VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi-590018

A MINI PROJECT REPORT
ON

"PLATE MANAGEMENT SYSTEM"

***Submitted in the partial fulfillment for the award of Bachelor of Engineering degree* in**
COMPUTER SCIENCE & ENGINEERING

Submitted by

ASHISH PRASAD R (4AD20CS014)

CHETHAN KUMAR CM (4AD20CS020)

Under the guidance of
Mrs. KAVYASHREE E D
Assistant Professor
Department of CSE
ATME College of Engineering

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

ATME College of Engineering,

13th Kilometer, Mysuru-Kanakapura-Bengaluru Road,
Mysuru - 570 028

2022-2023

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi-590018

ATME College of Engineering

13th Kilometer, Mysuru-Kanakapura-Bengaluru Road,
Mysuru - 570 028

Department of Computer Science and Engineering

CERTIFICATE

This is to certify that the Mini Project Work entitled **"PLATE MANAGEMENT SYSTEM"** is the bonafide work carried out by **Ashish Prasad R** (4AD20CS014) and **Chethan Kumar C M** (4AD20CS020) in partial fulfillment for the award of degree of Bachelor of Engineering in Computer Science and Engineering from Visvesvaraya Technological University, Belagavi during the year 2022-2023.

----------	----------
Signature of Guide	Signature of HoD
Mrs. Kavyashree E D	Dr. Puttegowda D
Assistant Professor	Professor & HoD
Dept. of CSE	Dept. of CSE

External Viva

Name of Examiners	**Signature with date**
1……	**1 ……..**
2……	**2 ……..**

ACKNOWLEDGEMENT

The successful completion of our mini project work would be incomplete without the mention of the names of the people who made it possible.

We are thankful to **Dr. L Basavaraju, Principal, ATME College of Engineering, Mysuru** for having supported us in our academic endeavors by granting us permission and extended full use of the college facilities to carry out this mini project successfully.

We are extremely thankful to **Dr. Puttegowda D, Professor and Head of the Department, Department of Computer Science and Engineering**, for his valuable support and his timely inquiries into the progress of the work.

We express our earnest gratitude towards our guide **Mrs. Kavyashree E D, Assistant Professor, Department of Computer Science and Engineering**, for her consistent cooperation and support in getting things done.

We are obliged to all **teaching and non-teaching staff members of Department of Computer Science and Engineering** for the valuable information provided by them in their respective fields.

Lastly, we thank almighty, our parents and friends for their constant encouragement and courage, for helping us in completing the mini project report successfully.

Ashish Prasad R (4AD20CS014)
Chethan Kumar CM (4AD20CS020)

ABSTRACT

Our project “PLATE MANAGEMENT SYSTEM”. There’s a constant desire to reduce our spending on household materials. So, when we find options that seem better and cheaper, we go for them. Of course, quality is also vital at this stage, so we opt for similar materials that offer different experiences. A Plate Management System is a database management system (DBMS) mini project that aims to streamline the process of managing and organizing cutlery plate information. This system allows for the input, storage, and retrieval of data related to cutlery plates. The mini project will involve the design and implementation of a database to store and manage this information, as well as the development of a UI for data entry and retrieval.

We aim to provide a safer shop experience for users, Customer can order new plates for their own. if they order areca plates after the use, they can dispose it of or else if they order the ceramic plates they can use it for the long time, from this we can give assure that customers can get the best, effective, durable (on user selection basis) plates through our online platform.

This project aims to develop a system for managing the distribution and collection of cutlery and plates in a food service setting. The system will track inventory levels and location of cutlery and plates and will be able to automatically reorder supplies as needed. Additionally, the system will have the capability to track usage and identify any potential issues, such as lost or stolen items. The goal of this project is to improve the efficiency and cost-effectiveness of the cutlery and plate management process.

TABLE OF CONTENTS

Chapter 1

INTRODUCTION

The “Plate Management System” is a software application designed to streamline the process of managing the plates. The system provides a centralized database for storing information of users, admins, plates, orders, and payment. The software includes tools for tracking plate inventory, plate orders and managing customer relationships.

Plate management system is an online application, which is used to display and sell plates irrespective to type of customer. Customers can register online for being a member in the plate management system and each user can order plates of different material for fixed price.

1.1 Problem Statement

To provide an online platform to manage and sell all types of plates added by the admin and deliver the products to the users.

1.2 Objectives

- This mini project provides the software for PLATE MANAGEMENT SYSTEM.
- The purpose of this mini project is to provide an easy plate managing facility. Different types of plates and prices are provided.
- It is designed in such a way that any user can view the different types of plates along with the prices provided.
- It helps in efficiently managing all types of plates and orders made by user.
- To develop computerized system to reduce the paper work and a save time by automating, thereby increasing the efficiency and decreasing the work load.
- Customers are provided with user friendly environment.

1.3 Overview

- The central concept of the application is to allow the customer to shop virtually using the internet and allow customers to buy the items of their desire from the store.
- The Server process the customers and the items are shipped to the address submitted by them.

- The application which is deployed at the customer database, the details of the item share brought forward from the database for the customer view based on the selection through the menu and the database of all the products are updated at the end of each transaction.
- Once the authorized personnel feed the relevant data into the system, several reports could be generated as per the security.

1.4 Scope

- This system can be implemented to any shop in the locality or to multinational branded shops having retail outlet chains.
- The system recommends a facility to accept the orders 24*7 and delivery system which can make customers happy**.**
- Gives more global opportunities for local products.

Chapter 2

SYSTEM DESIGN

System design is the solution for the creation of a new system. This phase focuses on the detailed implementation of the feasible system. It emphasis on translating design specifications to performance specification. System design has two phases of development:

- Logical design
- Physical design

During logical design phase the analyst describes inputs (sources), outputs (destinations), databases (data sores) and procedures (data flows) all in a format that meets the user requirements.

The physical design is followed by physical design or coding. Physical design produces the working system by defining the design specifications, which specify exactly what the candidate system must do.

2.1 Database

Databases are the storehouses of data used in the software systems. The data is stored in tables inside the database. Several tables are created for the manipulation of the data for the system. Two essential settings for a database are

- Primary key -the field that is unique for all the record occurrences.
- Foreign key -the field used to set relation between tables.

Normalization is a technique to avoid redundancy in the tables.

2.2 System Tools

The various system tools that have been used in developing both the front end and the back end of the mini project are being listed.

2.3 Front End

PHP

PHP is a server-side scripting language designed primarily for web development but also used as a general-purpose programming language. Originally created by Rasmus Lerdorf in 1994, the PHP reference implementation is now produced by The PHP Development Team. PHP code may be embedded into HTML or it can be used in combination with various web template systems, web content management systems and web frameworks. PHP code is usually processed by a PHP interpreter implemented as a module in the web server or as a Common Gateway Interface (CGI) executable. The web server software combines the result of the interpreted and executed PHP code, which may be any type of data, including images, with the generated web page. PHP code may also be executed with a command-line interface (CLI) and it can be used to implement stand-alone graphical applications. The standard PHP interpreter, powered by the Zend Engine, is free to use software released under the PHP License. PHP code is usually processed by a PHP interpreter implemented as a module in the web server or as Common Gateway Interface (CGI) executable. PHP has been widely ported on web servers on almost every operating system and platform, free of charge.

CASCADING STYLE SHEETS (CSS)

It is a style sheet language used for describing the look and formatting of a document written in a mark-up 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.

HTML

HTML or Hypertext Mark-up Language is the standard mark-up language used to create web pages. HTML is written in the form of HTML elements consisting of tags enclosed in angle brackets (like). HTML tags most come in pairs like and although some tags represent empty elements and so are unpaired, for example Error! Filename not specified. 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). Though not always necessary, it is best practice to append a slash to tags which are not paired with a closing tag. 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 describes the structure of a website semantically along with cues for presentation, making it a mark-up language rather than a programming language.

2.4 Back End

The back end is implemented using MySQL which is used to design the databases.

MySQL

MySQL is the world's second most widely used open-source relational database management system (RDBMS). The SQL phrase stands for Structured Query Language.

SQL is a standard computer language for accessing and manipulating databases.

- SQL stands for Structured Query Language.
- SQL allows you to access a database.
- SQL is an ANSI standard computer language.
- SQL can execute queries against a database.
- SQL can retrieve data from a database.
- SQL can insert new records in a database.
- SQL can delete records from a database.
- SQL can update records in a database.
- SQL is easy to learn.
- SQL is an ANSI (American National Standards Institute) standard computer language for accessing and manipulating database systems. SQL statements are used to retrieve and update data in a database. SQL works with database programs like MS Access, DB2, Informix, MS SQL Server, Oracle, Sybase, etc.
- Unfortunately, there are many different versions of the SQL language, but to be in compliance with the ANSI standard; they must support the same major keywords in a similar manner (such as SELECT, UPDATE, DELETE, INSERT, WHERE, and others).

2.5 IMPLEMENTATION

	Table	Action	Rows	Type	Collation	Size	Overhead
☐	admins	Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_general_ci	16.0 KiB	-
☐	employees	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	16.0 KiB	-
☐	orders	Browse Structure Search Insert Empty Drop	4	InnoDB	utf8mb4_general_ci	48.0 KiB	-
☐	plates	Browse Structure Search Insert Empty Drop	8	InnoDB	utf8mb4_general_ci	16.0 KiB	-
☐	users	Browse Structure Search Insert Empty Drop	4	InnoDB	utf8mb4_general_ci	32.0 KiB	-
	5 tables	Sum	17	InnoDB	utf8mb4_general_ci	128.0 KiB	0 B

Figure 2.5.1 Tables of PMS Database

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
☐	1	id	varchar(20)	utf8mb4_general_ci		No	*None*			Change Drop More
☐	2	password	varchar(20)	utf8mb4_general_ci		Yes	*NULL*			Change Drop More
☐	3	name	varchar(20)	utf8mb4_general_ci		Yes	*NULL*			Change Drop More
☐	4	phno	bigint(10)			Yes	*NULL*			Change Drop More
☐	5	address	varchar(50)	utf8mb4_general_ci		Yes	*NULL*			Change Drop More

Figure 2.5.2 admins

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
☐	1	**id**	int(10)			No	*None*			Change Drop More
☐	2	**name**	varchar(30)	utf8mb4_general_ci		Yes	*NULL*			Change Drop More
☐	3	**phno**	bigint(10)			Yes	*NULL*			Change Drop More
☐	4	**address**	varchar(50)	utf8mb4_general_ci		Yes	*NULL*			Change Drop More
☐	5	**designation**	varchar(20)	utf8mb4_general_ci		Yes	*NULL*			Change Drop More

Figure 2.5.3 employees

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
☐	1	**id**	int(10)			No	*None*		AUTO_INCREMENT	Change Drop More
☐	2	**uid**	varchar(20)	utf8mb4_general_ci		Yes	*NULL*			Change Drop More
☐	3	**ptype**	varchar(30)	utf8mb4_general_ci		Yes	*NULL*			Change Drop More
☐	4	**quantity**	int(10)			Yes	*NULL*			Change Drop More
☐	5	**trans_no**	varchar(20)	utf8mb4_general_ci		Yes	*NULL*			Change Drop More
☐	6	**amount**	int(10)			Yes	*NULL*			Change Drop More

Figure 2.5.4 orders

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
☐	1	**id**	int(10)			No	*None*		AUTO_INCREMENT	Change Drop More
☐	2	**type**	varchar(20)	utf8mb4_general_ci		Yes	*NULL*			Change Drop More
☐	3	**price**	int(5)			Yes	*NULL*			Change Drop More

Figure 2.5.5 plates

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
☐	1	**id**	varchar(20)	utf8mb4_general_ci		No	*None*			Change Drop More
☐	2	**password**	varchar(20)	utf8mb4_general_ci		Yes	*NULL*			Change Drop More
☐	3	**name**	varchar(20)	utf8mb4_general_ci		Yes	*NULL*			Change Drop More
☐	4	**phno**	bigint(10)			Yes	*NULL*			Change Drop More
☐	5	**address**	varchar(50)	utf8mb4_general_ci		Yes	*NULL*			Change Drop More

Figure 2.5.6 users

2.6 Schema Diagram

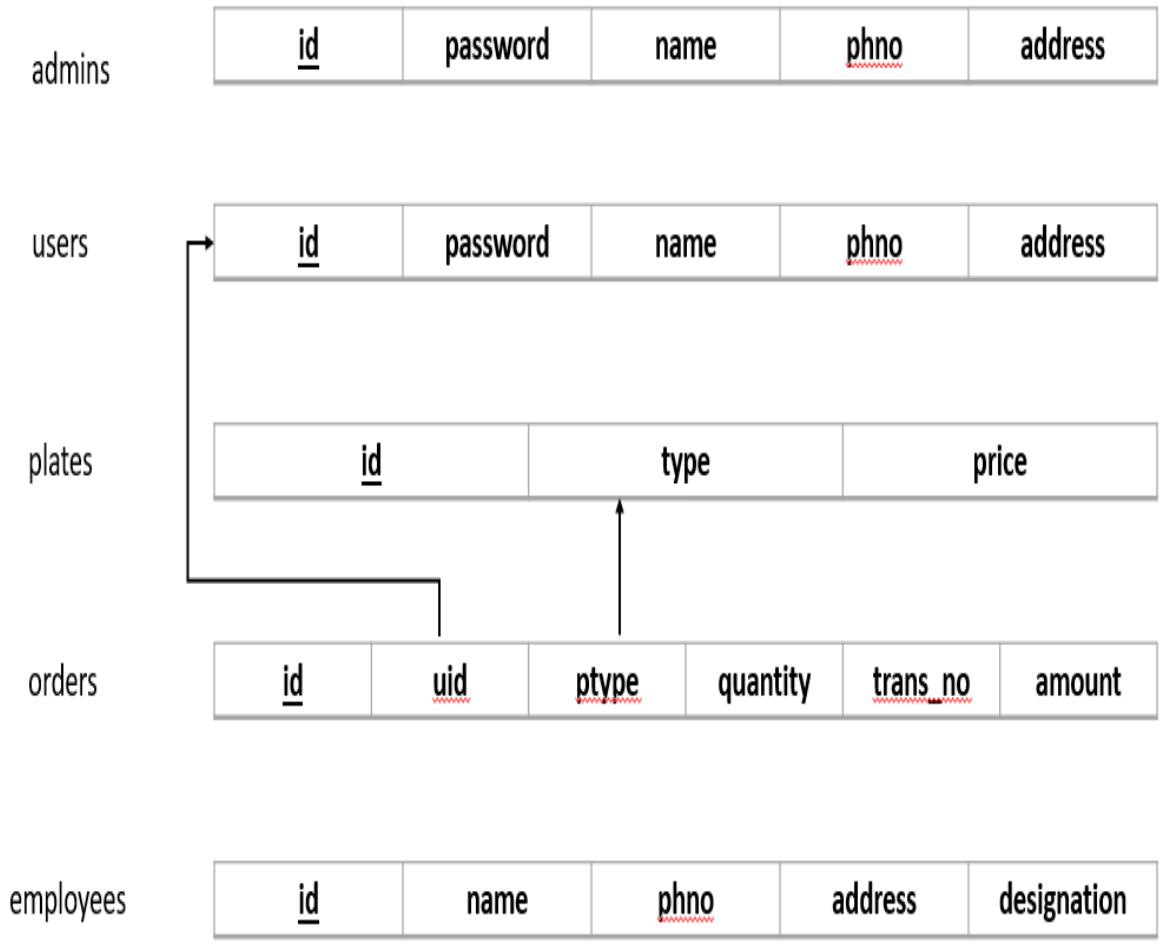

Fig 2.6.1 Schema Diagram

2.7 ER Diagram

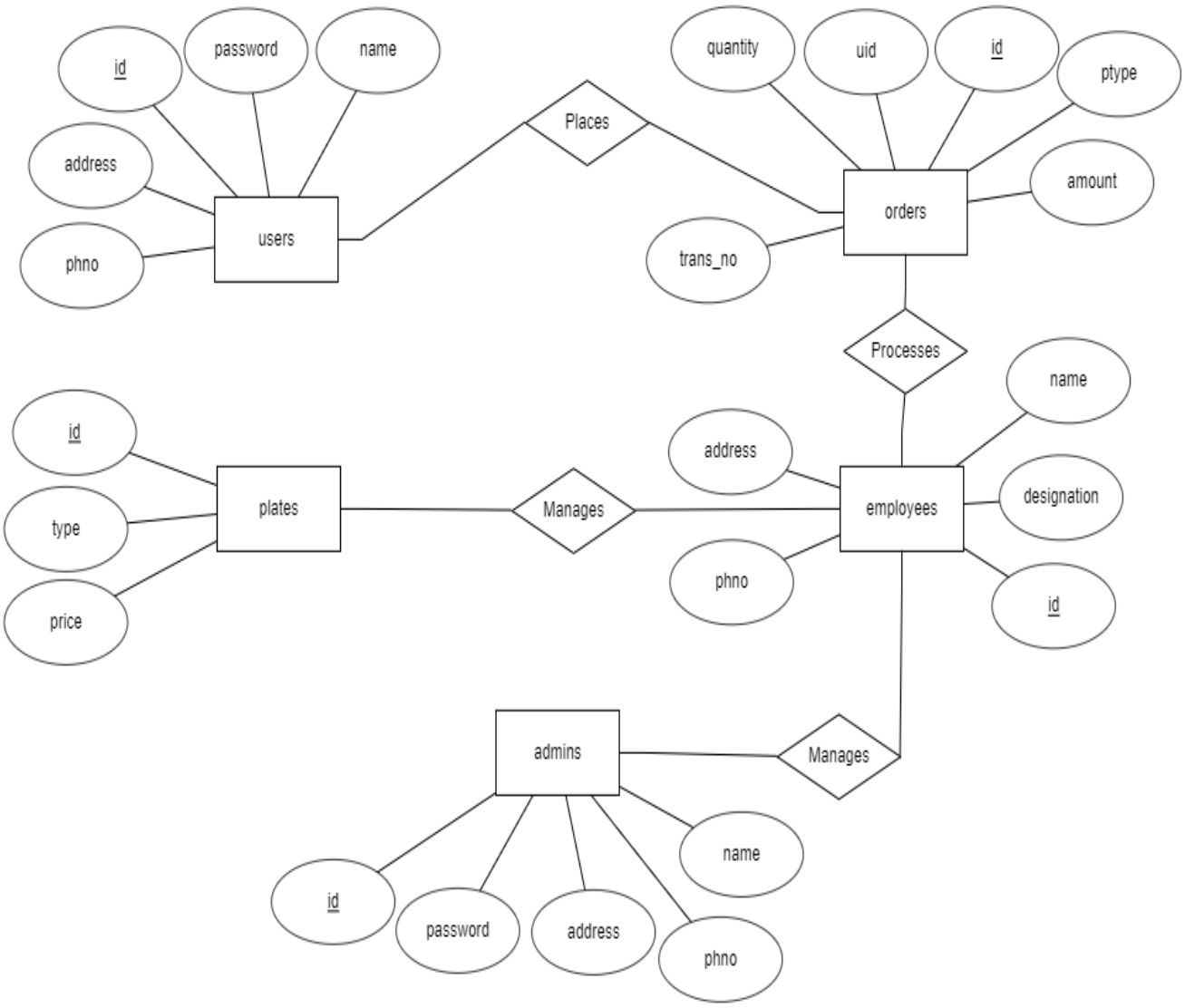

Fig 2.7.1 ER Diagram

Chapter 3

TABLE DESCRIPTION

Table 3.1: Admin Details

Table name	admin
Description	It stores the details of admins
Attributes	id, password, name, phno, address
Primary key	Id

Table 3.2: User Details

Table name	user
Description	It stores the details of users
Attributes	Id, password, name, phno, address
Primary key	Id

Table 3.3: Plate Details

Table name	plate
Description	It stores the details of the different type of plates available
Attributes	Id, type, price
Primary key	Id

Table 3.4: Orders

Table name	orders
Description	It stores the details of the orders made by the user
Attributes	Id, uid, ptype, quantity, trans_no, address
Foreign key	uid, ptype
Primary key	Id

Table 3.5: Employees

Table name	employees
Description	It stores the details of the employee
Attributes	Id, name, phno, address, designation
Primary key	Id

Chapter 4

SYSTEM ANALYSIS

System analysis is a problem-solving activity that requires intensive communication between the system users and system developers. The system is viewed as a whole, the inputs are identified and the system is subjected to close study to identify the problem areas. The solutions are given as a proposal. The proposal review is done user request and suitable changes are made.

4.1 Existing Systems

1. It is less user-friendly.
2. User must search the details related plates.
3. It is difficult to analyze within the description of the problem.
4. Description of the problem of the user is limited.
5. It is a time-consuming process.
6. Not in reach of distant users.

4.2 Functional Requirements

4.2.1 User

- User Login

  Description of the feature

  This feature used by the user to login into system. A user must login with his User ID and Password to the system after registration. If they are invalid, the user not allowed entering the system.

  Functional requirement

1. An Auto generated User ID and password will be provided after user registration is confirmed.

2. Password should be hidden from others while typing it in the field.

- Register New User

Description of the feature

A new user of this system will have to register in the system by providing essential details to view the beneficiary information in the system. The user can add the desired product into his cart by clicking add to cart option on the product. He can view his cart by clicking on the cart button. All products added by cart can be viewed in the cart.

Functional requirement

System must ensure that, only a registered customer can purchase items.

4.3 Study of the System

4.3.1 Users

- Registration

A new user will have to register in the system by providing essential details in order to view the information provided in the system. The admin must accept a new user.

- Login

A user must login with his user name and password to the system after registration.

- View Products

user can view the list of Information and reports based on their plate names and type after successful login. A detailed description of a particular plate with type, plate details, plate price can be viewed by users.

4.4 Methodology

- Each user and admin have unique ID namely user Id, admin Id. The user can view any plate details and other information if proceed by logging into 3 login pages.
- The user or admin is new or he/she has not been authorized to proceed then they can register their account by providing details like NAME, PASSWORD, ADDRESS, PHONE_NUMBER and the USER NAME given to the system.
- admin can add the information and reports related to the plates to which they are associated to, into the chart then proceed just by clicking on the SUBMIT button.
- They can remove the any details or update them in case if the previously updated information is outdated at any instance of time by going to respective table status.

Chapter 5

HARDWARE AND SOFTWARE REQUIREMENTS

5.1 Hardware

- Processor – Pentium
- Speed – 1.5 GHZ
- RAM – 1GB
- Hard disk – 40 GB

5.2 Software

- Operating system – Windows
- Technology – PHP & HTML
- IDE – XAMPP
- Database - MySQL

Chapter 6

SNAPSHOTS

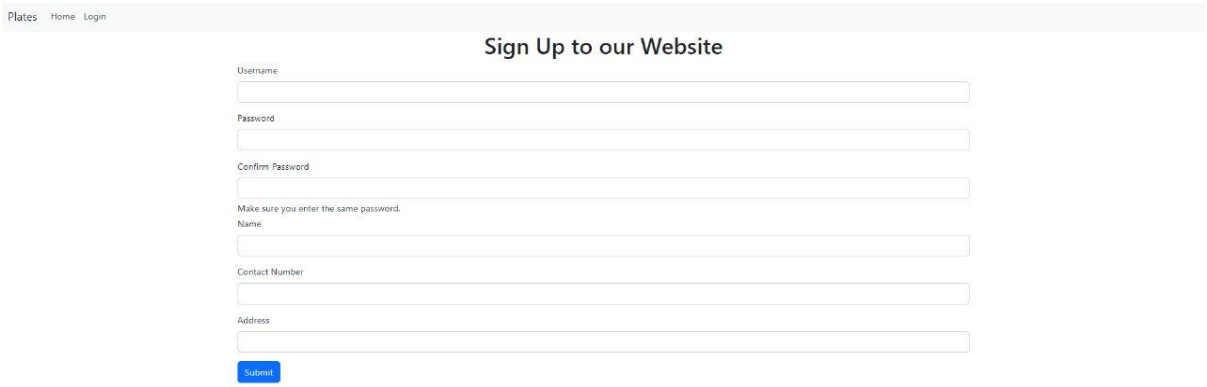

Figure 6.1: Sign Up Page

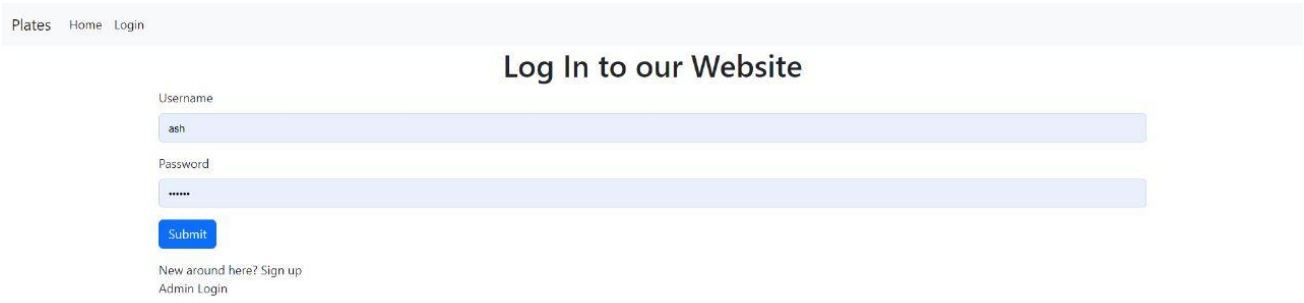

Figure 6.2: Login Form

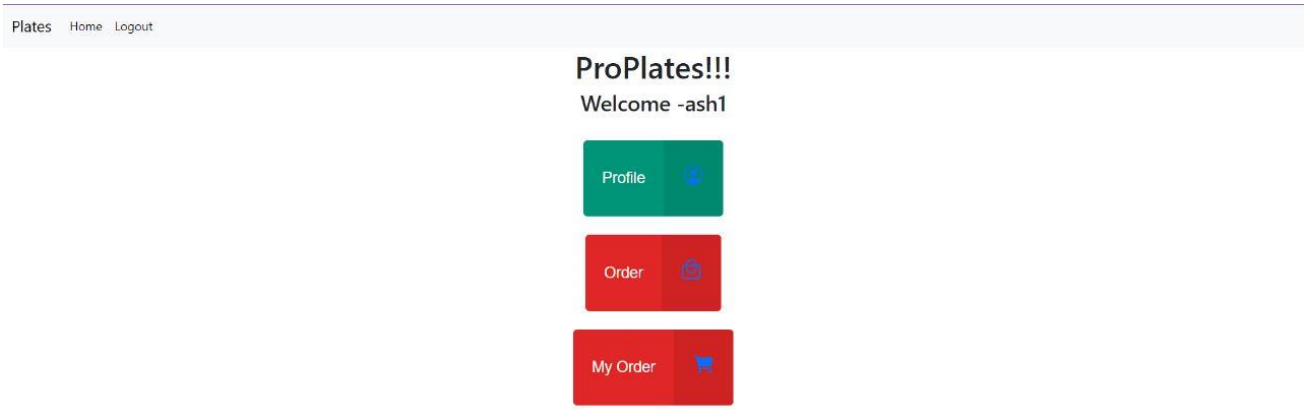

Figure 6.3: Home Page

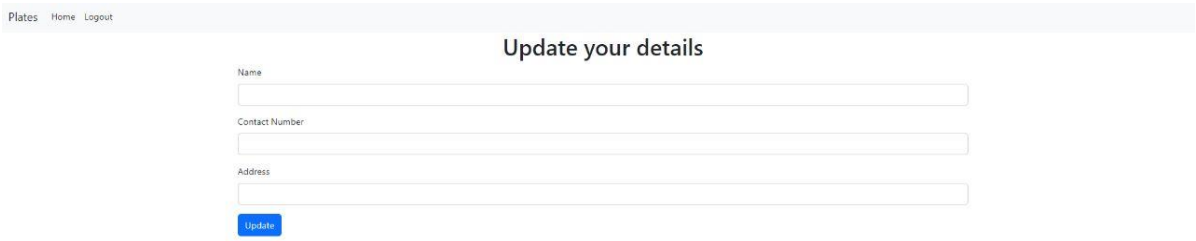

Figure 6.4: Update page

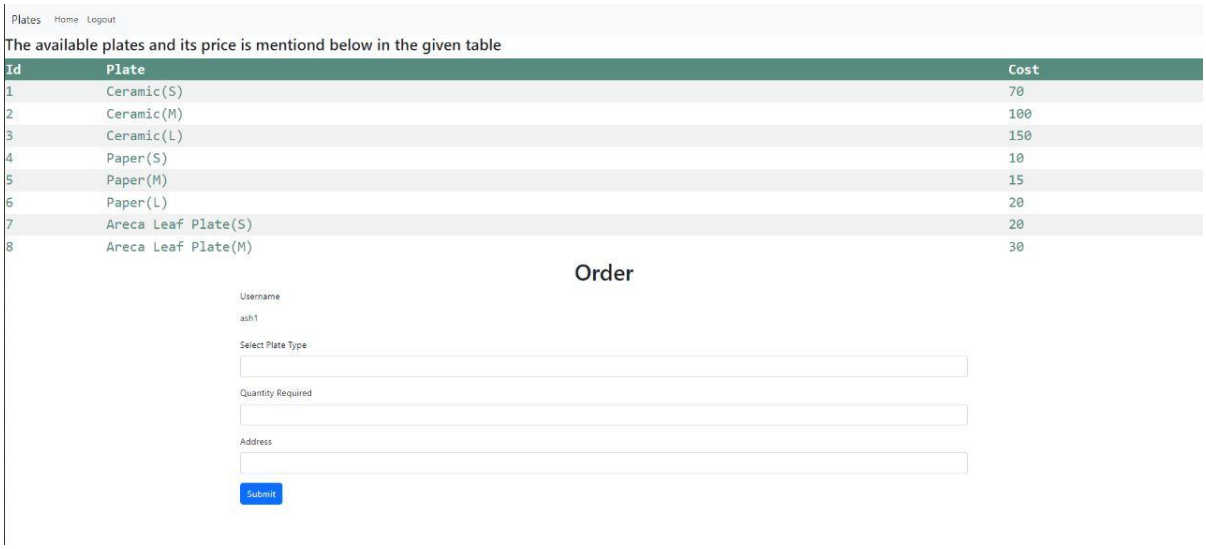

Figure 6.5 Order page

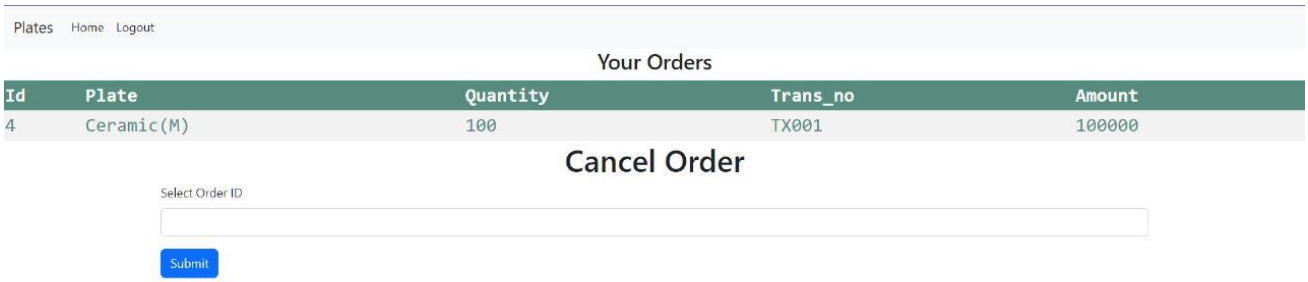

Figure 6.6 Cancel Order

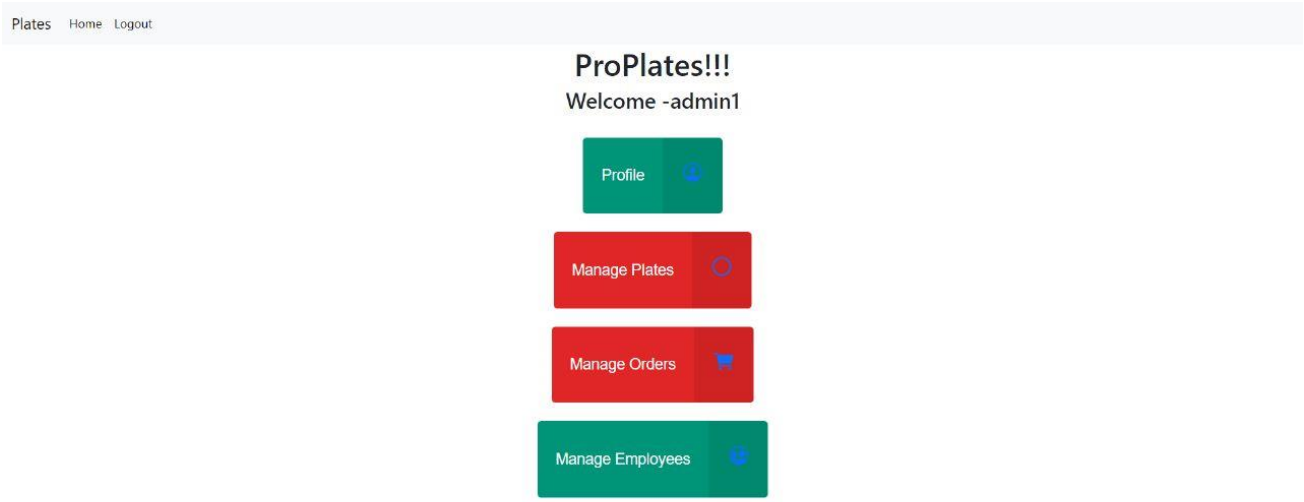

Figure 6.7 Admin Home Page

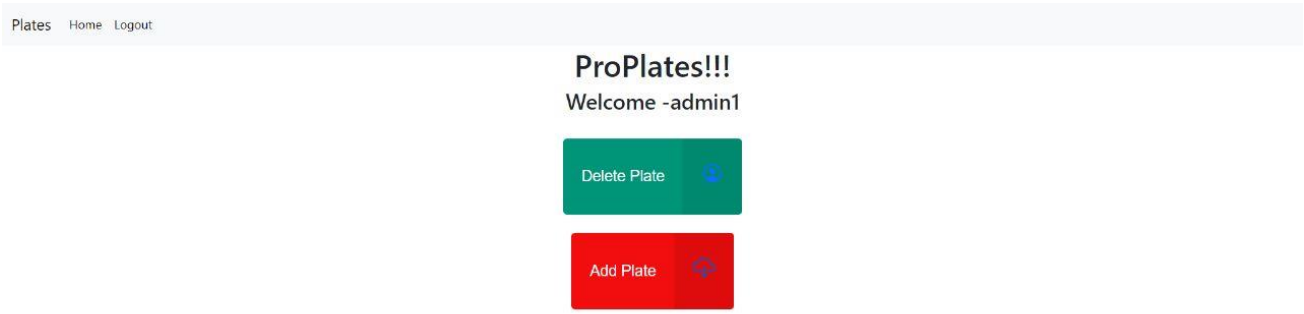

Figure 6.8 Admin Plate Management Dash Board

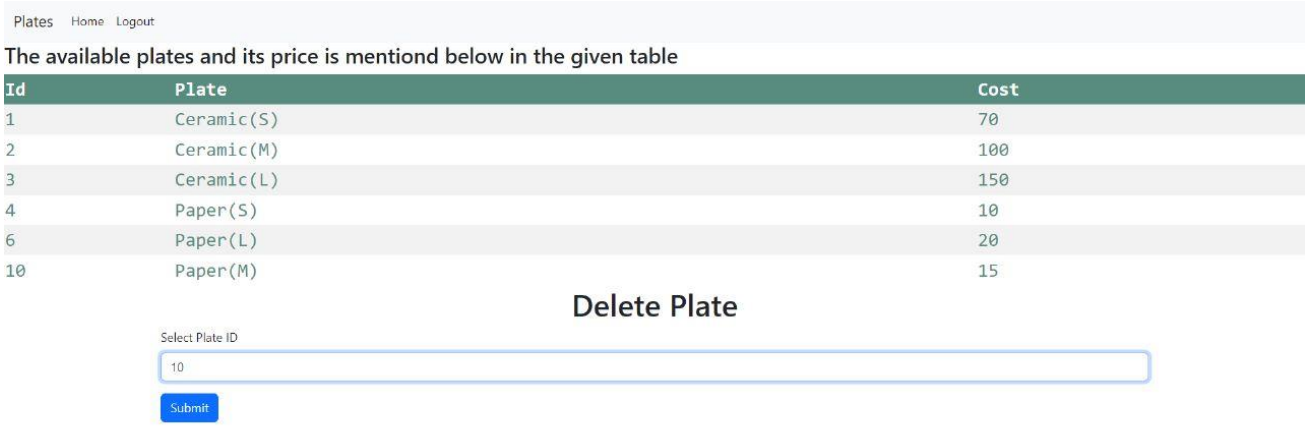

Figure 6.9 Admin Plate Deletion

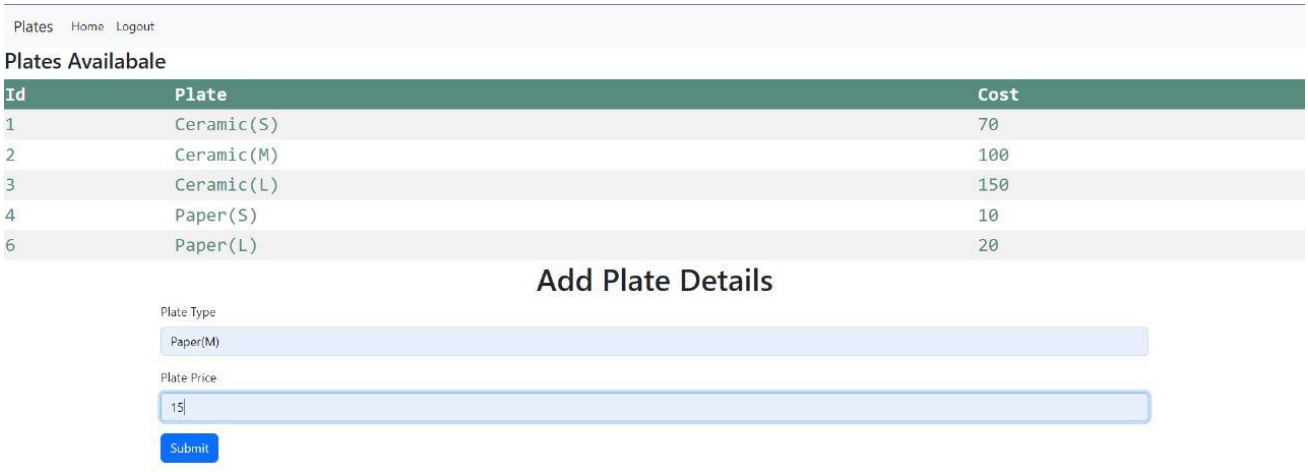

Figure 6.10 Admin Adding Plate

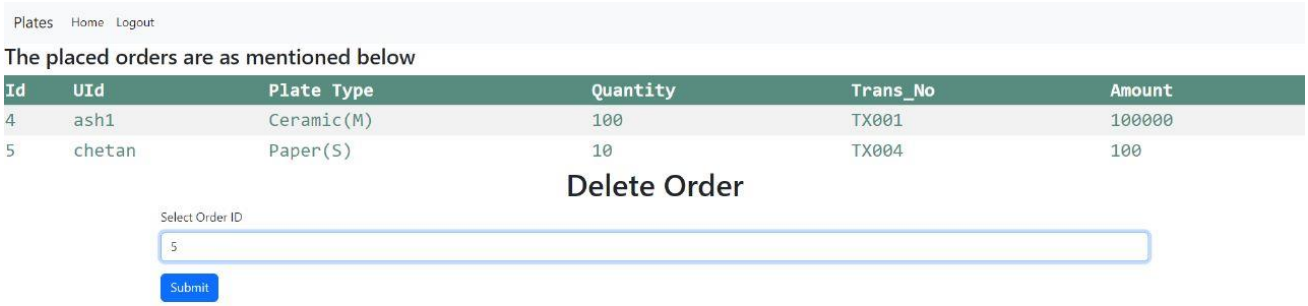

Figure 6.12 Order Deletion

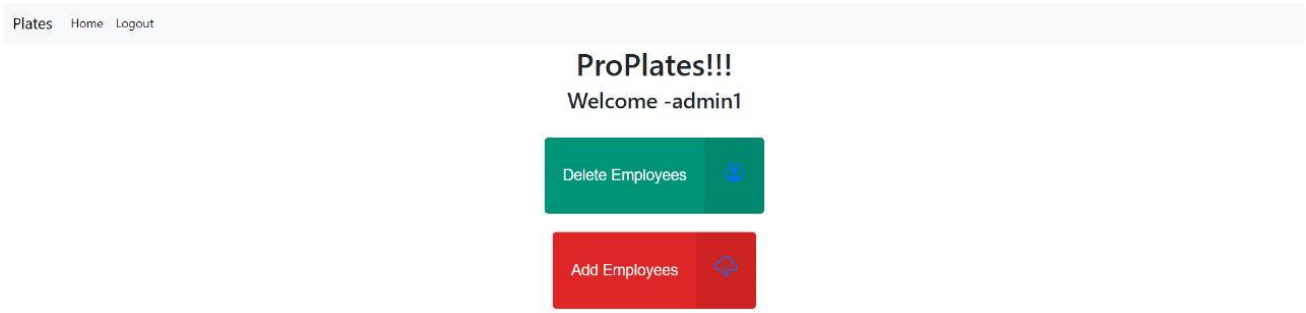

Figure 6.14 Admin Employees Manage Dashboard

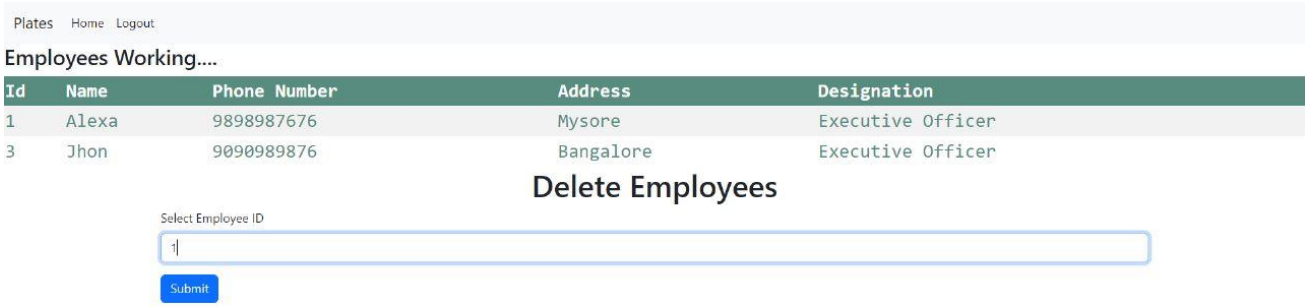

Figure 6.15 Deletion of Employee

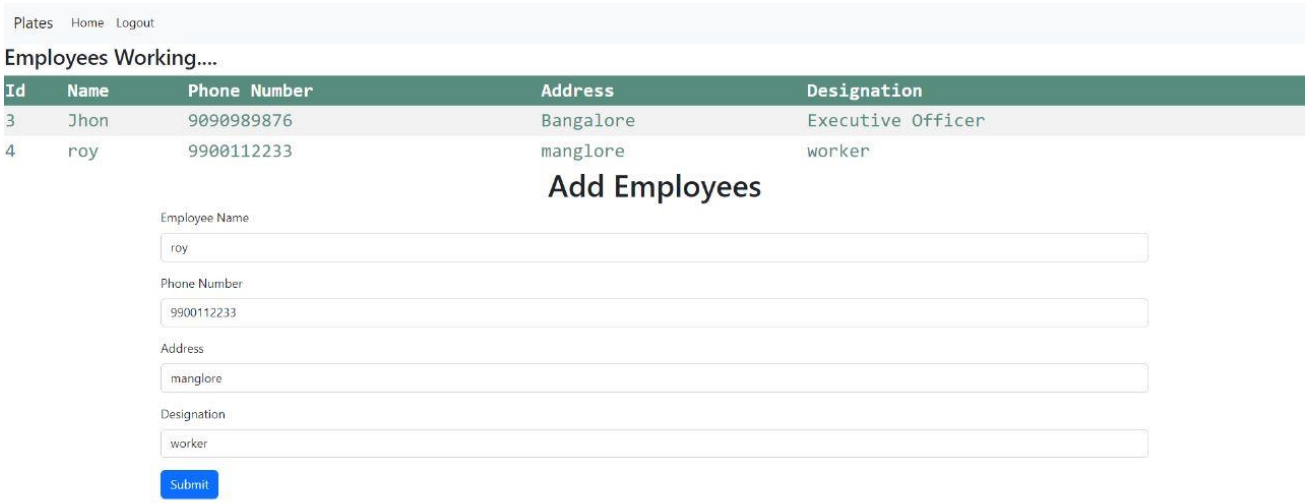

Figure 6.17 Addition of Employee

CONCLUSION AND FUTURE SCOPE

The mini project entitled plate management system was completed successfully. The mini project has been developed with much care and free of errors and at the same time it is efficient and less time consuming. The purpose of this mini project was to develop a web application and an android application for Digital plate managing. This mini project helped us in gaining valuable information and practical knowledge on several topics like designing web pages using swings and management of database using MySQL. The entire system is secured.

Future Scope

There is a scope for further development in our mini project to a great extent. A few features can be added to this system in future like providing more control over plates for the user so that each user can maintain and buy the different type of plates. Another feature we wished to implement was provide more options in case of plates with choosing a different color/design for every plate that are available in our plate management system. Another feature which would help the user is to see the plate images while ordering. We wish to add a feature to the admin page where the admin can view the quantity of the raw material & plates available in the warehouse.

REFERENCES

[1] Fundamentals of Database Systems by Ramez Elmasari and Shamkanth B. Navathe.

[2] Database management systems, Ramakrishnan, and Gehrke, 3rd Edition, 2014, McGraw Hill.

[3] Youtube – https://youtu.be/at19OmH2Bg4

[4] https://www.w3schools.com/sql/

[5] https://www.geeksforgeeks.org/java/

[6] http://tomcat.apache.org/

[7] https://www.tutorialspoint.com/mysql/index.html

[8] https://stackoverflow.com/

[9] https://getbootstrap.com/

[10] https://erdplus.com/