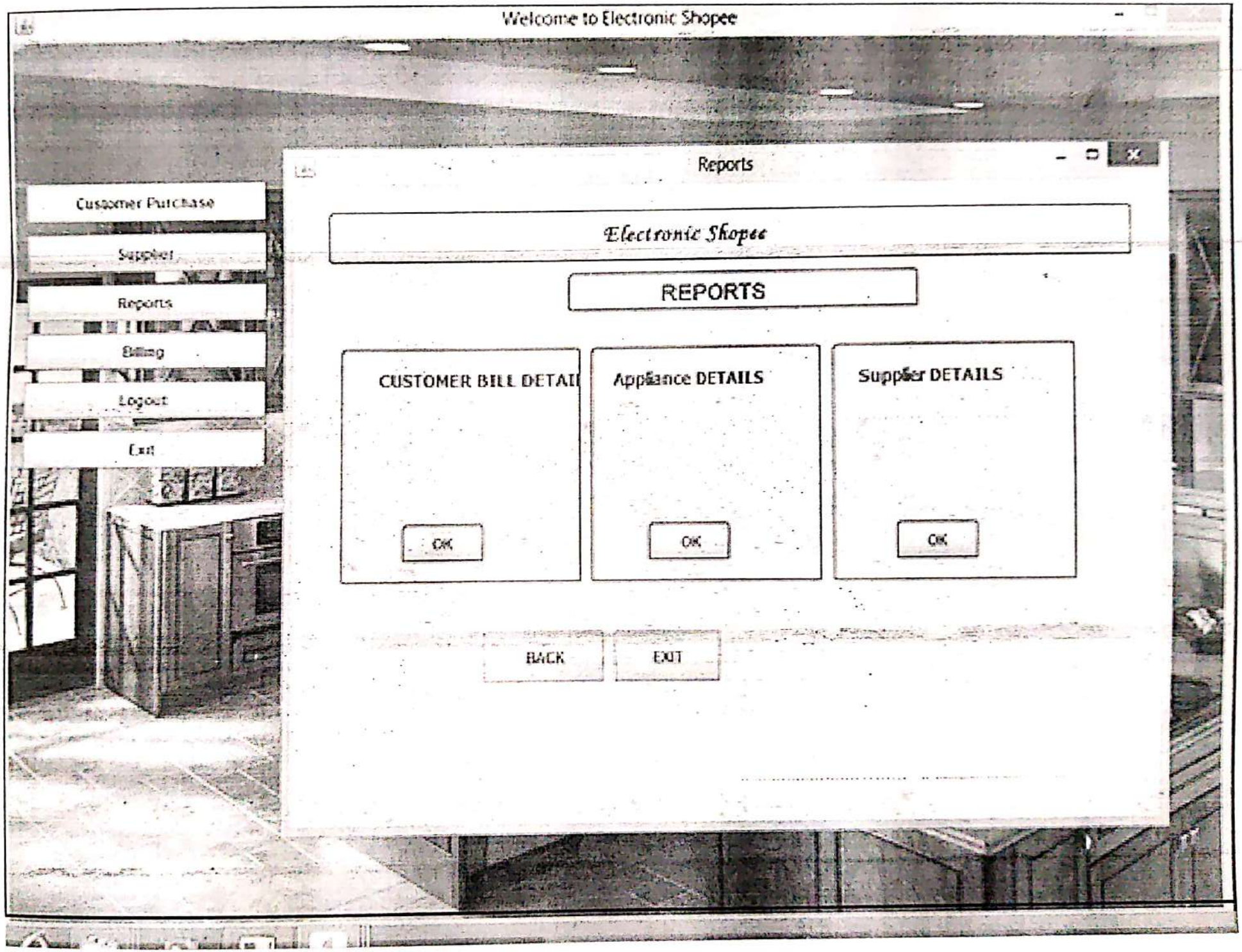
Login Name komal

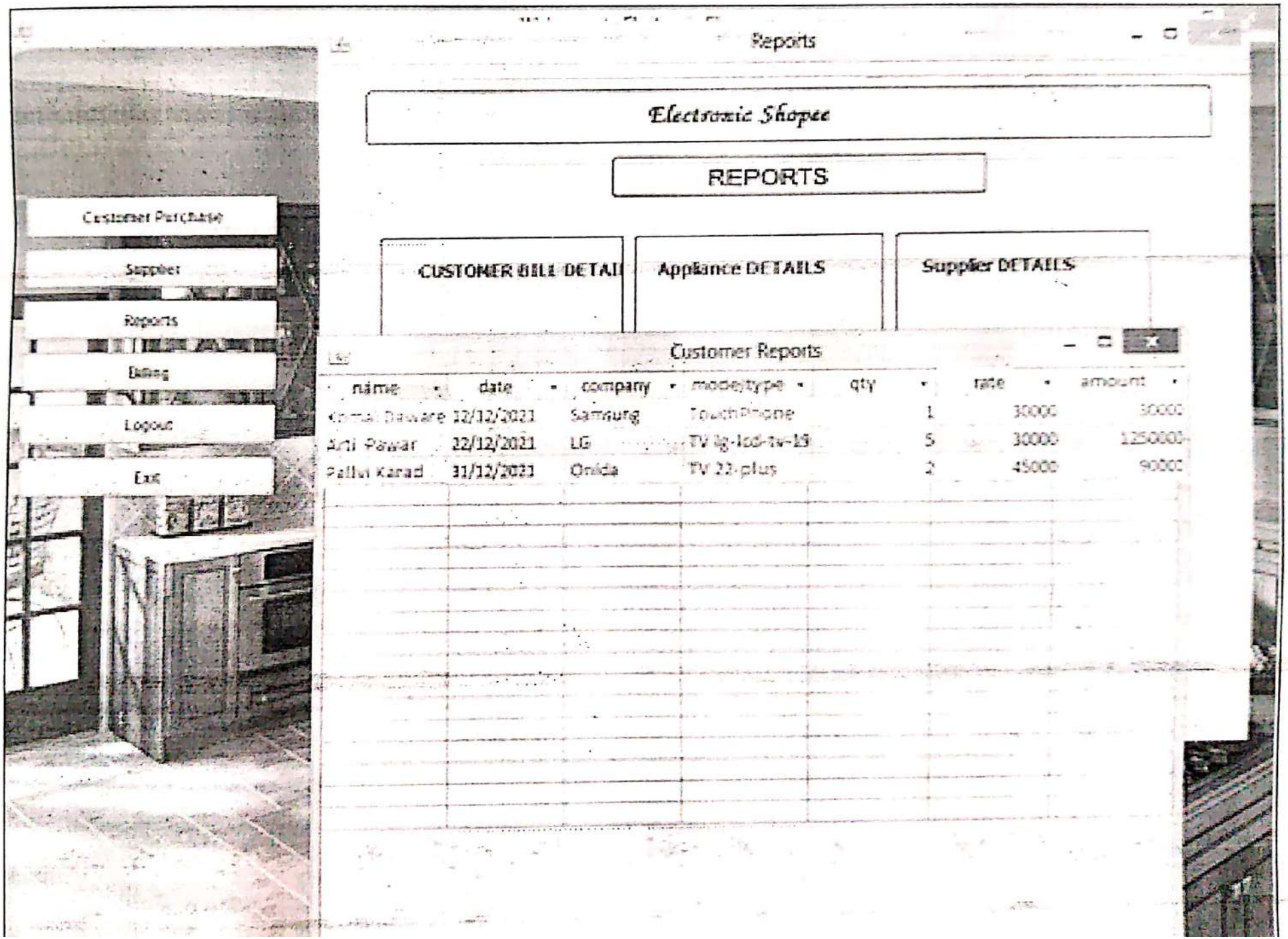
Password •••••

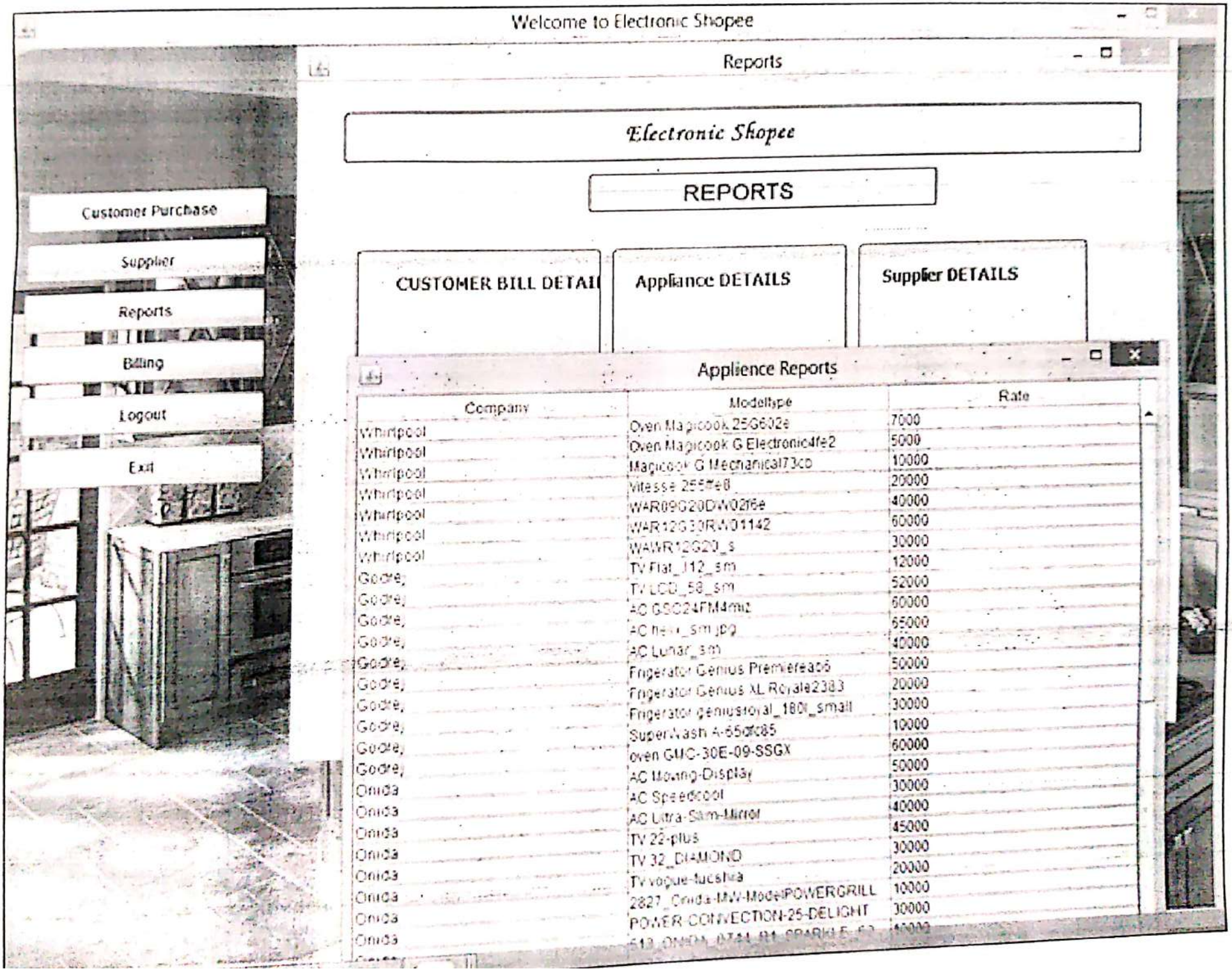
LOGIN CLEAR CHANGE PASSWORD

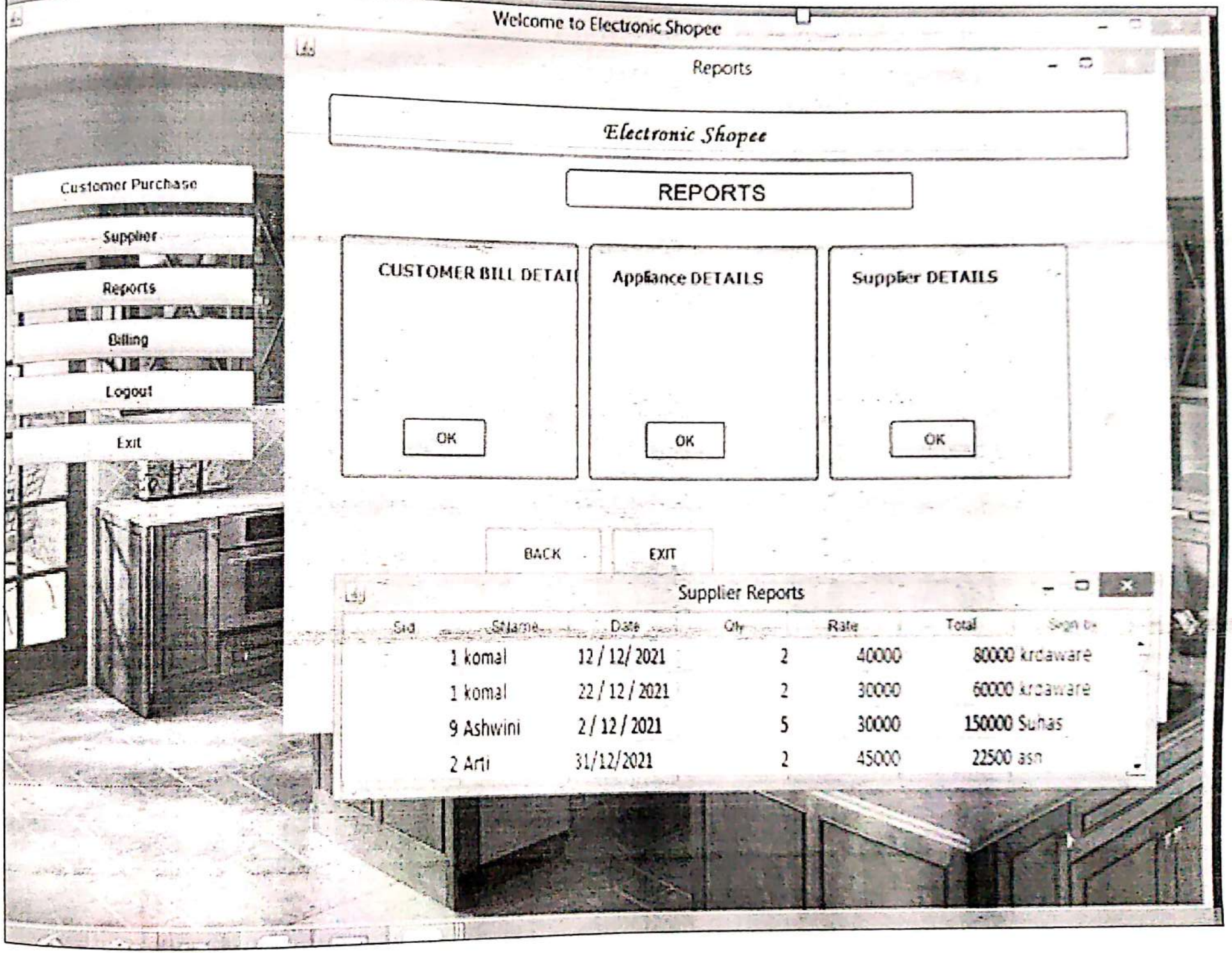


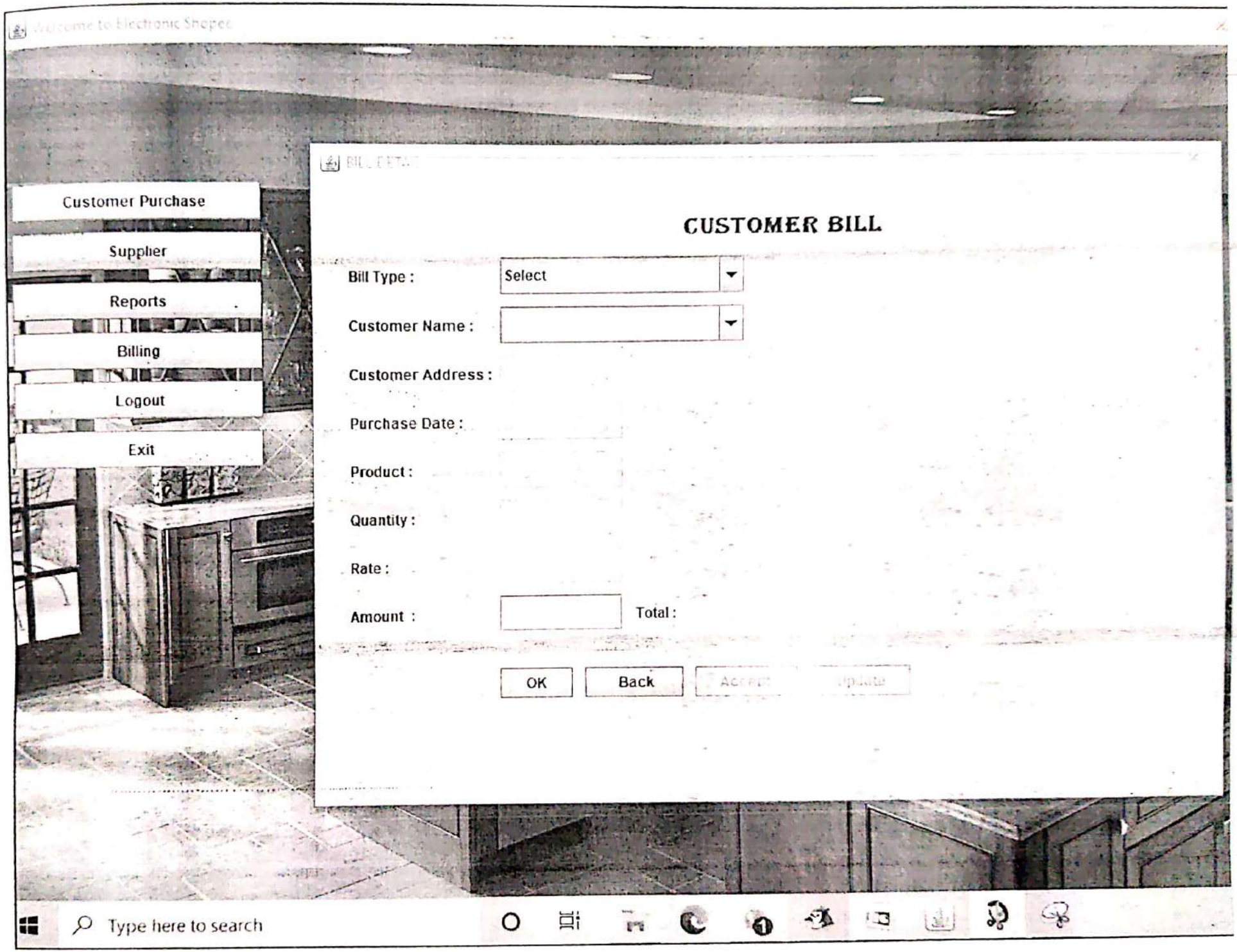












THANK YOU

G.M.D. ARTS, B.W. COMMERCE & SCIENCE COLLEGE, SINNAR.

Department Of Computer Science

A Project Report on

"Employee Management System"

Submitted by :
Shubhangi Pawar
Gaytri panchave

Guided by:
(SMT.N.V. LAHAMAGE)

Savitribai Phule Pune University 2022-2023

M.V.P. Samaj's.

G.M.D. ARTS, B.W. COMMERCE & SCIENCE COLLEGE, SINNAR.

CERTIFICATE

This is to certify that,

Pawar Shubhangi

Panchave Gayatri

Student of B.Sc. Computer Science has satisfactory completed Project work on "Employee Management System ", towards partial fulfillment of degree course affiliated to Savitribai Phule Pune University for the Academic Year 2022-2023 at G.M.D. ARTS, B.W. COMMERCE & SCIENCE COLLEGE, SINNAR.

Project Guide
Prof.SMT.N.V.Lahamage

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Head Dept. of Computer Sci
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INDEX

Employee management system

ABSTRACT

This report includes a development presentation of an information system for managing the staff data within a small company or organisation. The System as such as it has been developed is called Employee ManagementSystem. It consists of functionally related GUI (application program) and database.The choice of the programming tools is individual and particular.

Keywords

Information system, Database system, DBMS, parent table, child table,table fields,primary key, foreign key, relationship, sql queries, objects, classes,controls.

INTRODUCTION

This chapter gives a brief theoretical preview upon the database information systems and goes through the essence of the problem that should be resolved.

Most of the contemporary Information systems are based on the Database technology as a collection of logically related data, and DBMS as a software system allowing the users to define, create, maintain and control access to the database.The process of constructing such kinds of systems is not so simple. It involves a mutual development of application program and database. The application program is actually the bridge between the users and the database, where the data is stored. Thus,the well-developed application program and database are very important for the reliability, flexibility and functionality of the system.The so defined systems differentiate to each other and their development comprises a great variety of tasks to be resolved and implemented.

Information system suggests a computer technology to be used in order to provide information to users in an organisation (for instance), as for the purposes of data transformation into useful information; computer hardware and software are designed and used .A particular case is the Human Resources Information System development. These kinds of systems are responsible for storing data of the staff within an organisation and generating reports upon request.

Such a system could be integrated with other Information systems or modules Accounting

Information System (AI) ± designed to transform financial data into information, or Management Information.

System (MIS) that provides decision-oriented information to managers, and so. Organisations depend on Information Systems in order to stay competitive.Productivity, which is crucial to staying competitive, can be increased through better Information

Systems.´

2.1 MOTIVATION

The purpose of an employee management system is to help improve workforce productivity, identify ways to engage and retain talent, and alleviate administrative burdens for HR

professionals. Achieving greater efficiency through the use of technology can also help control costs and minimise compliance risks.

Worker management describes the process by which employers ensure optimal performance from their employees. This often requires a combination of traditional managerial techniques, like coaching and positive reinforcement, as well as state-of-the-art technology, which uses data to help monitor engagement trends, create workforce strategies and deploy them effectively.

2.2 PROBLEM STATEMENT

This report's documentation goes through the whole process of both application program and database development. It also comprises the development tools that have been utilised for these purposes.

Problem Discussion

This system should consist of an application program, on one hand, and a database(repository of data) on the other. The program should perform the basic operations upon the database as retrieving, inserting, updating and deleting data. Any Additional Functionality is a goal of a further module development.It is a kind of strategy to start the development from designing and constructing the database, as this structure will determine the further structure of the application program.The logical database model (tables, their content and the relationships between them) should respond to the given task and cover the basic requirements.The Interface of the program should be user-friendly, and the program should be as easy for use as it is possible.Both controls and forms should logically and functionally be related within the program and fully respond to the structure of the database.Another problem is establishing the connections with the database, every time,when query is needed to be performed upon it. Exception-handling should also be taken into account during the systems development due to eventual exceptions that may occur.

Report Overview

The overview and its subsections will turn the attention to the method for resolving the problem, the programming environments used for developing the system and the implementation of the operations performed upon the database.

- Overall Description
- Software Interface:User Interface

2.3 PURPOSE / OBJECTIVE GOALS

Employees are the backbone of any company; their management plays a major role in deciding the success of the organisation. Our QUEUE(our group name)understands this fact and therefore designed a unique and 100% functional employee management system. This system uses employee management software that helps in assembling,organising and managing the information of the employees as required by you. Every Organization has different employee management issues to be addressed, so we design customised employee information management system that could fit into your company requirement frame.Our QUEUE' suggests employee management system is not solely for big companies,but every organisation that requires managing of their HR needs or workforce.Employee management software makes easy for the employer to keep a track and check on the human resource department just by a click of the mouse from anywhere in the world thus making the work extremely easy for people having offices at different locations. It makes it easy to monitor the

workings of the employees and manage them.Employee information management helps in deciding the future management needs and any changes that have to be made for greater productivity. It keeps the records of the functions performed by the individual employee playing a vital role at the time of performance appraisal. Employee management software can carry out many functions like employee data analysis, employee monitoring, centralised employee database,management of the time sheet, etc.

2.4 LITERATURE SURVEY

Literature review consists of various sections that tell us about application and benefits of using this system.

2.5 SCOPE AND LIMITATIONS

In fixed scope, when you send us the enquiry, we determine the scope of work for your project upfront and give you pricing and timeline estimate upfront.Once you send us the enquiry, we analyse the same and reply to you with our understanding of your requirements along with the queries and suggestions. After we receive your clarifications, we finalise the scope of work, determine which technology will be used for this project and give you the timeline estimate. After we receive your approval on the pricing and timeline, we start with the project development which beginswith requirement analysis by the technical team. Once the project is complete in thelocal system, we deploy the project. Subsequently our 3QUEUE team does the quality testing of your project and after their approval we ask you to test the functionalities and after approval, we close the project.

LIMITATIONS

The major limitations of the project are as follows:

- **Due to the constraint of resources and time, the size of the project could not be increased.**

- **The project has been developed through utilising the records of the employees and other information available at certain organisations. The requirements gathered through various sources might not be properly reflected in the requirements analysis and the design documents due to limited knowledge and time.**

3 SYSTEM ANALYSIS

Employee management system to be developed such that it is capable of marking attendance of each employee. Data of users should be secured and must be accessed easily whenever required. Data to be structured such that it can be reused. Proper management of holidays to be done, which is an important concern in calculating salary of employees. Applications should be capable of giving salary, total working hours, overtime, present days at the end of month in just a click

3.1 EXISTING SYSTEM

Existing employee management system in the organisation still uses the ordinary classical methods which are merely based on pen-paper to record the data of their employees. Large quantities of registers are to be maintained for this purpose which results in downright waste of time in generating reports searching for employee's records and loss of data if any file is lost. It is also an arduous task for organisations as it is an expensive process. However, somewhere new technologies such as web based systems, Iot based systems are used but they also are costly and difficult to implement at some places. The other techniques that are in the market are dependent on facial recognition, biometric scan or card punching. But all of these require an external device to be installed in the working area, which is again a costly process and requires regular maintenance.

This project eliminates or reduces as much as possible the difficulties of the existing system and avoids errors while entering data. In comparison to the existing system it is cheaper, easy to implement, easy to use, no maintenance required, on time data and saves lots of time .

Disadvantages:

- Require external device, which is costly and require heavy maintenance - Needs an extra manual effort.

3.2 SCOPE AND LIMITATIONS OF EXISTING SYSTEM

Scope

Computerised employee management system is a web based application that can be accessed from anywhere within an operating system by the authorised user.The system would be centrally managed and controlled which is designed to run on the organisation.

Our project EMS is an online application where we create a website to check Number of employees in each branch, Employees records, Tasks and time frame, attendance records, salary details, etc.The employees can submit their attendance, and the managers can check employee

attendance and his task details, applying for leave etc. Also Branch Manager can calculate and payouts salary to his employees.Project can be developed for online services by which any employee can see their details anytime and anywhere.Our system does not include: Allocating dorms to employees of the project can be developed with a centralised database so that the data storage and backup services will be easy.

Limitation

Lack of sufficient information about the existing system because employers are not voluntary to give such full informationShortage of possible data collecting device and instrument. Such as sound recorder, digital cameraFinancial problemMissing of class when we gather the information.Shortage of time.

3.3. PROJECT PERSPECTIVE FEATURES

- **User- Friendly Interface. ...**
- **Time and Attendance Tracking. ...**
- **Performance and Productivity Tracking. ...**
- **Employee Scheduling. ...**
- **Employee Self-Service Portal. ...**
- **Automated Onboarding. ...**
- **Compliance Tracking. ...**
- **Security and Data Protection.**

3.4 STAKEHOLDERS

- ☐ Admin
- ☐ Employee

3.5 REQUIREMENT ANALYSIS

Functional requirements are the details and instructions that dictate how software performs and behaves. Typically, software engineers create and apply functional requirements to software during the development stages of a project to ensure their software is easy to use and operational. Functional requirements can vary in behaviours, features and protocols, depending on the user's industry. For example, a video game designer may use different functional requirements in software that focus on game design, while a teacher may use functional requirements that focus on student usability.

- Website
- Mobile app
- Customer management system
- Sales software
- Video game software

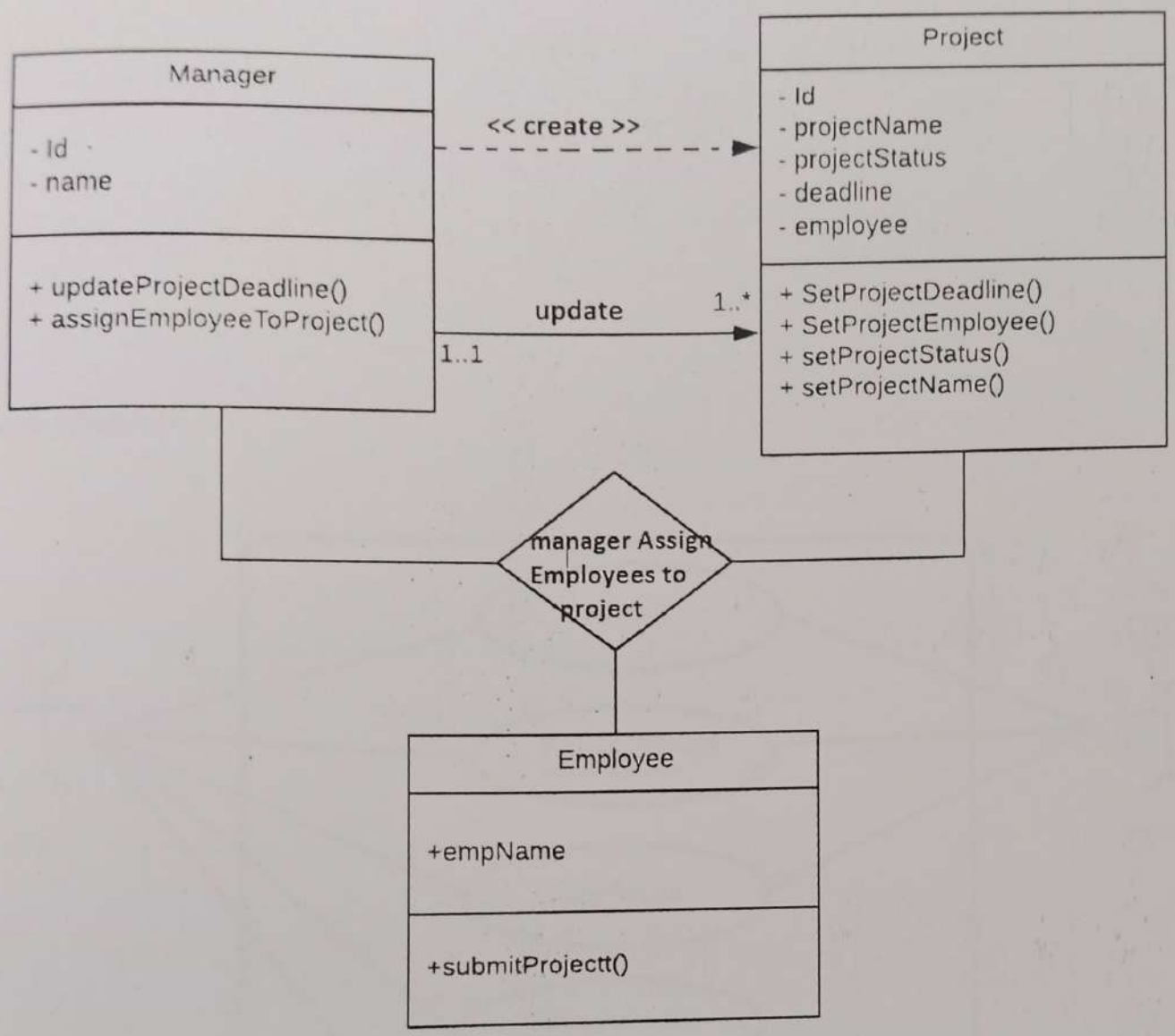
SYSTEM DESIGN

4.1 Design Constraints :

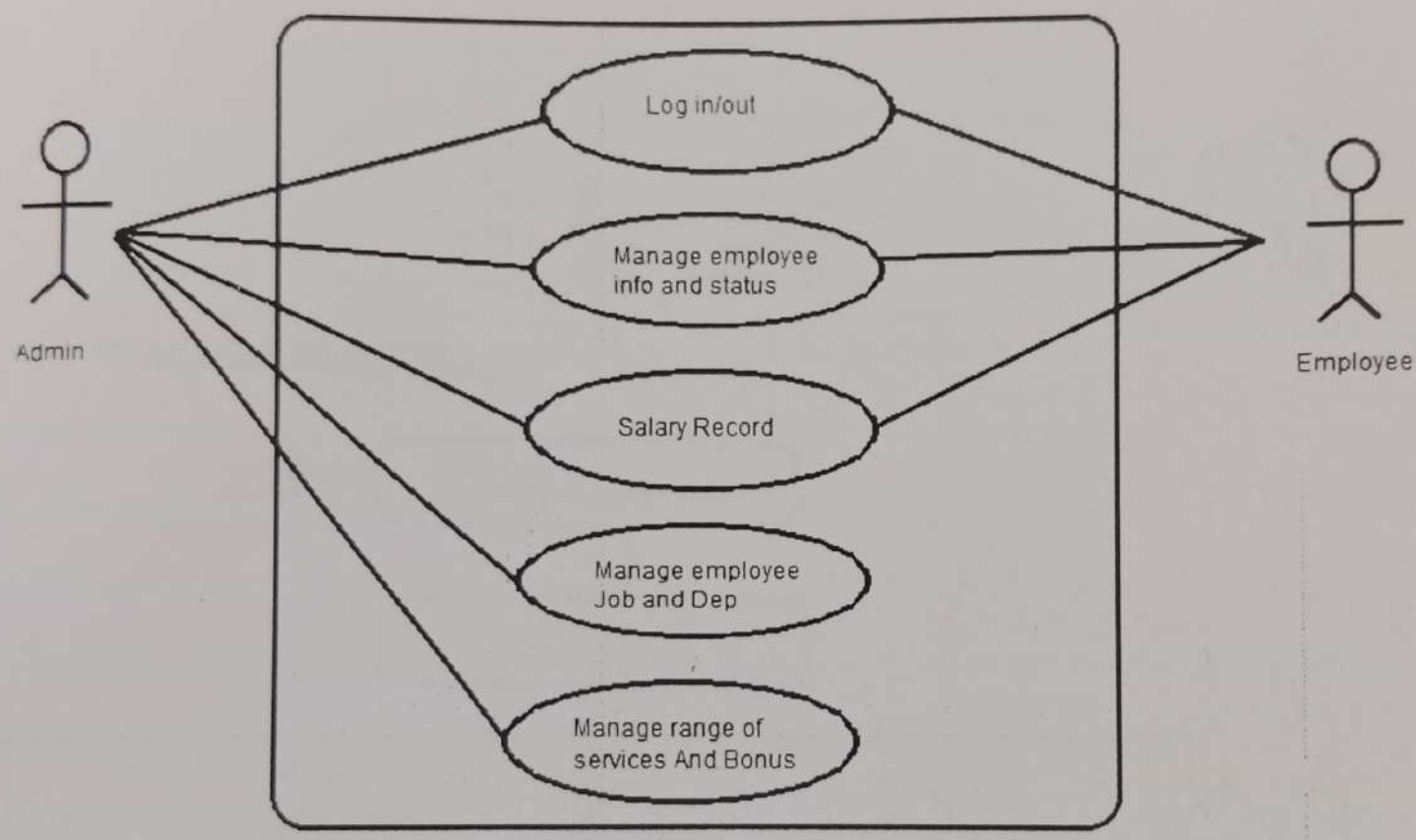
The logical model is Subject to review by both the management and the user who agree that the model does in fact reflect what should be done to solve the problem. System analysis is not a precise science. It is in fact more of an art, aided by scientific approach to find definition and recording data, gathering traditional structures is only one part of the system analysis, the next step is to examine the data, assess the situation and looking at the alternative

SYSTEM MODEL:

ER DIAGRAM:-

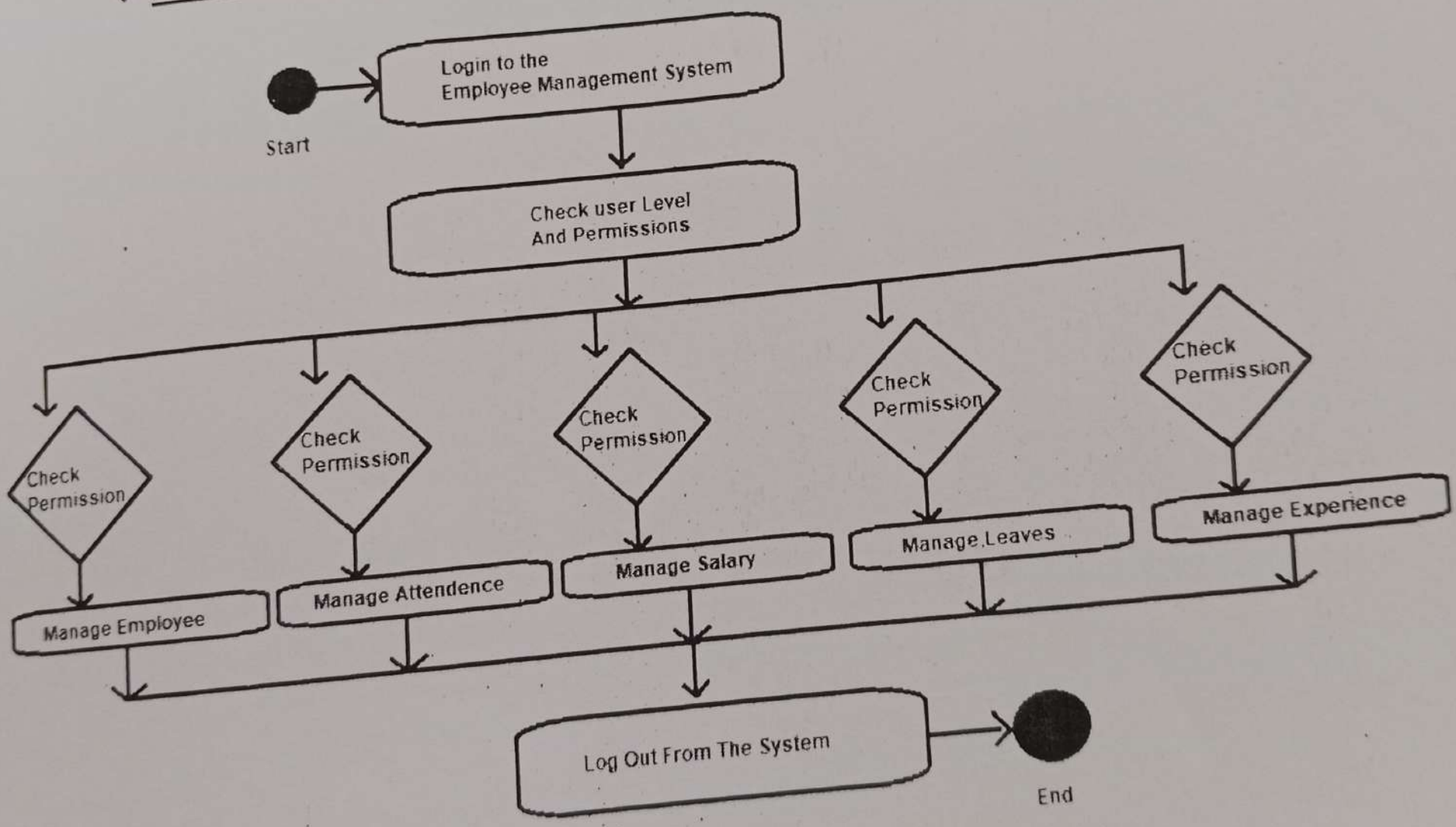

Manager
- Id
- name
+ updateProjectDeadline()
+ assignEmployeeToProject()
<< create >>
Project
- Id
- projectName
- projectStatus
- deadline
- employee
+ SetProjectDeadline()
+ SetProjectEmployee()
+ setProjectStatus()
+ setProjectName()
update
1..*
1..1
manager Assign Employees to project
Employee
+empName
+submitProjectt()

Class Diagram :-



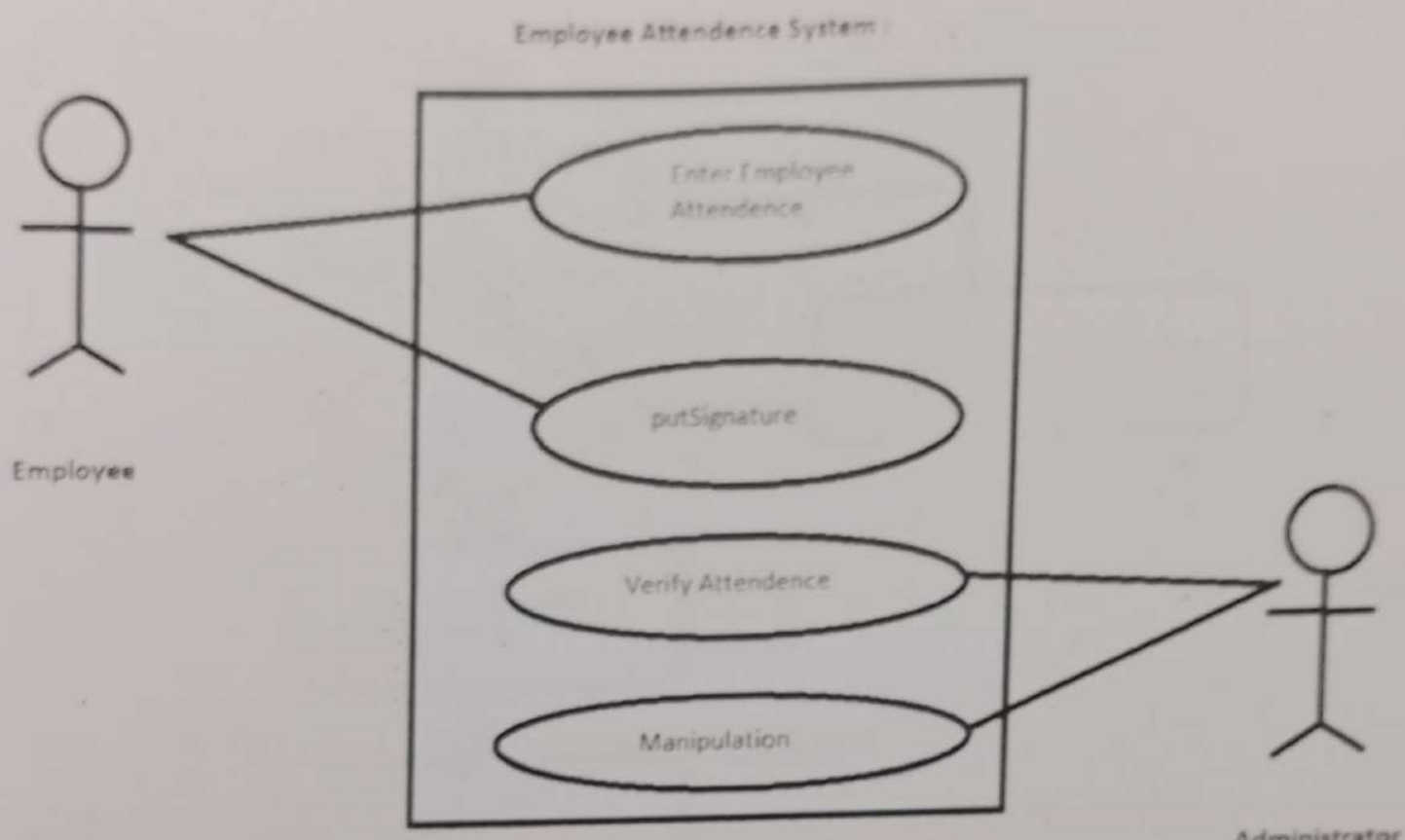
Case Diagram For Employee Management System

❖ Activity Diagram:-

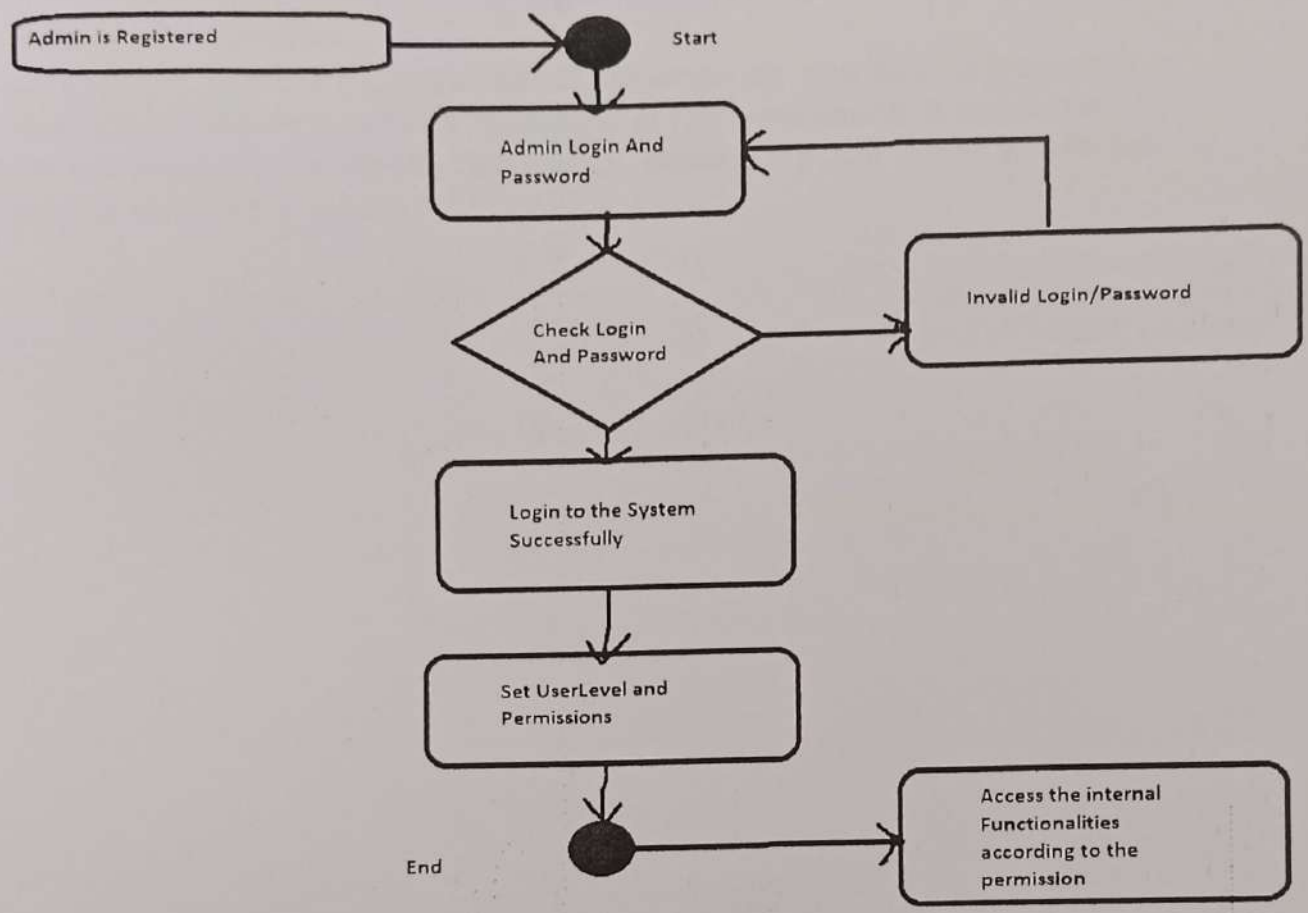


Activity Diagram for Employee Management System

❖ Case Diagram :



❖ Component Diagram:-

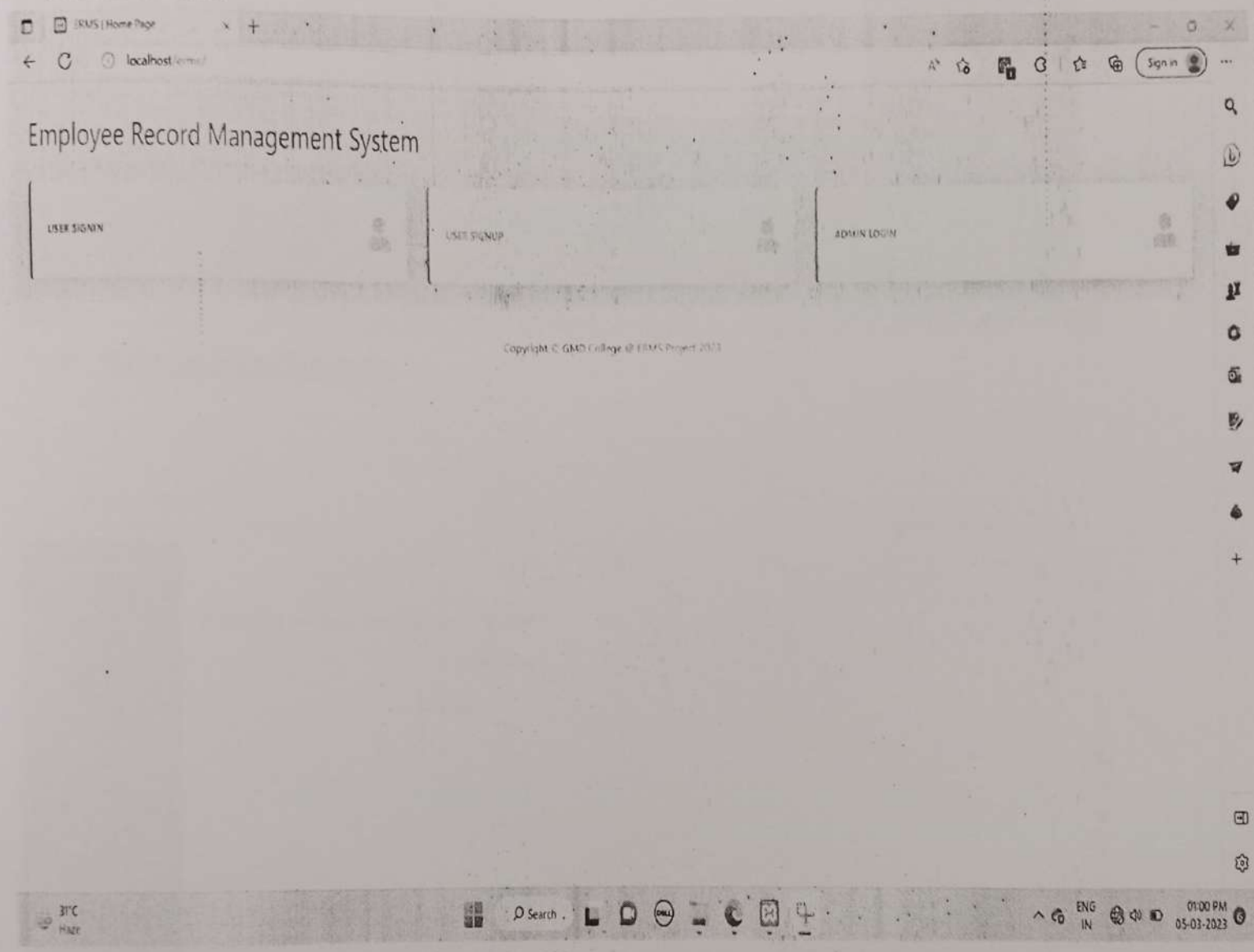


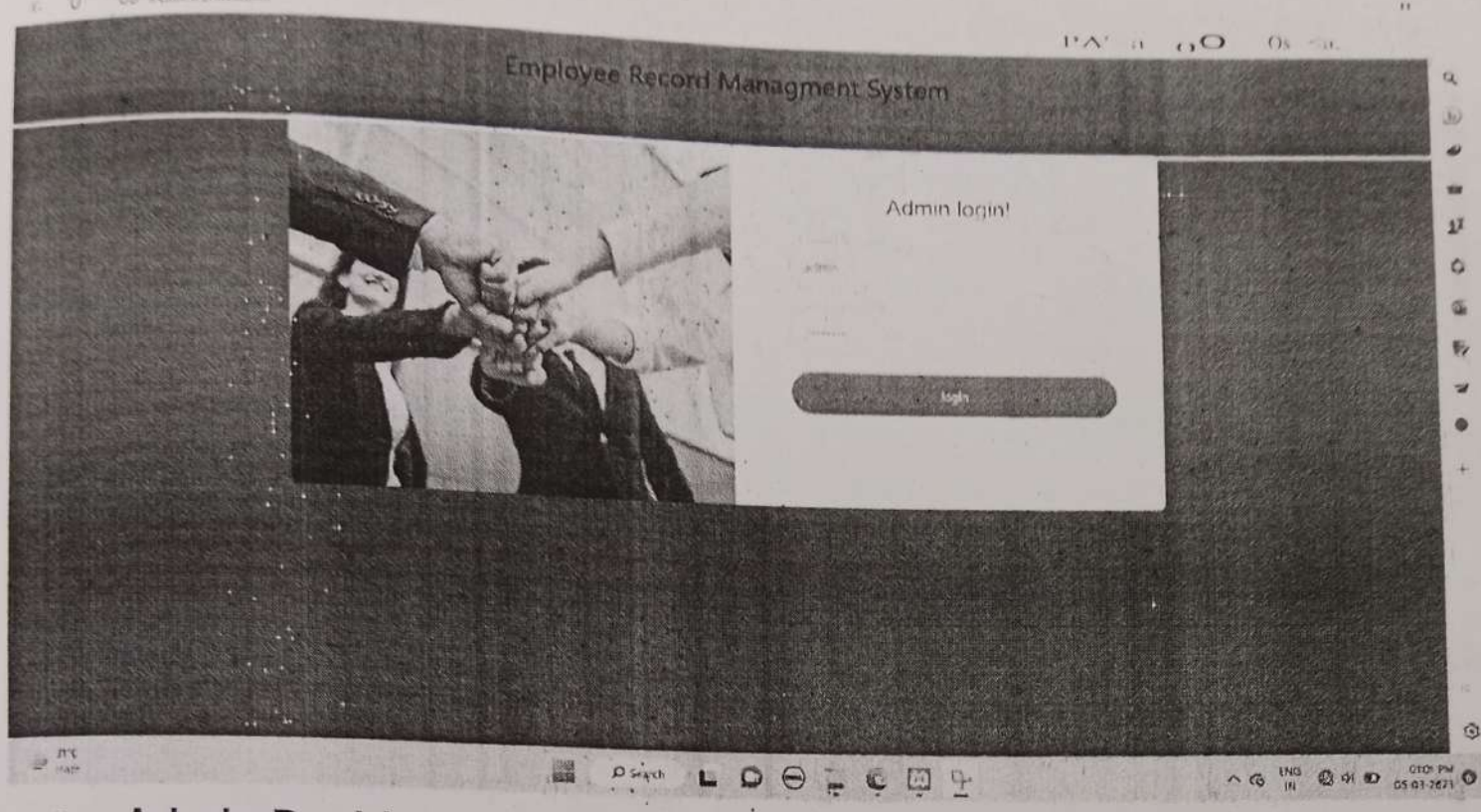
4.4 User interface:-

There are following User Interface:

- Employee User Interface:

A User Interface, which is also called as "UT" or simply an "interface". Is the means in which a person controls a software application or hardware device. A good User Interface provides a "User friendly" experience, allowing the user to interact with the software or hardware in a natural and intuitive way.


ERMS | Home Page
localhost/erms/
Sign in
Employee Record Management System
USER SIGNIN
USER SIGNUP
ADMIN LOGIN
Copyright © GMD College @ ERMS Project 2023
31°C
Haze
Search
ENG
IN
01:00 PM
05-03-2023



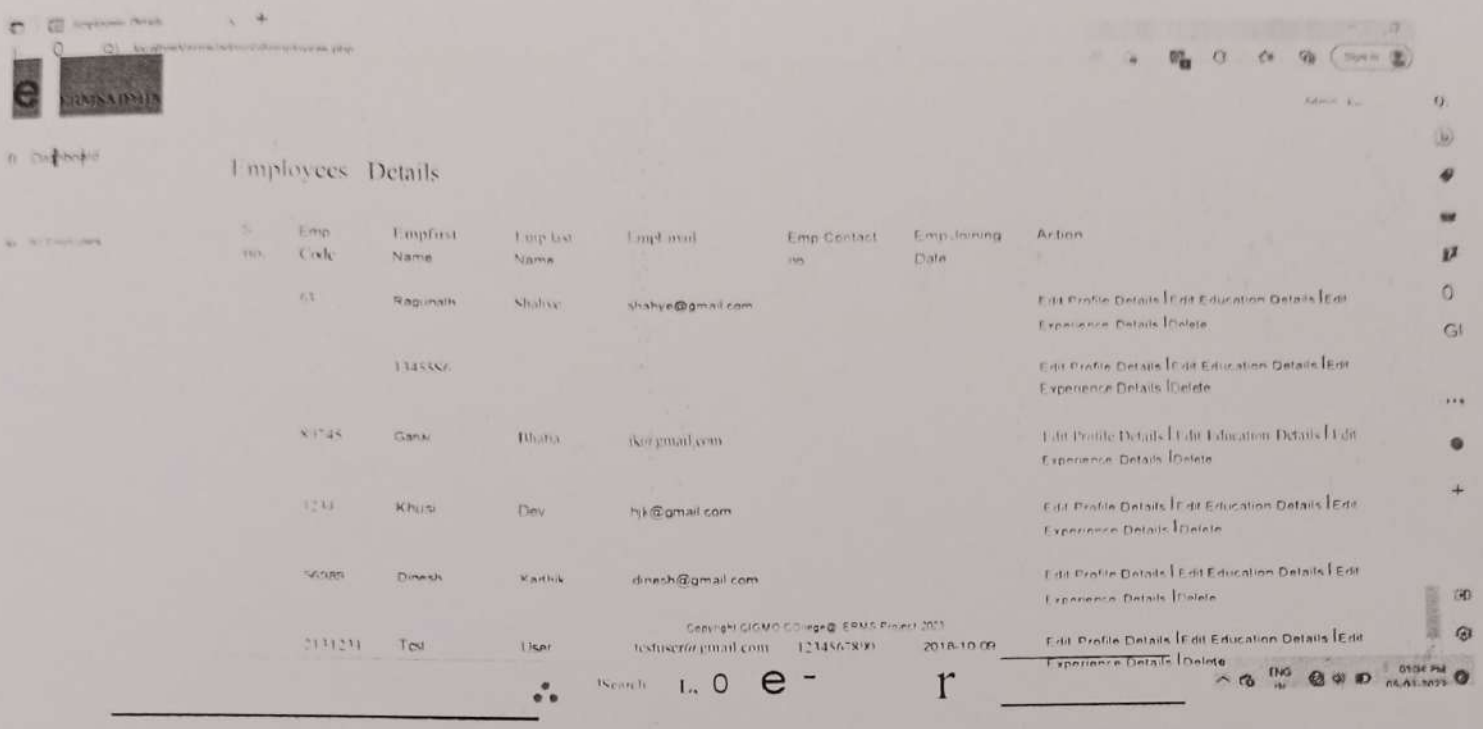
➢ **Admin Dashboard :**

Employee Record Management System

WELCOME BACK TO ERMS !

Admin

➢ **All Employee Data :**


Employees Details
Emp Code
Empfirst Name
Emplast Name
Emp Email
Emp Contact no
Emp Joining Date
Action
Ragunath
Shahye
shahye@gmail.com
Edit Profile Details | Edit Education Details | Edit Experience Details | Delete
Khusi
Dev
hjk@gmail.com
Edit Profile Details | Edit Education Details | Edit Experience Details | Delete
Dinesh
Karthik
dinesh@gmail.com
Edit Profile Details | Edit Education Details | Edit Experience Details | Delete
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User
testuser@gmail.com
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Edit Profile Details | Edit Education Details | Edit Experience Details | Delete
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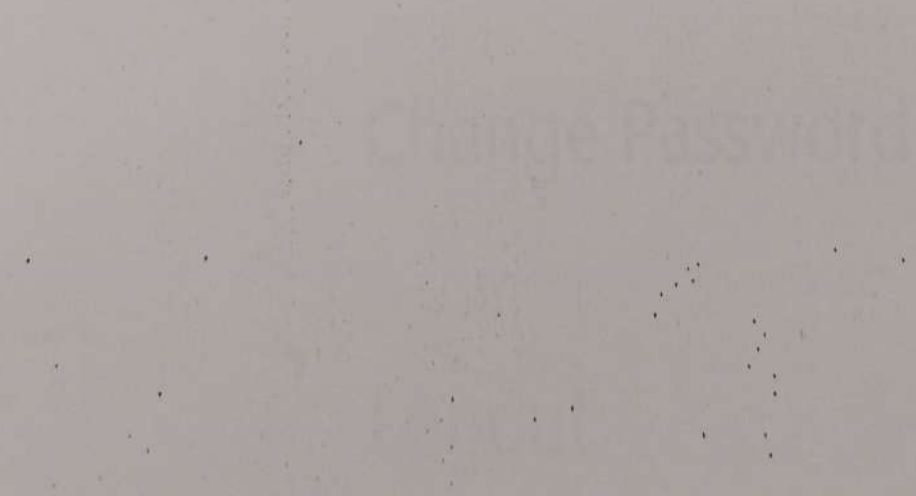
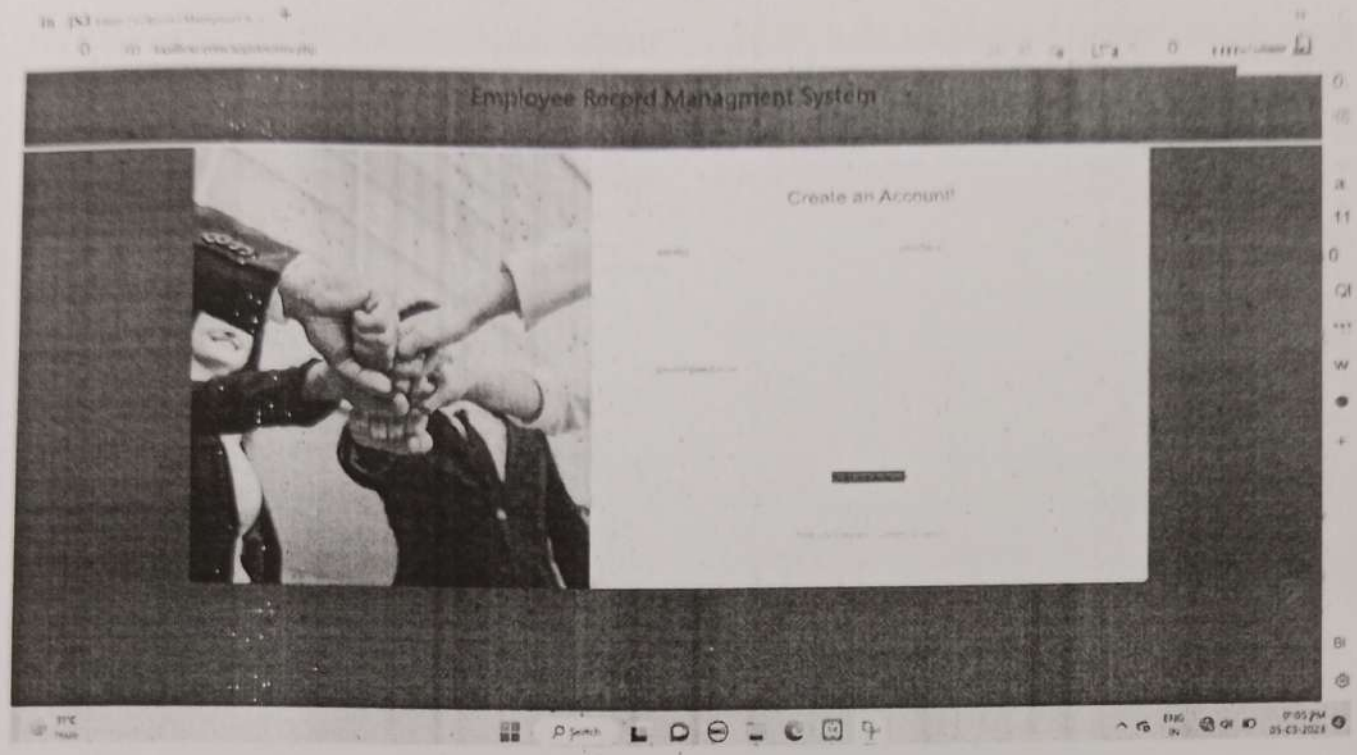

My Profile
Change Password

Admin

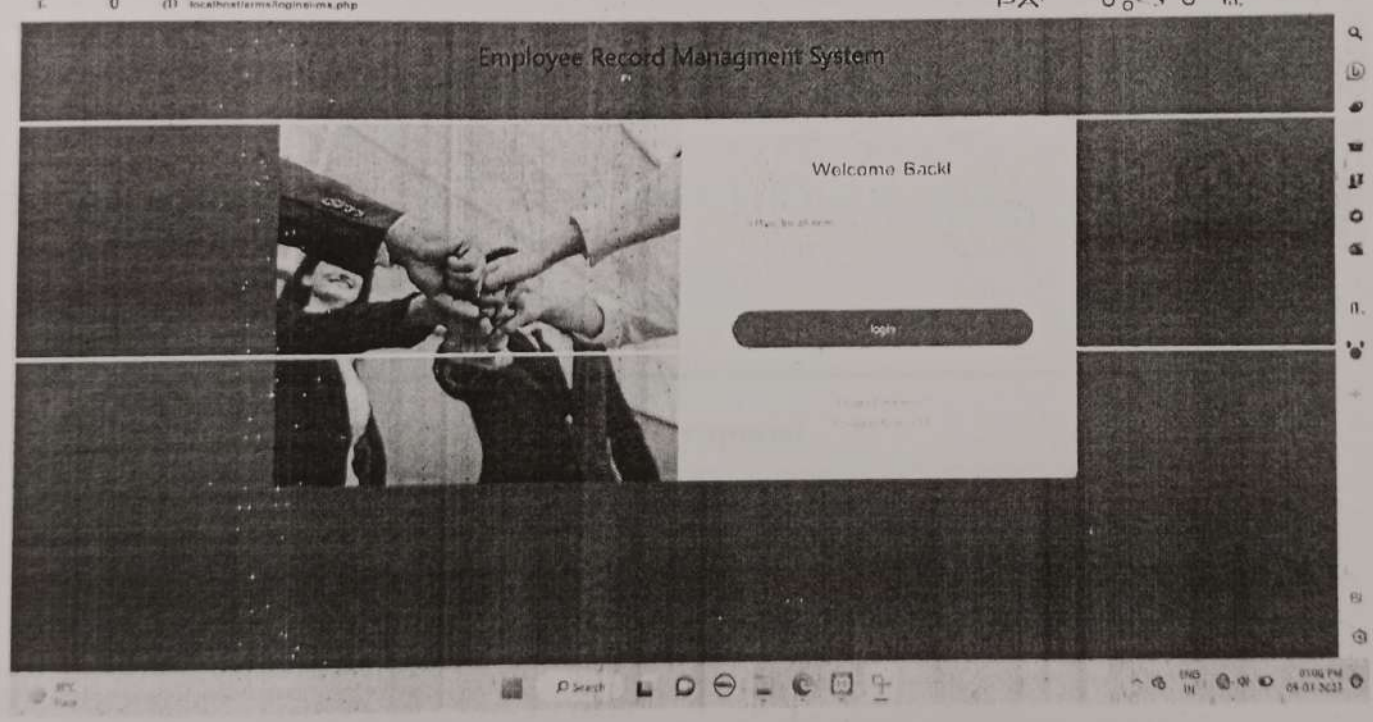
My Profile

Change Password

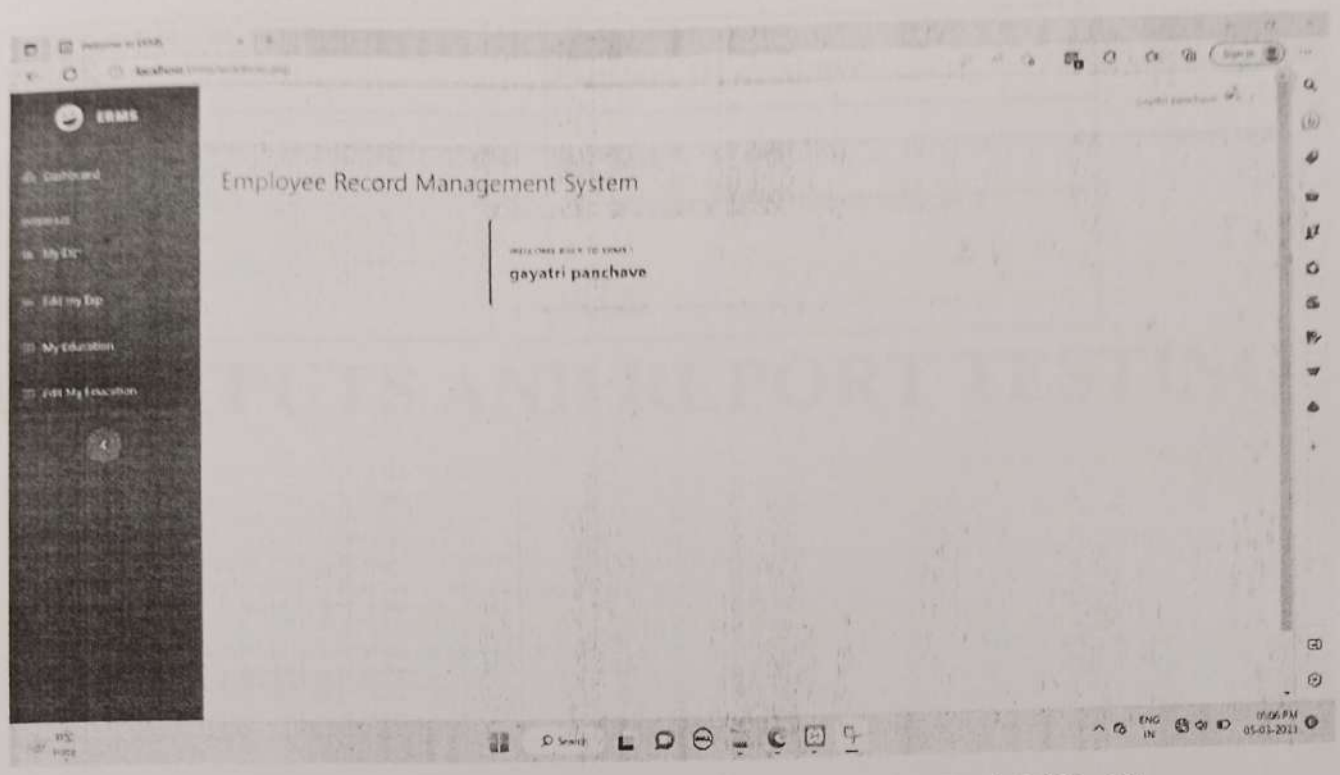
Logout



➢ **User Login Form :**



➢ **User DashBoard :**



5. IMPLEMENTATION DETAILS

5.1 Software and hardware specification:-

Software:-

Front End	Not any special
Back End	Microsoft Office Access
Operating System	Windows XP or Higher Version

Hardware:-

Processor	Pentium III or above
RAM	64 MB
HDD	10 GB

6.OUTPUTS AND REPORT TESTING

1. Unit Testing: -

Unit testing focuses verification effort on the smallest unit of software design the module. Using the detail design description as a guide, important control paths are tested to uncover errors within the boundary of the module. The relative complexity of tests and the errors detected as a result is limited by the constrained scope established for unit testing. The unit test is always white box oriented, and the step can be conducted in parallel for multiple modules.

Unit testing is normally considered an adjunct to the coding step. After source level code has been developed, reviewed, and verified for correct syntax, unit test case design begins. A review of design information provides guidance for establishing test cases that are likely to uncover errors. Each test case should be coupled with an asset of expected results.

Unit testing is simplified when a module with high cohesion is

designed. When only one function is addressed by a module, the number of test cases is reduced and errors can be more easily predicted and uncovered.

2. System Testing: -

Software is only one element of a larger computer based system. Ultimately, software is incorporated with other system elements (e.g. new hardware, information), and a series of system integration and validation tests are conducted. Steps taken during software design and testing can greatly improve the probability of successful software integration in the larger system.

A classic system testing problem is "finger pointing". This occurs when a defect is uncovered, and one system element developer blames another for the problem. Rather than including such nonsense, the software engineer should anticipate potential interfacing problems and design error handling paths that test all information coming from other elements of the system, conduct a series of tests that simulate bad data or other potential errors at the software interface record the results or tests to use as "evidence" if finger pointing does occur participate in the planning and design of system test to ensure that software is adequately tested.

3. Integration Testing: -

A neophyte in the software world might ask a seemingly legitimate question once all modules have been unit-tested. If they all work individually, why do you doubt that they'll work when we put them together? The problem, of course, is putting them together – interfacing. Data can be lost across an interface; one module can have an inadvertent, adverse effect on another, sub functions, when combined, may not produce the desired major function; individually acceptable imprecision may be magnified to unacceptable

levels; global data structures can present problems. Sadly, the list goes on and on.

Incremental integration is the antithesis of the "big bang" approach. The program is constructed and tested is small segments, where errors are easier to isolate and correct; interfaces are more likely to be tested completely, and a systematic test approach may be applied.

7.CONCLUSION AND RECOMMENDATION

This software/package is to meet the requirements of employee management.
It has been developed in php keeping in mind the specification of the system. The database of this system can also easily be ported in any other standard database with nominal change. The manager of office used to spare lot of time even after the normal office hours either at home or office for preparation of daily/weekly report and other necessary record.Now with the help of this system ,the manager has the information on his fingertips and can easily prepare a record based on their requirements apart from daily/weekly reports. Finally,We can say that this system will not only automate the process but save the valuable time of the office manager, which can be well utilised by this institute. This will be an additional advantage and management of manpower based on their free time from his normal duty.

8.FUTURE SCOPE

This software can be able to support internetworking with a little advancement in coding. Then any user can upload the date to the school website and can view the data and all reports online from any part of the world. This can also be connected strongly with the internet. even if management wants, parents can view their child's record through an attractive and graphic rich website. They can also make their child's fee online.

This software can also be equipped with strong backup facilities to protect the important data and hence prevent any sort of problem which might occur due to lost of data.

9. BIBLIOGRAPY & REFERENCES:-

- Websites:-
- http://www.google.com
- http://www.microsoft.com
- http://www.codeproject.com
- http://www.vb123.com
- http://www.vbcode.com

- BOOKS:-
- Mastering Visual Basic 6(Paperback)
- Visual Basic Black Book(Paperback)
- Database Development in Visual Basic
- *Teach Yourself Visual Basic 6 McGraw Hill*

THANK YOU !!!

G.M.D. ARTS, B.W. COMMERCE & SCIENCE COLLEGE, SINNAR.

DEPARTMENT OF COMPUTER SCIENCE

A PROJECT REPORT ON

"Hostel Management System"

Submitted by:

Pangavhane Rohan Annasaheb

Khule Dipak Ravindra

Chavanke Rahul Prakash

Guided by:

(SMT.N.V. LAHAMAGE)

Savitribai Phule Pune University

2022-2023

M.V.P. Samaj's.

G.M.D. ARTS, B.W. COMMERCE & SCIENCE COLLEGE, SINNAR.

CERTIFICATE

This is to certify that,

Pangavhane Rohan Annasaheb

Khule Dipak Ravindra

Chavanke Rahul Prakash

Student of B.Sc. Computer Science has satisfactory completed Project work on **"Hostel Management System"**, towards partial fulfilment of degree course affiliated to Savitribai Phule Pune University for the Academic Year 2022-2023 at G.M.D. ARTS, B.W. COMMERCE & SCIENCE COLLEGE, SINNAR.

Project Guide

(Smt.N.V.Lahamage)

Head of Department

(Smt.N.V.Lahamage)

HEAD
DEPARTMENT OF COMPUTER SCIENCE
G.M.D. Arts, B.W. Commerce
and Science College, Sinnar

Internal Examiner

External Examiner

Index

1. ABSTRACT

"HOSTEL MANAGEMENT SYSTEM" is a software developed for managing various activities in the hostel. For the past few years the number of educational institutes is increasing rapidly. Thereby the number of hostels isalso increasingfortheaccommodationofthestudentsstudyinginthisinstitution.And hence there is a lot of strain on the person who are running the hostel and software's are not usually used in this context. This particular project deals with the problems on managing a hotel and avoids the problems which occur when carriedmanually.

Identification of the drawbacks of the existing system leads to the designing of computerized system that will be compatible to the existing system with the system which is more user friendly add more GUI oriented. We can improvetheefficiencyofthesystem,thusovercomethedrawbacksoftheexisting system.

- Less humanerror
- Strength and strain of manual labour can bereduced
- High security
- Data redundancy can be avoided to someextent
- Dataconsistency
- Easy tohandle
- Easy toupdating
- Easy to recordkeeping
- Backup data can be easilygenerate

2. INTRODUCTION

The Online Hostel Management System is web-based software to provide college students accommodation to the university hostel more efficiently. This project also keeps details of the hostellers and applied students. It is headed by Warden. He will be the administrator. For accommodate a large number of students into hostel.

This document is intended to minimize human works and make hostel allocation is an easier job for coast student and hostel authorities by providing online application for hostel, automatically select the students from the waiting list and mess calculation, complaint registration, notice board etc. Students will get approval notification in their mails. Hostellers can view notice board, hostel fee, mess menu by login into the online system.

MOTIVATION:

1.In computer science a design analysis of algorithm is a particular way of organizing data in a computer so that is can be used efficiently .it canimplement on or more particular abstract data types which are the means of specifying the contract of operations & their complexity in comparison it is a concreate implementation on the contract provided by an ADT data structures provided in meanstomanagelargeamountofdataefficientlyforusessuchaslargedatabases and internet indexingservices.

The information of a data structures usually requires writing a set of procedures that create and manipulate instances of that structure.

2. A hostel management project can provide a significant benefit to both hostel staff and guests. By using technology to manage reservations, room assignments, and guest information, staff can save time and increase efficiency. Additionally, guests can benefit from a streamlined check-in process, online booking capabilities, and access to information about the hostel's amenities andservices.

3.Furthermore,ahostelmanagementprojectcanimprovecommunicationbetween staffandguests,allowingforpromptresponsestoinquiriesandconcerns.Thiscan lead to higher guest satisfaction and increased repeat business. By utilizing data analysis tools, the project can also provide insights into guest behavior and preferences, allowing staff to tailor their services and offeringsaccordingly.

Overall, a hostel management project can enhance the guest experience, increase staff productivity, and lead to improved business outcomes..

PROBLEMSTATEMENT:

Wehavegotninehostelsinouruniversity,whichconsistoffourboy'shosteland five girl's hostels. All these hostels at present are managed by the hostel office. The Registration from verification to the different data processing are done manually.

Thus, there are a lot of repetitions which can be easily avoided. And hence there is a lot of strain on the person who are running the hostel and software's are not usually used in this context. This particular project deals with the problems on managing a hostel and avoids the problems which occur when carried manually.

Identifications of the drawbacks of the existing system leads to the designing of computerized system that will be compatible to the existing system with the system which is more user friendly and more GUI oriented. We can improve the efficiency of the system, thus overcome the drawbacks of the existing system.

PURPOSE/OBJECTIVES ANDGOALS:

- Maintain the students as hostellers and waiting list studentsseparately.
- Process allotmentlist.
- Admin can send the approval notification to every approved student via email.
- Automatically insert student's details to the hosteller's record when the allotment is confirmed by the admin and deleted when vacation is conformed or after the course enddate.
- Students can register theircomplaints.
- Admin can edit notice board and each student can viewit.
- Hostel secretary can calculate hostel fee and can edit messmenu.
- Hostellers can check the status of every month's hostelfee.

LITERATURESURVEY:

Literature review is to do research on similar topics that are concerned with the proposed system. This is with an idea of suggesting the best methods of information management through the use of data warehouse concepts for the proposed Greenville School Hostel Management System. The result of literature review gives us information with regard to the research done on the topic by others researchers. Result of this review will be the gaps features that can be suggested for the proposed system.

Adatawarehouseisprojectedinawaythatcanbestoredandaccessedandisnot restricted only to tables and relational databases, user's queries do not cause any impact in these systems. Data warehoused contemplates the base and the resources needed for a Decision Support System (DSS), supplying historic and integrateddata.Thesedata arefortopmanagers,forwhomdetaileddatahelpsto observe some tactical aspects of the organization. In this way, data warehouse provides a specialized. For a centralized database oracle will be used for storing details of data being brought from differenthostel.

PROJECT SCOPE ANDLIMITATION:

Scope:

1) Using computerized system, Time accuracy facts are considerable changed.
2) To make existing systemfriendly.
3) Fast and efficient informationaccessed.
4) Easy to run onbrowser.

Limitation:

1) User can have required any browser without browser user cannot run project.
2) Internet may berequired.

3. SYSTEM ANALYSIS

Theinitialanalysisismadebyknowingtheuserrequirements.Inanalysisphase, we haveanalysed

The user's requirement such as:

Addition of the record of the customer ego comes into the hotel, deletion of the recordwhencustomerleavesthehotel,printingandcalculationofthebill,record of facilities available in the hotel, allotment of the rooms etc. In this project we have also analysed that the product or software should not be very costly but its quality and interface must be attractive. If any wrong operation is being performed then the software must invoke the operatoraccordingly.

EXISTING SYSTEM:

Theexistingsystemismanualbasedandneedlotofeffortsandconsumeenough time. In the existing system we can apply for the hostels online but the allotment processes are done manually. It may load to corruptions in the allocation process as well as hostel fee calculation. The existing system does not deal with mess calculation and complaintregistration.

DISADVANTAGES:

- More humanpower.
- More strength and strain of manual labourneeded.
- Repetition of same procedure.
- Lowsecurity.
- Dataredundancy.
- Difficulty tohandle.
- Difficulty to updatedata.
- Record keeping isdifficult.
- Backup data can be easilygenerated.

SCOPEANDLIMITATIONOFEXISTINGSYSTEM:

The main scope of the developing hostel management system is to save money and time. The proposed system generates following reports to help management of the hostel in decision making: Allocated Room report. Unallocated Room Report.

The system cannot handle online payment of student's accommodation fee and maintenance fee. The system cannot handle other hostel issues such as mess activities because the existing system does not have one.

Hostel management system is designed to manage all hostel activities like hostel admissions, fees, room, mess allotment, hostel stores & generates related reports forsmoothtransactions.Itisalsousedtomanagemonthlymessbillcalculations, hostel staff payroll, student certificates,etc.

PROJECT PRESPECTIVE,FEATURES:

Hostel management system has several functions which enable the staffs from accommodation office such as allocate students to the different hostels, reserve the room for the students, control status of rental payment and edit the details of the students & modify the student records.

Features of hostel management system:

- Systematic Control over HostelActivities.
- Accurate Student DataManagement.
- Complete Student Security.
- Online Addmission & FeesManagement.
- Room Allocation &Transfers.
- Alerts &Notifications.
- Mess Management.
- Paperless StudentAttendance.
- Visitor Management Record.
- Hostel Report.

STAKEHOLDERS:

- Admin
- Student

REQUIREMENT ANALYSIS:

- User generate accountnumber.
- Userallowthehostelstaffmembersorguardianstoscan'sthestudent's id and access itsprofile.
- User have permission of renewing the student's registration everyyear.
- Usershallgeneratetheusersprofilecontainingthefollowinginformation users account no, full name, address, phone no & roomno.
- User will change dues status in database according to dues paid ornot.
- User will allocate rooms to students according to the session orclass.
- User must have the details of a mess of a student and sorted in adatabase.
- User must allow the warden to add new users to the system'sdatabase.
- Usermustallowtoputholdon aroomifanyroomisnotavailableatthe moment.
- User must allow the guardian to cancel the registration from the system's database who will leaveroom.

4. SYSTEM DESIGN

System analysis is a method of problem-solving that deals with the breaking down of a system into components parts in order to study how well the individual parts work and interact to accomplish their purpose. It involves the processofenumeratingtheexistingproblems,analysingtheproposedsystemfor costs andbenefits,
analysing the system and user requirements, and considering possible alternative system.

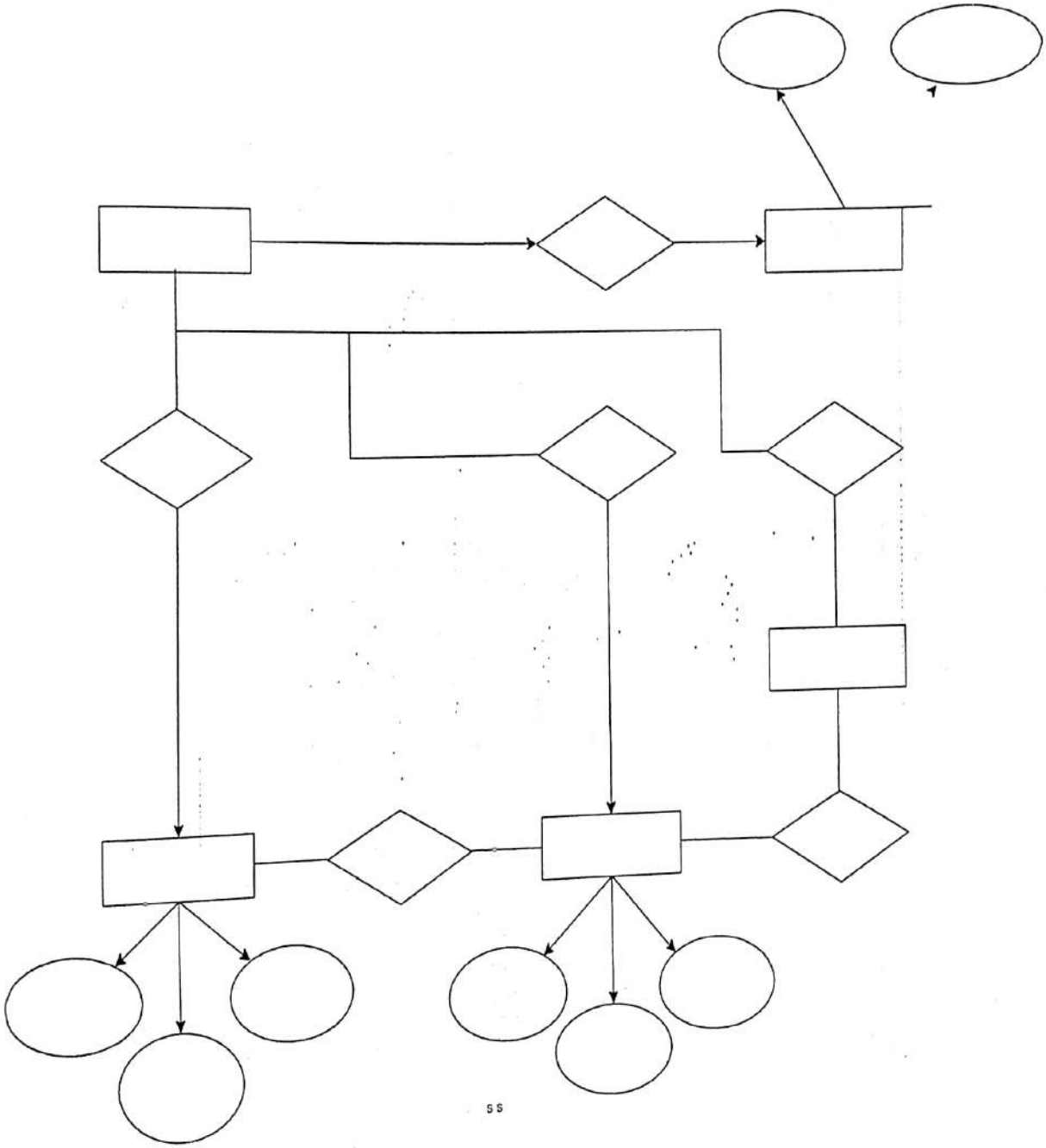
System analysis is important in the design of subsequent systems. System design consists of design activities that produce system specifications which satisfy the functional requirements that have been developed in the system analysis process. System design is basically the structural implementation of system analysis. The proposed system is being designed in such a way that studentsonlyneedtoinputtheirdataonlinewhichisthenenteredintoacomputer database.Studentswillalsouploadapassportphotographtotheirprofileforeasy identification.

DESIGNCONSTRAINTS:

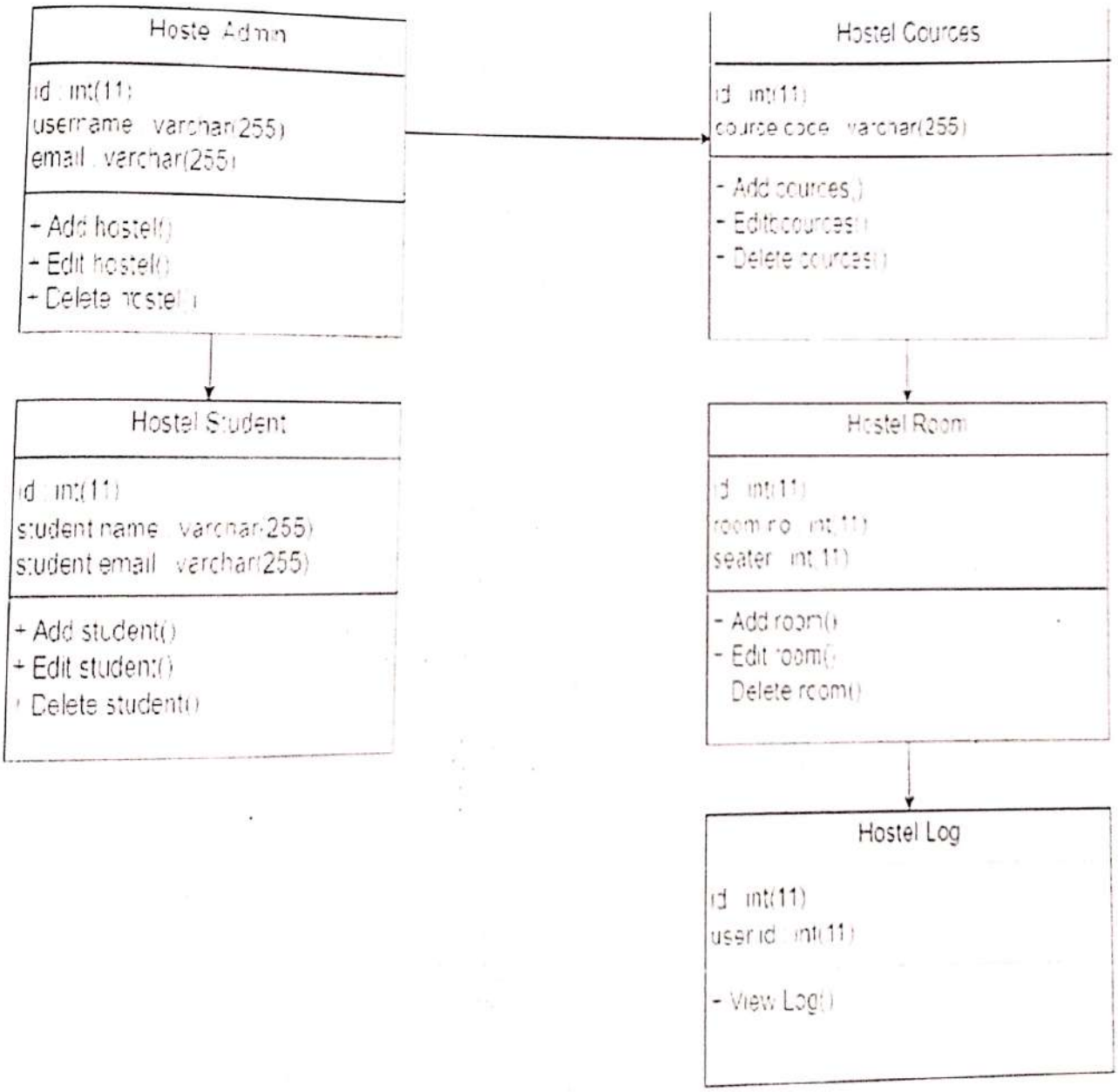
Common Diagram Containing Following- The Symbols used in ER diagram are as follow: ER Diagram describes data at rest, data being stored. Data relationship is the relation between the entities. Entity is an object that exist and its distinguishable from other objects. ER diagram shows data at rest. This means ER diagram does not show data flow.

SYSTEM MODEL:

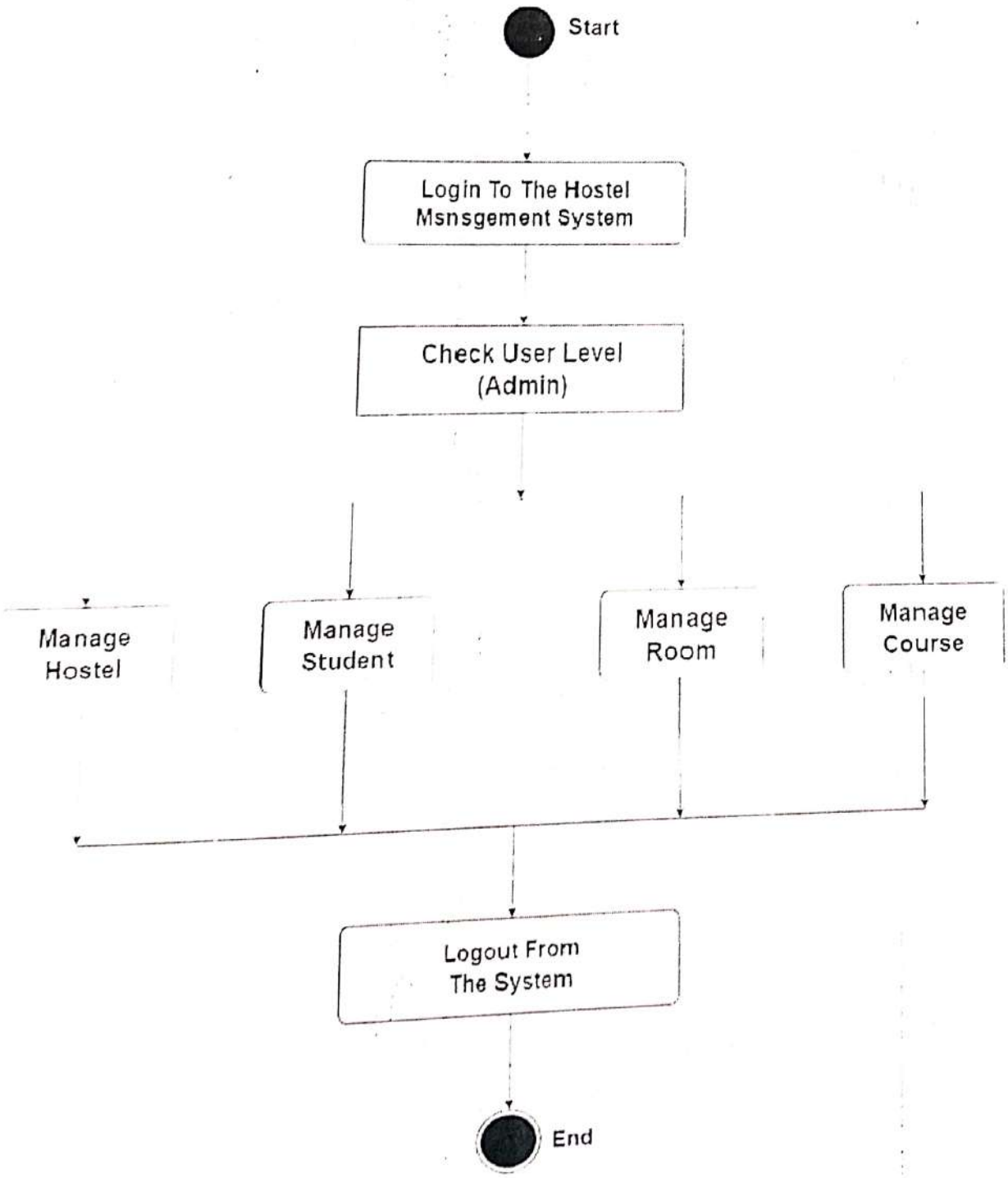
- ER Daigram-



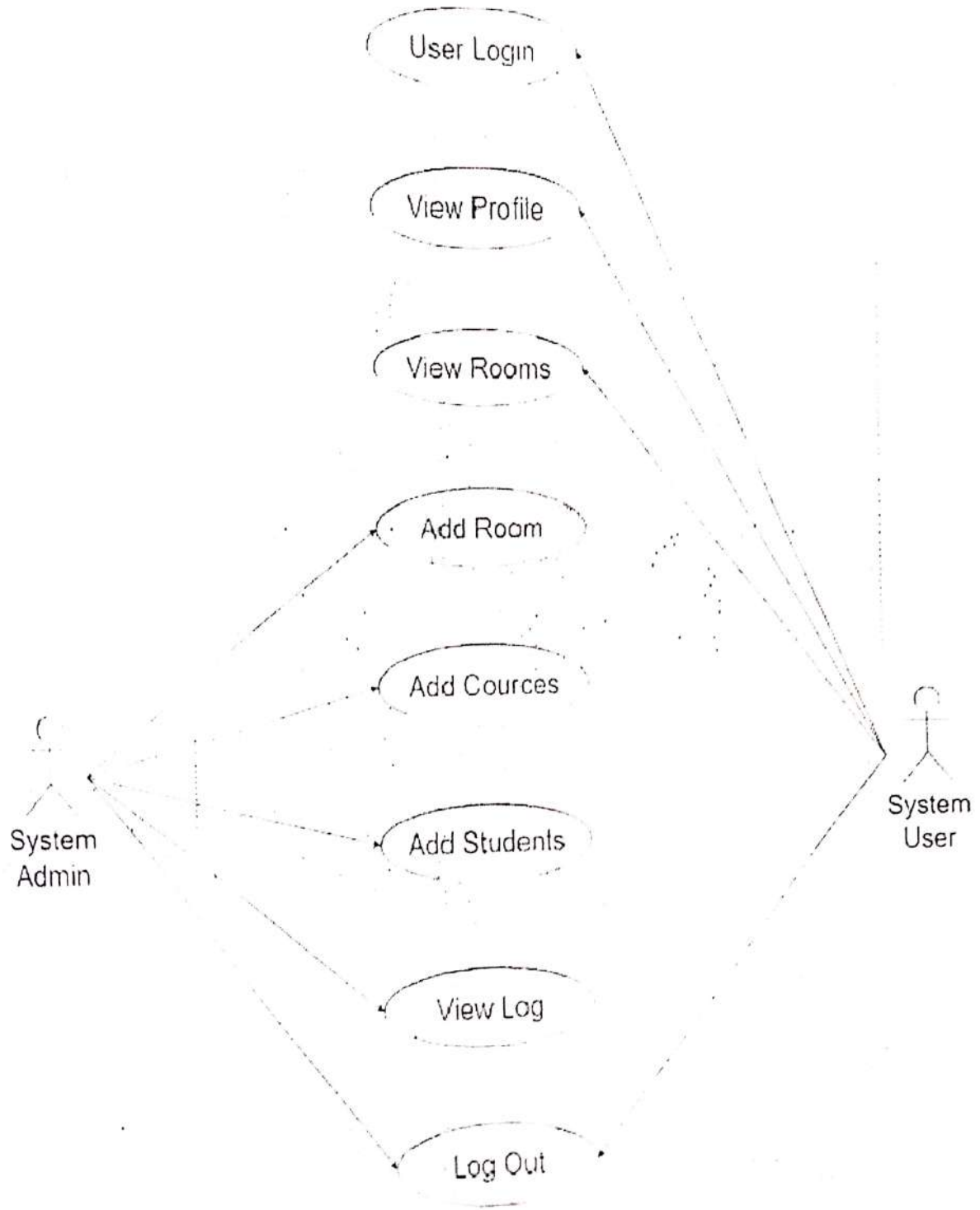
➢ Class Diagram -



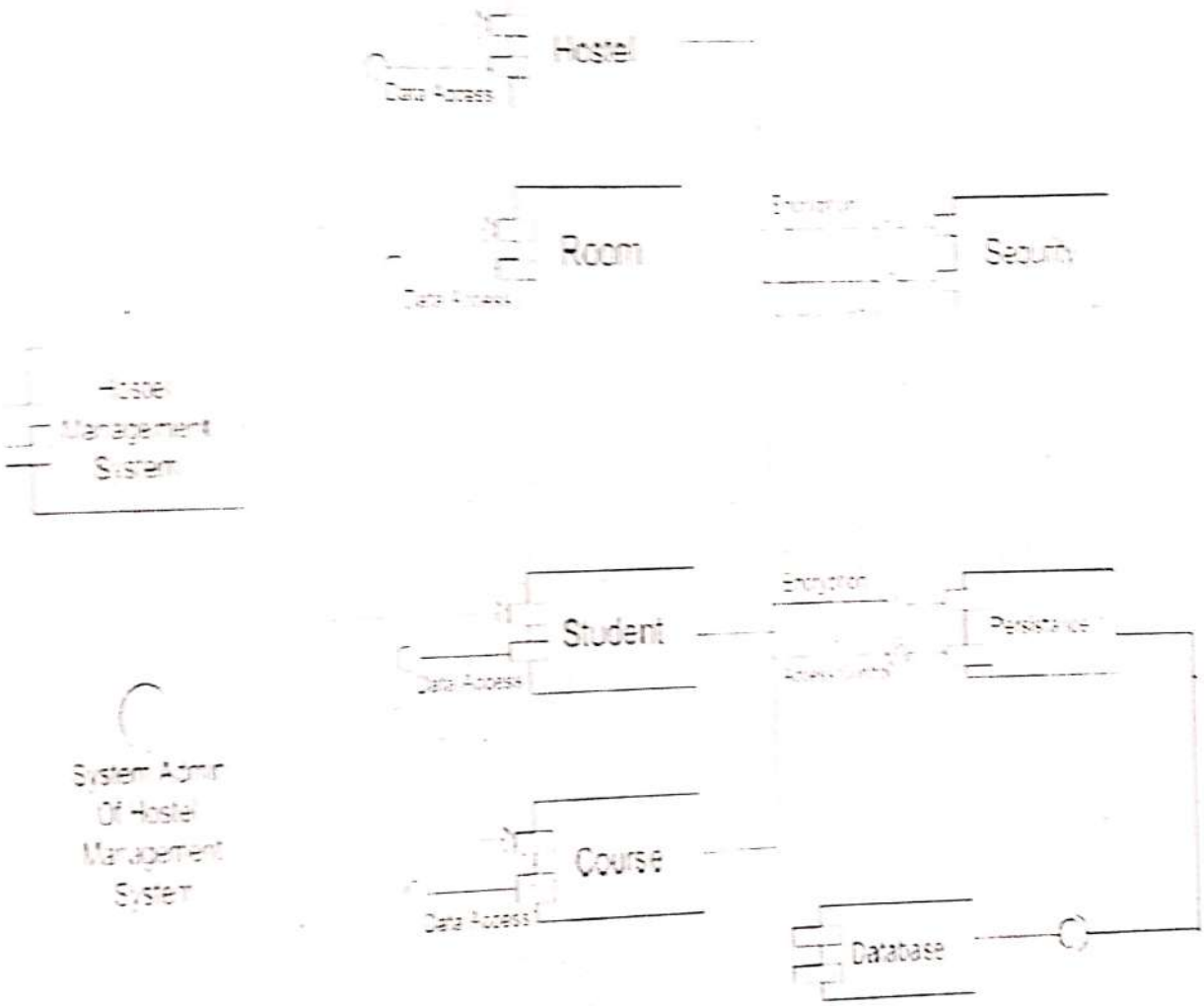
➢ Activity Diagram-



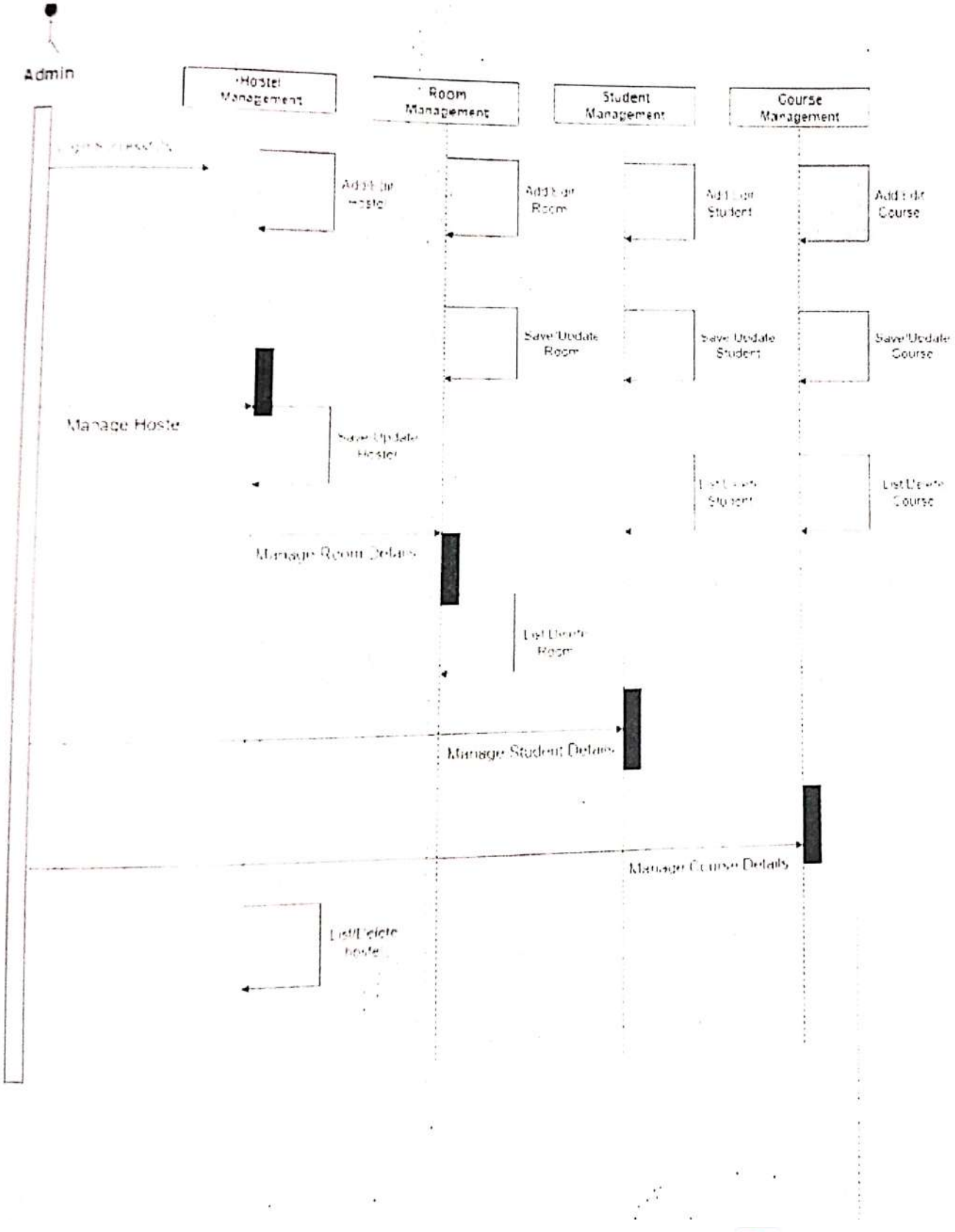
➢ Use – Case Diagram-



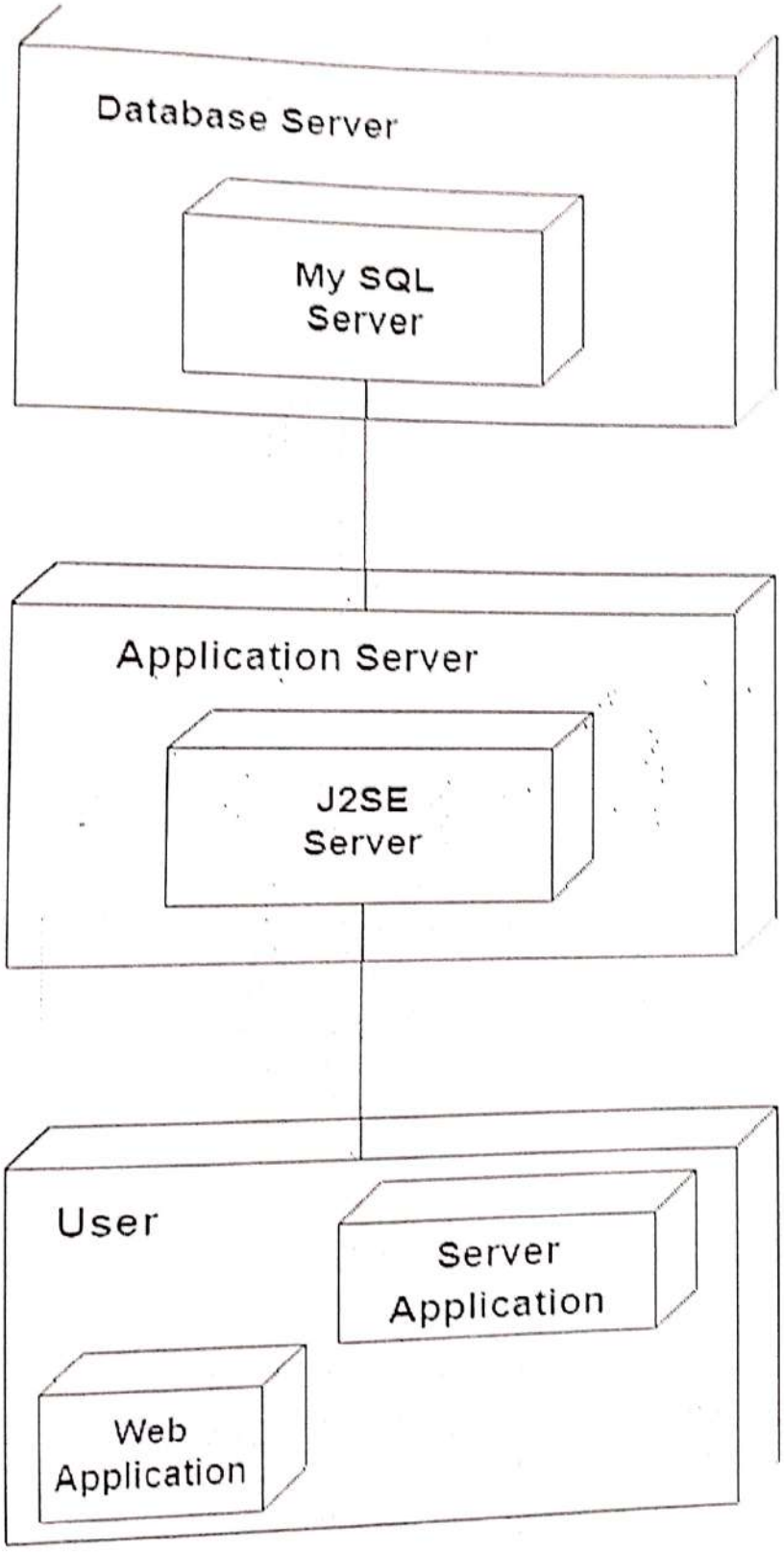
➢ Component Daigram-



➢ Sequence Daigram-



➢ Deployment Diagram-



DATAMODEL:

1) Table 1 – Admin:

Field	Data Type	Key	Size
Id	int	primary	11
Password	varchar	not null	255
Email	varchar	not null	255

2) Table 2 – Student:

Field	Data Type	key	Size
Id	int	primary	11
Name	varchar	not null	255
Email	varchar	not null	255

3) Table 3 – Course:

Field	Data Type	key	Size
Id	int	primary	11
Course Code	varchar	not null	25

4) Table 4 – Room:

Field	Data Type	key	Size
Id	int	primary	11
No.	int	not null	11
Seater	int	not null	11

USERINTERFACE:

The user interface is as follows:

Login

Student Module: Profile

Student Module: Apply Room

Student Module: Status of Application

Student Module: View History

Student Module: Change Password

Student Module: Logout

Administrator Module: Adduser

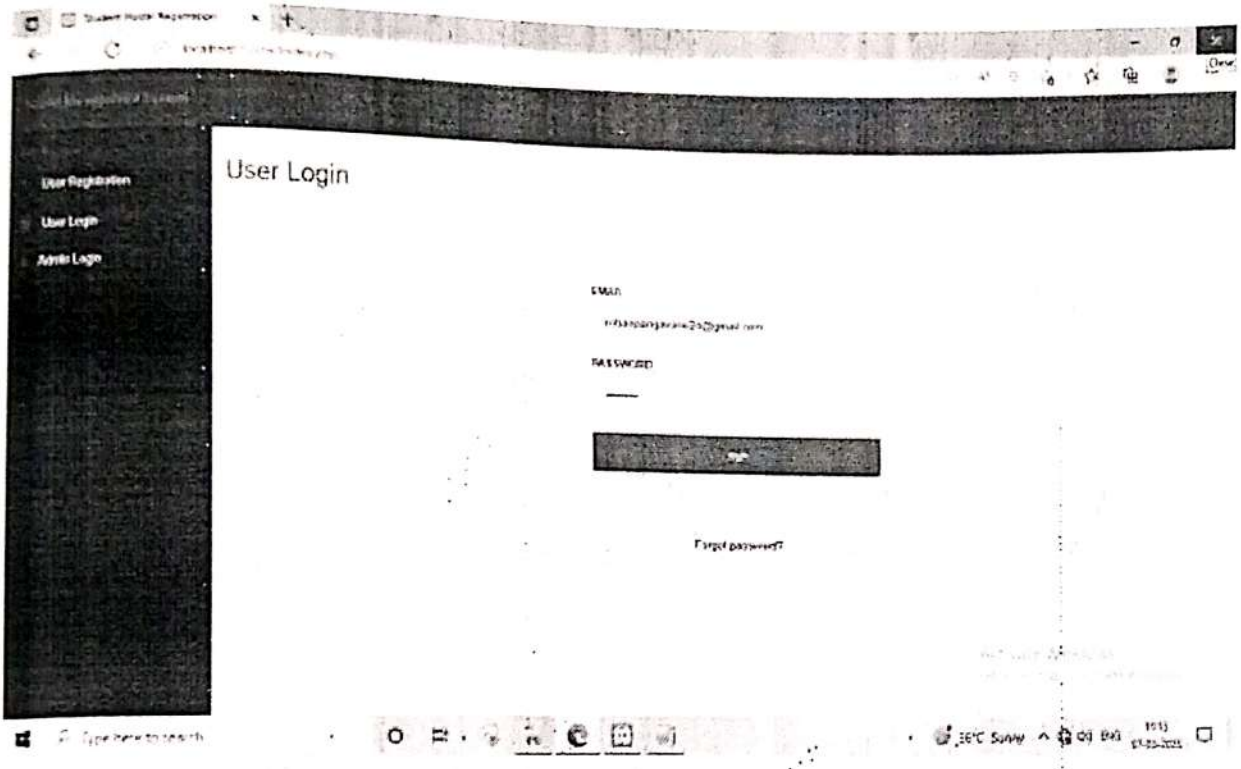
Administrator Module: View Applicant

Administrator Module: View Student

Administrator Module: Change Password

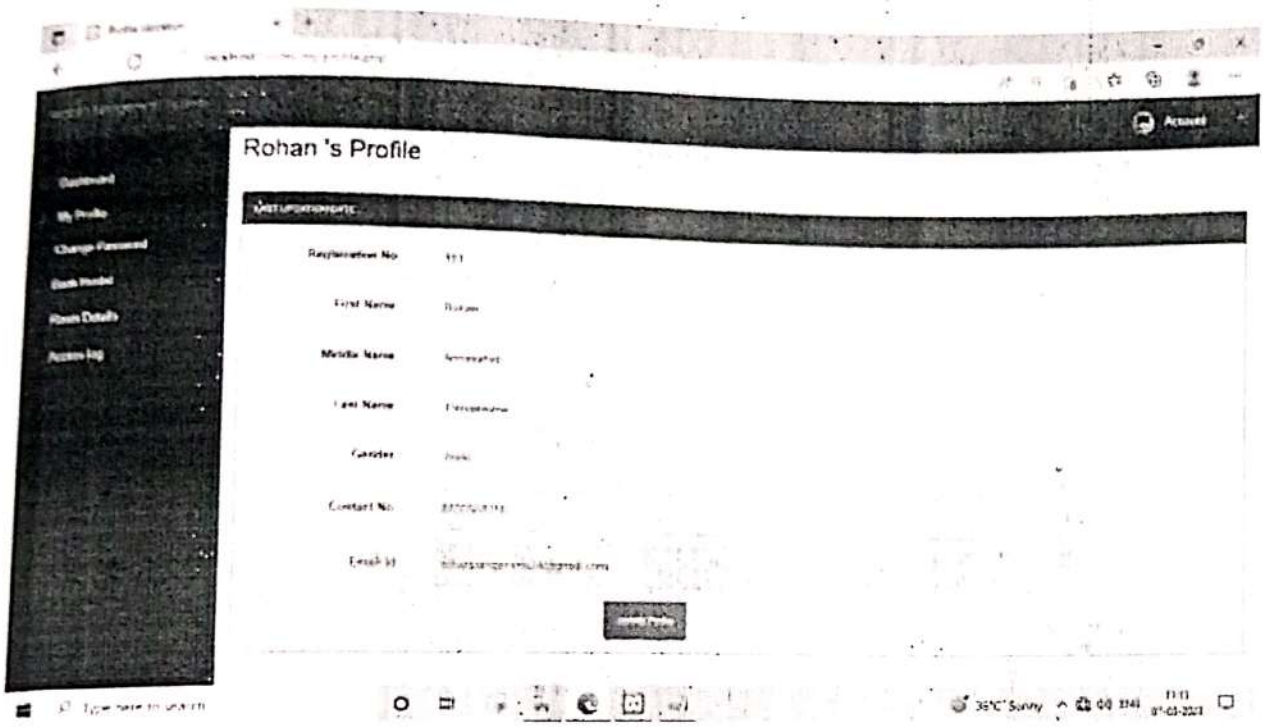
OUTPUT SCREEN:

➢ USER LOGIN

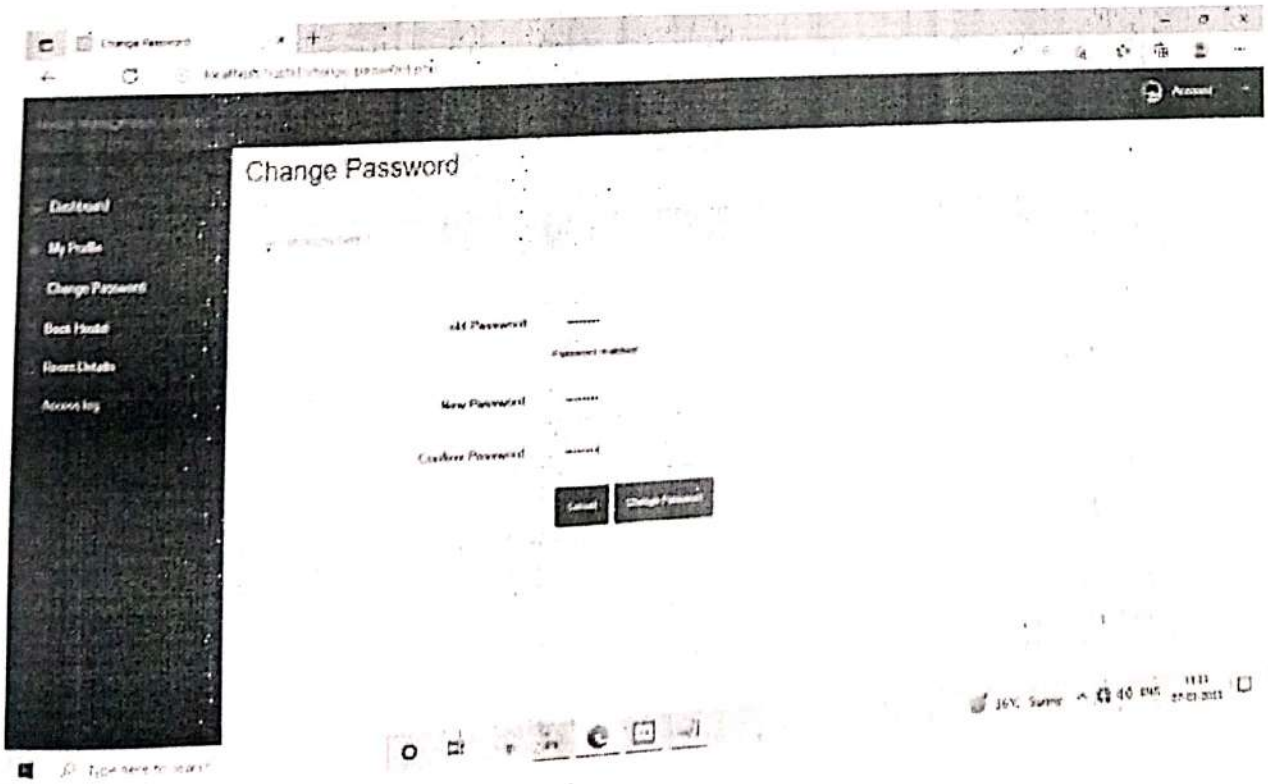


➢ DASHBOARD

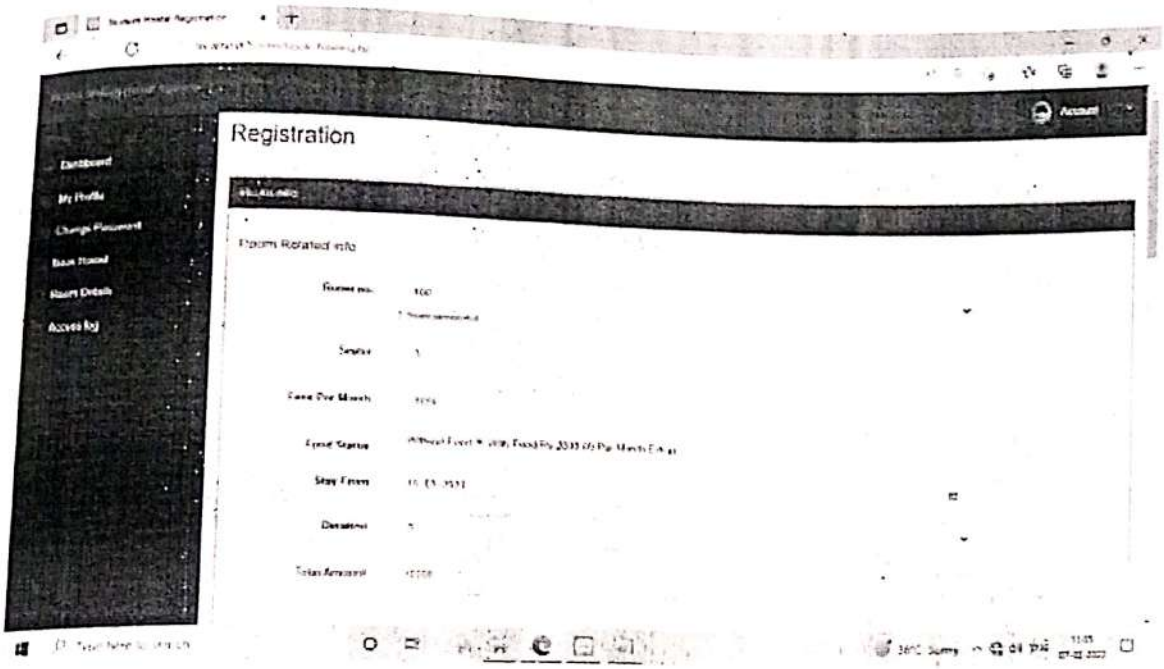
➢ Profile



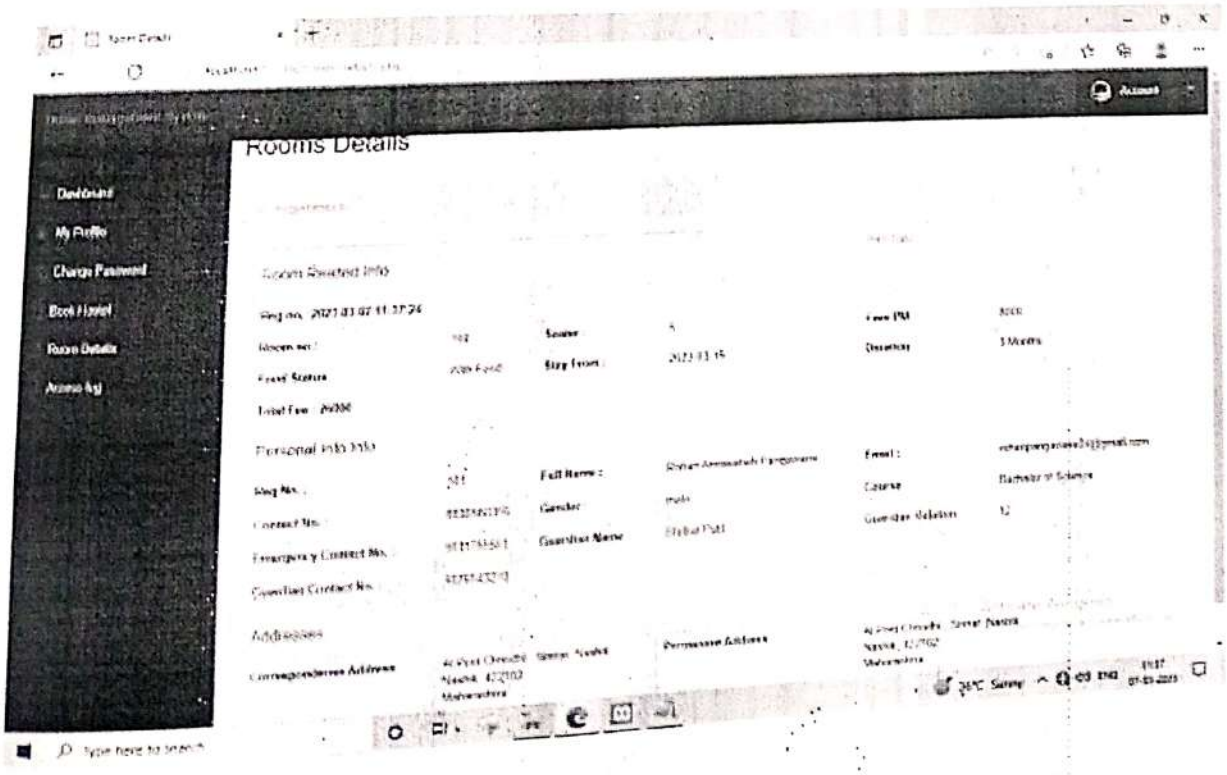
➢ CHANGE PASSWORD



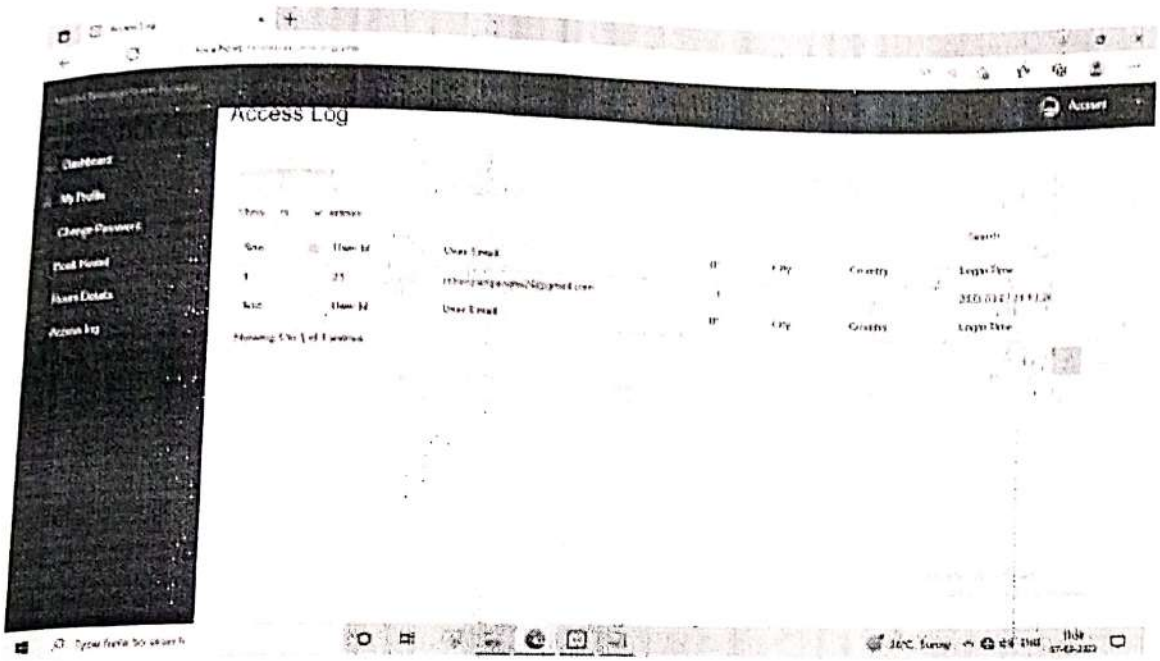
➢ REGISTRATION



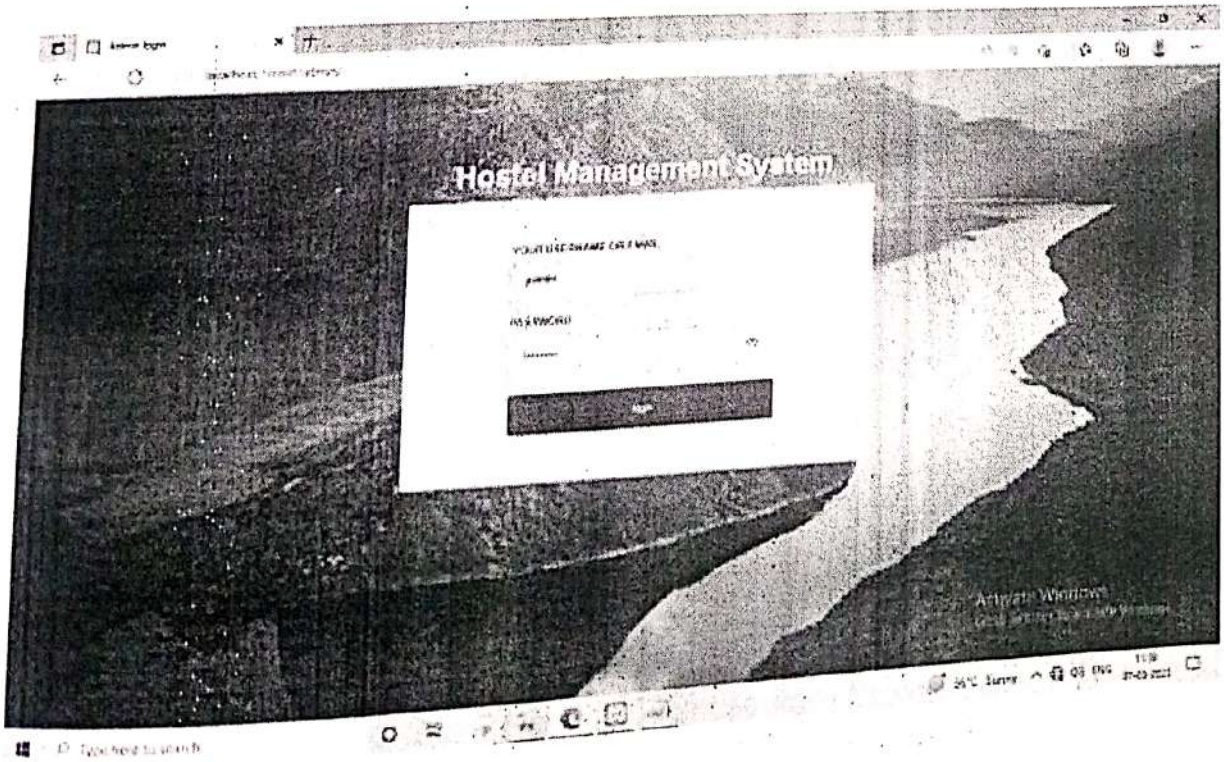
➢ ROOMSDETAILS



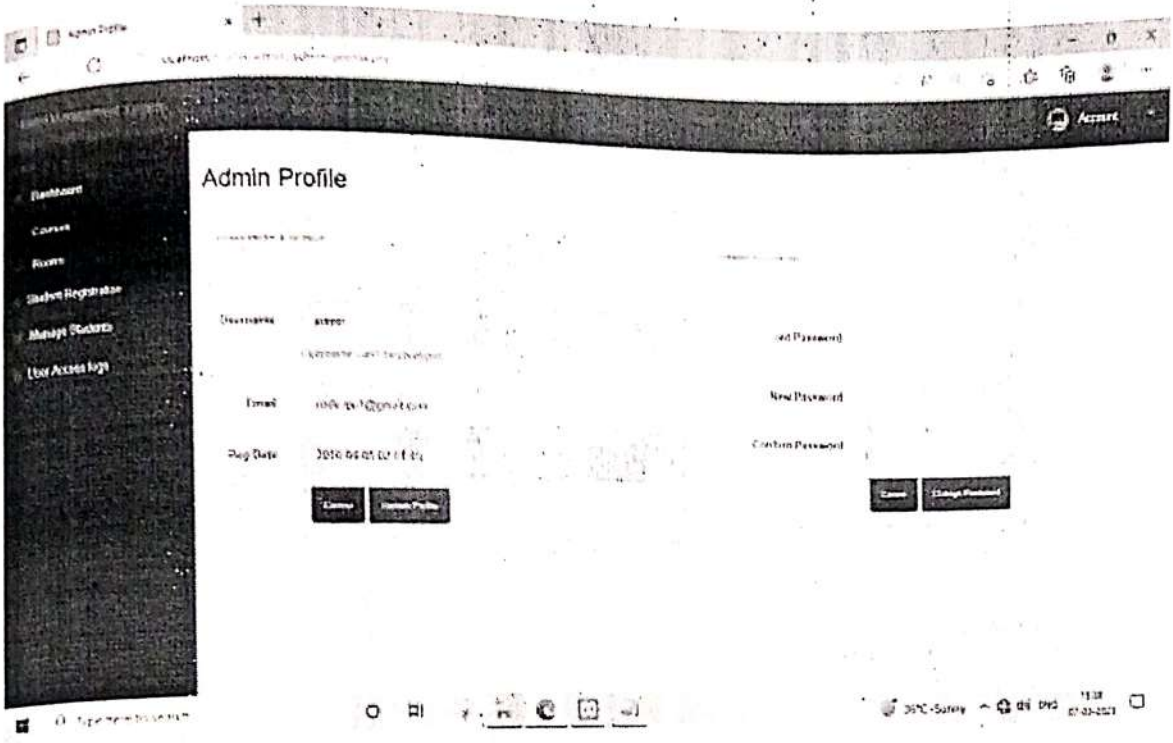
➢ ACCESSLOG



➢ ADMINLOGIN

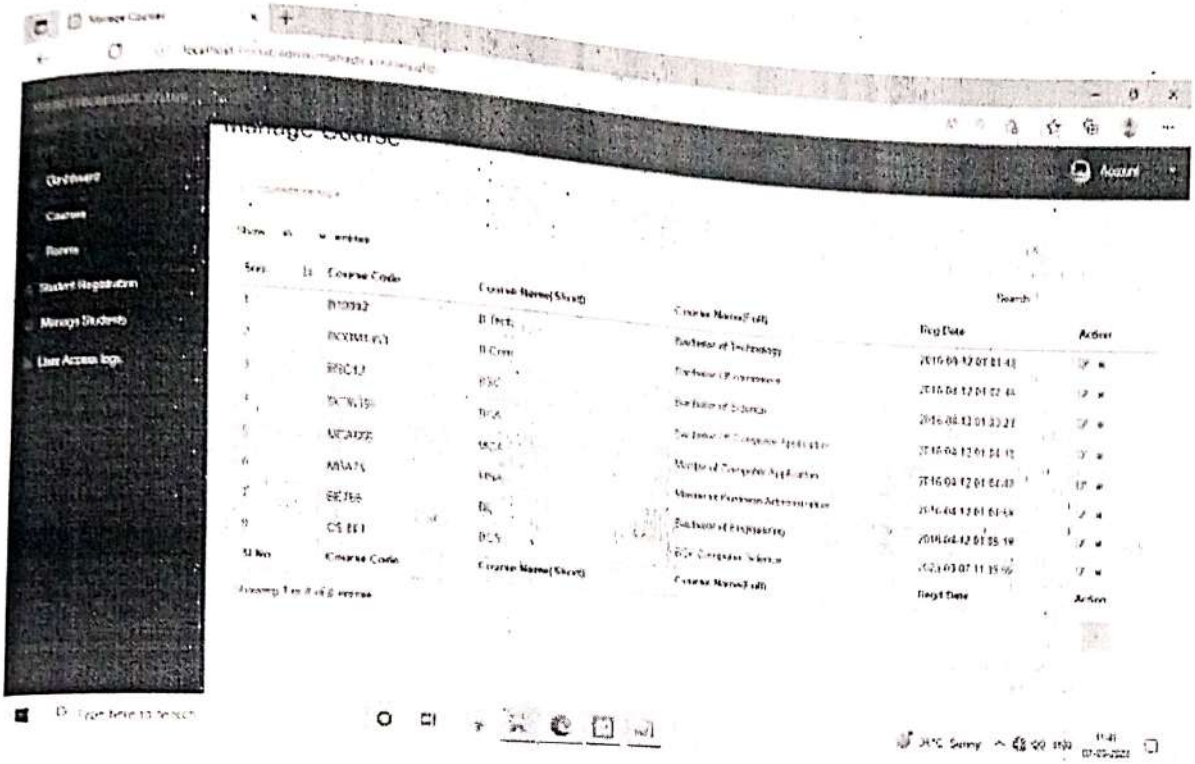


➢ ADMINPROFILE

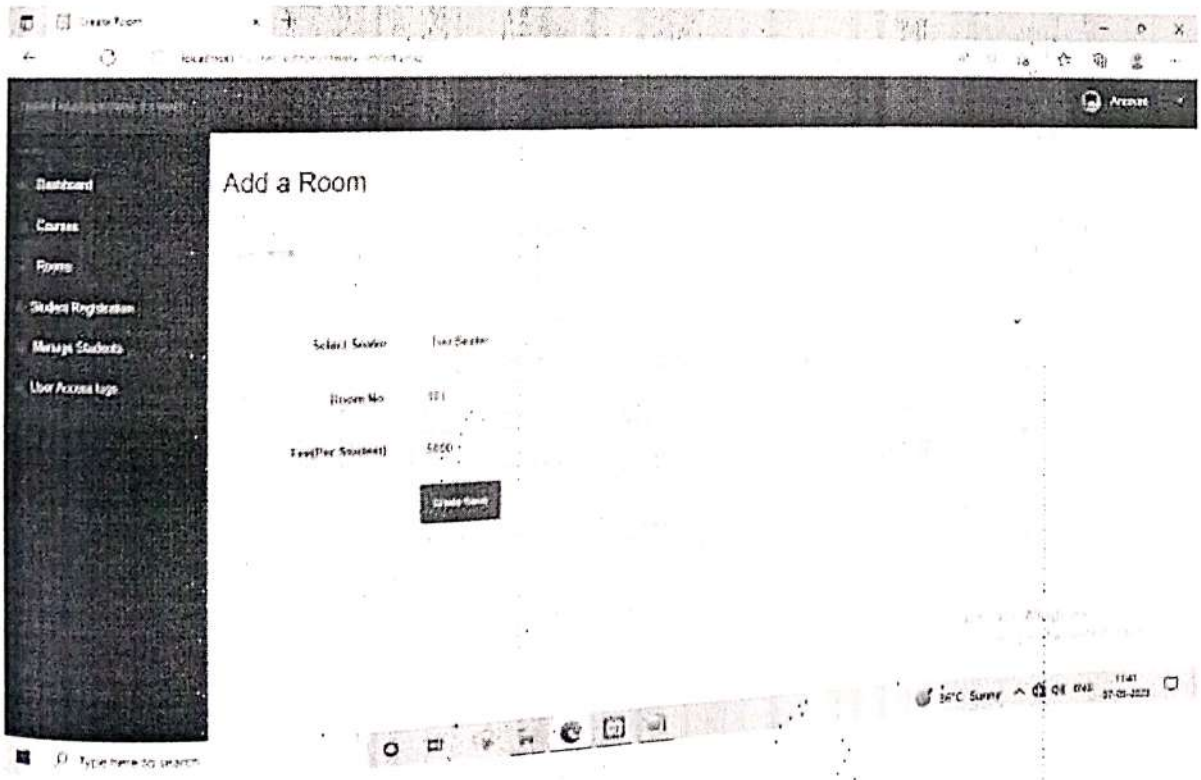


➢ ADDCOURSES

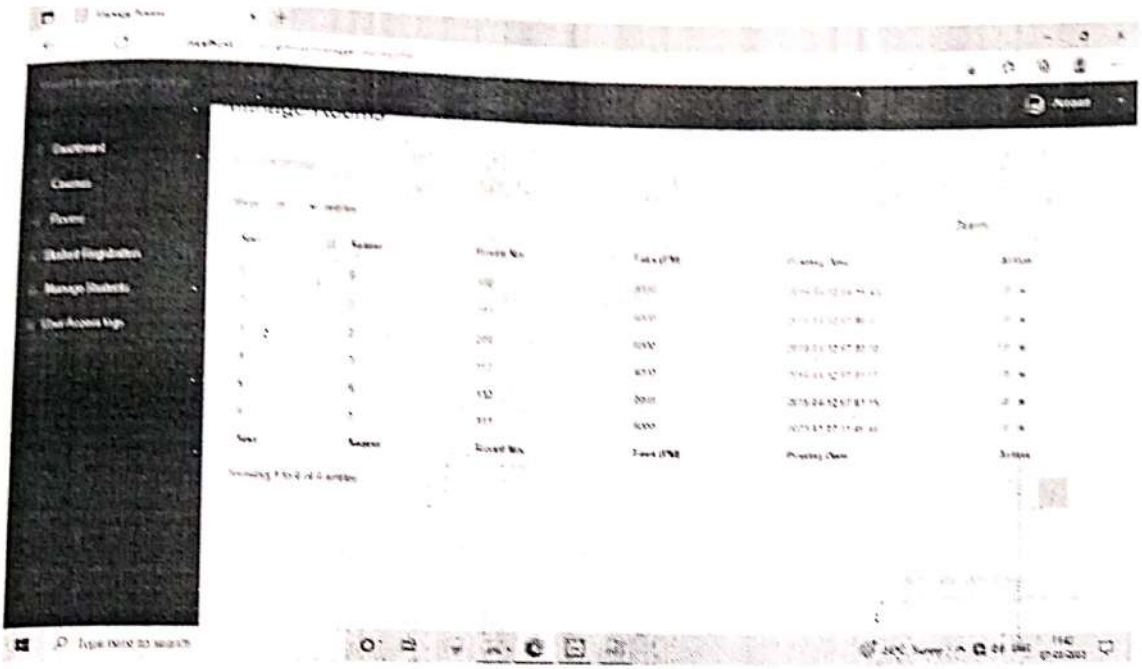
➢ MANAGE COUSRES



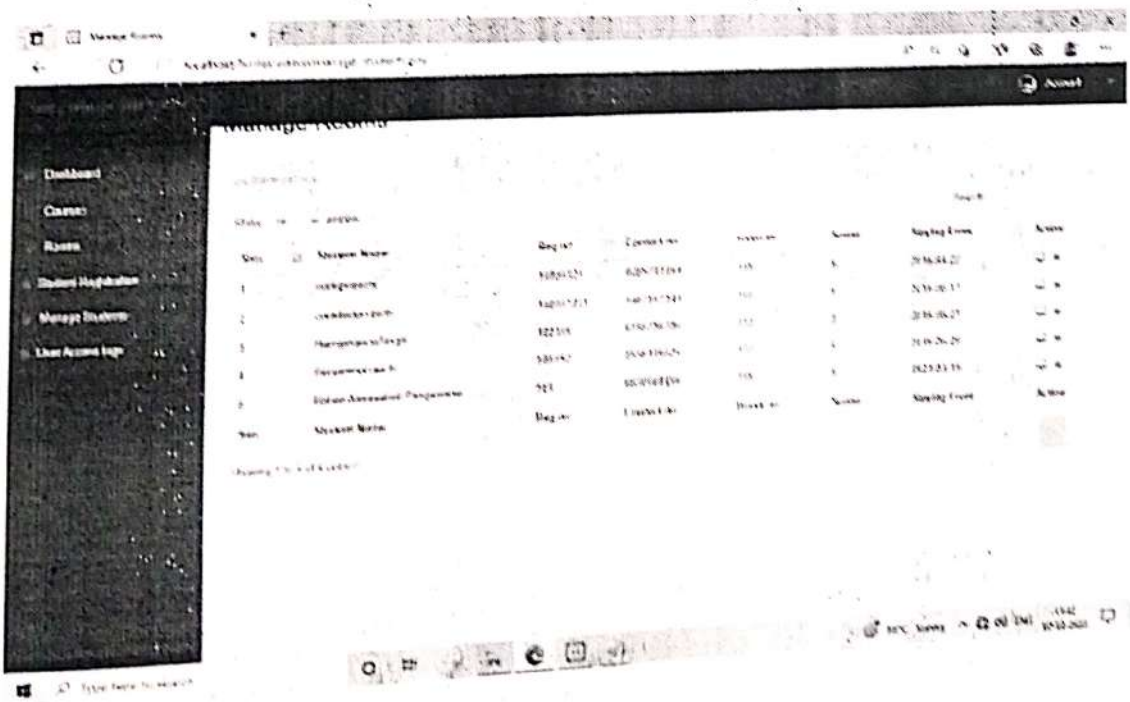
➢ ADD AROOM



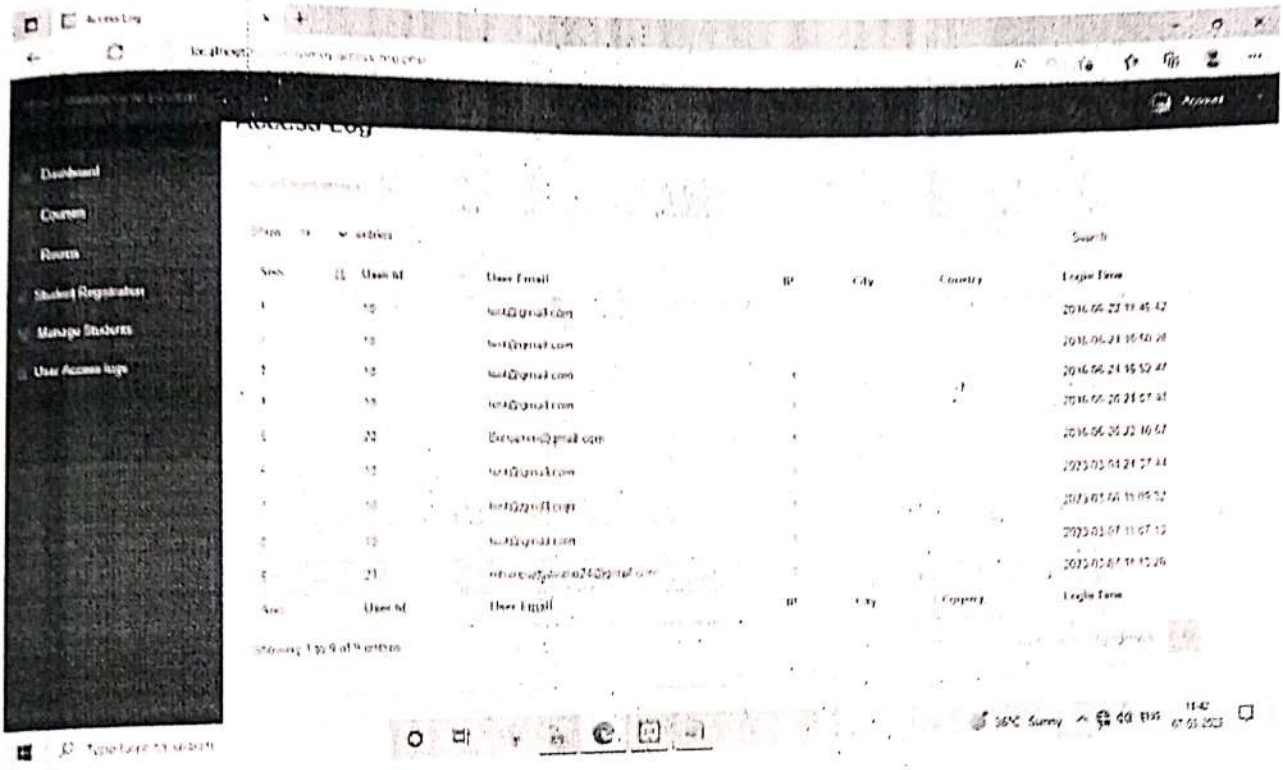
➢ MANAGE ROOM



➢ MANAGE STUDENTS



➢ ACCESS LOG



5. IMPLEMENTATION DETAILS

SOFTWARE AND HARDWARESPECIFICATIONS:

Software:

(1) Google chrome (using runtime theproject).

(2) Apacheserver

(3) XAMPPserver

(4) Notepad (used aseditor).

(5) Internet explorer (usingruntime).

(6) Ms Word.

(7) 64-bit Windows Operating System.

Hardware:

(1) HP Pavilion laptop (used as server).

(2) DESKTOP-8M8NEI

(3) RAM.

(4) Mouse.

(5) Keyboard.

(6) Printer.

6. OUTPUTS AND REPORTTESTING

Test Plan:

The project test plan is a document that outlines for project stakeholders the productfunctionstobetested,whatspecifictestswillbeperformed,theapproach to be taken for those tests, what to test and what not to test, how the tests will be performed, who will be responsible for performing each test, what results are expected. Testing is vital to the success of the system. Testing is the process of executing a program with the explicit intention of finding errors that is making theprogramfail.Thetestermaybeananalyst,programmeroraspecialisttrained for softwaretesting.

Black Box Testing:

The black box is a powerful technique to check the application under test from theuser'sperspective.Blackboxtestingisusedtotestthesystemagainstexternal factors responsible for software failures. This testing approach focuses on the inputthatgoesintothesoftware,andtheoutputthatisproduced.Thetestingteam does not cover the inside details such as code, server logic, and development method. Black box testing is based on the requirements and checks the system to validate against predefinedrequirements.

White BoxTesting:

White box testing refers to a scenario where (as opposed to black box testing), the tester deeply understands the inner workings of the system or system component being tested. White box testing is a type of testing where the tester can see the code. The main purposes of this type of testing are to test the inner workings of the software, as well as strengthen its security, and improve its usabilityanddesign.Thisisalsoknownasstructuraltestingasthetesterchooses which inputs to test and follows their paths through the software to reach their expected outputs. White box testing is used in the unit, integration and systems phases of software testing.

7. CONCLUSION ANDRECOMMENDATIONS

To conclude the description about the project, the project developed using PHP with My SQL is based on the requirement specification of the user and the analysis of the existing system, with flexibility for future enhancement.

"HOSTELMANAGEMENTSYSTEM"isveryusefulforhostelallotment andmessfeecalculation.Thishostelmanagementsoftwareisdesignedforpeople who want to manage various activities in the hostel. For the past few years the number of educational institutions are increasing rapidly. Thereby the numbers of hostels are also increasing for the accommodation of the students studying in this institution. And hence there is a lot of strain on the person who are running the hostel and software's are not usually used in thiscontext.

This particular project deals with the problems on managing a hostel and avoids the problems which occur when carried manually.

Identification of the drawbacks of the existing system leads to the designing of computerized system that will be compatible to the existing system with the system which is more user friendly and more GUI oriented.

8. FUTURE SCOPE

It is easy to extend the system that we have proposed. A person could see anyoftheissued,unissuedoralltheroomsaccordingtohis/herwill.Infuturewe can implement some features for "HOSTEL MANAGEMENT SYSTEM" project. In this system its possible to categorize room rent for particular concession for the entire year.

9. BIBLIOGRAPGY ANDREFERENCE

1. https://www.w3school.com
2. https://www.codeproject.com
3. www.mysql.com
4. www.google.com

G.M.D. Arts, B.W. Commerce & Science College,
Sinnar

HOTEL BOOKING SYSTEM

Student Name :

1) Kedar Tejas Somnath

2) Zinjurde Akash Rajendra

3)Zinjurde Kishor Govind

Class :

TYBSC (COMPUTER SCIENCE)

Guided by: Prof.Smt.N.V.Lahamage

G.M.D. Arts, B.W. Commerce & Science College, Sinnar

CERTIFICATE

This is certifying that **Kedar Tejas Somnath, Zinjurde Akash Rajendra and Zinjurde Kishor Govid** has successfully completed the project on the topic **"Hotel Booking System"** in partial fulfilment of the Bachelor of Science (Computer Science).

Science as prescribed by Savitribai Phule Pune University during of the academic year 2021-2022.

Project Guide :

Prof. Smt.N.V.Lahamage

15/5/23

Head of Dept. (Computer Science)

Prof. Smt.N.V.Lahamage

15/5/23

Internal Examiner

G.M.D.ARTS, B.W. COMMERCE & SCIENCE COLLEGE SINNAR 422 103

15/5/23

External Examiner

INDEX

Acknowledgement

We, the student of G.M.D. College, undergoing *Final Year of Bsc(Computer Science)*, have undertaken the web Project "*Hotel Booking System*" programmed in php.

First of all we would like to express our heartfelt gratitude to our Parents who are always supportive and without their help this project would have been a difficult task.

We would like to express our sincere thanks to our Mr. B. B. Darekar for their guidance throughout the development of this project.

We would also like to thank all the members of the *Computer Science Department* who always helped us in this project directly or indirectly without which this project would have been an absolute dream for us.

Last but not the least we would like to thank our friends who always had a helping hand whenever needed and also for their co-operation and also moral support for doing this project.

- Kedar Tejas Somnath

- Zinjurde Akash Rajendra

- Zinjurde Kishor Govid

Abstract

The project "Online Hotel Booking System" is a system based on accessing the internet to book for rooms in a hotel. The purpose of this study is to develop and implement an online hotel reservation system for hotels, that will replace the manual method of booking for hotel rooms. The previous system for booking rooms were faced with so many problems like, delay in processing the customer booking or paying for rooms that is below or beyond his standard, causes difficulty for emergency booking.

The use of online view of room rates and uploading of available rooms and facilities was used for the new system so that the customer can view and make his choice before arrival, and also in the case of emergency travelling. This new system assisted the hotel owners in managing their hotels, because they can also regulate the receptionist moves and avoid fraudulent activities. It also increased the efficiency of the hotel managers and also their profit margin, once they have a better and good facilities.

Modules

There are two modules

- Admin
- Customer

❖ Admin side

- **Manage Rooms**
- **Manage Accommodation**
- **Manage Reservation**
- **Generate Reports**
- **Manage Users**

❖ User side

- **Home**
- **Room and Rates**
- **About Us**
- **Contact Us**
- **Guest Profile**
- **Manage Booking Cart**
- **Reservation Details**

- Submit Reservation
- Login and Logout

❖ Preferred Technologies

- Operating System: Windows XP
- User Interface: CSS, Bootstrap
- Client-side Scripting: JavaScript
- Programming Language: PHP
- Database: My SQL
- Server Deployment: Apache

Hardware Requirement

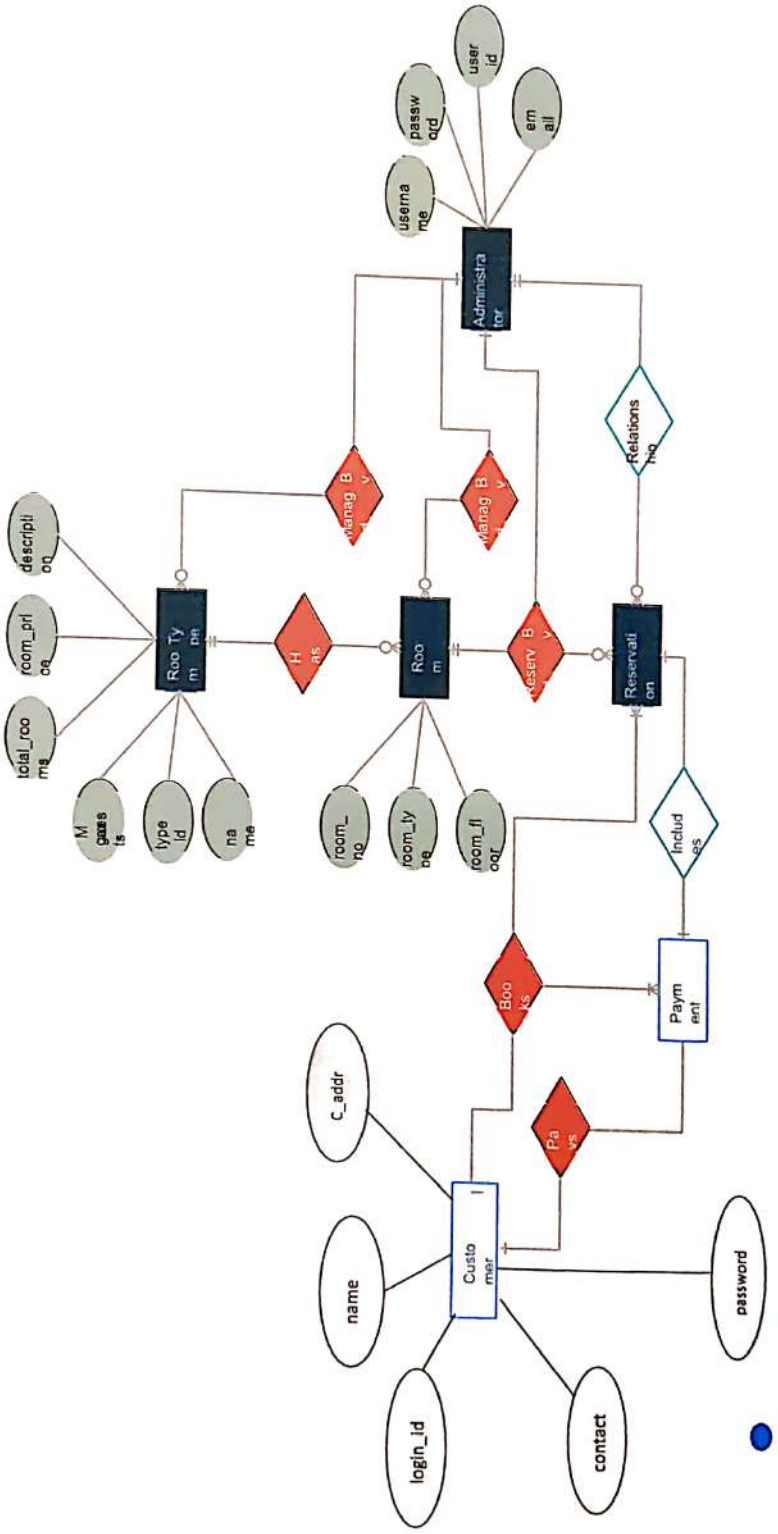
- **Processor**: CORE i3
- **Hard Disk**: 80 GB
- **RAM**: 4 GB

Software Specification

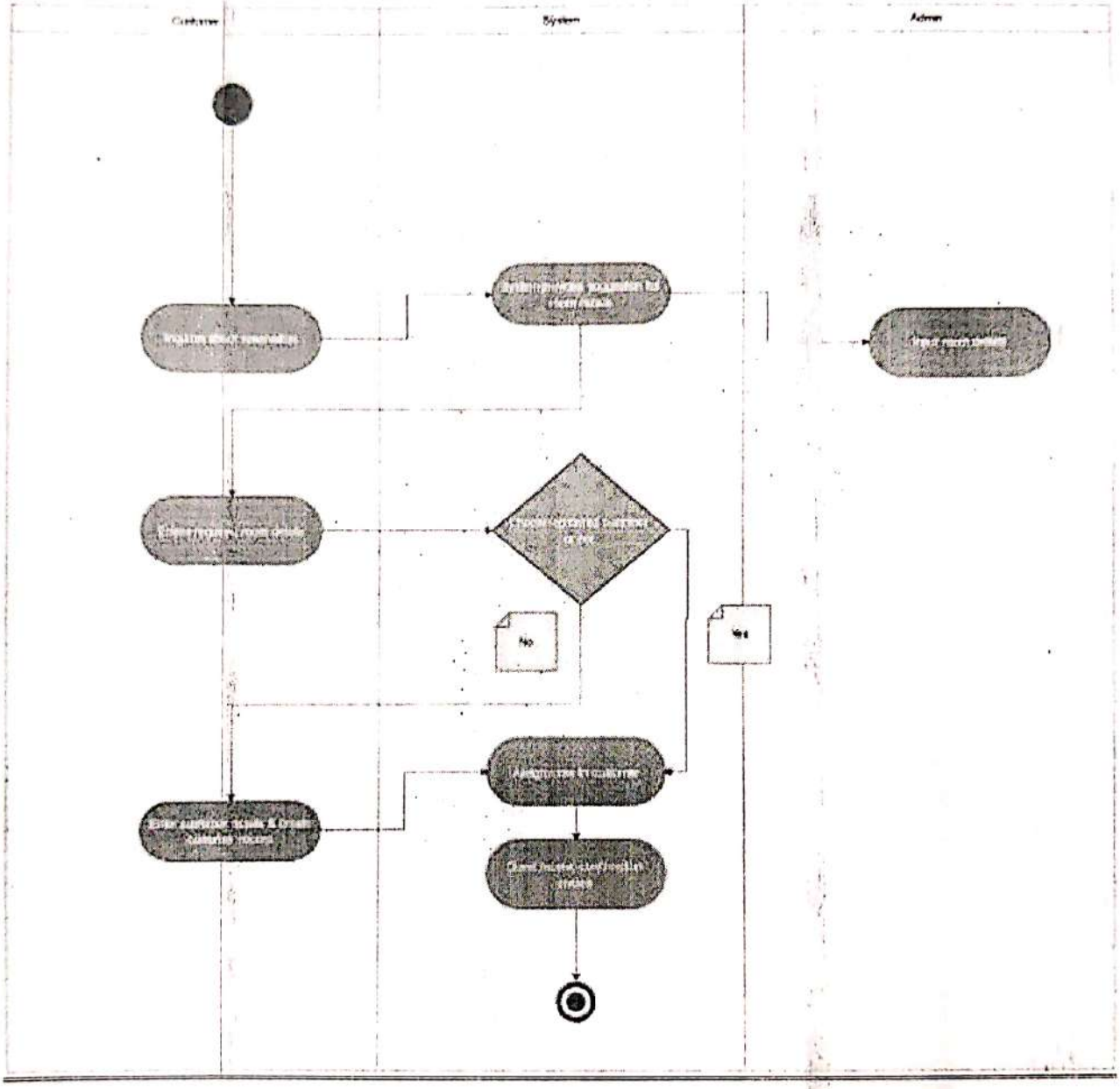
- **Language Used**: PHP 5.6.4
- **Database**: My SQL 5.5
- **Server used**: Apache/3.2.3
- **User Interface Design**:

  Bootstrap, JavaScript

ER Diagram



Activity diagram



SCREENSHOTS

HOME

GALLERY

Amazing Hotel in front of the Sea

A great stay is closer than you think. Every stay will give you a reason to smile. Enjoy an extraordinary retreat with exclusive offers. Modern. Accessible. Affordable.

ABOUT US

About Us

Amazing Hotel in front of the Sea

A great adventure begins here. Grateful hospitality in the heart of the city.
Maximum luxury. Exclusive sensation. The best holidays start here! Relax and feel peace in you

ROOMS

Wing A Standard Room

without TV

- Number of Person - 1
- Remaining Rooms : 1

Rs.800/ Day

Book Now!

Wing A Travelers Time

Without TV

- Number of Person - 1
- Remaining Rooms : 3

Rs.2000/ Day

Book Now!

Wing B and Ground Floor Standard Room

With TV

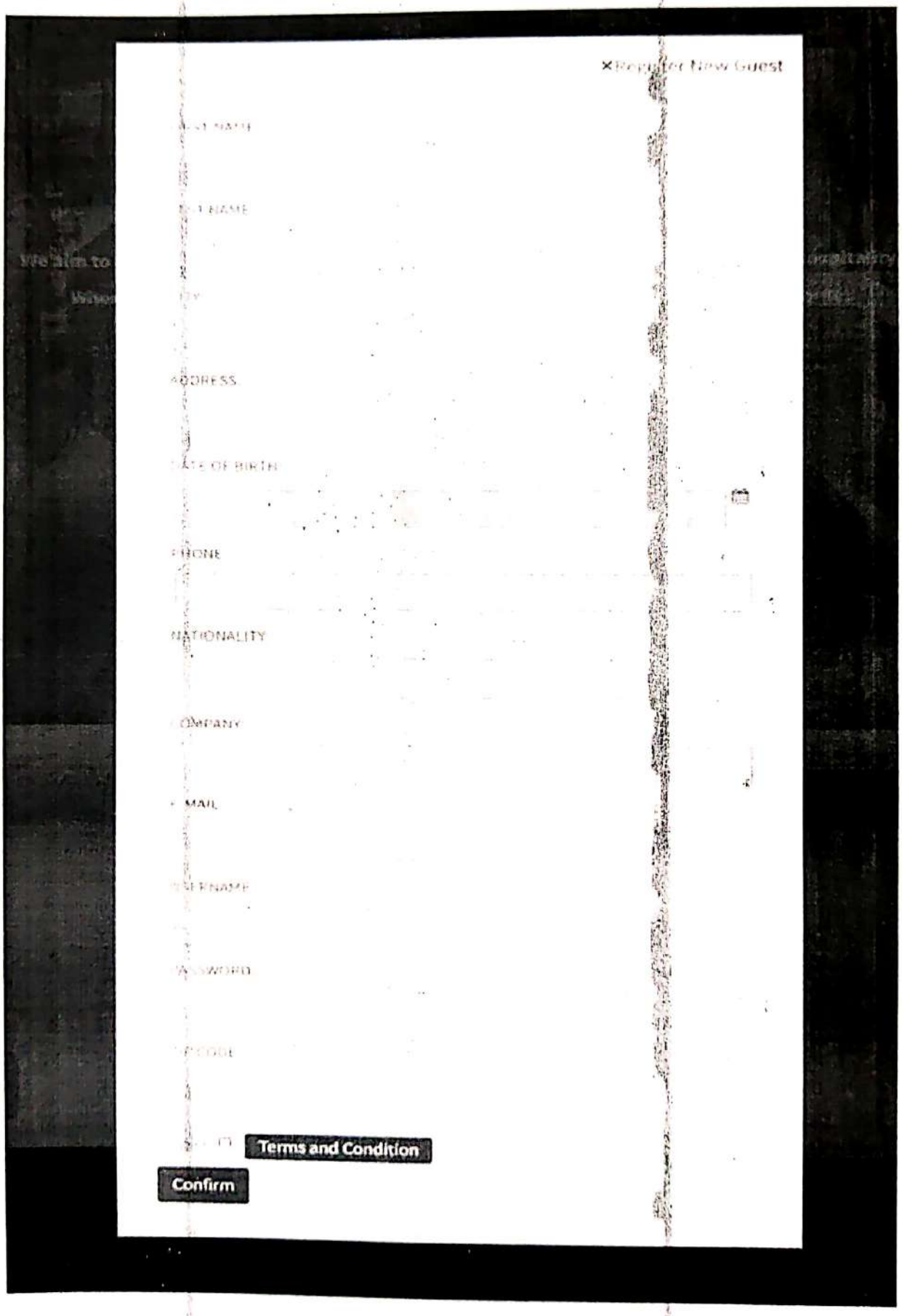
- Number of Person - 1
- Remaining Rooms : 1

Rs.5000/ Day

Book Now!

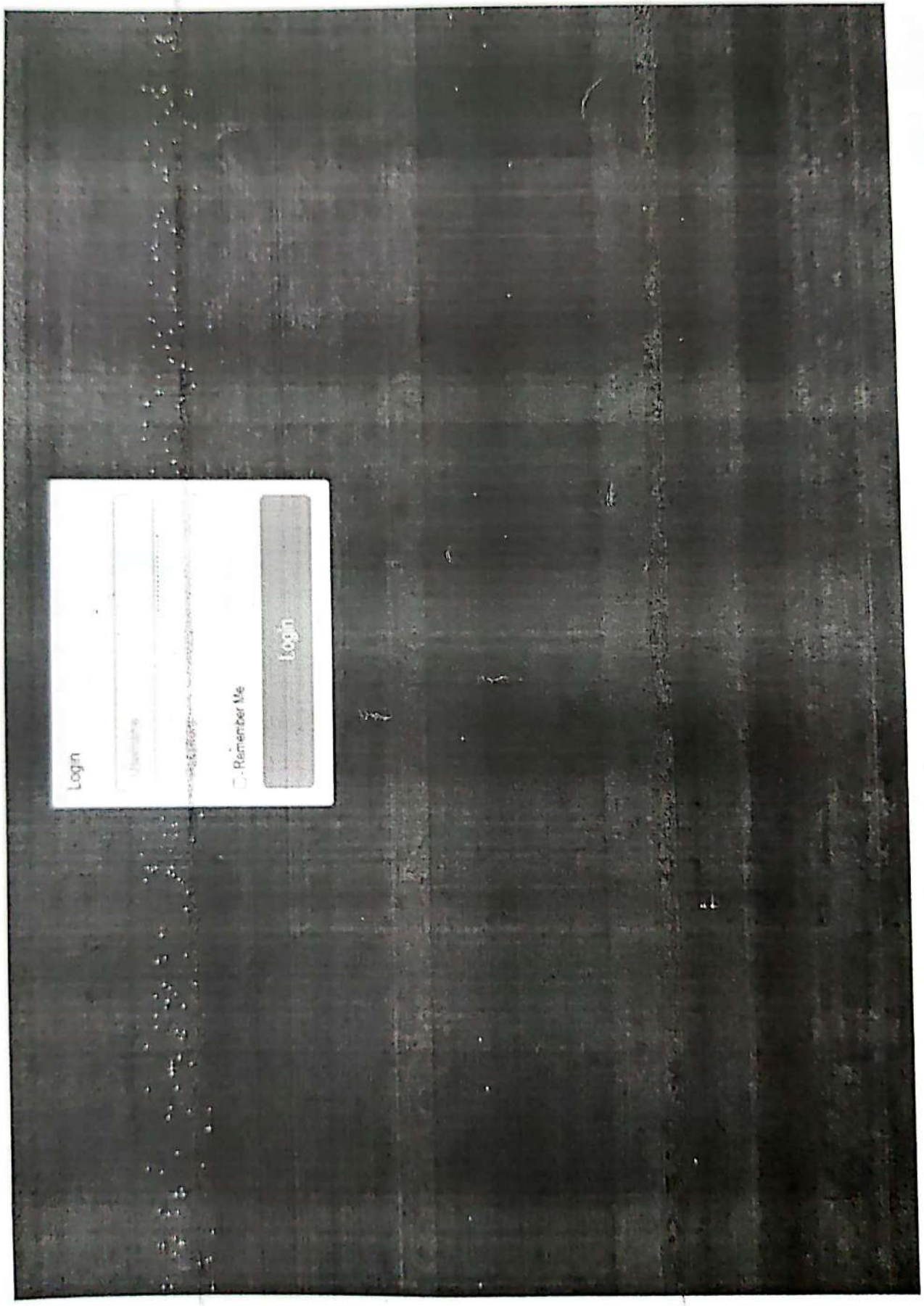
CONTACT US

REGISTRATION



REGISTRATION

LOGIN



ADMIN HOME PAGE

Administrator Panel:Welcome Anonymous

Rooms

The guest house has got various rooms that are categorised accordion to types. Each room is of particular category and have a maximum number of Adults and Children that can be accomodated. Click HERE.

Accomodation

Reservation

Users

© Dragon House

Conclusion

- This project is designed to meet the requirements of Online Hotel Booking.
- It has been developed in Visual Basic keeping in mind the specifications of the system.
- For designing the system we have used simple data flow diagrams. Overall the project teaches us the essential skills like:
- Using system analysis and design techniques like ER diagram and activity diagram in designing the system.
- Understanding the database handling and query processing.

G.M.D. ARTS, B.W. COMMERCE & SCIENCE COLLEGE, SINNAR.

Department Of Computer Science

A project Report On

LIBRARY MANAGEMENT System

Submitted By:

Shaikh Fayyaj Abdul

Harkal sachin somnath

Jha kailash lakshman

Guided by :

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Department Of Computer Science

CERTIFICATE

This is certify that

Shaikh Fayyaj Abdul

Harkal sachin somnath

Jha kailash lakshman

Student of BSC Computer science satisfactory completed project work on library management system towards partial full film and degree course affiliated to Savitribai Phule Pune University for the academic year 2022-2023at GMD arts B W. Commerce and science College sinnar

13/4/23

Project Guide
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TABLE OF CONTENTS

college name-g. m. d arts, b. w. commerce college, sinnar
Branch -BSc Computer science

Library Management system

Group members-

- Shaikh Fayyaj Abdul
- Harkal sachin somnath
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Abstract

System to maintain all the daily work of library this project has many features which Are generally not available in normal library management system like library Management system is a project which AIMS in developing a computerizedd facility of user login and a facility of teachers login .it also has a facility of admin login through which the admin can monitor the whole system .it also has facility of an online notice board where teachers can student can put up information about workshop or seminars being held in our colleges or nearby colleges and librarian after proper verification from the concerned institution organizing the seminar can add it to the notice board . it has also a facility where student after logging in their accounts can See list of books issued and its issue date and return date and also the which are generally not available in normal library management system like student can request the librarian to add books by filling the book request form. The librarian After logging into his account ie admin account can generate overall this project of ours is being developed to help the students as well as staff human efforts

INTRODUCTION

This chapter gives an overview about the aim , objectives ,background and operation environment of the system.

1.1 PROJECT AIMS AND OBJECTIVES

The project aims and objectives that will be achieved after completion of this project are discussed in this subchapter. The aims and objectives are as follows:

- Online book issue
- Request column for librarian for providing new books
- A separate column for digital library
- Student login page where student can find books issued by him/her and date of return.
- A search column to search availability of books
- A teacher login page where teacher can add any events being organized in the college and important suggestions regarding books.
- Online notice board about the workshop.

1.2 BACKGROUND OF PROJECT

Library Management System is an application which refers to library systems which are generally small or medium in size. It is used by librarian to manage the library using a computerized system where he/she can record various transactions like issue of books, return of books, addition of new books, addition of new students etc.

Books and student maintenance modules are also included in this system which would keep track of the students using the library and also a detailed description about the books a library contains. With this computerized system there will be no loss of book record or member record which generally happens when a non computerized system is used.

In addition, report module is also included in Library Management System. If user's position is admin, the user is able to generate different kinds of reports like lists of students registered, list of books, issue and return reports.

All these modules are able to help librarian to manage the library with more convenience and in a more efficient way as compared to library systems which are not computerized.

1.5 OPERATION ENVIRONMENT

PROCESSOR	INTEL CORE PROCESSOR OR BETTER PERFORMANCE
OPERATING SYSTEM	WINDOWS VISTA ,WINDOWS7, UBUNTU
MEMORY	1GB RAM OR MORE
HARD DISK SPACE	MINIMUM 3 GB FOR DATABASE USAGE FOR FUTURE
DATABASE	MY SQL

Motivation

efficient management : library management system can help in efficient management of library resources , such as books,general,magazines and other materials. it can help librarians keep track of what book are available,who has borrowed them, when they are due to be returned , and other important details.
user convenience : a library management system can improve user convenience by making it easier for them to search for books, place, holds, and renew borrowed items. it can also provide access to electronic resources such as ebooks and databases
data analysis : the library management system can generate reports and statistics on library usage which can help librarians and make inform decisions about resource a location and collection development

Motivation

The present Study offers intervention of MIS (Management Information System) to the conventional Library Management.Libraries, as centers of learning are experiencing unprecedented rates of change, both from internal and External environment.
The new library environment incorporates a changing user population, technology enhancements, transformation of the scholarly a renewed commitment to planning and assessment throughout the organization. However, Librarians as information managers have been slow to keep pace with this change. According to Lakos (2006), academic libraries are confronting the issues of organisational viability and relevance and are fast adapting to the new reality of the web. Since 1995, when Netscape enabled real access to the Internet, academic libraries are no longer the main owners of the information gateway. The web has changed every aspect of life. The most visible change has occurred in the size, rate of change and speed of information availability and delivery. The breakthrough combination of internet with the libraries as academic warehouses has brought us to the age of information explosion. The intervention of e-resources to libraries has manifold the reach of conventional academic resources. It is estimated that the amount of information in the world doubles every 20 months.

Motivation

As we live in an information environment dominated increasingly by the Internet, we have to understand that it is primarily a communication environment.
All organizations and businesses are busyinrediscovering and reinventing themselves and adapting themselves around the potentials andthe pitfalls of the Internet.
The Internet opens tremendous and until now inconceivable possibilities and it enables the creation of communities of interest. Librarians have to realize that they are in the information business rather than in the librarybusiness. They have to adjust, re-evaluate their core services, and change their perspective and purpose. Libraries have to rediscover and re-imagine themselves in order to stay relevant or fade. In order to change successfully, libraries have to change their systems, processes, but mainly their organizational cultures.
Libraries have to transform themselves into organizations that support the values of quality and quality management (Brophy & Couling, 1996). This also means that libraries should build organizations that support learning. (Senge, 1994) Libraries that focus on customer needs increase their ability to provide quality service to their customers. By concentrating on their ability to learn and create solutions, the learning organization "is continually enhancing its capacity to create its future

SYSTEM ANALYSIS

In this chapter, we will discuss and analyze about the developing process of Library Management System including software requirement specification (SRS) and comparison between existing and proposed system . The functional and non functional requirements are included in SRS part to provide complete description and overview of system requirement before the developing process is carried out. Besides that, existing vs proposed provides a view of how the proposed system will be more efficient than the existing one.

2.1 SOFTWARE REQUIREMENT SPECIFICATION

2.1.1 GENERAL DESCRIPTION

PRODUCT DESCRIPTION:

Library Management System is a computerized system which helps user(librarian) to manage the library daily activity in electronic format. It reduces the risk of paper work such as file lost, file damaged and time consuming.
It can help user to manage the transaction or record more effectively and time-saving.

PROBLEM STATEMENT:

The problem occurred before having computerized system includes:

- File lost
  When computerized system is not implemented file is always lost because of human environment.Some times due to some human error there may be a loss of records.

- File damaged When a computerized system is not there file is always lost due to some accdent like spilling of water by some member on file accidentally.Besides some natural disaster like floods or fires may also damage the files.

- Difficult to search record

  When there is no computerized system there is always a difficulty in searching of records if the records are large in number .

- Space consuming

  After the number of records become large the space for physical storage of file and records also increases if no computerized system is implemented.

- Cost consuming

  As there is no computerized system the to add each record paper will be needed which will increase the cost for the management of library.

2.1.2 SYSTEM OBJECTIVES

- Improvement in control and performance

  The system is developed to cope up with the current issues and problems of library .The system can add user, validate user and is also bug free.

- Save cost

  After computerized system is implemented less human force will be required to maintain the library thus reducing the overall cost.

- Save time

  Librarian is able to search record by using few clicks of mouse and few search keywords thus saving his valuable time.

- Option of online Notice board

  Librarian will be able to provide a detailed description of workshops going in the college as well as in nearby colleges

- Lecture Notes

  Teacher have a facility to upload lectures notes in a pdf file having size not more than 10mb

2.1.3.1 NON FUNCTIONAL REQUIREMENTS

- Product Requirements

EFFICIENCY REQUIREMENT

When a library management system will be implemented librarian and user will easily acess library as searching and book transaction will be very faster .

RELIABILITY REQUIREMENT

The system should accurately performs member registration ,member validation , report generation, book transaction and search

USABILITY REQUIREMENT

The system is designed for a user friendly environment so that student and staff of library can perform the various tasks easily and in an effective way.

ORGANIZATIONAL REQUIREMENT

IMPLEMENTATION REQUIREMNTS

In implementing whole system it uses html in front end with php as server side scripting language which will be used for database connectivity and the backend ie the database part is developed using mysql.

DELIVERY REQUIREMENTS

The whole system is expected to be delivered in six months of time with a weekly evaluation by the project guide.

2.1.3.2 FUNCTIONAL REQUIREMENTS

1. NORMAL USER

1.1 USER LOGIN

Description of feature

This feature used by the user to login into system. They are required to enter user id and password before they are allowed to enter the system .The user id and password will be verified and if invalid id is there user is allowed to not enter the system.

Functional requirements

-user id is provided when they register

-The system must only allow user with valid id and password to enter the system

-The system performs authorization process which decides what user level can acess to.

-The user must be able to logout after they finished using system.

1.2 REGISTER NEW USER

Description of feature

This feature can be performed by all users to register new user to create account.

Functional requirements

-System must be able to verify information

-System must be able to delete information if information is wrong

1.3 REGISTER NEW BOOK

Description of feature

This feature allows to add new books to the library

Functional requirements

-System must be able to verify information

-System must be able to enter number of copies into table.

- System must be able to not allow two books having same book id.

1.5 SEARCH BOOK

DESCRIPTION OF FEATURE

This feature is found in book maintenance part . we can search book based on book id , book name , publication or by author name.

Functional requirements

- System must be able to search the database based on select search type
- System must be able to filter book based on keyword enterd
- System must be able to show the filtered book in table view

1.5 ISSUE BOOKS AND RETURN BOOKS

DESCRIPTION OF FEATURE

This feature allows to issue and return books and also view reports of book issued.

Functional requirements

-System must be able to enter issue information in database.

-System must be able to update number of books.

- System must be able to search if book is available or not before issuing books

-System should be able to enter issue and return date information .

1.6 EVENT ADDITION

DESCRIPTION OF FEATURE

This feature allows teacher and student to add information about various workshops being conducted in college and colleges nearby.

Functional requirements

-System should be able to add detailed information about events .

-System should be able to display information on notice board available in the homepage of site

2.1.4 SOFTWARE AND HARDWARE REQUIREMENTS

This section describes the software and hardware requirements of the system

2.1.4.1 SOFTWARE REQUIREMENTS

- Operating system- Windows 7 is used as the operating system as it is stable and supports more features and is more user friendly
- Database MYSQL-MYSQL is used as database as it easy to maintain and retrieve records by simple queries which are in English language which are easy to understand and easy to write.
- Development tools and Programming language- HTML is used to write the whole code and develop webpages with css, java script for styling work and php for sever side scripting.

2.1.4.2 HARDWARE REQUIREMENTS

- Intel core i5 2nd generation is used as a processor because it is fast than other processors an provide reliable and stable and we can run our pc for longtime. By using this processor we can keep on developing our project without any worries.
- Ram 1 gb is used as it will provide fast reading and writing capabilities and will in turn support in processing

2.2 EXISTING VS PROPOSED SYSTEM

i. Existing system does not have any facility of teachers login or student login where as proposed system will have a facility of student login as well as teacher's login

ii. Existing system does not have a facility of online reservation of books whereas proposed system has a facility of online reservation of books

iii. Existing system does not have any facility of online notice board where description of workshops happening in our college as well as nearby colleges is being provided.

iv. Existing system does not has any option of lectures notes uploaded by teachers whereas proposed system will have this facility

v. Existing system does not have any facility to generate student reports as well book issue reports whereas proposed system provides librarian with a tool to generate reports

vi. Existing system does not has any facility for book request and sugeestions where as in proposed system after logging in to their accounts student can request books as well as provide suggestions to improve library

2.3 SOFTWARE TOOLS USED

The whole Project is divided in two parts the front end and the back end.

2.3.1 Front end

The front end is designed using of html , Php ,css, Java script

- HTML- **HTML** or **Hyper Text Markup Language** is the main markup language for creating web pages and other information that can be displayed in a web browser.HTML is written in the form of HTML elements consisting of *tags* enclosed in angle brackets (like `<html>`), within the web page content. HTML tags most commonly come in pairs like `<h1>` and `</h1>`, although some tags represent *empty elements* and so are unpaired, for example `<img>`. The first tag in a pair is the *start tag*, and the second tag is the *end tag* (they are also called *opening tags* and *closing tags*). In between these tags web designers can add text, further tags, comments and other types of text-based content. The purpose of a web browser is to read HTML documents and compose them into visible or audible web pages. The browser does not display the HTML tags, but uses the tags to interpret the content of the page.HTML elements form the building blocks of all websites. HTML allows images and objects to be embedded and can be used to create interactive forms. It provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. It can embed scripts written in languages such as JavaScript which affect the behavior of HTML web pages.
- CSS- **Cascading Style Sheets** (**CSS**) is a style sheet language used for describing the look and formatting of a document written in a markup language. While most often used to style web pages and interfaces written in HTML and XHTML, the language can be applied to any kind of XML document, including plain XML, SVG and XUL. CSS is a cornerstone specification of the web and almost all web pages use CSS style sheets to describe their presentation.CSS is designed primarily to enable the separation of document content from document presentation, including elements such as the layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification

of presentation characteristics, enable multiple pages to share formatting, and reduce complexity and repetition in the structural content (such as by allowing for table less web design).CSS can also allow the same markup page to be presented in different styles for different rendering methods, such as on-screen, in print, by voice (when read out by a speech-based browser or screen reader) and on Braille-based, tactile devices. It can also be used to allow the web page to display differently depending on the screen size or device on which it is being viewed. While the author of a document typically links that document to a CSS file, readers can use a different style sheet, perhaps one on their own computer, to override the one the author has specified. However if the author or the reader did not link the document to a specific style sheet the default style of the browser will be applied.CSS specifies a priority scheme to determine which style rules apply if more than one rule matches against a particular element. In this so-called *cascade*, priorities or *weights* are calculated and assigned to rules, so that the results are predictable.

- JAVA SCRIPT- **JavaScript** (**JS**) is a dynamic computer programming language. It is most commonly used as part of web browsers, whose implementations allow client-side scripts to interact with the user, control the browser, communicate asynchronously, and alter the document content that is displayed. It is also being used in server-side programming, game development and the creation of desktop and mobile applications. JavaScript is a prototype-based scripting language with dynamic typing and has first-class functions. Its syntax was influenced by C. JavaScript copies many names and naming conventions from Java, but the two languages are otherwise unrelated and have very different semantics. The key design principles within JavaScript are taken from the Self and Scheme programming languages. It is a multi-paradigm language, supporting object-oriented, imperative, and functional programming styles. The application of JavaScript to use outside of web pages—for example, in PDF documents, site-specific browsers, and desktop widgets—is also significant. Newer and faster JavaScript VMs and platforms built upon them (notably Node.js) have also increased the popularity of JavaScript for server-side web applications. On the client side, JavaScript was traditionally implemented as

an interpreted language but just-in-time compilation is now performed by recent (post-2012) browsers.

- PHP- **PHP** is a server-side scripting language designed for web development but also used as a general-purpose programming language. PHP is now installed on more than 244 million websites and 2.1 million web servers. Originally created by Rasmus Lerdorf in 1995, the reference implementation of PHP is now produced by The PHP Group. While PHP originally stood for *Personal Home Page*, it now stands for *PHP: Hypertext Preprocessor*, a recursive backronym.PHP code is interpreted by a web server with a PHP processor module, which generates the resulting web page: PHP commands can be embedded directly into an HTML source document rather than calling an external file to process data. It has also evolved to include a command-line interface capability and can be used in standalone graphical applications. PHP is free software released under the PHP License. PHP can be deployed on most web servers and also as a standalone shell on almost every operating system and platform, free of charge.

2.3.2 BACK END- The back end is designed using mysql which is used to design the databases

- MYSQL- **MySQL** ("My S-Q-L", officially, but also called "My Sequel") is (as of July 2013) the world's second most widely used open-source relational database management system (RDBMS). It is named after co-founder Michael Widenius daughter, My. The SQL phrase stands for Structured Query Language. The MySQL development project has made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements. MySQL was owned and sponsored by a single for-profit firm, the Swedish company MySQL AB, now owned by Oracle Corporation .MySQL is a popular choice of database for use in web applications, and is a central component of the widely used LAMP open source web application software stack (and other 'AMP' stacks). LAMP is an acronym for "Linux, Apache, MySQL, Perl/PHP/Python." Free-software-open source projects that require a full-featured database management system often use MySQL. For commercial use, several paid editions are available, and offer additional functionality. Applications which use MySQL databases

include: TYPO3, MODx, Joomla, WordPress, phpBB, MyBB, Drupal and other software. MySQL is also used in many high-profile, large-scale websites, including Wikipedia, Google (though not for searches), Facebook, Twitter, Flickr, and YouTube

SYSTEM DESIGN

3.1 TABLE DESIGN

VARIOUS TABELS TO MAINTAIN INFORMATION

- BOOK TABLE FOR KEEPING TRACK OF BOOKS

Field	Data type	Default	Key	Extra
Code	INT(11)	Not Null	Primary	Auto increment
Bookname	VARCHAR(255)	Null		
Author	VARCHAR(255)	Null		
Publication	VARCHAR(255)	Null		
Subject	VARCHAR(255)	Null		
No of copies	INT(10)	Null		

- STUDENT TABLE FOR STUDENT INFORMATION

Field	Data type	Default	Key	Extra
libid	INT(11)	NOT NULL	Primary key	Auto increment
regno	INT(10)	NULL		
branch	VARCHAR(255)	NULL		
section	VARCHAR(255)	NULL		
semester	VARCHAR(255)	NULL		
section	VARCHAR(2)	NULL		
yearofadm	INT(5)	NULL		

- TEACHER TABLE TO KEEP TEACHER INFORMATION

Field	Data Type	Default	Key	Extra
Tid	INT(11)	NOT NULL	Primary key	Auto increment
Name	VARCHAR(255)	NULL		
Designation	VARCHAR(255)	NULL		
Branch	VARCHAR(255)	NULL		
Contactno	INT(13)	NULL		
Lectures	LONG BLOB	NULL		

- Issue table to keep track of books issued

Field	Data Type	Default	Key	Extra
bookid	INT(11)	NOT NULL	Foreign key	References book
stuid	INT(11)	NOT NULL	Foreign key	References Student
issuedate	DATE	NULL		
returndate	DATE	NULL		

- STUDENT LOGIN TABLE

Field	Data type	Default	Key	Extra
logid	INT(11)	NOT NULL	Foreign key	References Student
Username	VARCHAR(255)	NULL		
Password	VARCHAR(255)	NULL		
numbooks	INT(1)	NULL		

- EVENT TABLE FOR EVENT INFORMATION

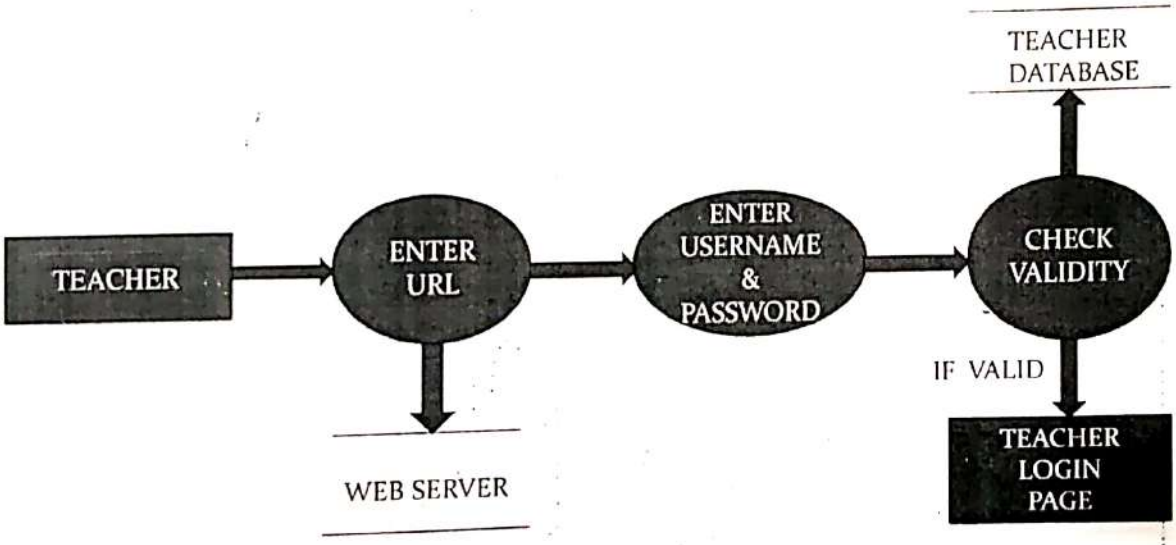
Field	Data type	Default	Key	Extra
Name	Varchar(255)	NULL		
Date	Date(yyyy/mm/dd)	NULL		
Time	VARCHAR(255)	NULL		
Mname	VARCHAR(255)	NULL		
Contactno.	Int(30)	NULL		
Email	VARCHAR(255)	NULL		
Venue	varchar(255)	NULL		

- TEACHER LOGIN TABLE

Field	DataType	Default	Key	Extra
Loginid	INT(11)	NOT NULL	Foreign key	References teacher
Username	VARCHAR(255)	NULL		
Password	VARCHAR(255)	NULL		

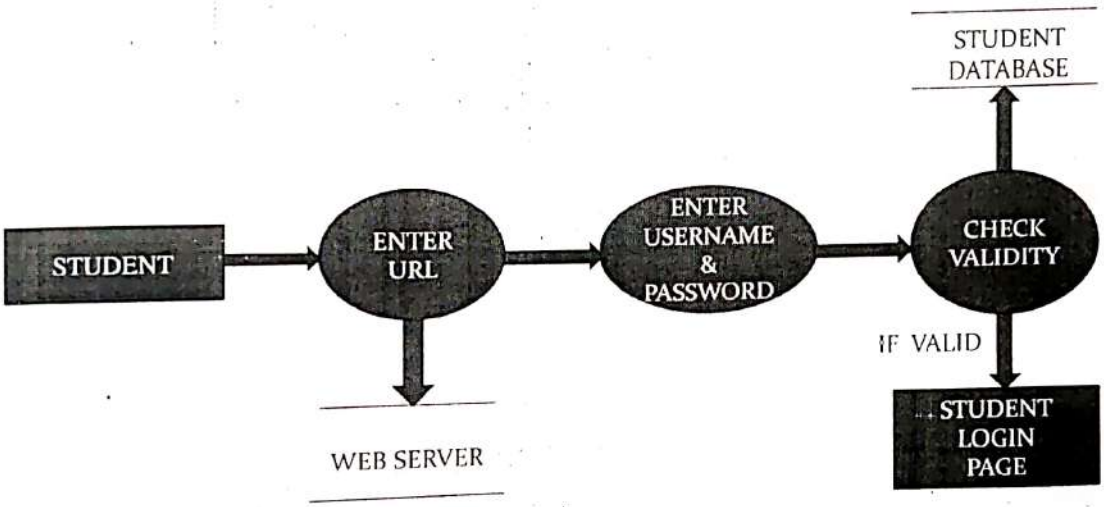
3.2 DATA FLOW DIAGRAMS (Er diagrams)

DATA FLOW DIAGRAM FOR TEACHER LOGIN



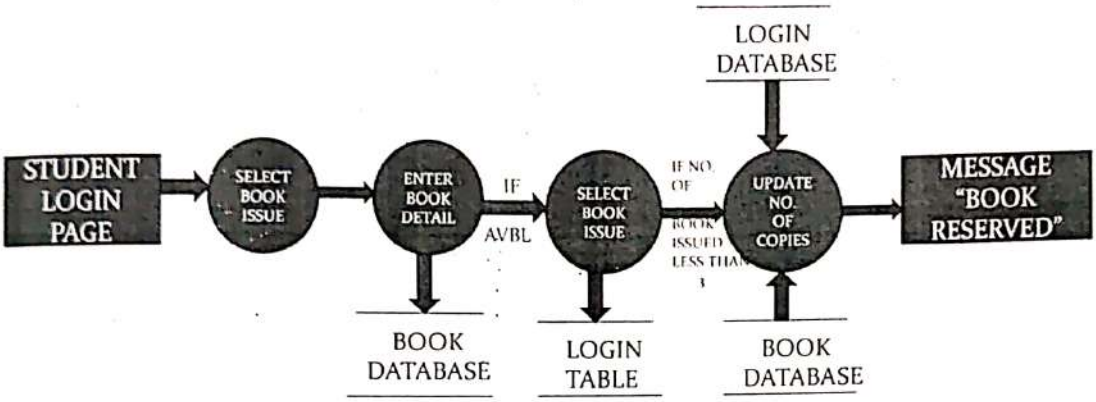
After entering to the home page of the website , teacher can choose the TEACHER LOGIN option where they are asked to enter username & password , and if he/she is a valid user then a teacher login page will be displayed.

DATA FLOW DIAGRAM FOR STUDENT LOGIN



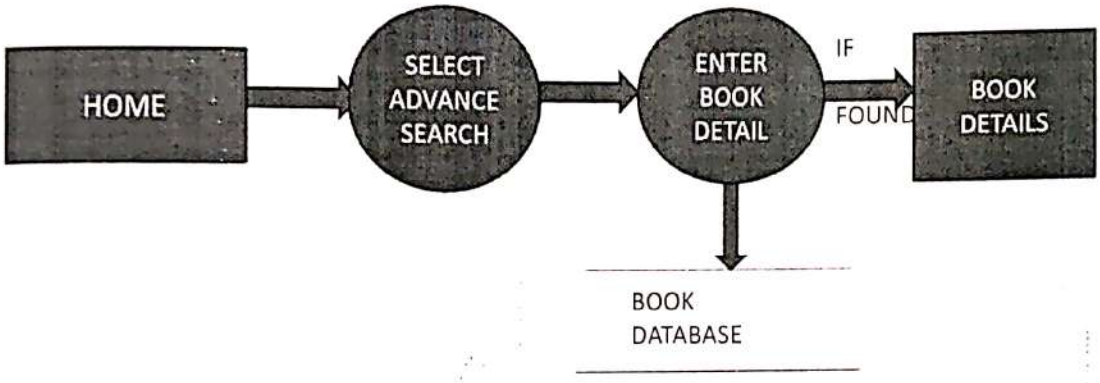
After entering to the home page of the website , student can choose the STUDENT LOGIN option where they are asked to enter username & password , and if he/she is a valid user then a student login page will be displayed.

DATA FLOW DIAGRAM FOR BOOK ISSUE



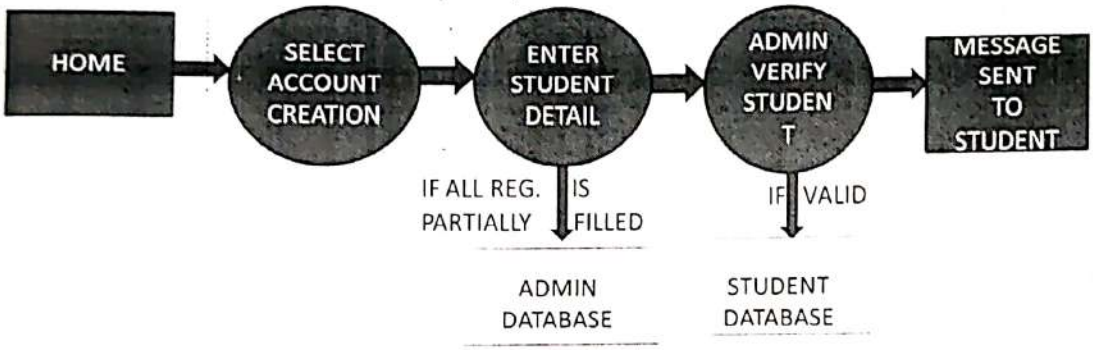
It is a 2nd level Data Flow Diagram where after entering STUDENT LOGIN page he/she can select a book issue option where after entering the book detail, he/she can select the book issue option and if the maximum no of books issued limit is not crossed then a request will be sent to the librarian who will approve the book issue.

DATA FLOW DIAGRAM FOR BOOK SEARCH



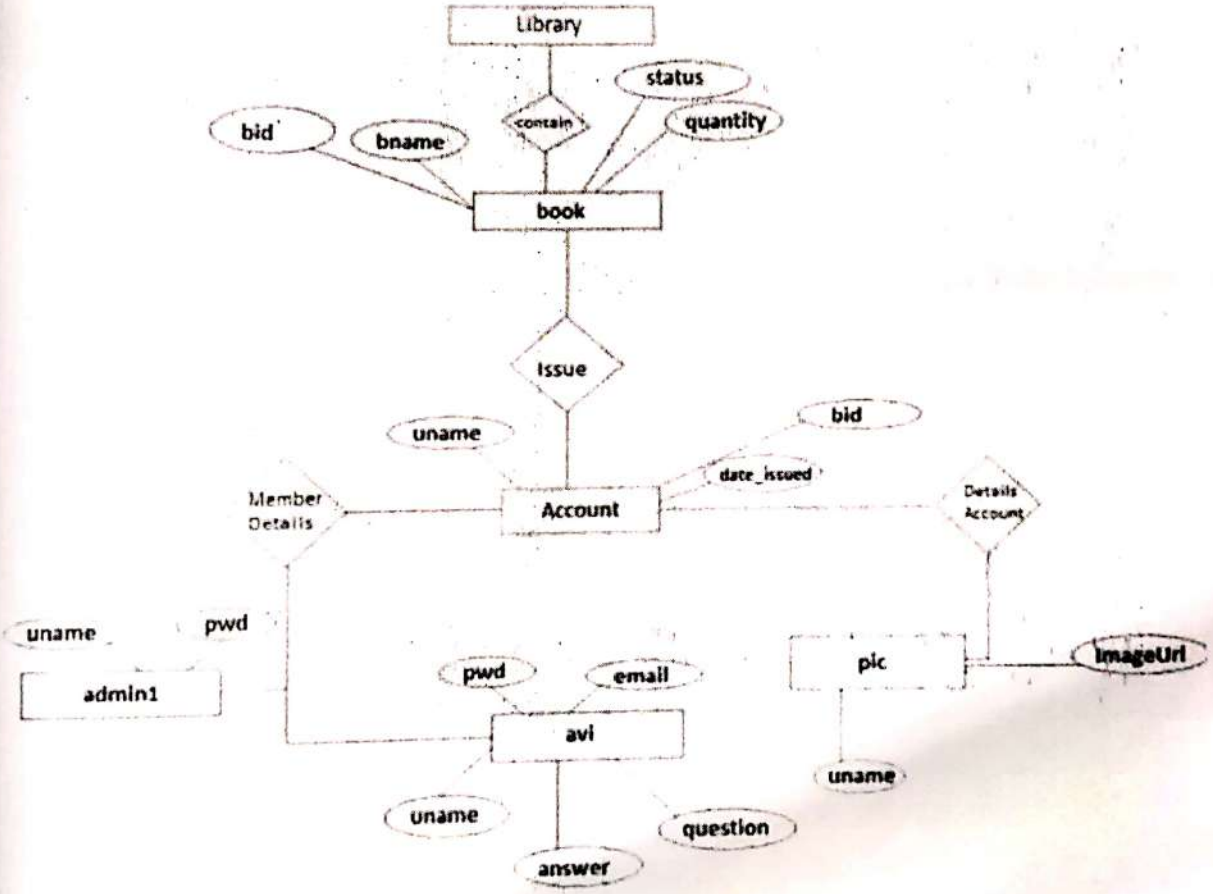
After the home page login there will be an option of the book search where after entering book detail like author name, publication, book name etc book details will be displayed.

DATA FLOW DIAGRAM FOR ACCOUNT CREATION



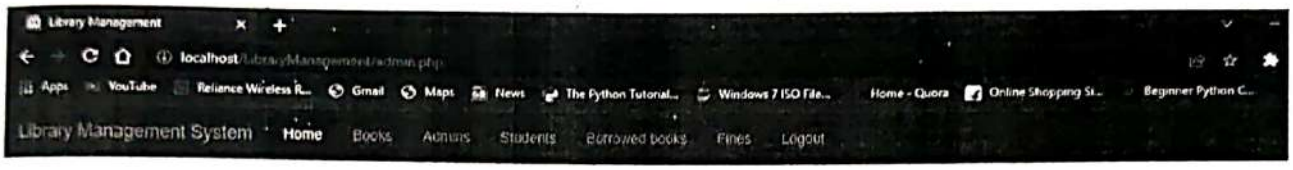
After the home page login there will be an option of CREATE AN ACCOUNT where after entering student detail ,if all the fields are filled then a request will be sent to the librarian who will approve him as a registered member of the library.

ER DIAGRAM



SYSTEM IMPLEMENTATION

4.1.1Screenshot for homepage



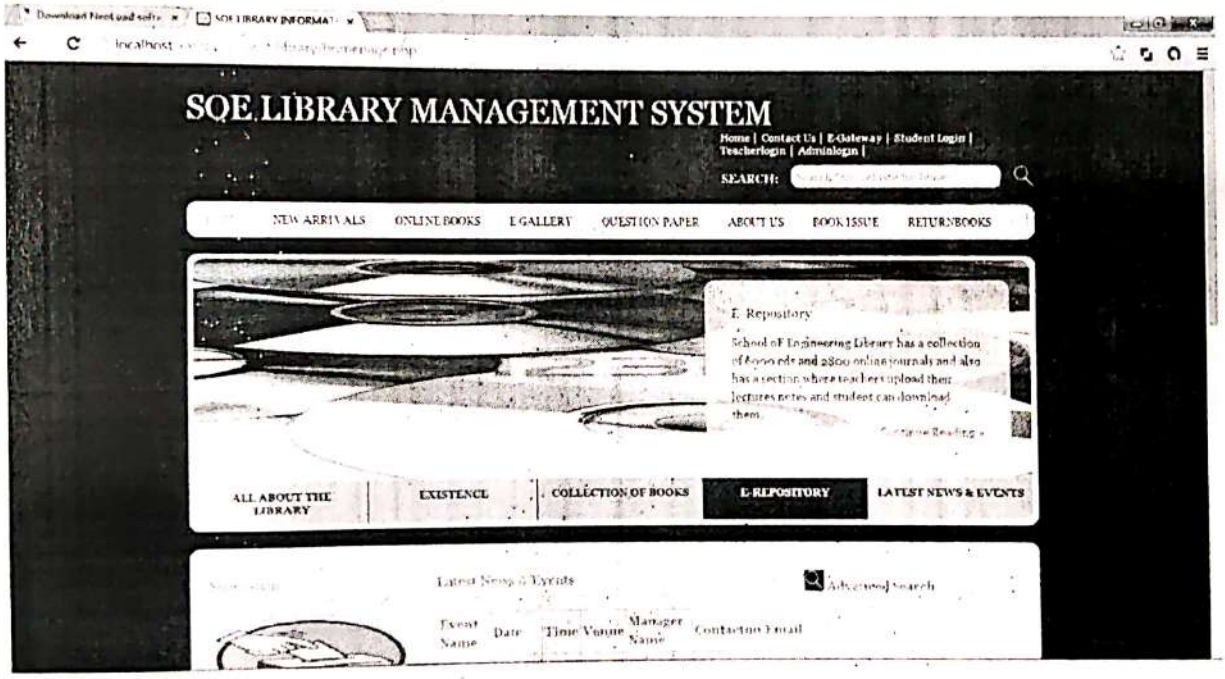
Welcome sachin@123

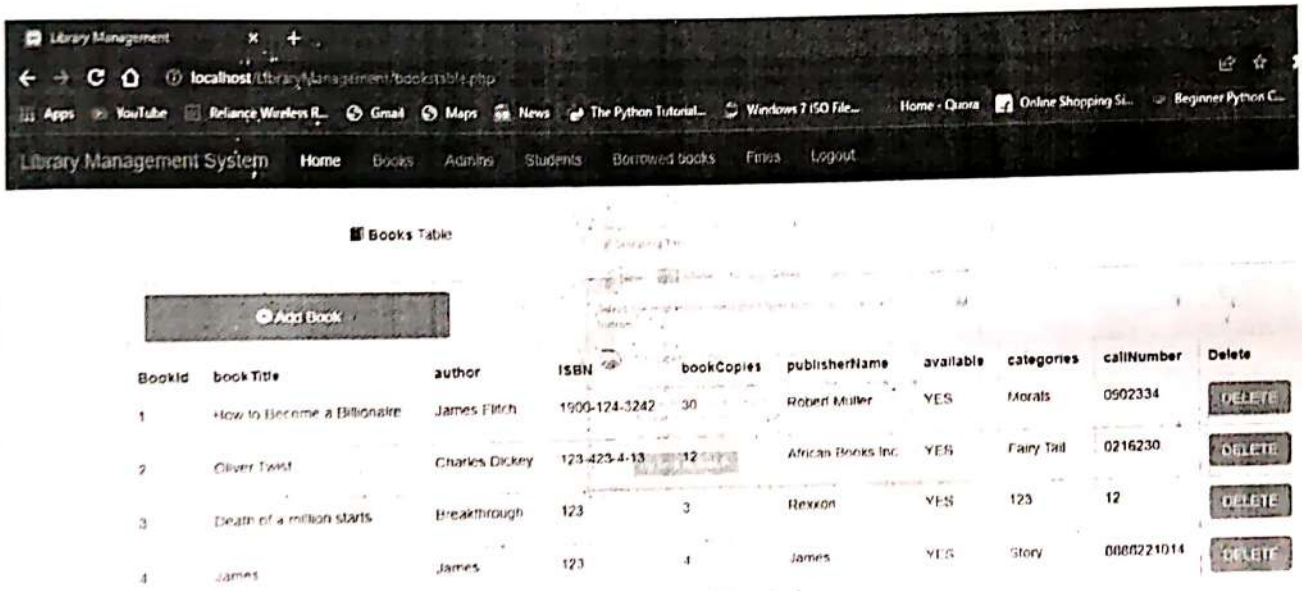
Published Announcements

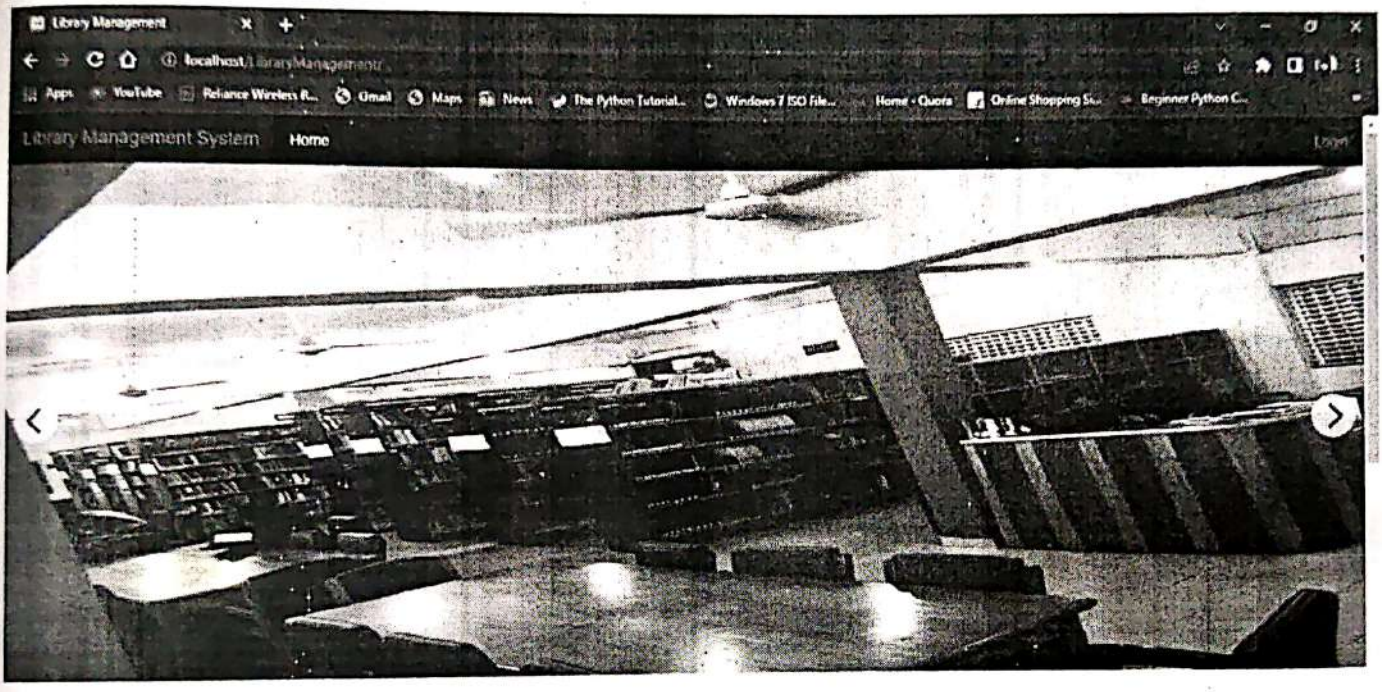
NewsId	Announcement	Delete
1	Welcome to Our Online Library Management System. You can have access to all our e books at a really good affordable price!	DELETE
2	Man don't dance	DELETE
3	Godfrey Okoye is going Places	DELETE

Publish New Announcements

Announcement





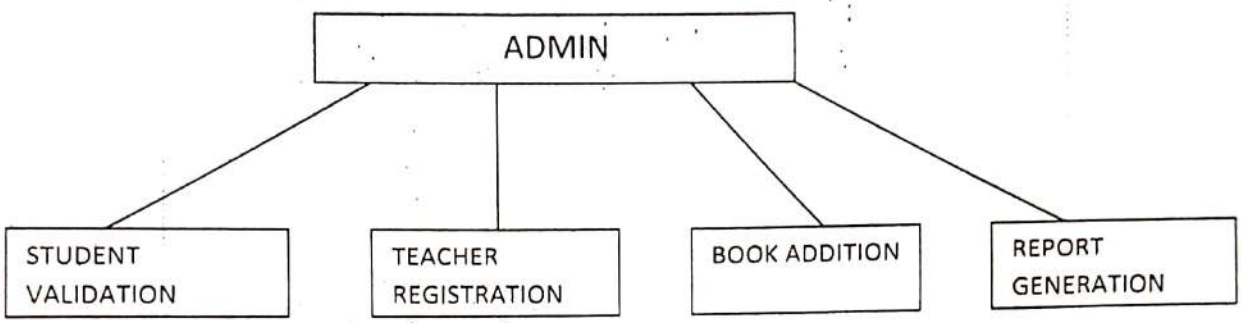


Published Announcements

4.1 MODULE DESCRIPTION Diagrams

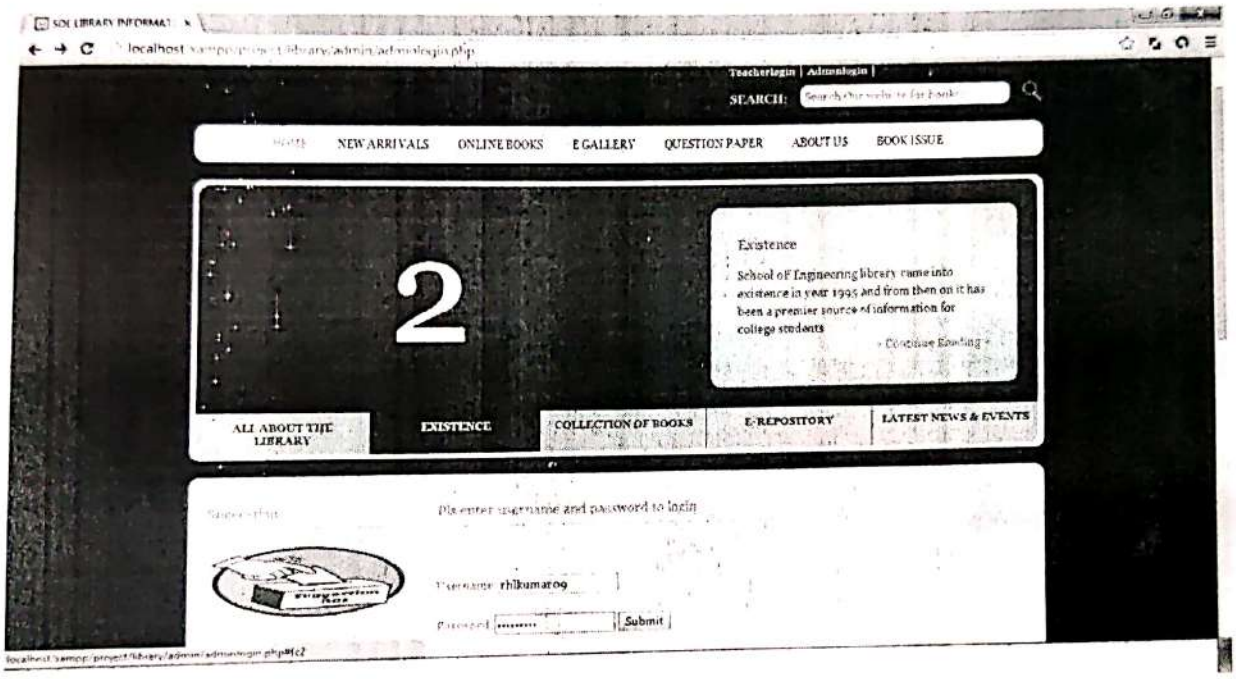
For Library Management System it is divided into the following Modules:

4.1.1 Admin Module

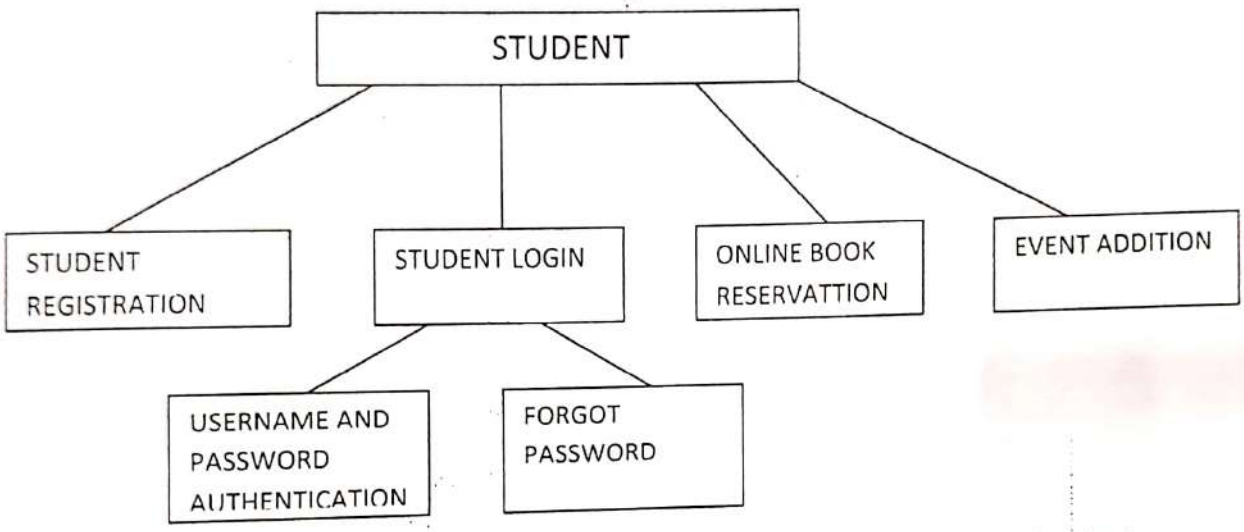


The following module contains various facilities like student validation, teacher registration, book addition, and report generation.

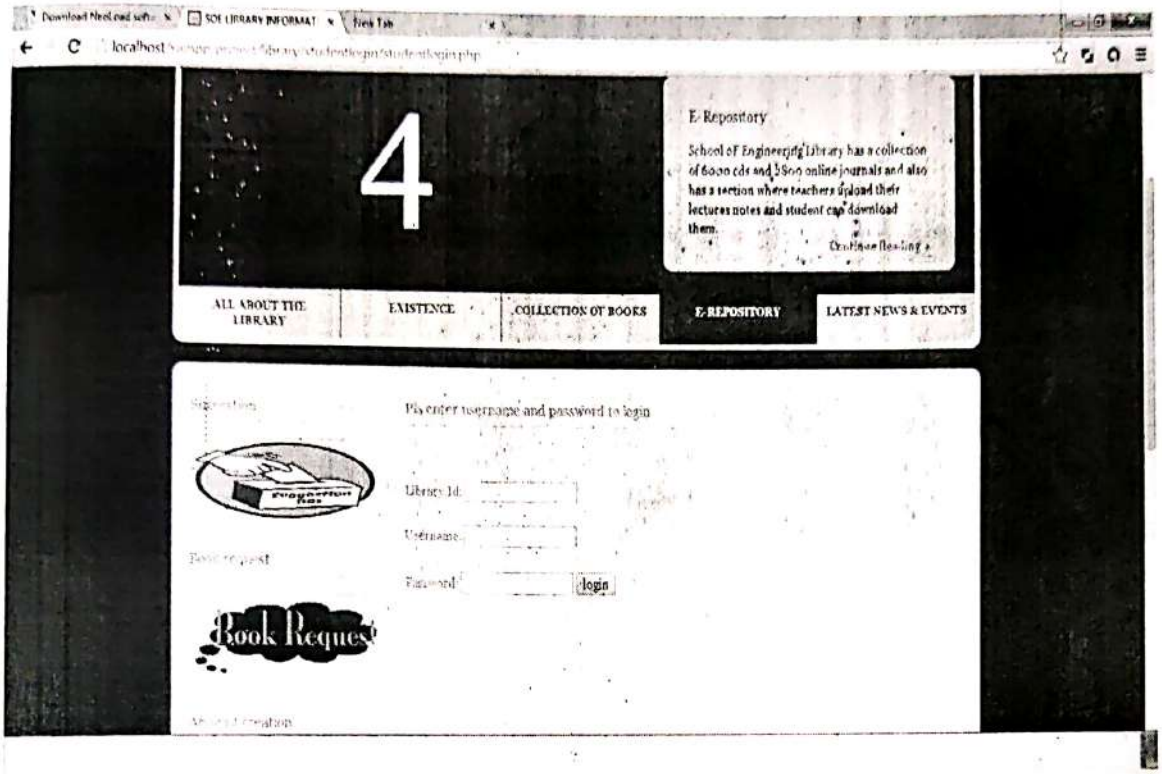
4.1.1 Screenshot for Admin login



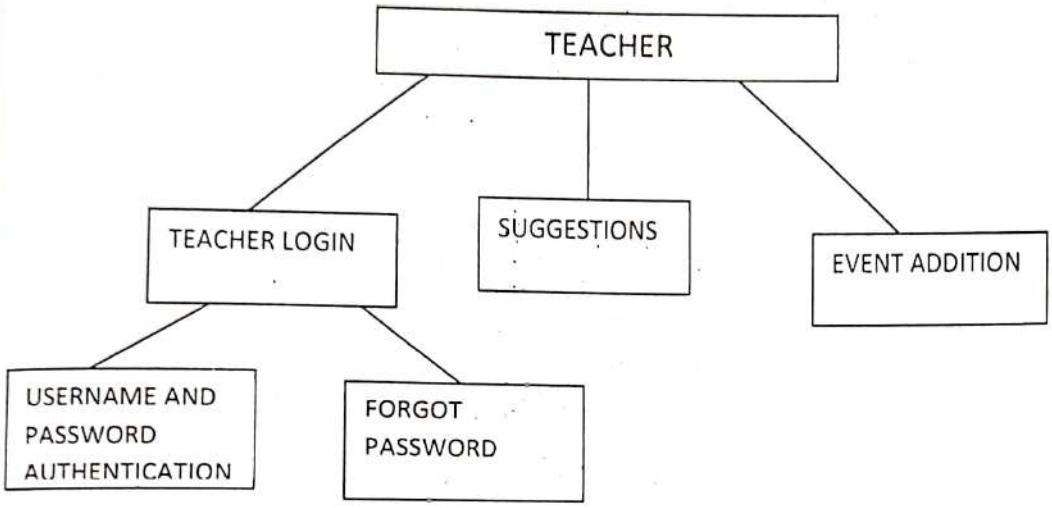
4.1.2Student Module



The following module contains various facilities like student registration, student login, online book reservation, and event addition. Any student if at any moment forgets his password he can retrieve it from forgot password option.

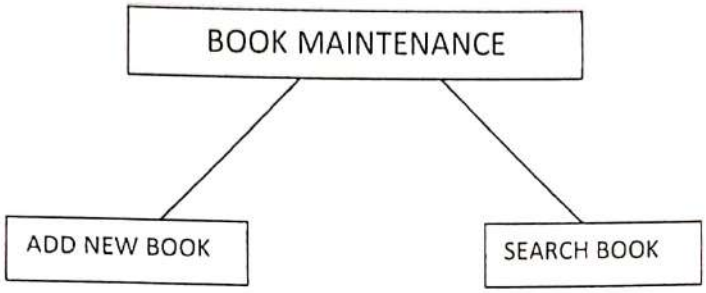


- **4.1.3 Teacher Module**



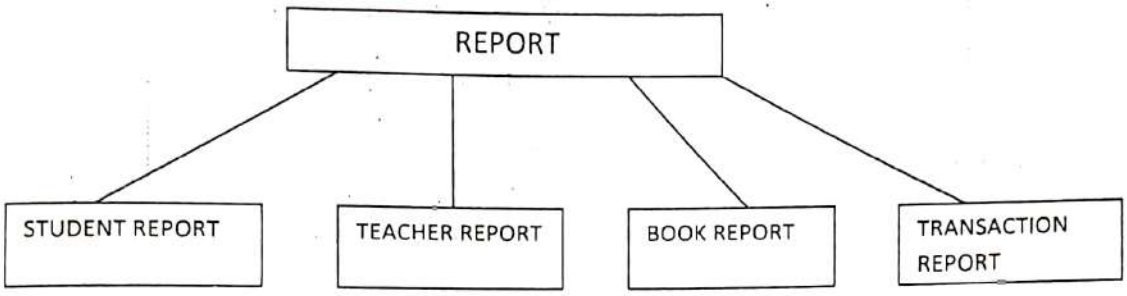
The following module contains various facilities like teacher login, suggestions, and event addition. Further any teacher if at any moment forgets his/her password he/she can retrieve it from 'forgot password' o

- **4.1.4 Book Module**



The following module contains various facilities like add new book and search book. In the 'add new book' section if any new book comes in the library then the librarian can add its specifications. Similarly if the user wants to search for a specific book then he/she can use search book option to do it.

- **4.1.6 Report Module**



The following module contains various facilities like student report, teacher report, book report, and transaction report.

SYSTEM TESTING

The aim of the system testing process was to determine all defects in our project .The program was subjected to a set of test inputs and various observations were made and based on these observations 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 undertaken when a module has been created and succesfully reviewed .In order to test a single module we need to provide a complete environment ie besides the module we would require

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

Unit testing was done on each and every module that is described under module description of chapter 4

1. Test For the admin module

- Testing admin login form-This form is used for log in of administrator of the system.In this we enter the username and password if both are correct administration page will open other wise if any of data is wrong it will get redirected back to the login page and again ask for username and password
- Student account addition- In this section the admin can verify student details from student academinc info and then only add student details to main library database it contains add and delete buttons if user click add button data will be added to student database and if he clicks delete button the student data will be deleted
- Book Addition- Admin can enter details of book and can add the details to the main book table also he can view the books requests .

2. Test for Student login module
   - Test for Student login Form-This form is used for log in of Student .In this we enter thelibraryid, username and password if all these are correct student login page will open other wise if any of data is wrong it will get redirected back to the login page and again ask for libraryid, username and password.
   - Test for account creation- This form is used for new account creation when student does not fill the form completely it asks again to fill the whole form when he fill the form fully it gets redirected to page which show waiting for conformation message as his data will be only added by administrator after verification.
3. Test for teacher login module-
   - Test for teacher login form- This form is used for logg in of teacher .In this we enter the username and password if all these are correct teacher login page will open other wise if any of data is wrong it will get redirected back to the login page and again ask for username and password.

INTEGRATION TESTING

In this type of testing we test various integration of the project module by providing the input .The primary objective is to test the module interfaces in order to ensure that no errors are occurring when one module invokes the other module.

CONCLUSION & FUTURE SCOPE

This website provides a computerized version of library management system which will benefit the students as well as the staff of the library.
It makes entire process online where student can search books, staff can generate reports and do book transactions. It also has a facility for student login where student can login and can see status of books issued as well request for book or give some suggestions. It has a facility of teacher's login where teachers can add lectures notes and also give necessary suggestion to library and also add info about workshops or events happening in our college or nearby college in the online notice board.

There is a future scope of this facility that many more features such as online lectures video tutorials can be added by teachers as well as online assignments submission facility , a feature Of group chat where students can discuss various issues of engineering can be added to this project thus making it more interactive more user friendly and project which fulfills each users need in the best way possible

Refrence

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http://www.w3schools.com/css/css_background.asp

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http://www.w3schools.com/sql/sql_insert.asp

http://www.w3schools.com/sql/sql_update.asp

http://www.w3schools.com/php/php_forms.asp

M.V.P. Samaj's.

G.M.D. ARTS,B.W. COMMERCE & SCIENCE COLLEGE, SINNAR.

DEPARTMENT OF COMPUTER SCIENCE

A PROJECT REPORT ON

"Online Car Rental System"

Submitted by:

Derle Tejas Sudhakar

Ugale Shubham Madhukar

Sheikh Sahil Javed

Guided by:

(SMT.N.V. LAHAMAGE)

Savitribai Phule Pune University

2022-2023

M.V.P. Samaj's.

G.M.D. ARTS, B.W. COMMERCE & SCIENCE COLLEGE, SINNAR.

CERTIFICATE

This is to certify that,

Derle Tejas Sudhakar

Ugale Shubham Madhukar

Sheikh Sahil Javed

Student of B.Sc. Computer Science has satisfactory completed Project work on **"Online Car Rental System",** towards partial fulfilmentof degree course affiliated to Savitribai Phule Pune University for the Academic Year 2022-2023 at G.M.D. ARTS, B.W. COMMERCE & SCIENCE COLLEGE, SINNAR.

Project Guide

(Smt.N.V.Lahamage)

13/4/23

Head of Department

(Smt.N.V.Lahamage)

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Index

1.Abstract

The online car rental system is a comprehensive and user-friendly platform designed to meet the needs of individuals and businesses looking to rent cars. This system simplifies the rental process, from searching and booking a vehicle to making payments and managing reservations. Users can easily search for available cars based on their preferred location, date, and time, and choose the vehicle that best suits their needs. The system provides detailed information about each car, including its make, model, features, and rental rates, making it easier for users to compare and select the best option. The reservation process is straightforward, allowing users to make a booking in just a few clicks. Payments can be made securely online, and the system also allows users to manage their reservations and make changes if necessary. This online car rental system offers a convenient and hassle-free way to rent cars, making it a popular choice for people who need to rent vehicles for personal or business purposes. The platform is designed to be accessible, user-friendly, and secure, ensuring a smooth and efficient rental experience for all users.

2.Introduction

The emergence of the sharing economy has created a new wave of innovative business models, one of which is online car rental services. With the increasing popularity of ride-sharing and car-sharing platforms, consumers are increasingly looking for more convenient and affordable ways to access vehicles. Online car rental services offer a flexible and cost-effective way for individuals and businesses to rent cars for short or long-term periods.

2.Introduction

The emergence of the sharing economy has created a new wave of innovative business models, one of which is online car rental services. With the increasing popularity of ride-sharing and car-sharing platforms, consumers are increasingly looking for more convenient and affordable ways to access vehicles. Online car rental services offer a flexible and cost-effective way for individuals and businesses to rent cars for short or long-term periods.

1.Motivation:

The car rental industry has been growing steadily, and the COVID-19 pandemic has accelerated this trend as people opt for road trips rather than air travel. The demand for online car rental services has also increased as consumers prefer the convenience of renting cars from the comfort of their homes. However, despite the increasing demand for online car rental services, there are still challenges that need to be addressed.

1.Motivation:

An online car rental system offers a convenient and efficient way for people to rent vehicles for personal or business use. By providing a user-friendly platform with a variety of car options, customers can easily browse and select the vehicle that best fits their needs. This eliminates the need to physically visit rental locations, saving time and increasing accessibility. Additionally, online systems allow for 24/7 availability and booking, making it easier to accommodate last-minute rental needs. With the added benefits of transparent pricing and easy payment options, online car rental systems can offer a seamless and hassle-free experience for customers.

1.Motivation:

Car rental services have become increasingly popular in recent years due to changing consumer preferences and the rise of the sharing economy.The success of peer-to-peer car sharing platforms, such as Turo and Getaround, has inspired many entrepreneurs to enter the car rental industry.The purpose of this car rental project is to develop a platform that offers a convenient, reliable, and affordable car rental service to customers.Develop a user-friendly platform that enables customers to easily search and book rental cars.

Offer a wide range of vehicles at competitive prices, catering to the diverse needs and preferences of customers.

2.Problem Statement:

The traditional car rental process can be time-consuming and inconvenient, with long wait times at rental offices and complicated paperwork. Moreover, traditional car rental companies may not offer competitive prices, and the selection of vehicles may be limited. There is a need for an online car rental platform that simplifies the rental process, offers competitive pricing, and provides a wide range of vehicles to choose from.

3.Purpose/Objective and Goals:

The purpose of this project is to develop an online car rental platform that offers a user-friendly interface, competitive pricing, and a wide selection of vehicles to choose from. The goal is to make car rental more convenient and accessible to consumers while reducing the time and cost associated with the traditional rental process.

4.Literature Survey:

A literature survey will be conducted to understand the existing online car rental platforms, their features, strengths, and weaknesses. This survey will help to identify the gaps in the existing systems and inform the design of the new platform.

5.Project Scope and Limitations:

The project will focus on developing an online car rental platform with basic features such as vehicle selection, reservation, payment, and cancellation. The platform will also have a user management system, including user registration, login, and account management. The platform will be limited to rentals within a specific geographical location, and it will not include the management of vehicle maintenance or repair. The project will not cover the development of a mobile application, but the platform will be designed to be mobile-responsive.

3.System Analysis

3.1 Existing System:

An existing system can provide manually paper work. The user has to go in the office where user can get the car on rent and book their car. In the existing system you cannot provide feedback of the user to the admin online.

3.2 Scope and Limitations of Existing System:

Scope: The existing system for online car rental allows customers to search and book cars, manage bookings, and make payments online.

Limitations: The system lacks advanced features such as AI, machine learning, and personalized recommendations. It also has limited payment options, and the user interface needs improvement to enhance customer experience.

3.3 Project perspective, features :

Project perspective: The online car rental system aims to provide a convenient and efficient way for customers to rent cars.

Features: The system includes features such as car search and booking, online payments, vehicle management, customer reviews, and rental history. It also offers real-time availability updates and the ability to cancel or modify bookings. Additionally, the system has an easy-to-use interface and responsive customer support.

3.4 Stakeholders :

Customer

Employee

3.5 Requirement analysis:

Requirement analysis for the online car rental system includes identifying customer needs, defining system functionality, and determining system performance requirements. It also involves ensuring compatibility with different devices and platforms, incorporating security measures, and adhering to relevant regulations and industry standards.

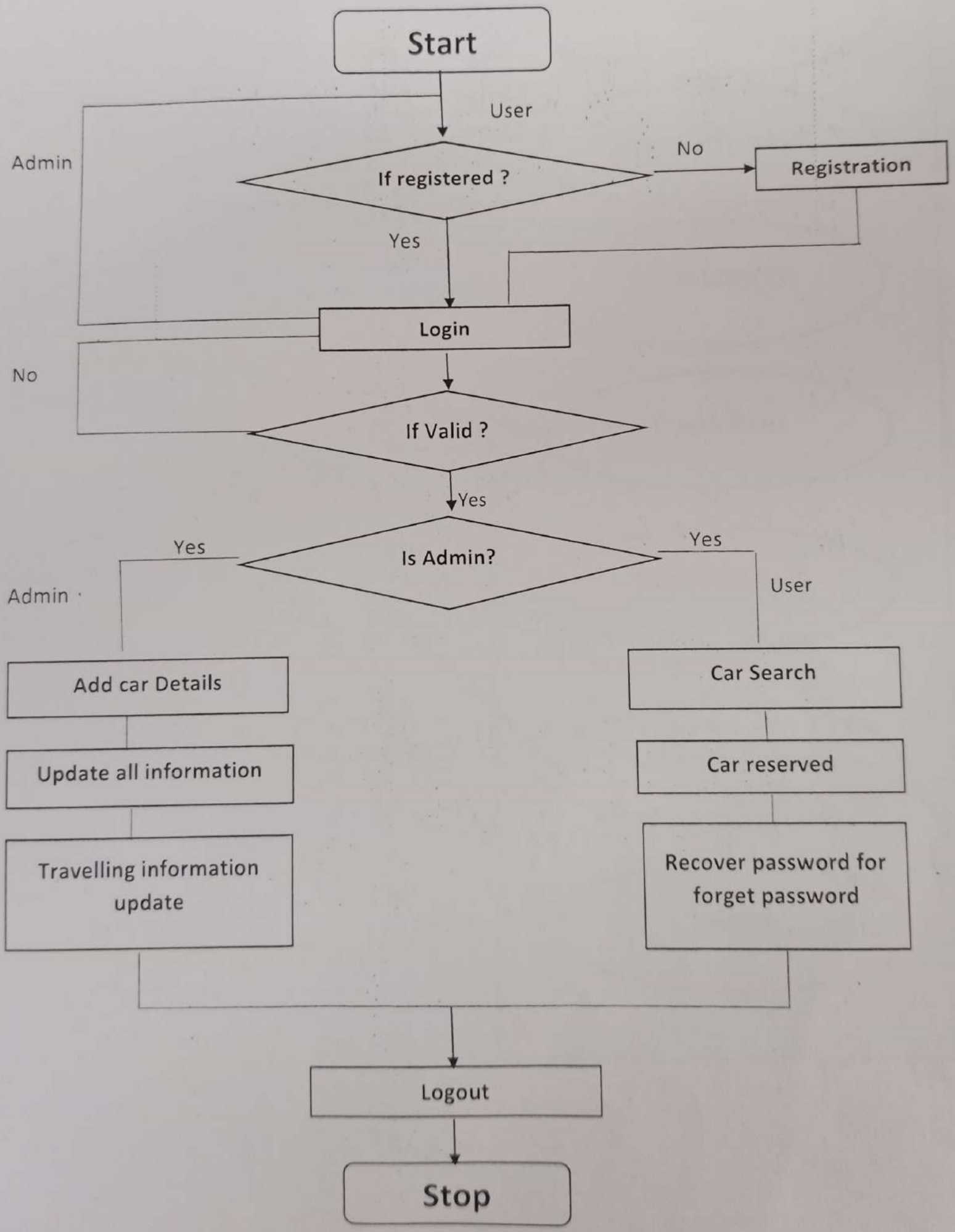
4.System Design

4.1 Design Constraints:

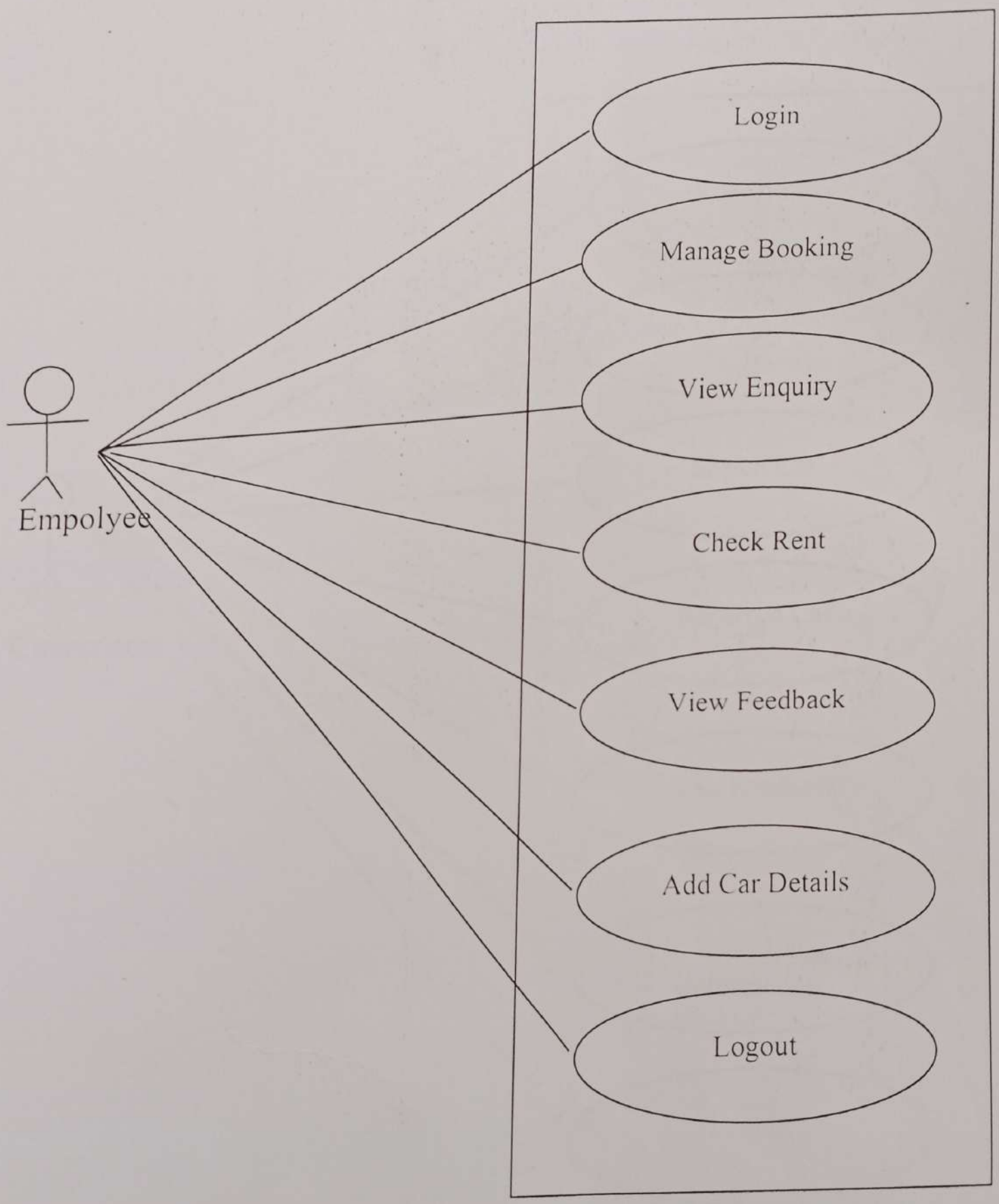
Common Diagram Containing Following- The Symbols used in ER diagram are as follow: ER Diagram describes data at rest, data being stored. Data relationship is the relation between the entities. Entity is an object that exist and its distinguishable from other objects. ER diagram shows data at rest. This means ER diagram does not show data flow.

4.2 System Model :

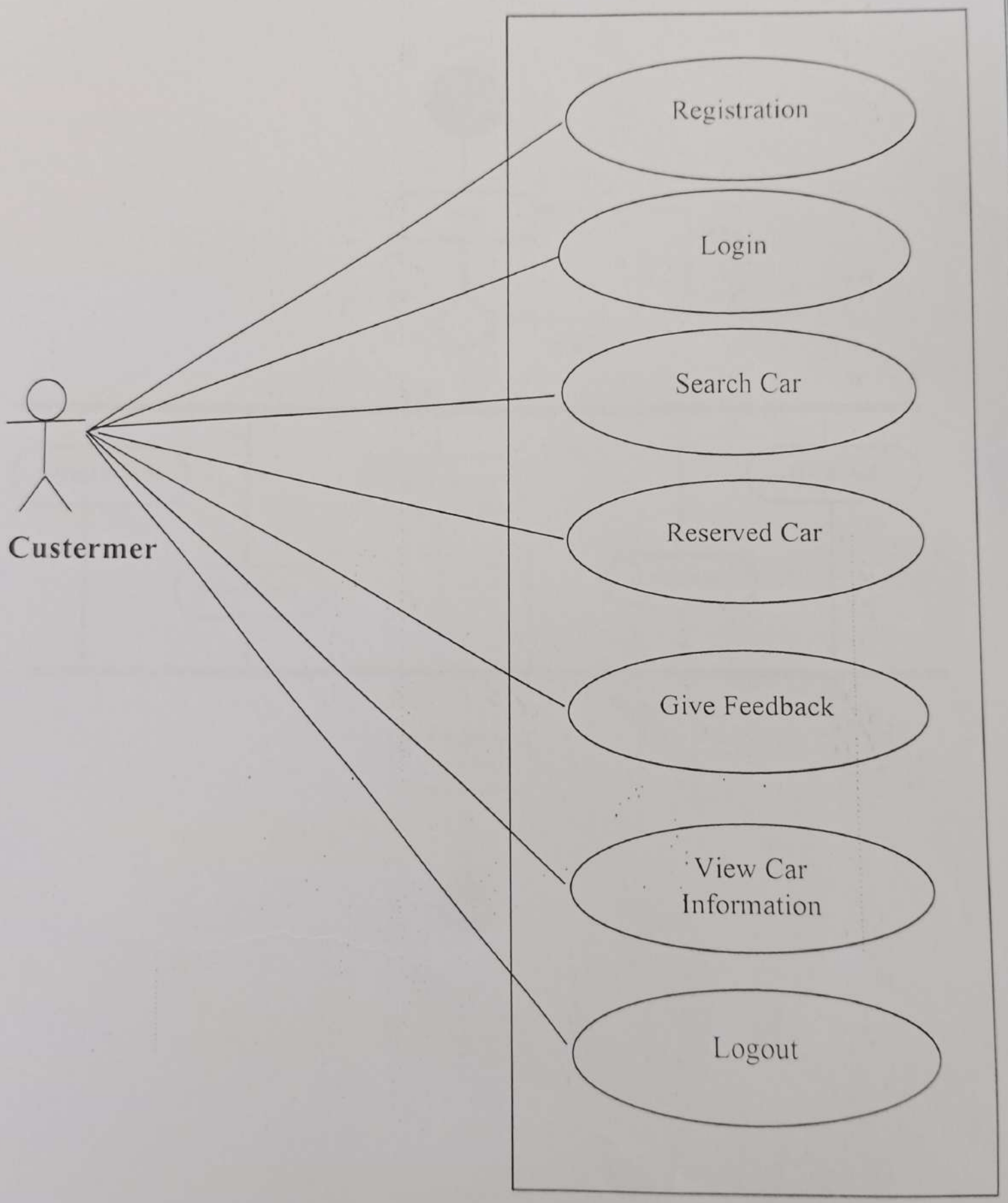
System Flow Chart:



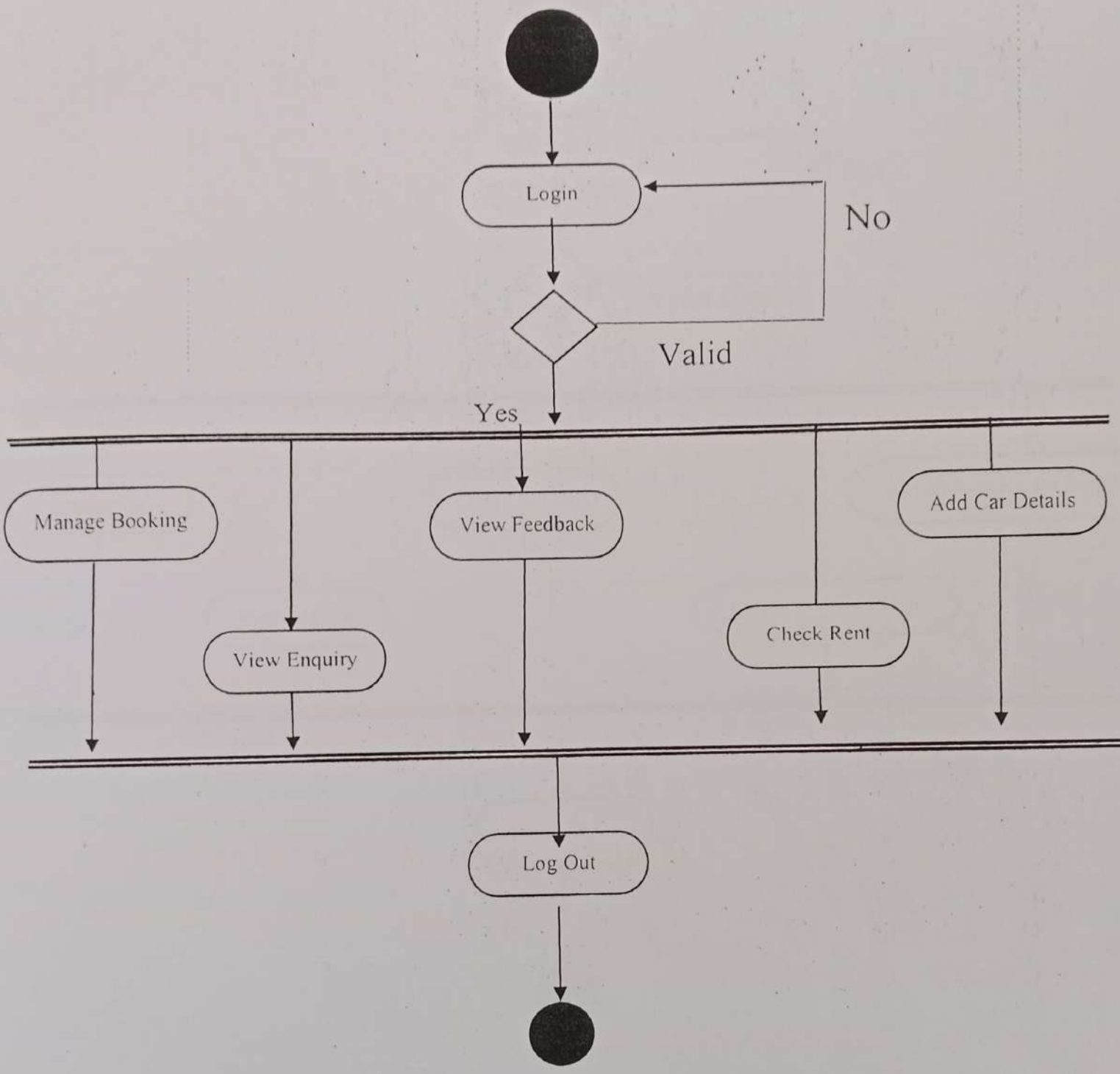
Use case diagram for Emplolyee :



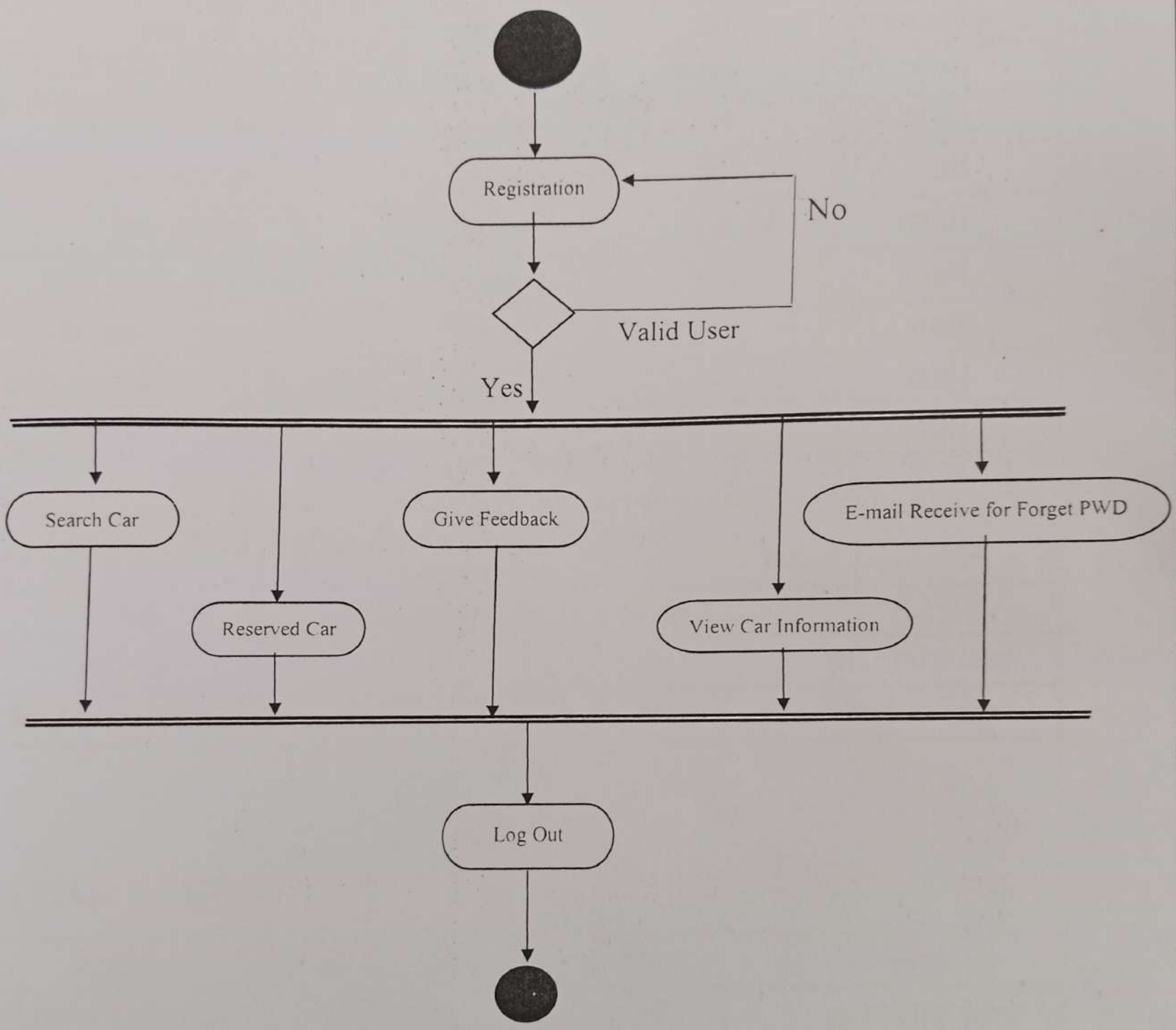
Activity Digram for Custermer:



Activity Digram for Emplolyee :



Activity Digram for Custormer :



4.3 Data Model

1) Table 1 –Car

Field	Data Type	Size	Key
car_id	int	20	primary key
car_name	varchar	50	null
car_name_plate	varchar	50	null
car_image	varchar	50	null
car_price	float	10	null
car_non_ac_price	float	10	null
car_price_par_day	float	10	null
non_car_price_par_day	float	10	null
car_availability	float	10	null

2) Table 2 – Client Cars

Field	Data Type	Size	Key
car_id	int	20	primary key
client_username	varchar	50	index key

3) Table 3 – Client

Field	Data Type	Size	Key
client_username	varchar	50	primary key
client_name	varchar	50	null
client_phone	varchar	15	null
client_email	varchar	25	null
client_address	varchar	50	null
client_password	varchar	20	null

4) Table 4 – Custormer

Field	Data Type	Size	Key
custormer_username	varchar	50	primary key
custormer_name	varchar	50	null
custormer_phone	varchar	15	null
custormer_email	varchar	25	null
custormer_address	varchar	50	null
custormer_password	varchar	20	null

5) Table 5 – Driver

Field	Data Type	Size	Key
driver_id	int	20	primary key
driver _name	varchar	50	null
dl_number	varchar	50	index
driver_phone	varchar	15	null
driver_address	varchar	50	null
driver_gender	varchar	10	null
client_username	varchar	50	null
driver_availability	varchar	10	null

6) Table 6 – Rented Cars

Field	Data Type	Size	Key
id	int	100	primary key
car_name	varchar	50	index
car_id	int	20	index
driver_id	int	20	index
booking_date	date	-	null
rent_start_date	date	-	null
rent_end_date	date	-	null
car_retun_date	date		null
face	double	-	null
charge_type	varcher	25	null
distance	double		null
no_of_day	int	50	null
total_amount	double		null
retun_status	varchar	10	null

7) Table 7 – Feedback

Field	Data Type	Size	Key
name	varchar	20	null
e-mail	varchar	30	null
message	varchar	150	null

4.4 User Interface :

➢ Home :

AVAILABLE CARS

Hyundai Creta
AC Fare: Rs. 22/km & Rs.2900/day
Non-AC Fare: Rs. 12/km & Rs.1400/day

Mercedes-Benz E-Class
AC Fare: Rs. 45/km & Rs.7200/day
Non-AC Fare: Rs. 30/km & Rs.5200/day

Ford EcoSport
AC Fare: Rs. 21/km & Rs.3690/day
Non-AC Fare: Rs. 13/km & Rs.2600/day

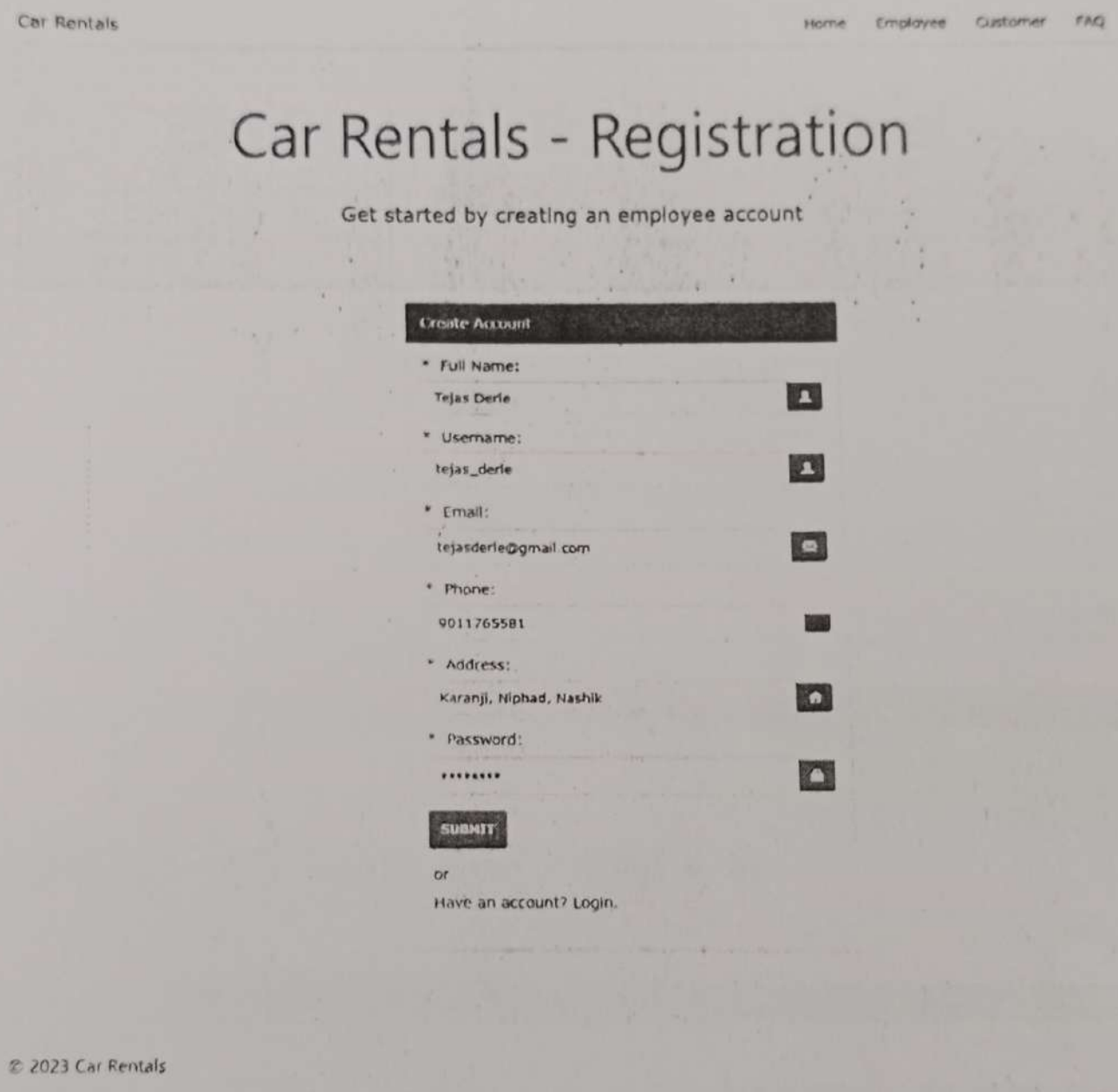
Honda CR-V
AC Fare: Rs. 22/km & Rs.2850/day
Non-AC Fare: Rs. 15/km & Rs.1400/day

Mahindra XUV 500
AC Fare: Rs. 15/km & Rs.3000/day
Non-AC Fare: Rs. 13/km & Rs.2600/day

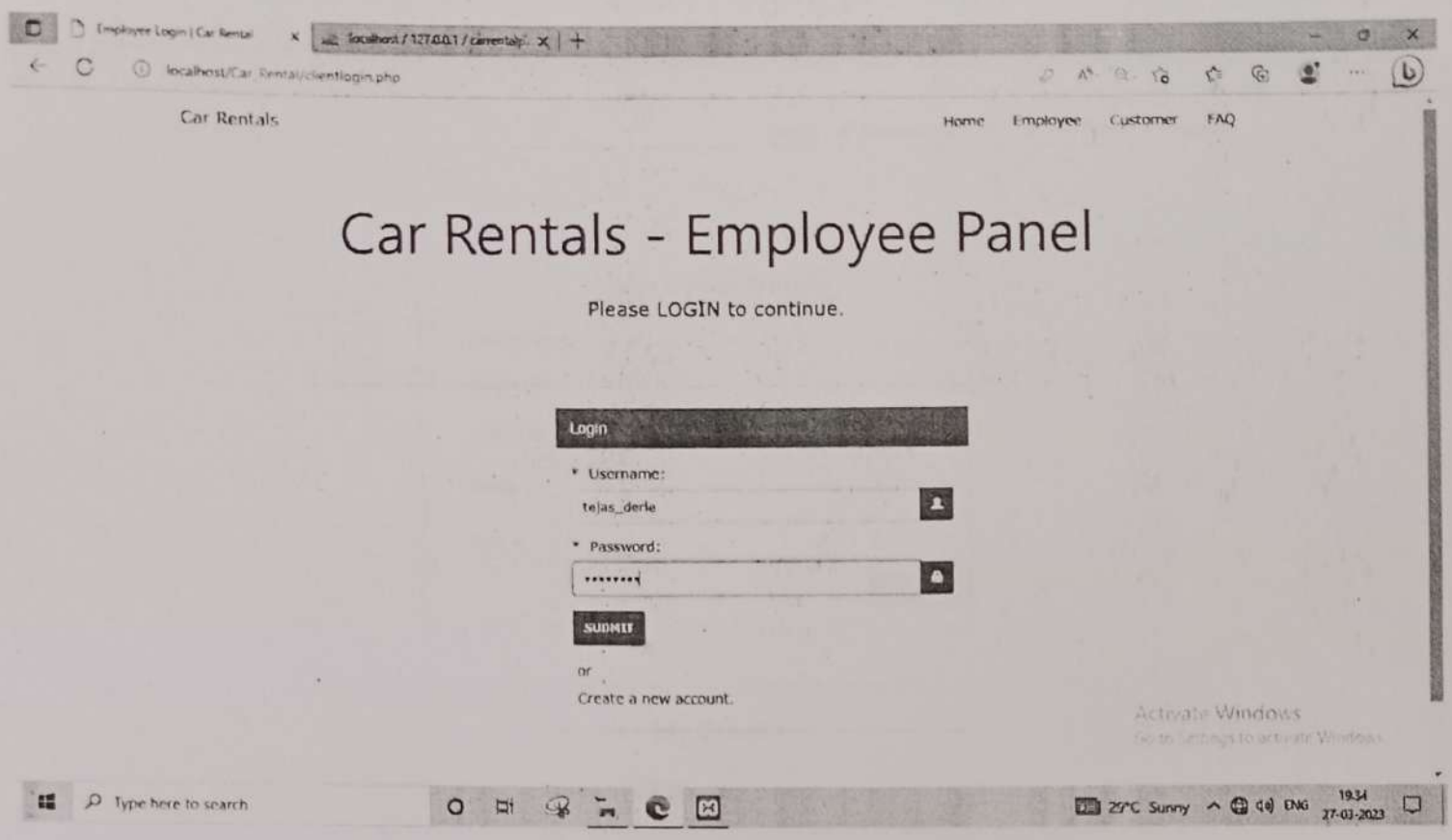
Toyota Fortuner
AC Fare: Rs. 16/km & Rs.3200/day
Non-AC Fare: Rs. 14/km & Rs.2800/day

Hyundai Veloster
AC Fare: Rs. 23/km & Rs.4500/day
Non-AC Fare: Rs. 15/km & Rs.3500/day

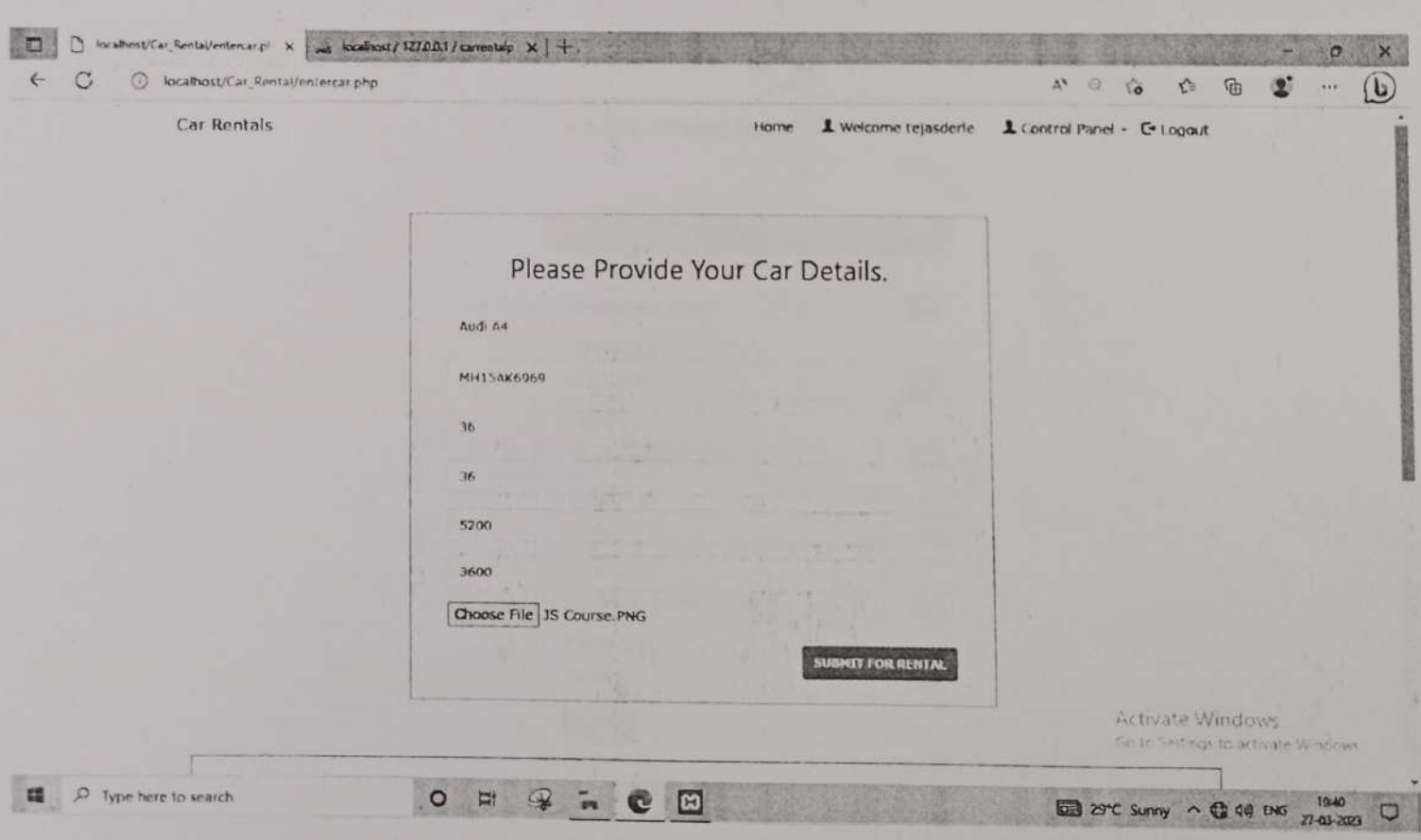
➢ Employee Registration Page :



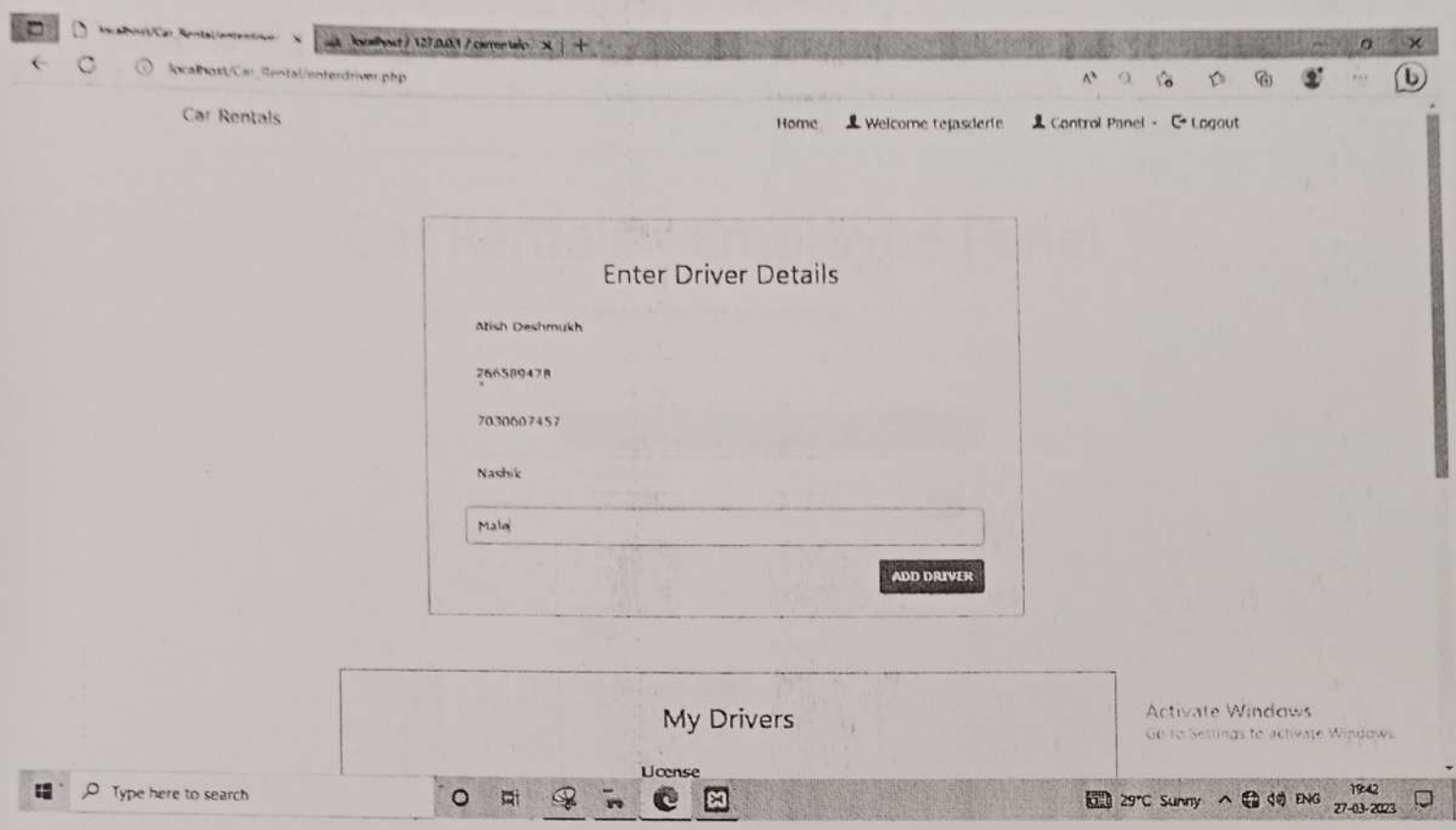
➢ Employee Log In Page :



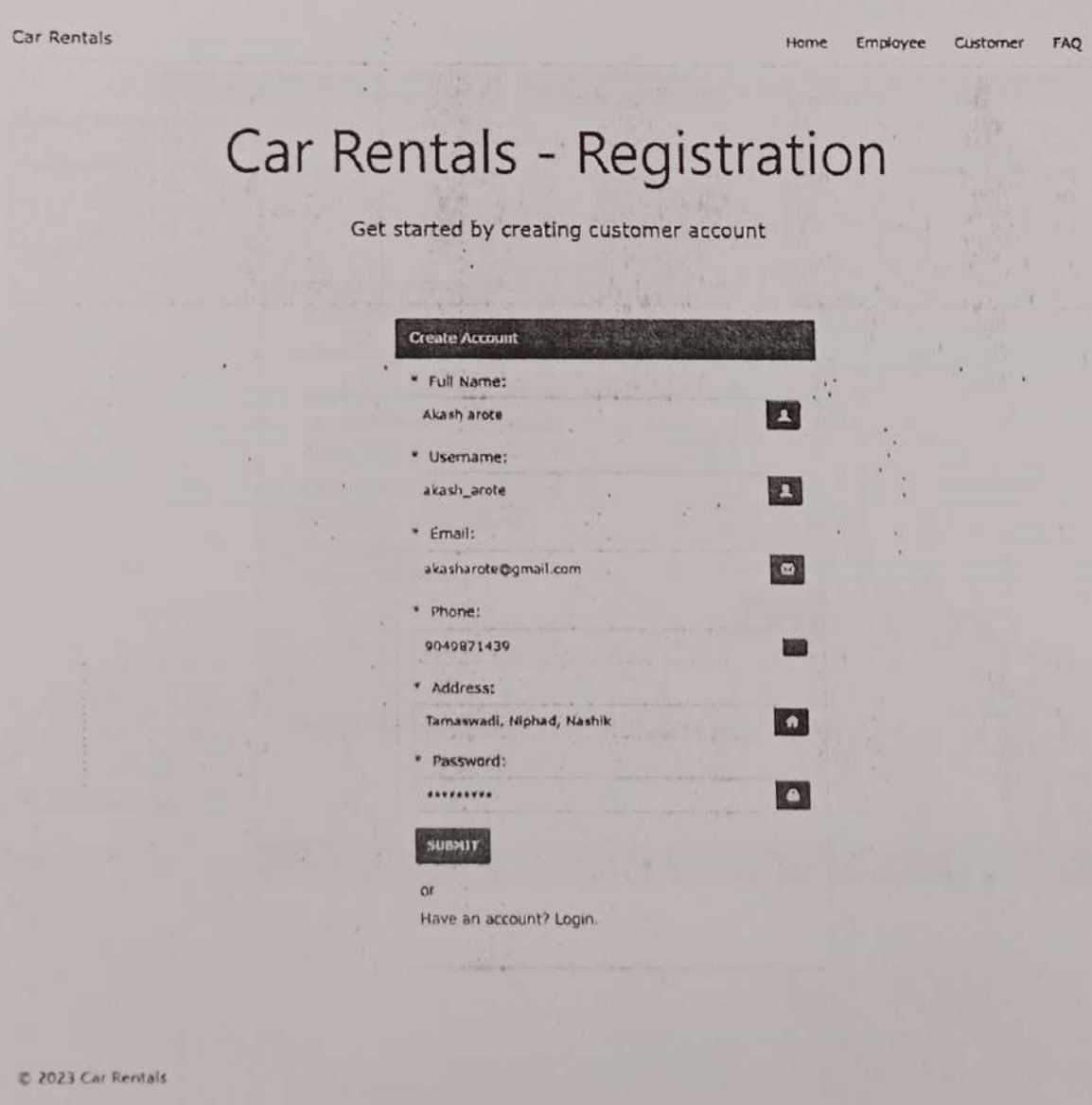
➢ Employee Control Panal - Add Car



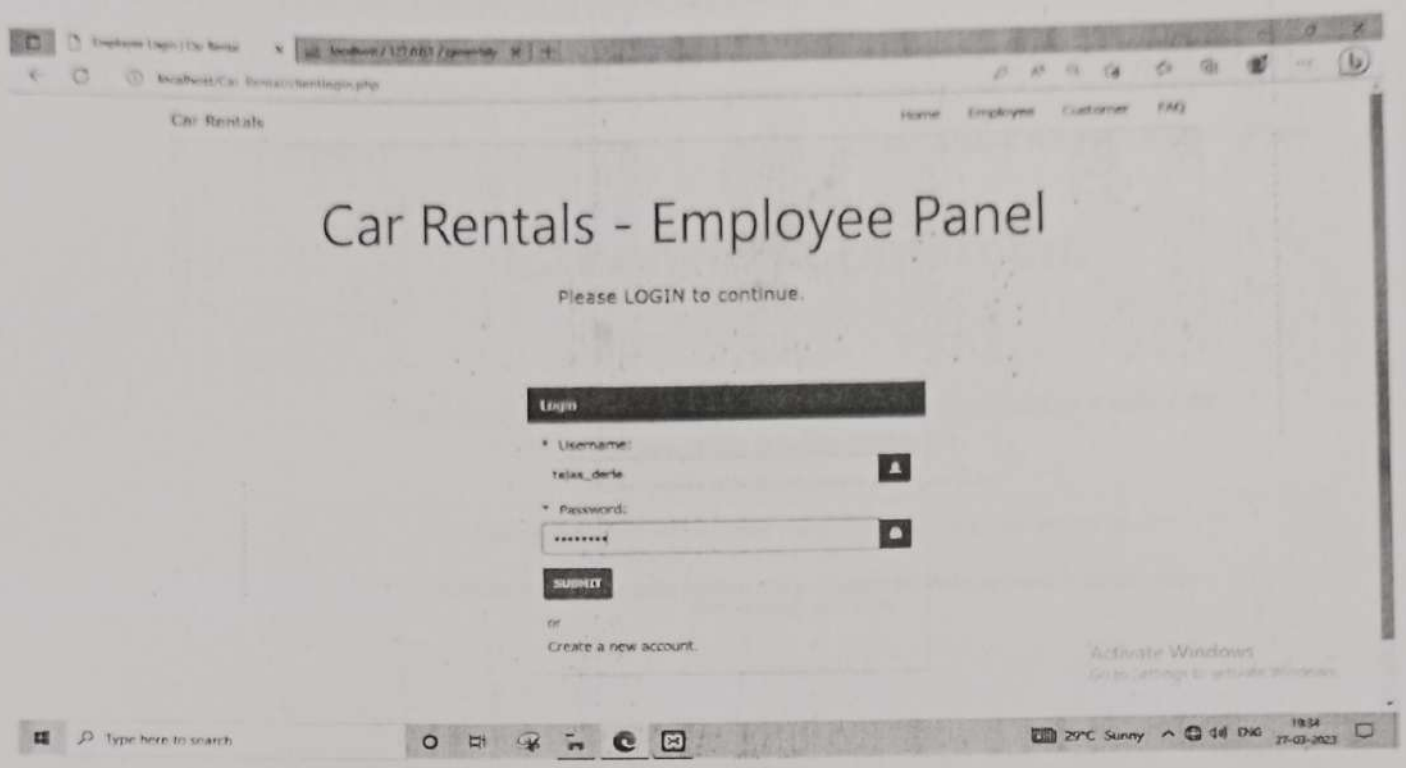
➢ Employee Control Panal - Add Driver



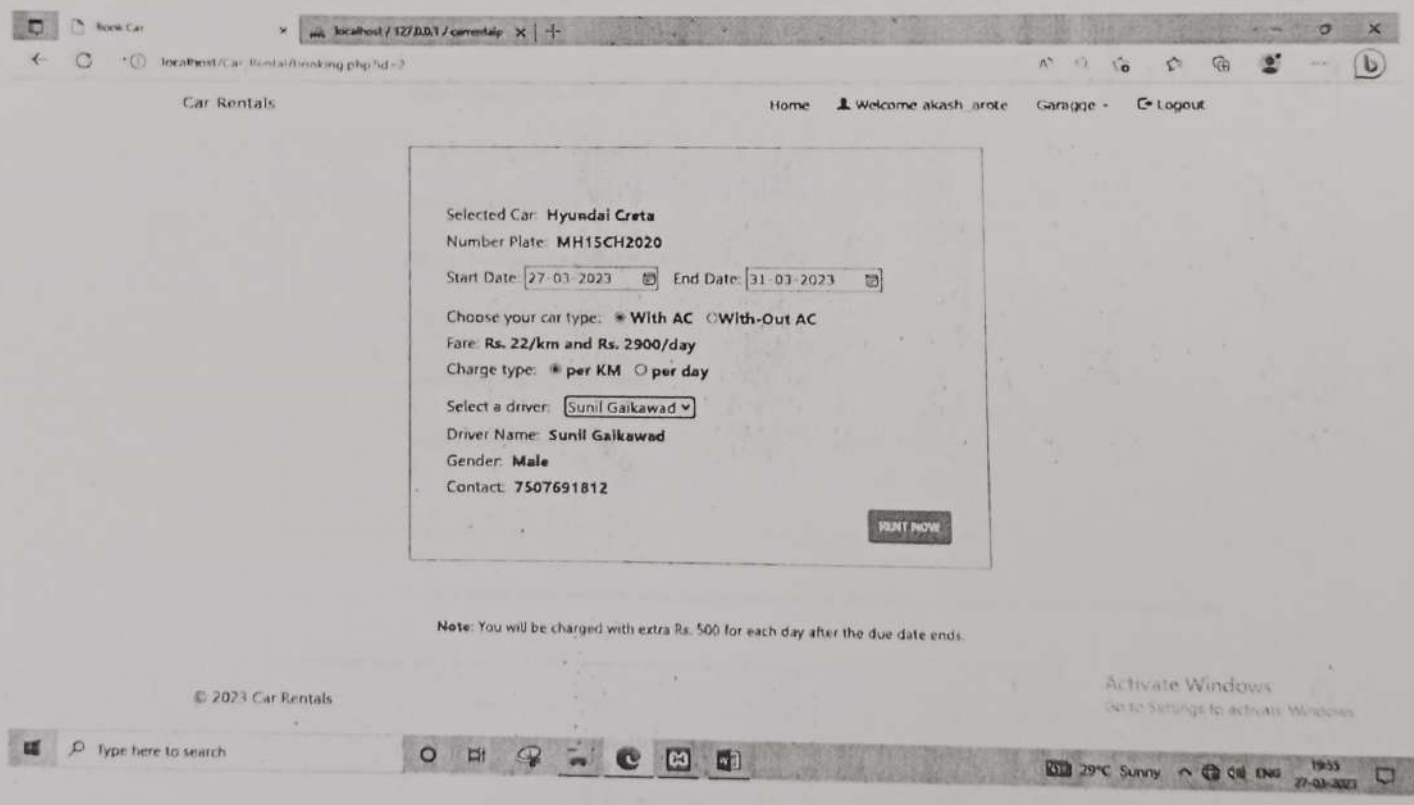
➢ CustomerRegistrationPage :



➢ Customer Log InPage :



➢ CustomerCar Booking:



➢ CustomerCar Booking Sucessfully :

Car Rentals

Home | Welcome akash_arote | Garagge | Logout

Booking Confirmed.

Thank you for using Car Rental System! We wish you have a safe ride.

Your Order Number: 574681265

Please read the following information about your order.

Your booking has been received and placed into out order processing system.

Please make a note of your **order number** now and keep in the event you need to communicate with us about your order.

Invoice

Vehicle Name: Hyundai Creta

Vehicle Number: MH15CH2020

Fare: Rs. 22/km

Booking Date: 2023-03-27

Start Date: 2023-03-27

Return Date: 2023-03-31

Driver Name: Sunil Gaikawad

Driver Gender: Male

Driver License number: 211356911

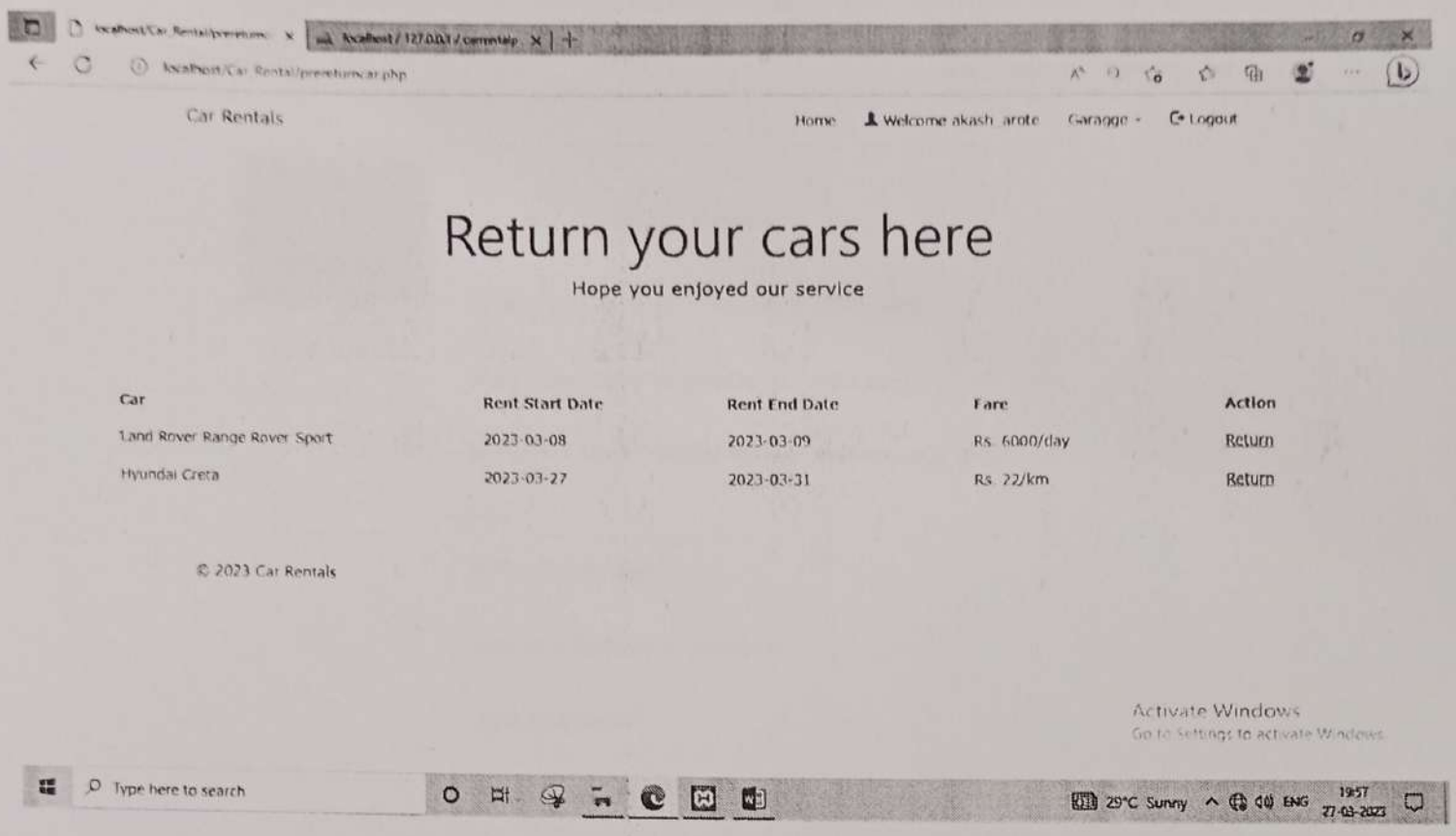
Driver Contact: 7507691812

Employee Name: Tejas Derle

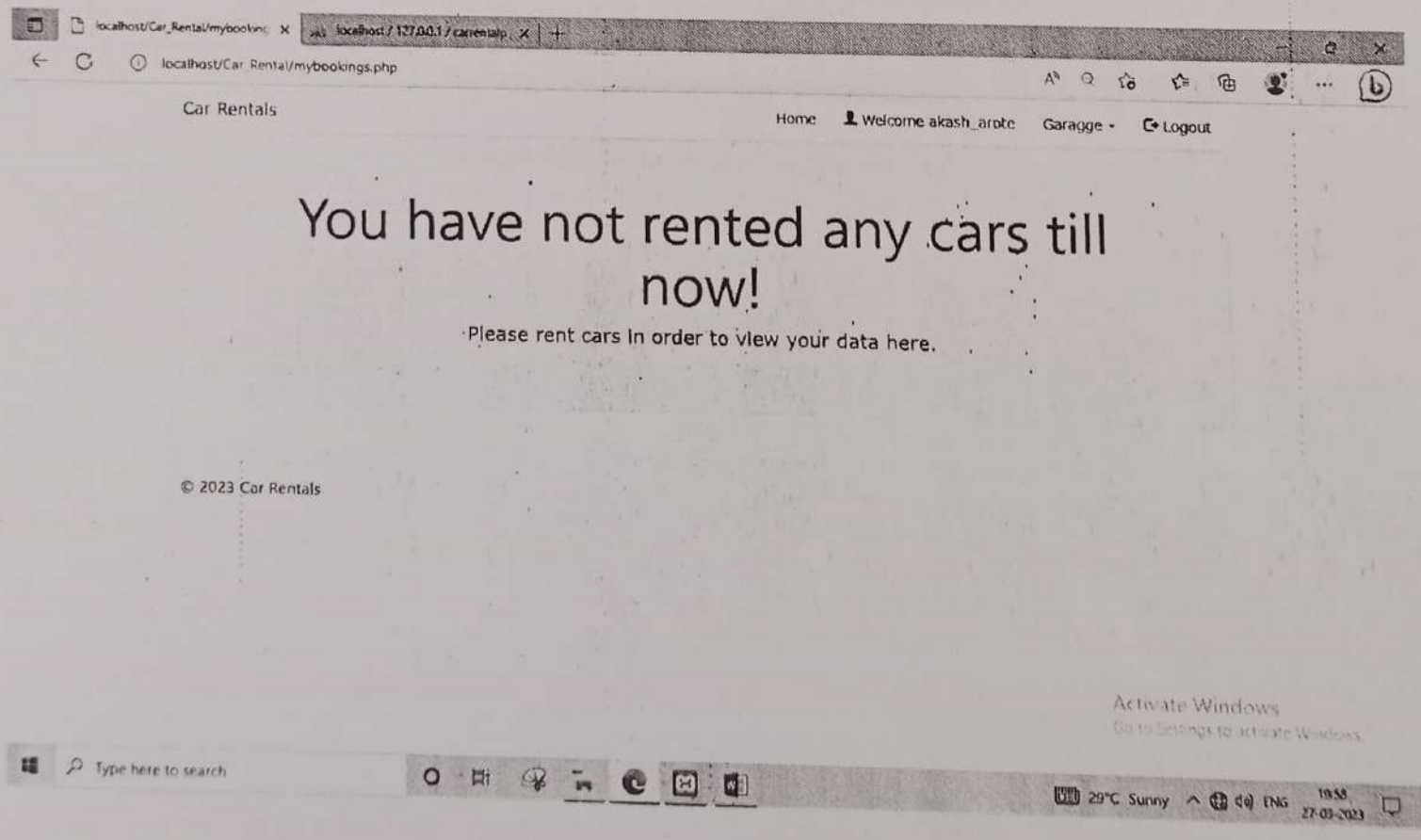
Employee Contact: 9011765581

Warning! **Do not reload this page** or the above display will be lost. If you want a hardcopy of this page, please print it now.

➢ CustomerGaragge – Return Now Page :



➢ Customer Garagge –My Booking Page :



➢ FAQ Page :

Car Rentals

HOME EMPLOYEE CUSTOMER FAQ

How do I pay for my Rental?

What if i find a better rate for a rental car?

Will I need a driving license to rent a car?

Is there a fee if I return the car after the due date?

Why should i sign up?

How do I become a member?

How do I login?

What about my privacy?

What if i share my computer?

Is my credit card information stored in my account?

Do you have meet and greet services?

How can i pay for my chauffeur services?

Is there a fee if i change my Chauffeur services?

5.Implementation Details

5.1 Software and hardware specification: -

Software: -

(1) Google chrome (using runtime the project).

(2) Notepad (used as editor).

(3) Internet explorer (using runtime).

(4) 64-bit Windows Operating System.

Hardware: -

(1) HP Pavilion laptop (used as server).

(2) DESKTOP-8M8NEI

(3) Ram.

(4) mouse.

(5) keyboard

6.Output and Reports Testing

Output testing for the online car rental system involves verifying that the system is performing the required functions correctly, such as booking a car, making payments, and sending confirmation emails. Report testing involves verifying that reports generated by the system, such as financial reports, rental history, and customer feedback reports, are accurate and complete. Both types of testing ensure that the system is functioning as intended and meeting customer needs. Testing results are documented in a test report, which summarizes the testing process and findings.

7.Conclusion and Recommendations

In conclusion, the development of an online car rental system has provided customers with a convenient and efficient way of renting a car. The system has proven to be effective in improving customer experience, reducing wait times and streamlining rental processes. The project has also contributed to the growth of the car rental industry by increasing accessibility to car rental services.

8. Future Scope

Add new car is representing the car list.

The User payment for the current receipt of the payment.

Add the current project for booking easy.

9.Bibliography and References

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www.w3schools.com

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G.M.D. ARTS, B.W. COMMERCE & SCIENCE COLLEGE, SINNAR.

DEPARTMENT OF COMPUTER SCIENCE

A PROJECT REPORT ON

"Online GYM Management System"

Submitted by:

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Sonawane KavitaManik

Pawar Nikita Anil

Guided by:

(SMT.N.V. LAHAMAGE)

Savitribai Phule Pune University

2022-2023

M.V.P. Samaj's.

G.M.D. ARTS, B.W. COMMERCE & SCIENCE COLLEGE, SINNAR.

CERTIFICATE

This is to certify that,

Sonawane Pooja Ashok

Sonawane Kavita Manik

Pawar Nikita Anil

Student of the B.Sc. Computer Science has satisfactory completed Project work on **"Online Gym Management System",** towards partial fulfilmentof degree course affiliated to Savitribai Phule Pune University for the Academic Year 2022-2023 at G.M.D. ARTS, B.W. COMMERCE & SCIENCE COLLEGE, SINNAR.

13/4/23

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13/5/23

External Examiner

Index

1.Abstract

The project titled as "Online Gym Management System" is develop using front end as PHP and back end MYSQL tool. Gyms are become the essential part of our lives and providing best exercise. In this web application admin can manage the customer an easier and more convenient way. This project also maintains the Customer details, to provide the valuable reports regarding progress of the gym member. Admin can login with their username and password. Admin can add and update Trainer details and work out details. Customer will register and login with their username and password. Customer can view exercise and work out timing etc.

2. Introduction

The Gym Management requires a system that will handle all the necessary and minute details easily and proper database security accordingly to the user. Theyrequiresoftware, which will store data about members, employees, products, payroll, receipts of members & all transactions that occur in Gym and lock-up with graphical user interface(GUI).

1.Motivation:

A modern business needs to make data-driven decisions. If you want to succeed in the digital era, leverage your data. You have never had access to more data than you do right now. When organizations realize the full power of data, they can make better decisions every day. That means increased efficiency, speed, and quality of service. Collecting, understanding, and reporting data are all very different stages. You can't justify a higher budget or readjust your class schedule if you don't understand the data. That why it's important that the proposed system can provide reports across the business in an easy-to-digest format.

2.Motivation:

To make well-informed financial decisions, you need to know the inner workings of your business. A gym management system can offer you financial insights by producing reports and tracking your cash flow. It's essential that you know how much money is coming in and out of your business, whether that's monitoring multiple revenue streams or knowing the recurring revenue coming in every month. No need to compare confusing spreadsheets using a manual system; your management software should produce clear reports that allow you to track all transactions easily.

3.Motivation:

By using your gym management system for email marketing, you can keep clients engaged. Automation and personalization are key to increasing engagement while at the same time easing the number of resources you need to run email campaigns. Segment your audience and target your email list with content that is relevant and valuable. You can create monthly newsletters, nurturing campaigns, or send out quick updates whenever you need to inform your members of your latest news. When choosing a gym management system, you will need to think about accessibility.

2.Problem Statement:

People with intellectual disabilities (ID) have high prevalence of physical inactivity and high rates of preventable health conditions, including obesity and cardiovascular disease. Increased participation in fitness and wellness activities can improve their overall health and well-being. However, many fitness and wellness organizations do not know how to effectively serve this population nor how to fitness and wellness organizations do not know how to effectively serve this population nor how to support their inclusion into their programs.

3.Purpose/Objective and Goals:

The main objective of the project is to develop software that facilitates the data storage, data maintenance and its retrieval for the gym. To store the record of the customers, the staff that has the privileges to access, modify and delete any record and finally the service. gym. To develop an user friendlysystem that requires minimal user training. Most offeatures and function are similar to those on any windows platform.

4.Literature Survey:

A literature survey will be conducted to understand the existing online Gym Management System, their features, strengths, and weaknesses. This survey will help to identify the gaps in the existing systems and inform the design of the new platform.

5.Project Scope and Limitations:

- Storing information of members, employees.
- Check validity of information provided by user.
- Storing information of members according to their id.
- Generating reports for different id.

3.System Analysis

3.1 Existing System:

The gym is working manually. The current system is time consuming and also it is very costly, because it involves a lot of paperwork. The following are the reasons why the current system should be computerized:

- To increase efficiency with reduced cost.
- To reduce the burden of paper work.
- To generate required reports easily. Limitations of existing system.

3.2 Scope and Limitations of Existing System:

Scope: To manually handle the system was very difficult task. But now-a-days computerization made easy to work.

Limitations: As the records are to be manually maintained it consumes a lot of time. Lot of paper work is involved as the records are maintained in the files & registers.

3.3 Project perspective,features:

Project perspective: The online gym management system aims to provide a convenient and efficient way for customers to get easily booking.

Features: The system includes features such asbooking, online payments, gym management, customer reviews, and gym history. It also offers real-time availability updates and the ability to cancel or modify bookings. Additionally, the system has an easy-to-use interface and responsive customer support.

3.4 Stakeholders:

Customer

Employee

3.5 Requirement analysis:

Requirement analysis for the online gym management system includes identifying customer needs, defining system functionality, and determining system performance requirements. It provides the potential for rapid development of incremental versions of the software.

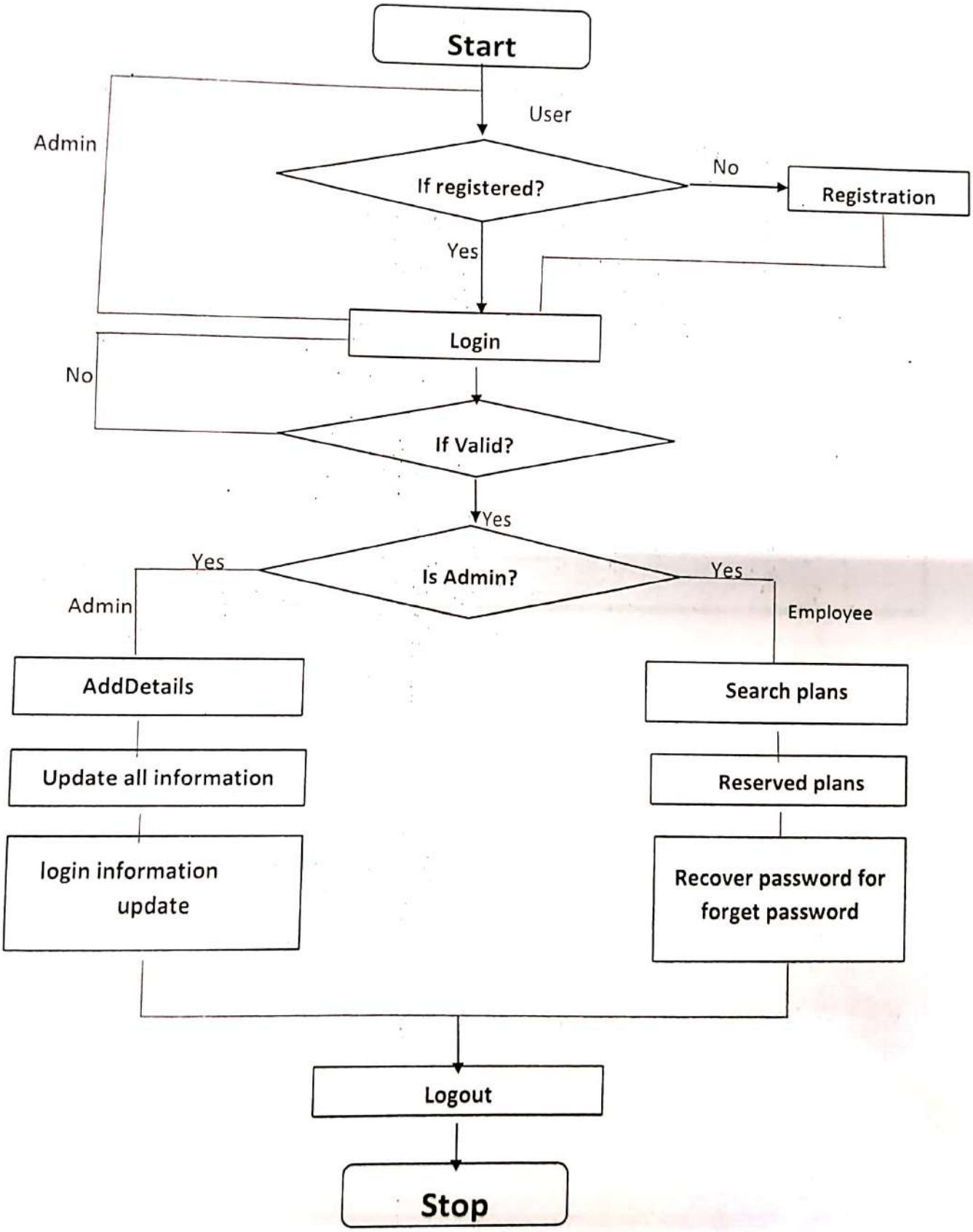
4.System Design

4.1 Design Constraints:

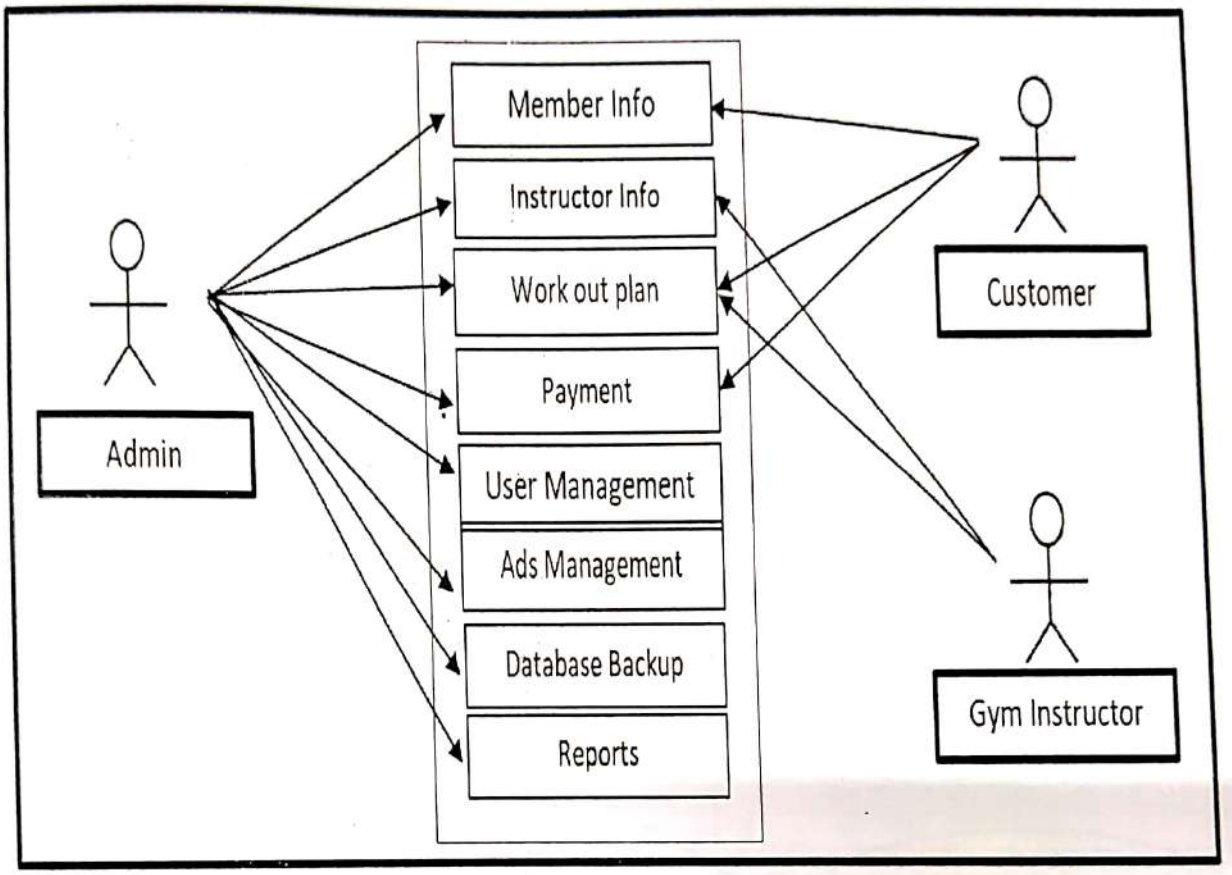
Common Diagram Containing Following- The Symbols used in ER diagram are as follow: ER Diagram describes data at rest, data being stored. Data relationship is the relation between the entities. Entity is an object that exist and its distinguishable from other objects. ER diagram shows data at rest. This means ER diagram does not show data flow.

4.2 System Model:

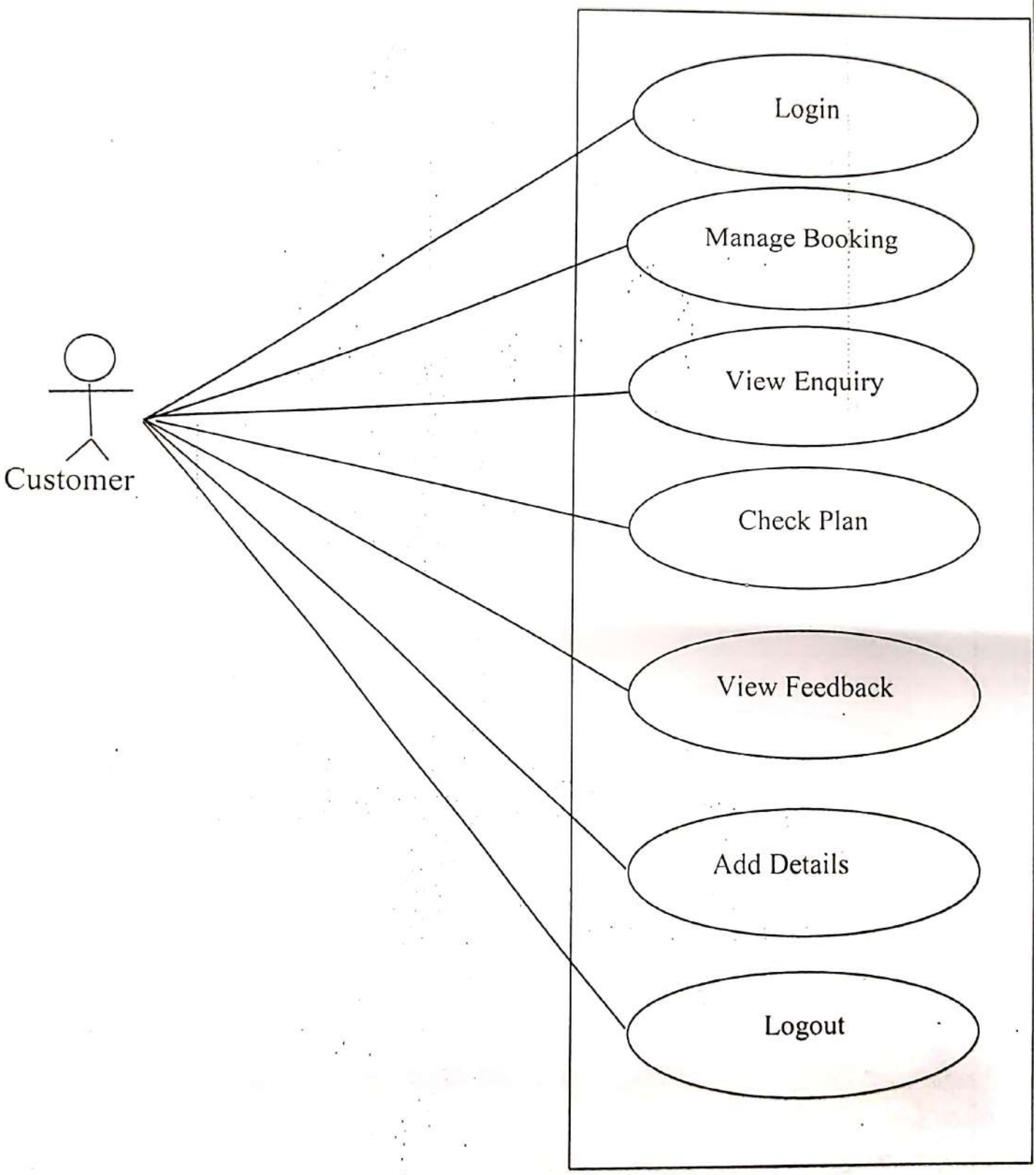
System Flow Chart:



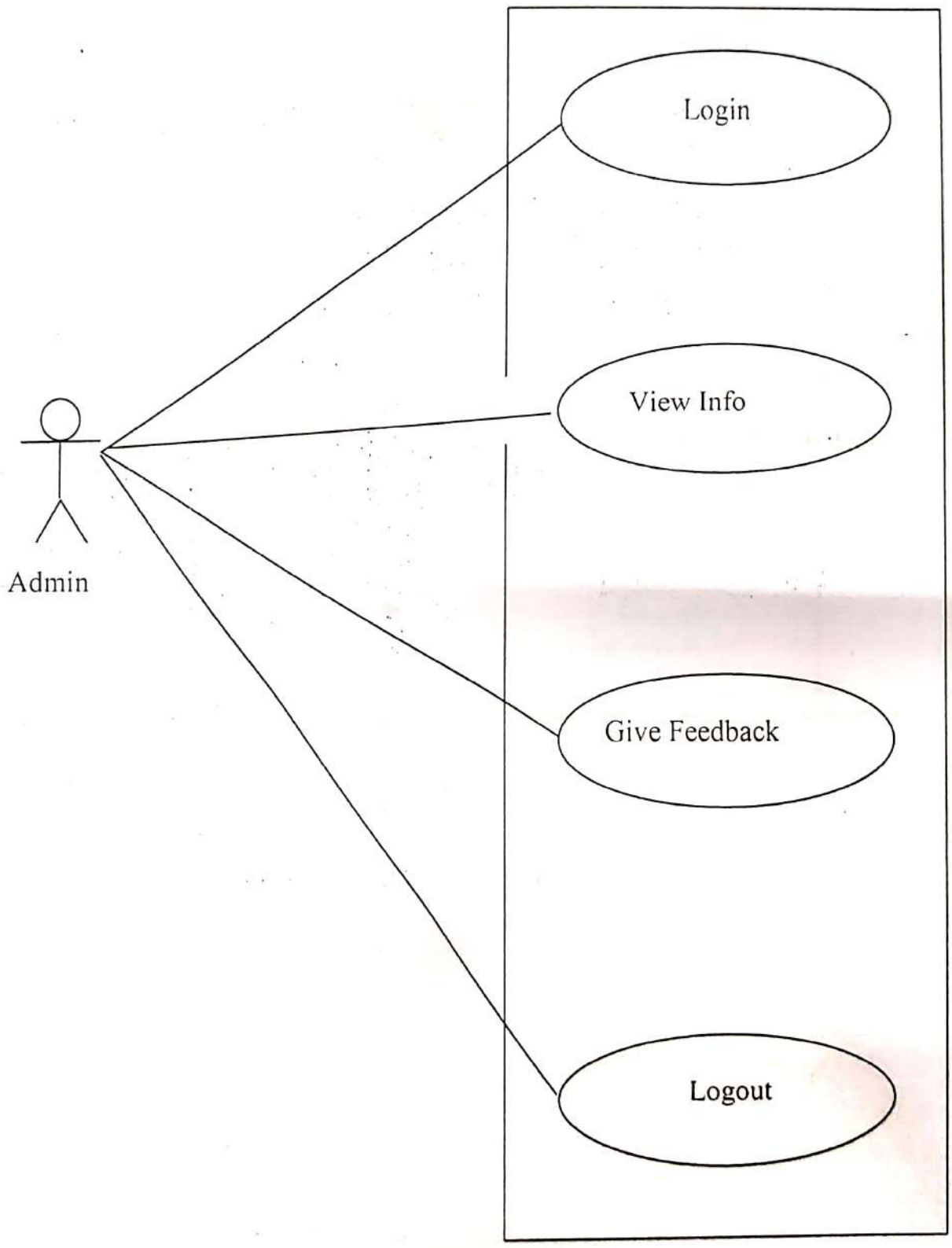
ER Diagram:



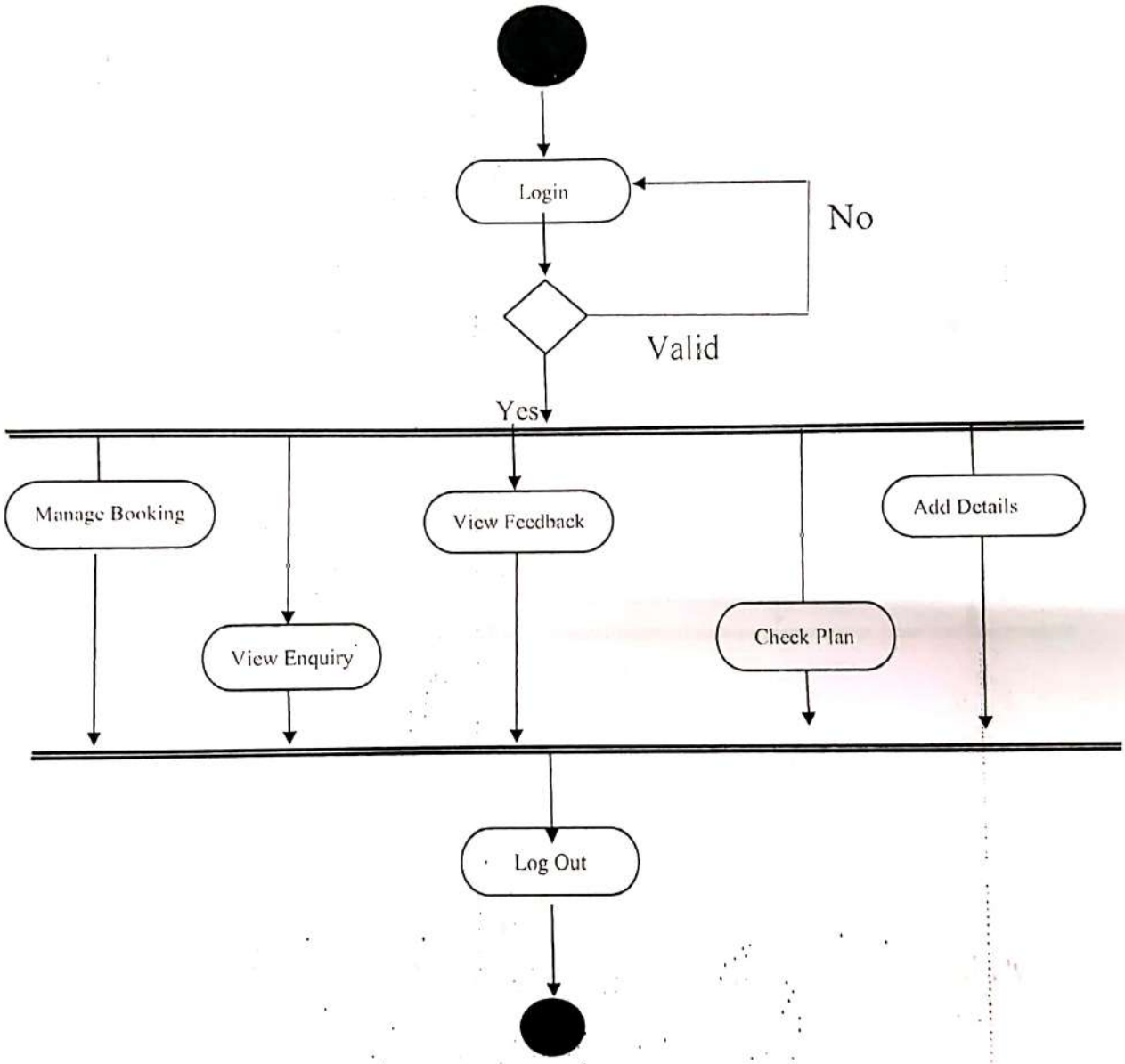
Use case diagram forCustomer:



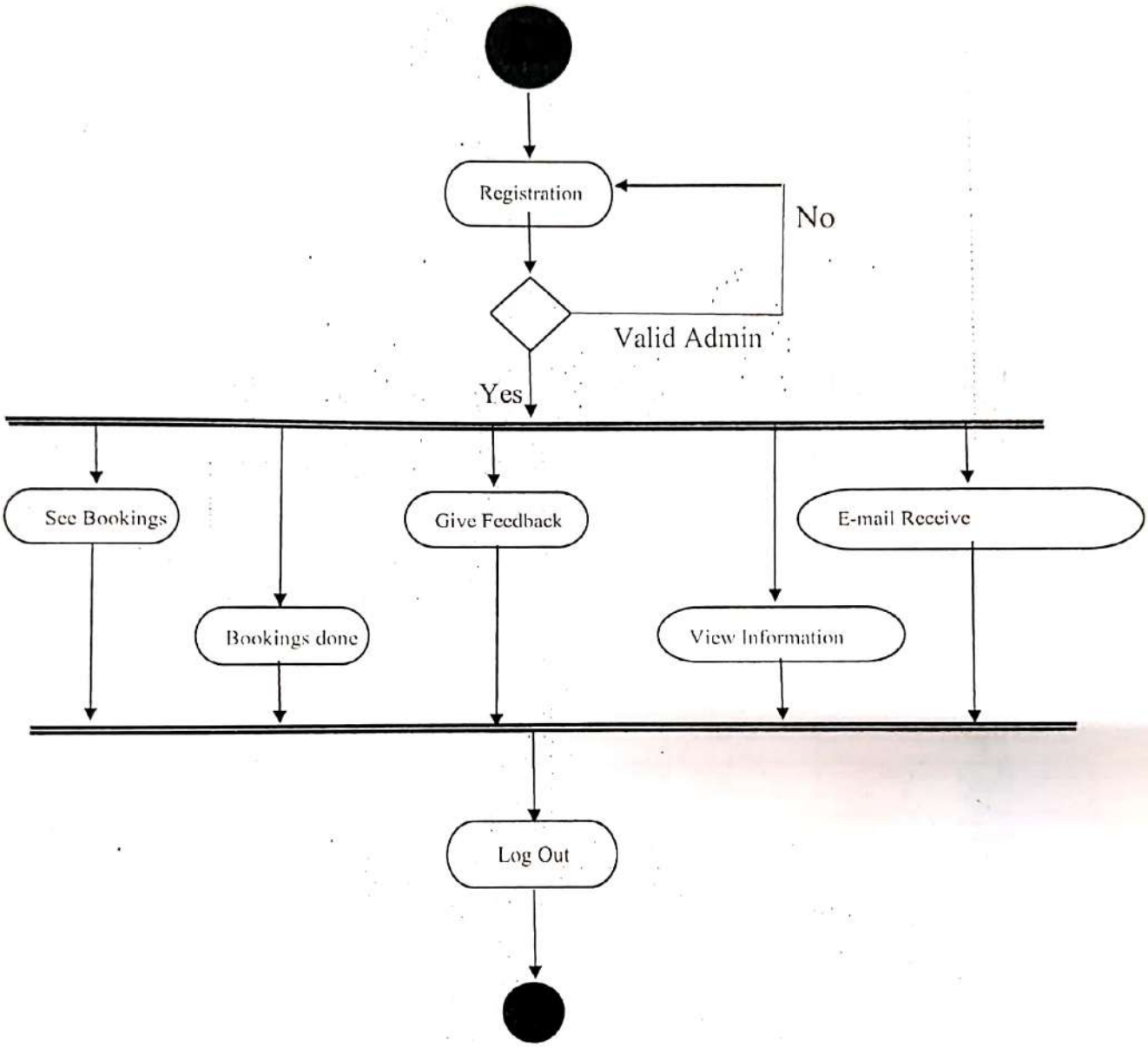
Activity Diagram for Admin:



Activity Diagram for Customer:



Activity Diagram for Admin:



4.3 Data Model:

1) Table 1 – Customer/Membership

Field	Data Type	size	key
Customer ID	int	20	Primary key
First name	String	50	Null
Last name	String	50	Null
Gender	String	10	Null
Age	int	10	Null
Contact number	Int	10	Null
E-mail	varchar	20	Null
Password	varchar	10	Null

2)Table 2 – Payment

Field	Data Type	size	key
Payment ID	int	20	Primary key
Customer ID	varchar	20	Index Key
Transaction ID	int	50	Null
Total Amount	varchar	10	Null
Date	int	10	Null

2) Table 3 – Transaction Records

Field	Data Type	size	key
Transaction ID	varchar	50	Primary key
Transaction Name	varchar	20	Null
Customer ID	varchar	50	Index Key
Amount	varchar	10	Index Key
Date	int	10	Index Key

3) Table 4 – Schedule

Field	Data Type	size	key
Schedule ID	varchar	20	Primary key
Customer ID	varchar	50	Index key
Session	varchar	50	Null
Activity	varchar	10	Null
Date	int	10	Index key
Time start	varchar	10	Null
Timer end	varchar	20	Null

4) Table 5 – Plans

plans	Data Type of price	size	key
Free Fitness Gear Package	int	20	Primary key
3 Months Membership Package	varchar	50	Null
6 Months Membership Package	varchar	50	Null
4 Months Membership Package	varchar	10	Null

5) Table 6 – Workout Sessions

Workout	Data Type	size	key
ID	int	20	Primary key
Password	varchar	50	Index key

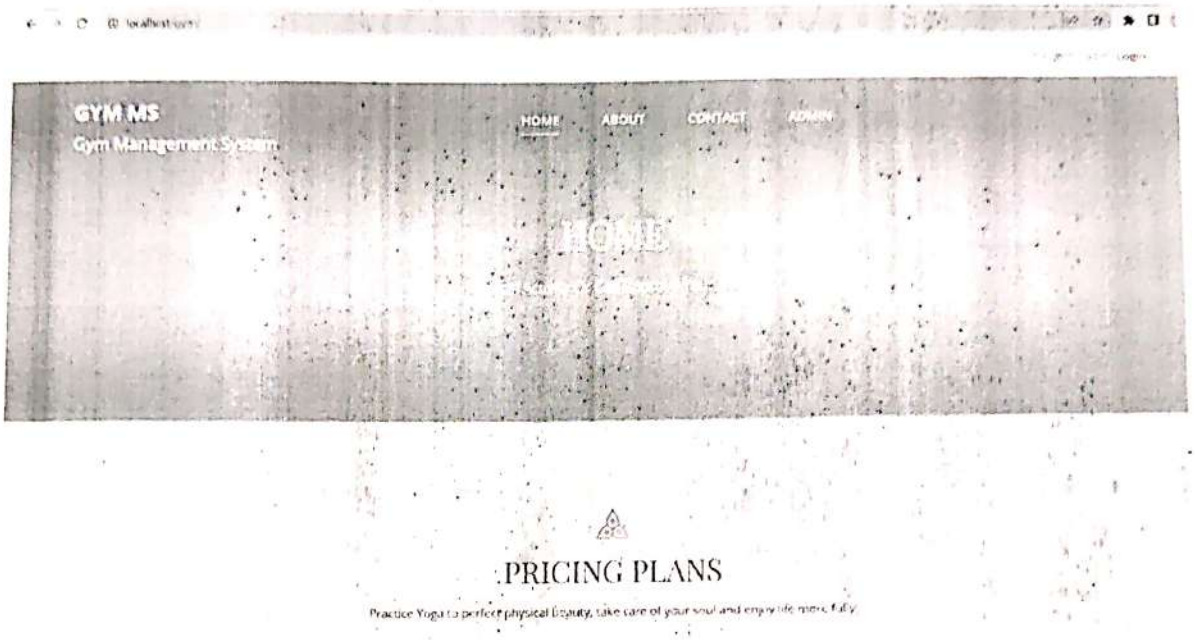
Duration	varchar	50	Null
Training Goals	varchar	10	Null
Start time	int	10	Null
End time	int	10	Null
Days	varchar	20	Null
Date	varchar	10	Null

6) Table 7 – Feedback

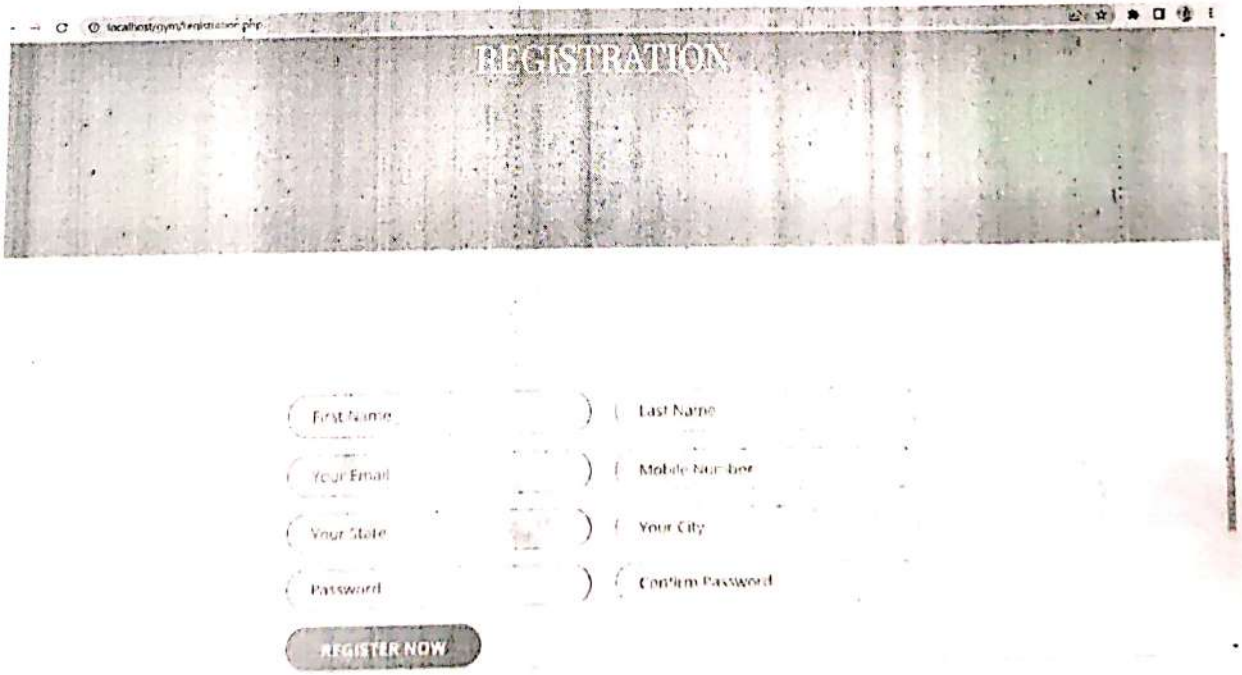
Field	Data Type	size	key
name	varchar	20	Null
e-mail	varchar	20	Null
message	varchar	150	Null

4.4 User Interface:

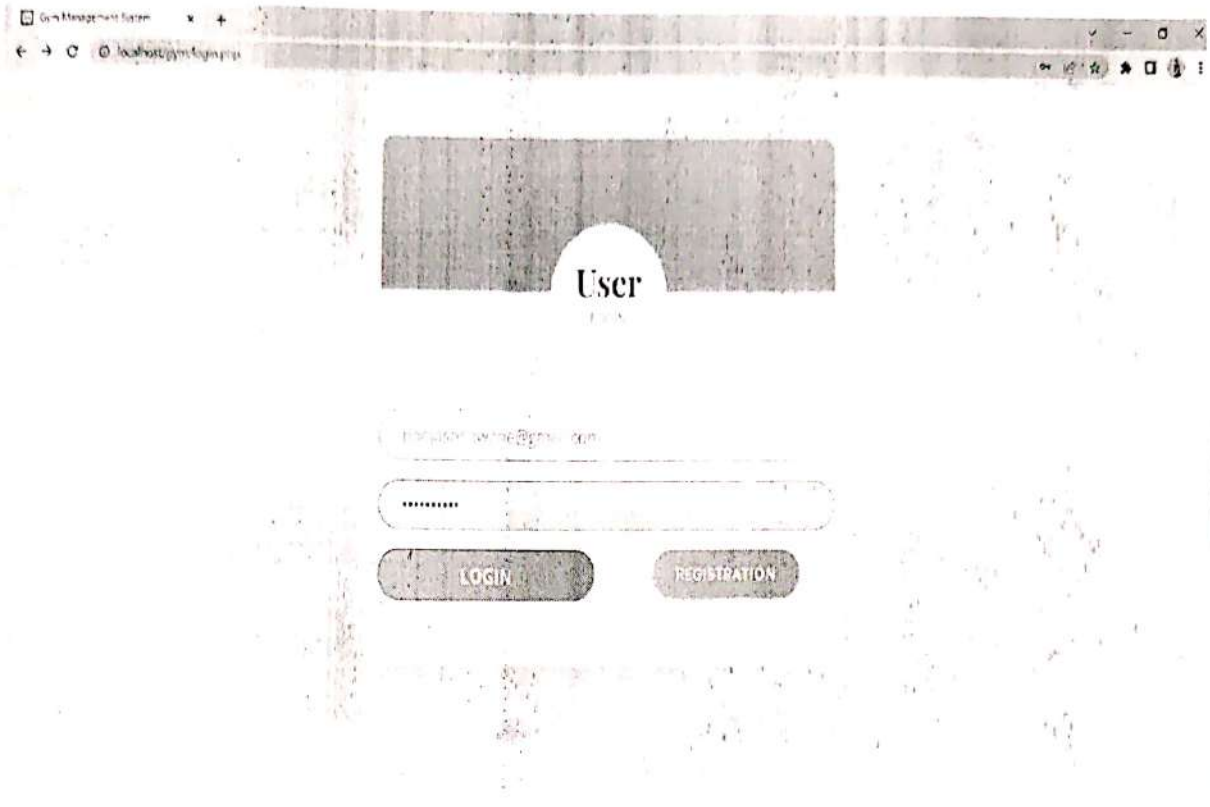
❖ Home:



❖ User Registration Page:

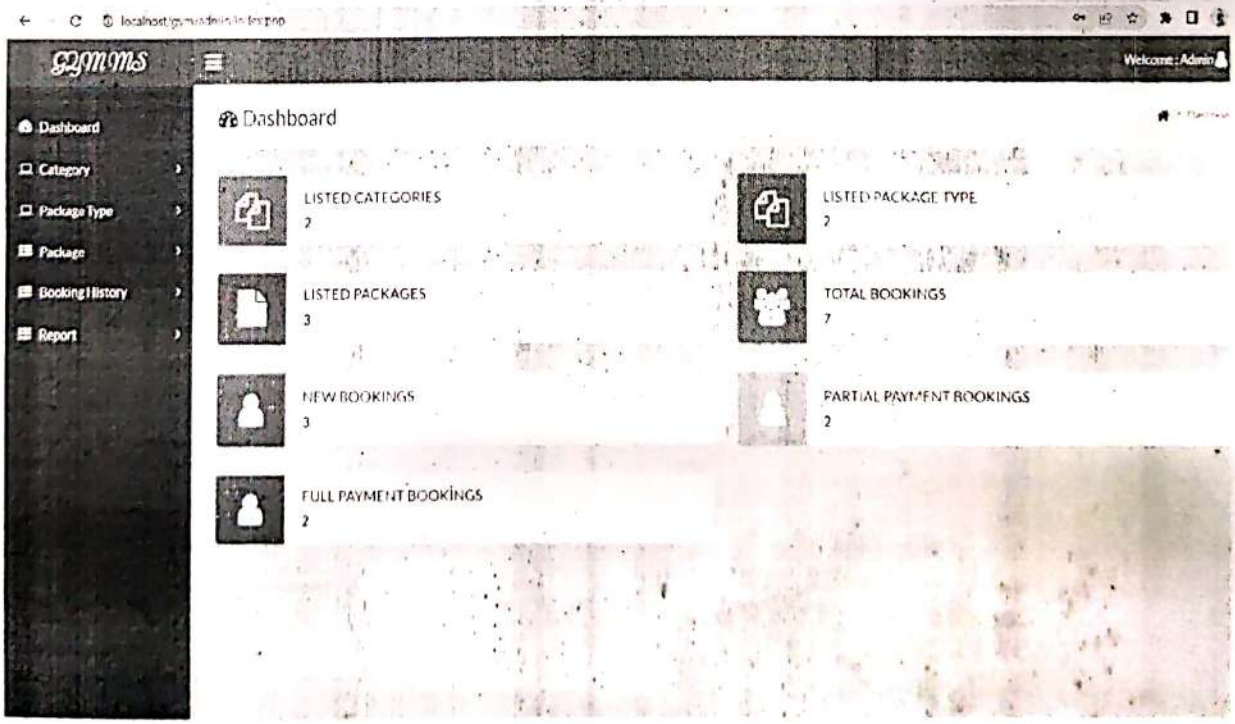


❖ User Login Page:

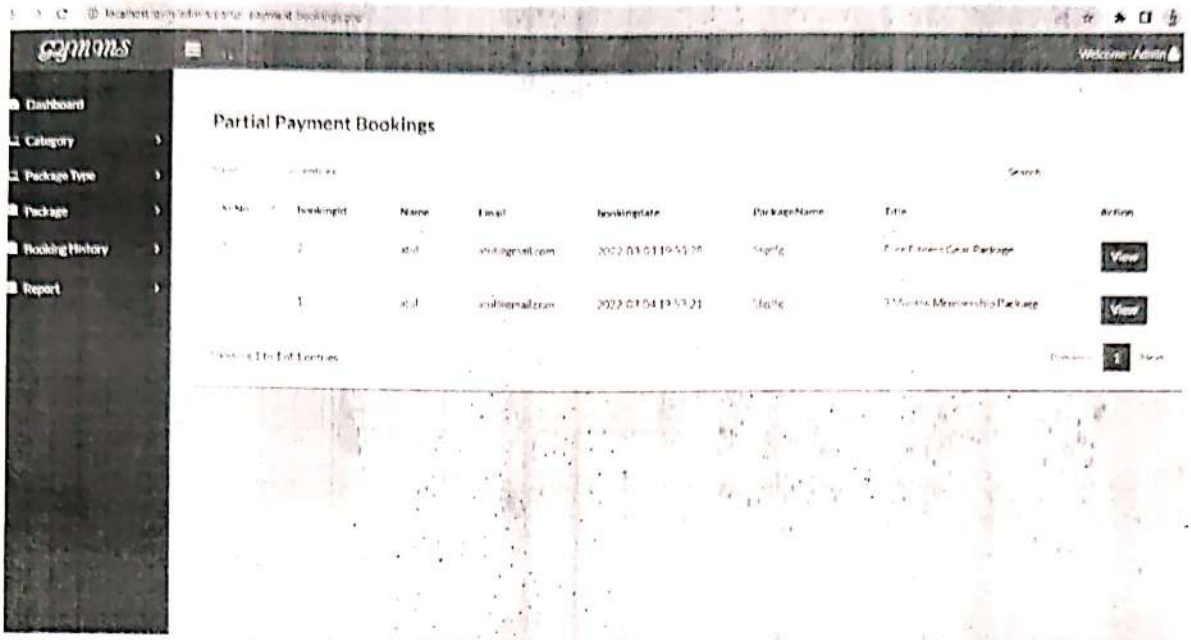


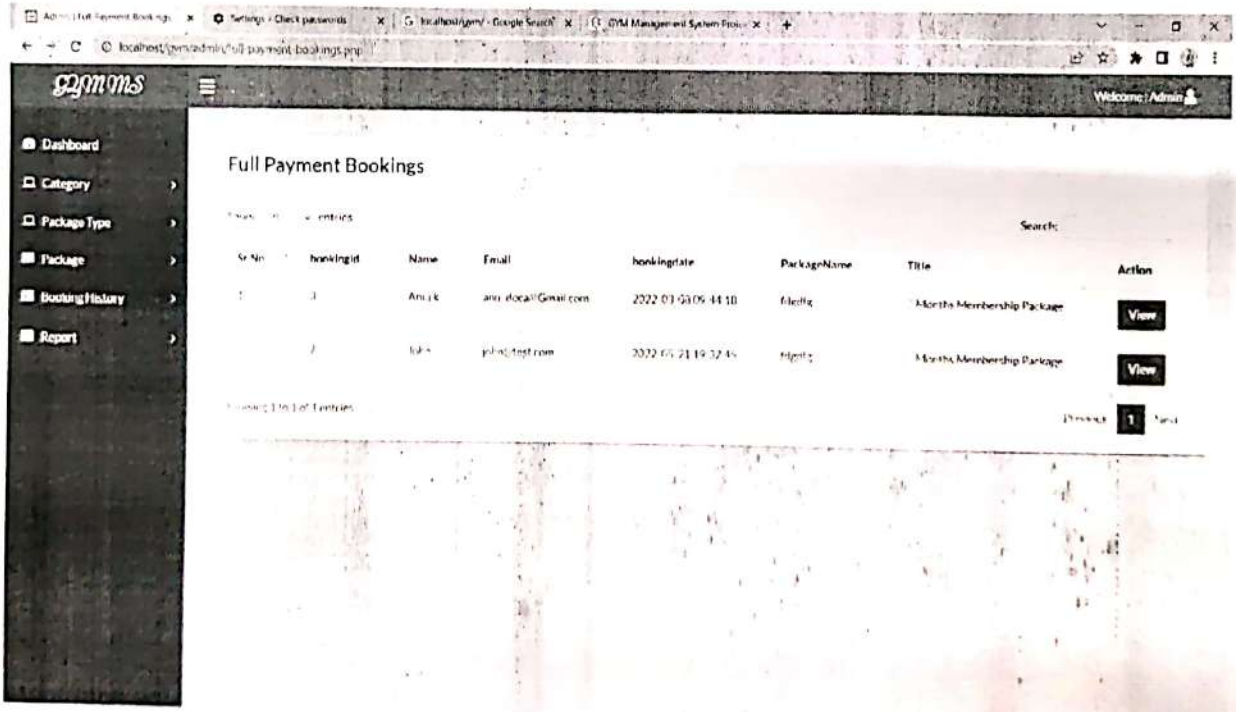
❖ Admin Login Page:

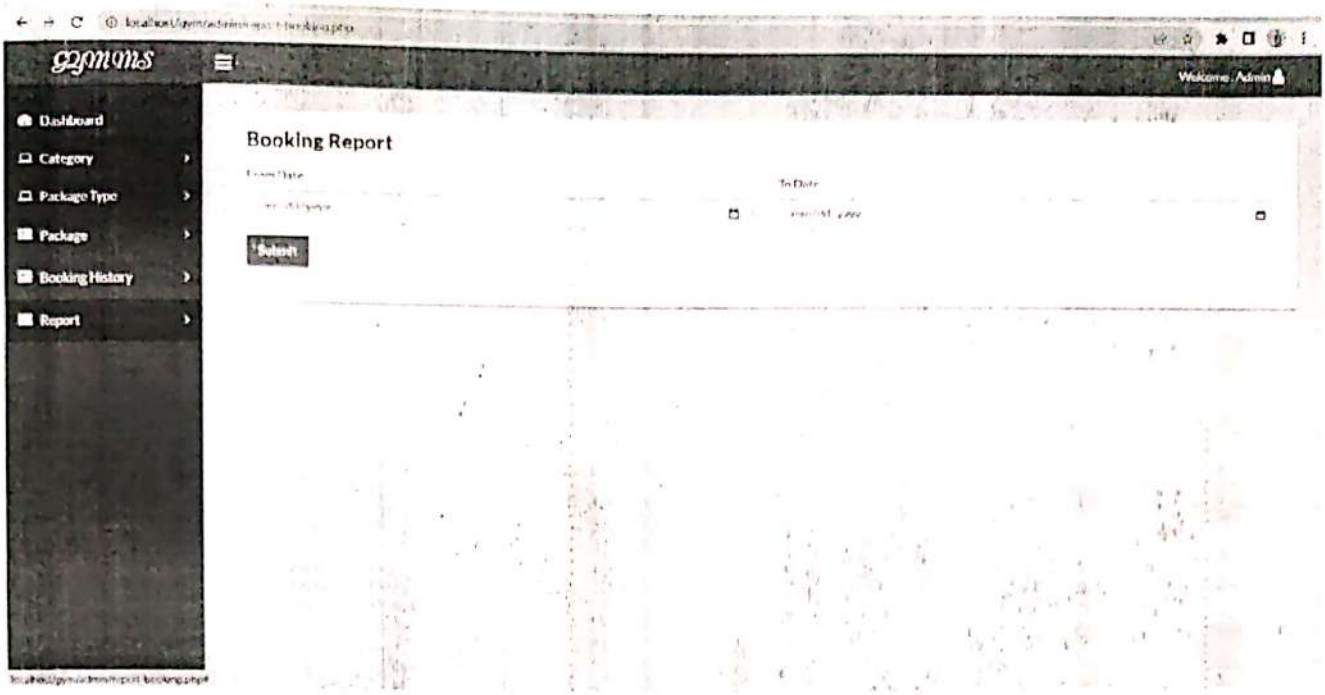
❖ Admin Dashboard:

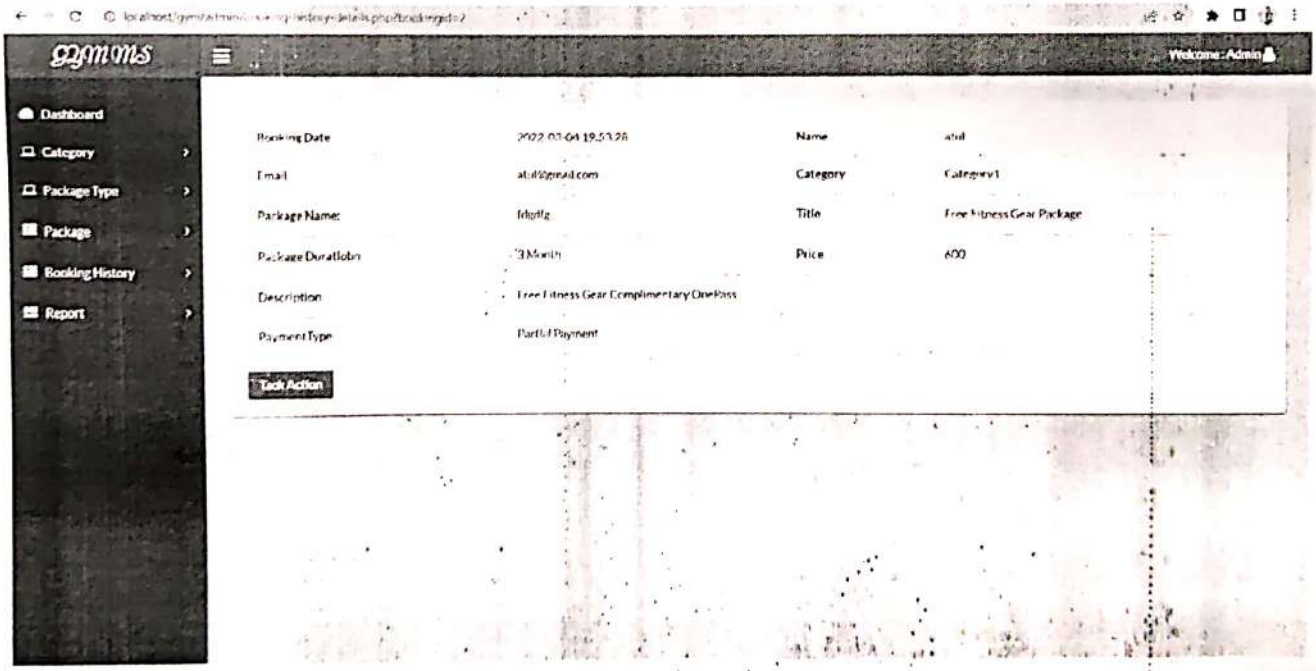


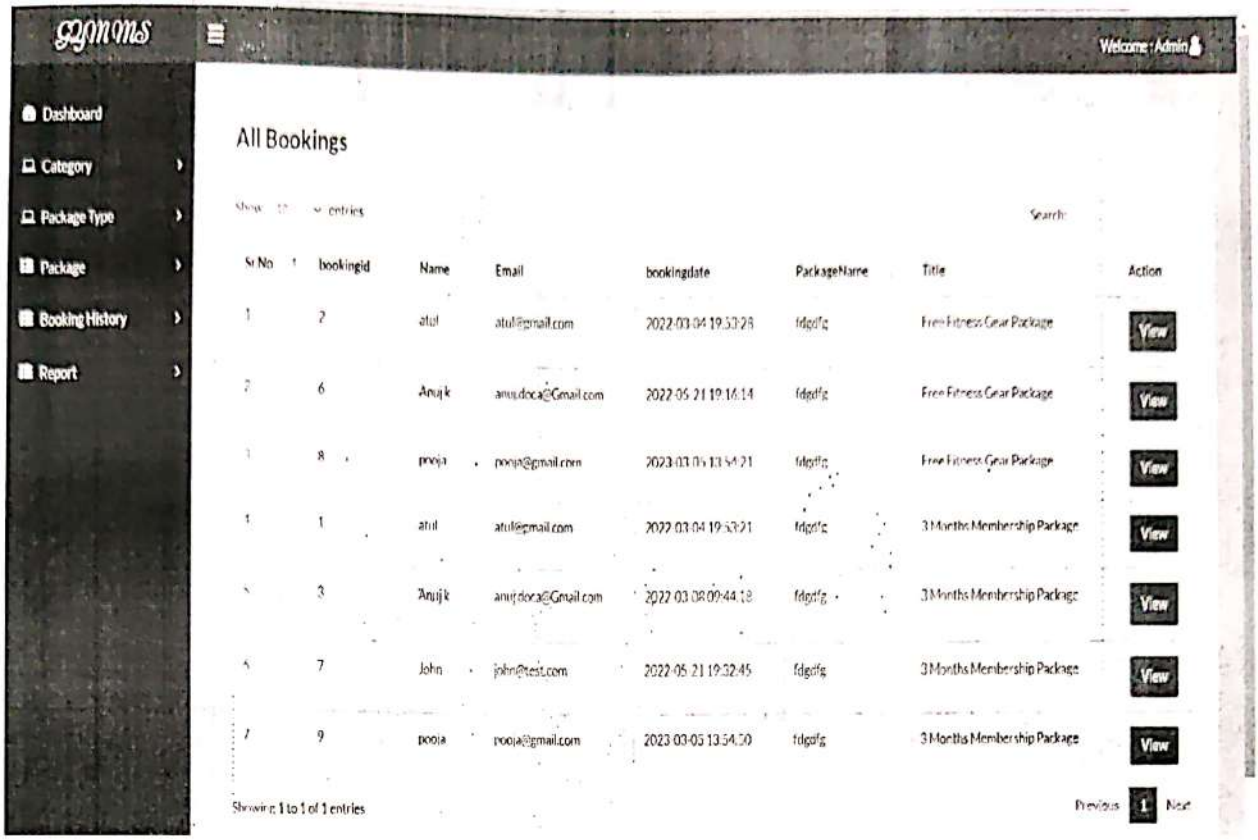
❖ Bookings:







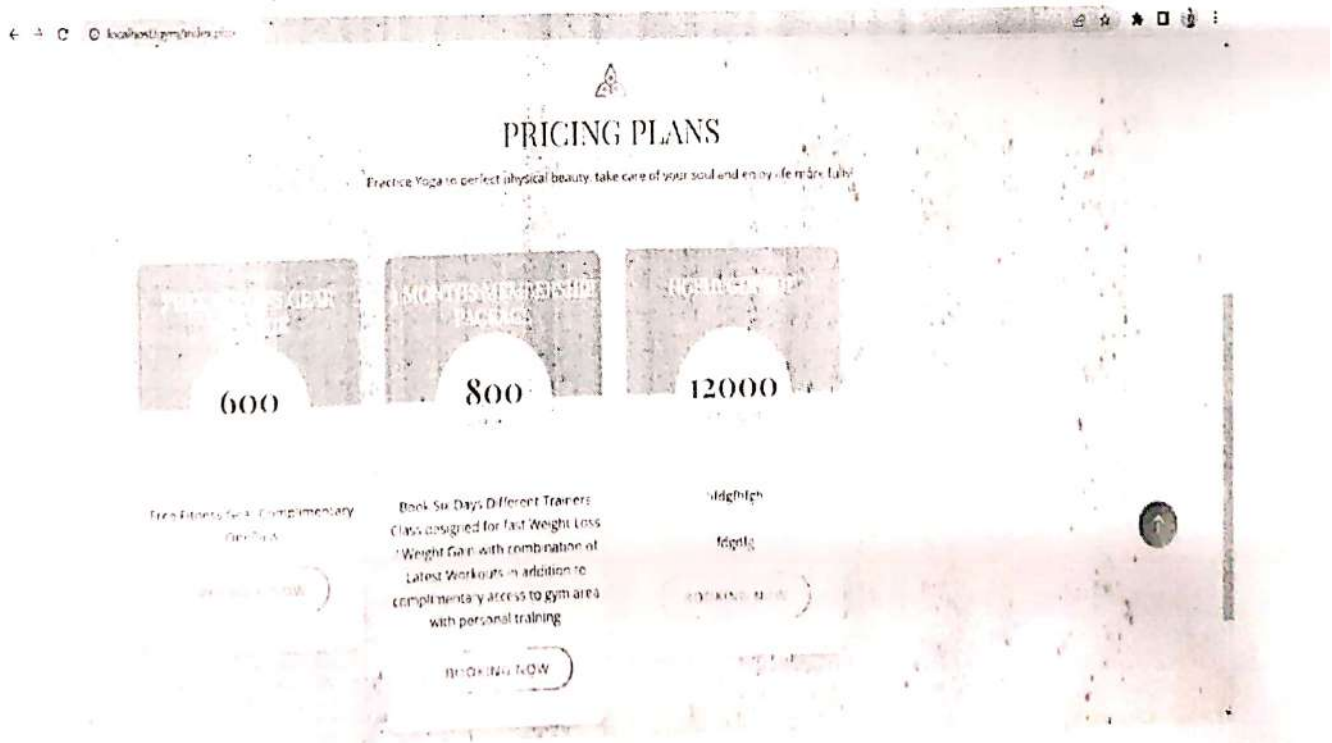




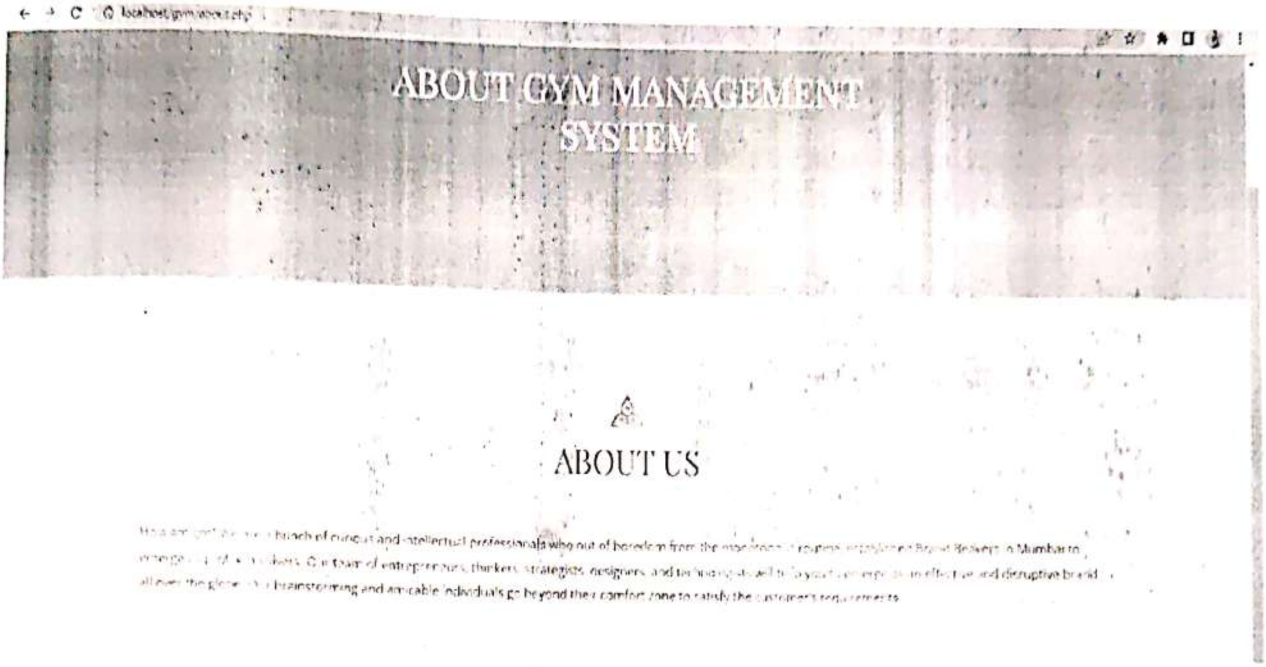
❖ Booking History:

Booking Date	2023-03-05 13:51:21	Name	[illegible]
Email	[illegible]@gmail.com	Category	Category1
Package Name:	fdgdfg	Title	Free Fitness Gear Package
Package Duratiobn	3 Month	Price	600
Description	Free Fitness Gear Complimentary OnePass		
PaymentType	Payment not made yet .		

❖ Plans:



❖ About:


localhost/gym/about.php
ABOUT GYM MANAGEMENT SYSTEM
ABOUT US

5.Implementation Details

5.1 Software and hardware specification: -

Software: -

(1) Google chrome (using runtime the project).

(2) Notepad (used as editor).

(3) Internet explorer (using runtime).

(4) 64-bit Windows Operating System.

Hardware: -

(1) HP Pavilion laptop (used as server).

(2) DESKTOP-8M8NEI

(3) Ram.

(4) mouse.

(5) keyboard

6.Output and Reports Testing

After performing the validation testing the next step is output testing of the proposed system since no system is useful if it does not produce the required output in the specific format. The outputs generated or displayed by the system under consideration are tested by asking the users about the formats required by them.

7.Conclusion and Recommendations

The "GYM MANAGEMENT SYSTEM" is successfully designed and developed to fulfilling the necessary requirements, as identify in the requirements analysis phase, such as the system is very much user friendly, form level validation and field level validation are performing very efficiently. The new computerized system was found to be much faster and reliable and user friendly then the existing system, the system has been designed and developed step by step and tested successfully. It eliminates the human error that are likely to creep in the kind of working in which a bulk quantity of data and calculations as to be processed.The system results in quick retrieval of information that is very vital for the progress any organization. Cost is minimized in case of stationary. Burden of manual work is reduced as whenever transaction takes place, there is a no need to record it in many places manually.

8.Future Scope

The health and fitness industry has become extremely diverse in the range of services and facilities it offers; varying from large scale leisure centers and gymnasiums, to individual personal trainers who travel from one client to the next in their cars., Some services specialize in offering structured classes, others are informal; some cater for a particular demographic, and others for anyone.

9.Bibliography and References

www.google.com

www.w3schools.com

www.php.net

www.wikipedia.com

Thank you