



INSTITUTE FOR ADVANCED COMPUTING AND SOFTWARE DEVELOPMENT AKURDI, PUNE

Documentation On

"STORE MANAGEMENT SYSTEM"

PG-DAC SEPT 2021

Submitted By: Group No: 19

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1.INTRODUCTION

This project is a web-based store management system for an existing shop. The project objective is to deliver the online management application into web platform.

This project is an attempt to provide the advantages of online store management system to sellers of a real shop. It helps storing the products in the shop anywhere through internet by using an website device. This system can be implemented to any shop in the locality or to multinational branded shops having retail outlet chains.

Here Admin can add any number of users i.e. Seller and Supplier.

Seller can add various categories and add products into them. They are required to add the address of their shop. They can order the products required from any of the supplier available in the application and see the status of products whether delivered or not.

Supplier can change the status of ordered products and can view the address where the required product is to be supplied.

1.1 Objective

The objective of this Store Management System is to develop a high digitized details maintenance in the departmental store to analyze and improve the business activities.

1.2 Project Overview

Administration and management of a departmental store is an essential part of the overall working and function of a

departmental store. Particularly in the case of bigger stores, there will be several products and number of sections. So good and effective use of resources and effective management is necessary to the success and smooth working. This system makes the daily activities efficient and provides fast response by storing and retrieving information about all the products.

1.3 Problem Definition

In the existing Store Management System departmental store management system, most of the work is completed manually by using paper records. It is a place where we get all our daily use basic requirement products. This is one of the difficult job to administrate. Most of these jobs are done manually. This includes many drawbacks,

- Increases the paper work
- Time consuming
- Loss of information
- Security issues
- Lack of integrated resources
- Data duplication

2.System Design

2.1 Proposed Methodology

The proposed Store Management System concentrates on providing smart functioning in the departmental store with user friendly application.

The system after careful analysis has been identified to be presented with the following modules and roles.

The various modules involved are:

- > Admin
- > Salesman
- > Supplier

i)Admin

The admin is the super user of this application. Only admin have access into this admin page. The admin has all the information about the users.

- Admin can Add/Update/Delete Salesman.
- Admin can Add/Update/Delete Supplier.

• Admin can view the List of all the users.

ii)Salesman

- Can view his Profile: Here all the details about the seller is shown. Here the details can be updated.
- Can add its Address: Here the details about the shop name and location is added and seller can see his complete details here.
- Add Category and Products: Here various Categories are added under which related products are added/updated/deleted.All the list of products and categories are shown here.
- Supply: Here the status of products ordered are shown. Salesman can add the supplier from which he want to buy the products.
- Contact: In case of any query or help they can contact on the given number or can mail at given id.

iii)Supplier

• Can view profile: Here all the details about the supplier is shown. Here the details can be updated.

• Product Details: Here the status of products are changed which gets reflected in the salesman part. Supplier can view the address details where the products are to be supplied.

2.2 DATABASE DESIGN

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

2.3 SYSTEM TOOLS

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

FRONT END:

React is a library which is developed by Facebook are utilized to implement the frontend. React (also known as React.js or ReactJS) is a free and open-source front-end JavaScript library for building user interfaces or UI components. It is maintained by Facebook and a community of individual developers and companies. React can be used as a base in the development of single page or mobile applications. However, React is only concerned with state management and rendering that state to the DOM, so creating React applications usually requires the use of additional libraries for routing, as well as certain client-side functionality.

BACKEND:

The back end is implemented using MySQL which is used to design 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 .An application software called Navicert was used to design the tables in MySQL.

Spring-Boot:

This is used to connect MYSQL and fetch data from database and store the data in database. The Spring Framework is an application framework and inversion of control container for the Java platform. The framework's core features can be used by any Java application, but there are extensions for building web applications on top of the Java EE (Enterprise Edition) platform. Although the framework does not impose any specific programming model, it has become popular in the Java community as an addition to the Enterprise JavaBeans (EJB) model. The Spring Framework is Open-source Framework.

3. SYSTEM REQUIREMENT SPECIFICATION(SRS)

3.1 External Interface Requirements:

User Interfaces:

- All the users will see the same page when they enter in this website.
 This page asks the users a username and a password.
- After being authenticated by correct username and password, user will be redirect to their corresponding profile where they can do various activities.
- The user interface will be simple and consistence, using terminology commonly understood by intended users of the system. The system will have simple interface, consistence with standard interface, to eliminate need for user training of infrequent users.

Hardware Interfaces:

- No extra hardware interfaces are needed.
- The system will use the standard hardware and data communication resources.

This includes, but not limited to, general network connection at the server/hosting site, network server and network management tools.

Application Interfaces:

Web Browser:

The system is a web-based application; clients need a modern web browser such as Mozilla Firebox, Internet Explorer, Opera, and Chrome. The computer must have an Internet connection in order to be able to access the system.

Communications Interfaces:

- This system uses communication resources which includes but not limited to, HTTP protocol for communication with the web browser and web server and TCP/IP network protocol with HTTP protocol.
- This application will communicate with the database that holds all the booking information. Users can contact with server side through HTTP protocol by means of a function that is called HTTP Service. This function allows the application to use the data retrieved by server to fulfil the request fired by the user.

3.2 Functional Requirements:

I)Admin Functionality

- Login, Enter Email and Password
- On successful login, Admin will be able to see his/her dashboard.He will be able to see all users list and can add, update or delete users.

II)Salesman Functionality

- Login, Enter Email and Password .
- On Successful login ,Salesman will be able to see his/her dashboard.
- Here Salesman will be able to see his profile and can update if required, Add address of the shop where the delivery is to be done.
- Salesman will be able to see the category and product list and can add,update and delete the category and product accordingly.
- There will be one status bar which shows whether the product is delivered or not.

III)Supplier Functionality

- Login, Enter Email and Password
- On successful login, Supplier can see dashboard.
- Here supplier will be able to see the products which are to be delivered or which are delivered. He will be able to maintain the status the products supplied and can view the address where the product is to be supplied.

3.3 Non-Functional Requirements:

Following Non-Functional Requirements will be there in the insurance to the internet:

- Secure access to consumer's confidential data.
- 24X7 availability.
- Better component design to get better performance at peak time.

 Flexible service based architecture will be highly desirable for future extension. Non-Functional Requirements define system properties and constraints.

Various other Non-Functional Requirements are:

- Security: Registered user can maintain their various functionalities.
- Reliability: The system will backup business data on regular basis and recover in short time duration to keep system operational.Continous updates are matained , continous Adminstration is done to keep system operational.During peak hours system will maintain same user experience by managing load balacning.
- Availability: 24*7 Available
- Maintainability: IT operations team will easily monitor and configure System using Adminstrative tools provided by Servers. Separate environment will be maintained for system for isolation in production, testing, and development.
- Portability: System will provide portable User Interface (HTML, CSS, JS) through which users will be able to access store management portal.
- Modularity: System will designed and developed using reusable, independent or dependent business senarios in the form of modules. These modules will be loosely coupled and highly cohesive.
- Performance: Easy tracking of records and updating can be done.

4.System Diagram

4.1 Activity Diagram:

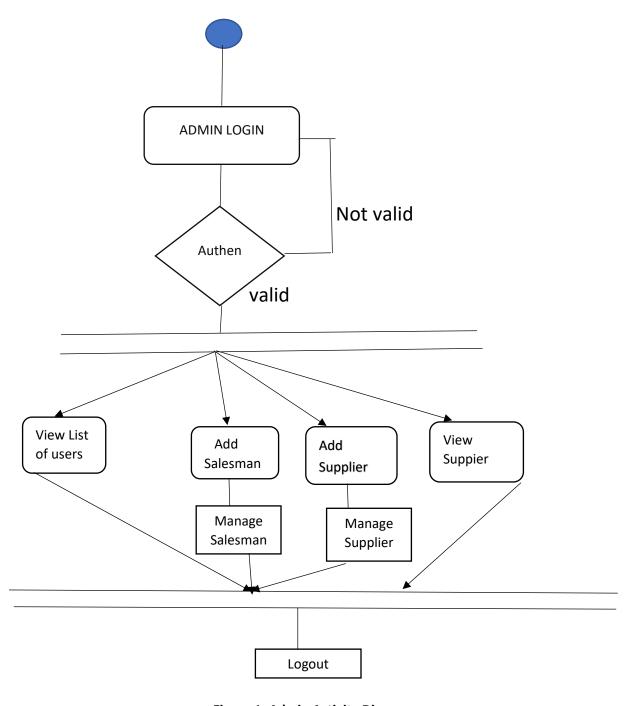


Figure 1: Admin Activity Diagram

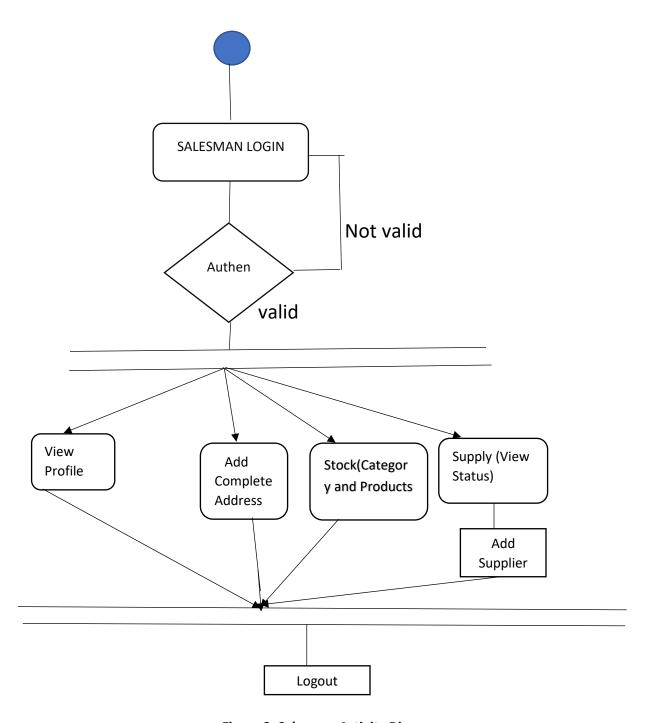


Figure 2: Salesman Activity Diagram

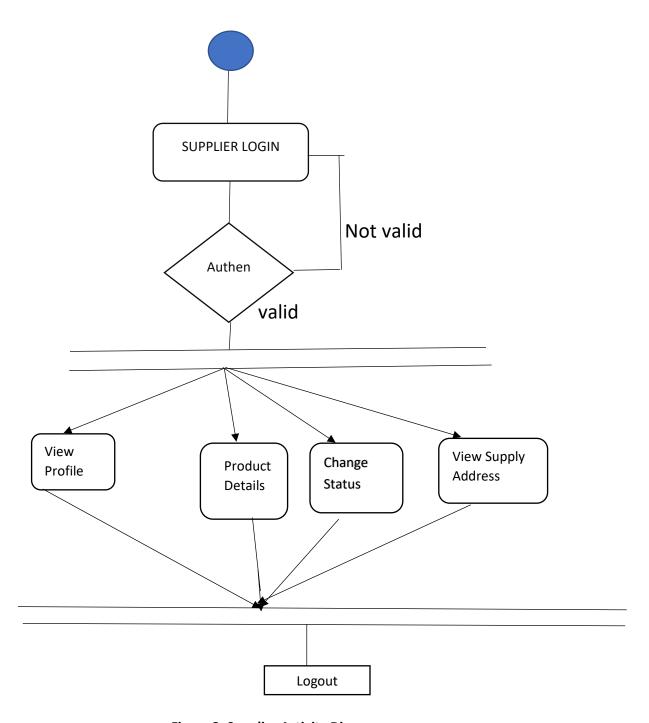


Figure 3: Supplier Activity Diagram

4.2 E-R Diagram:

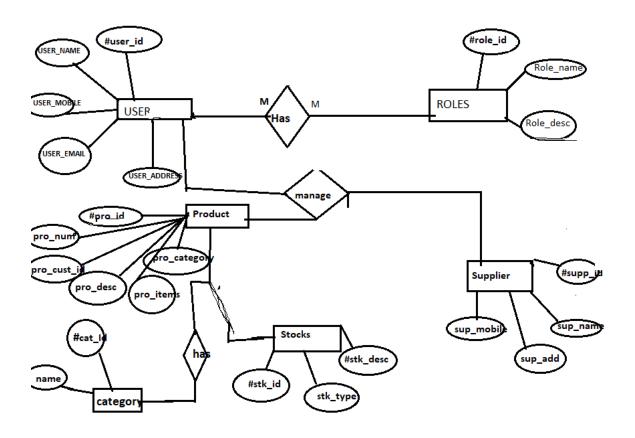


Fig 4:E-R Diagram1

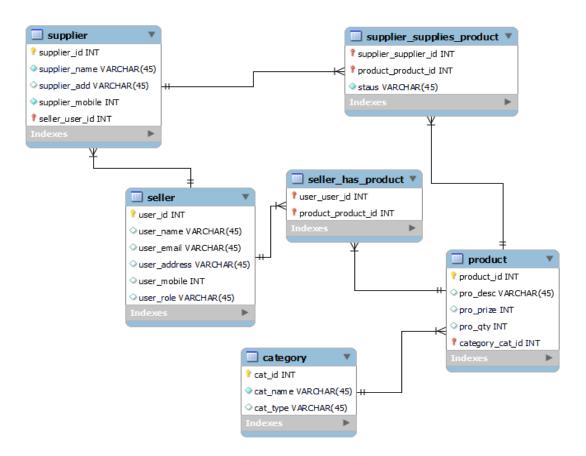


Figure 5: E-R Diagram

4.3 Class Diagram:

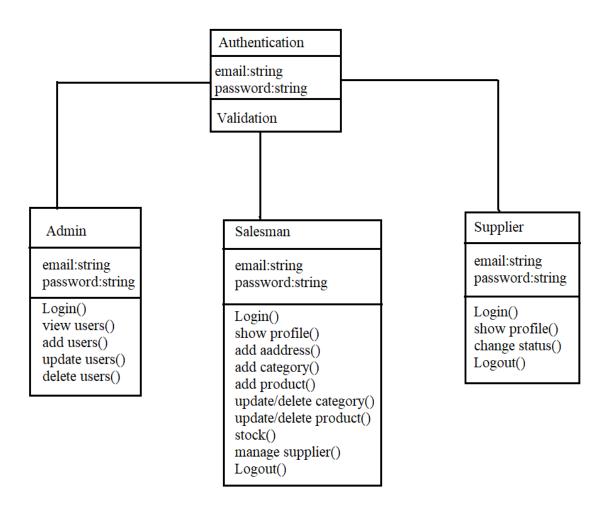


Figure 5: Class Diagram

5.TABLE STRUCTURE

Tables:

```
mysql> show tables;
+-----
| Tables_in_store3 |
+-----
| address_tbl
| category_table
| product_table
| salesman_product |
| salesman_table
| users
+------
6 rows in set (0.02 sec)
```

Address_table:

```
mysql> desc address_tbl;
                            Null | Key | Default | Extra
 Field
             Type
 user_id
              int
                                    PRI
                                          NULL
                             NO
 city
              varchar(255)
                             YES
                                          NULL
              varchar(255)
                             YES
 country
                                          NULL
              varchar(255)
 state
                             YES
                                          NULL
 zip_code
              int
                             NO
                                          NULL
             varchar(255)
  shop_name
                            YES
                                          NULL
6 rows in set (0.05 sec)
```

Category_table:

mysql> desc	category_table;				
Field	Туре	Null	Key	Default	Extra
cat_name cat_type 	int varchar(255) varchar(255) varchar(255) et (0.00 sec)	NO YES YES YES	PRI	NULL NULL NULL NULL	auto_increment

Product_table:

mysql> desc prod	duct_table;				
Field	Туре	Null	Key	Default	Extra
id discount final_price prod_desc prod_price prod_qty product_name status category_id user_id	int int double varchar(100) int int varchar(20) varchar(20) int	NO NO NO YES NO NO YES YES YES	PRI	NULL NULL NULL NULL NULL NULL NULL NULL	auto_increment
+ 10 rows in set	+ (0.01 sec)	+	+	+	++

Users:

Field	Type	Null	Key	Default	Extra
id	int	NO	PRI	NULL	auto_increment
email	varchar(30)	NO	UNI	NULL	
first_name	varchar(20)	NO		NULL	
last_name	varchar(20)	NO		NULL	
password	varchar(20)	NO		NULL	
phone	varchar(20)	YES		NULL	
role	varchar(20)	YES		NULL	

6.PROJECT DIAGRAMS









Store Management System

Stores are very important in carrying out day-to-day operations. The objective behind stores is the continuous supply and production of goods and services. Managing the stores ensures that every project, no matter how large or small is properly managed. Store keeping's basic function is to receive the materials, recognize, place the same and issue the raw materials on the requisition made by the respective department.

Objectives of Store Management:

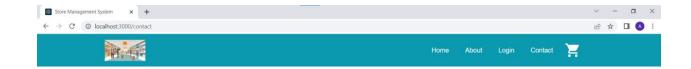
The various objectives of store management are as follows:

Minimizing Cost of Production: The store's primary goal is to produce services at the lowest possible cost by minimizing production costs. The total material cost in production includes the cost of materials, the cost of procurement, and the cost of transporting and transferring materials. The costs of the store include preservation, accounting, insurance, and store equipment. These costs have a direct or indirect effect on the total cost of the product. So, the company is trying to minimize these costs.

Maintaining the Worth of Stock: The primary goal of store management is to keep materials at a minimum on a regular basis in order to make the best use of working capital. It also contributes to lower storage costs. The stock-keeping in the store is completed in a shorter period of time. The storekeeper tries to prevent the inventory from becoming obsolete and also tries to minimize the warehouse time for the stock. The storekeepers work tirelessly to keep the store's merchandise valuable.

Services to Organisation: The store management helps in providing different types of services to the organization. The service consists of monitoring all the stages, i.e., raw materials and work-in-progress, finished goods, and controlling the scrap. There is the proper movement of raw materials, components, tools, equipment, and any other commodities required for the production of products and services. They assist with the upkeep of materials, spare parts, and stores as needed. They help in maintaining a proper supply of materials at the time of work in progress. They assist in obtaining and storing scrap items. They help with keeping records of all the receipts, issues, and goods









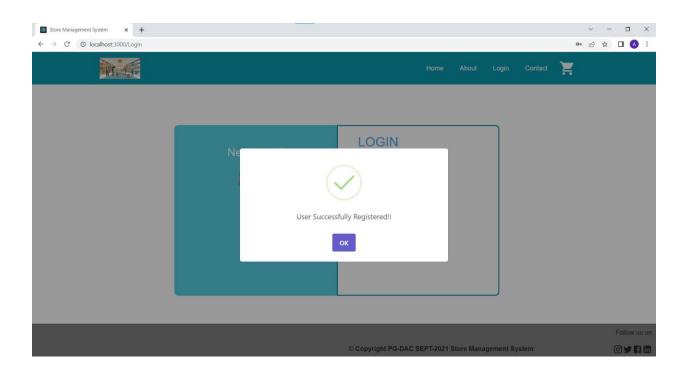


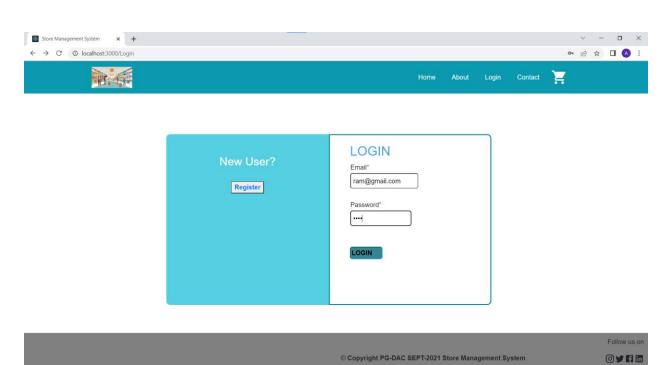


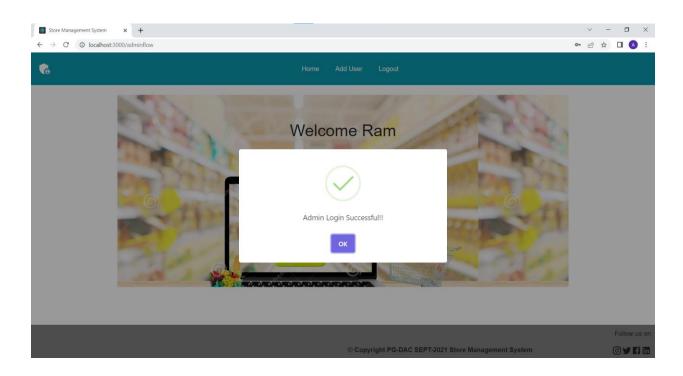
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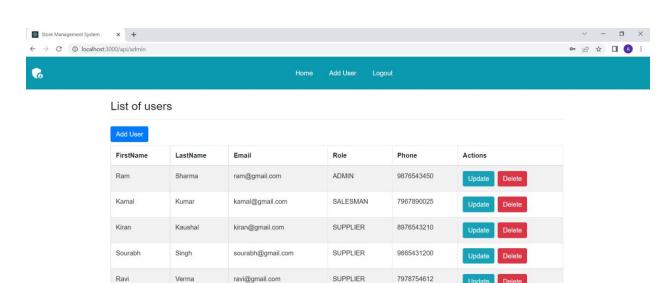
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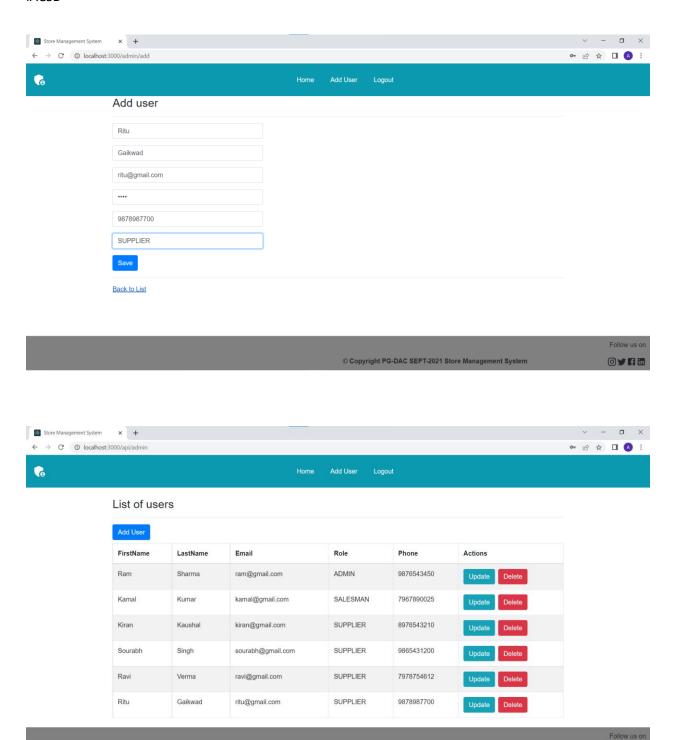






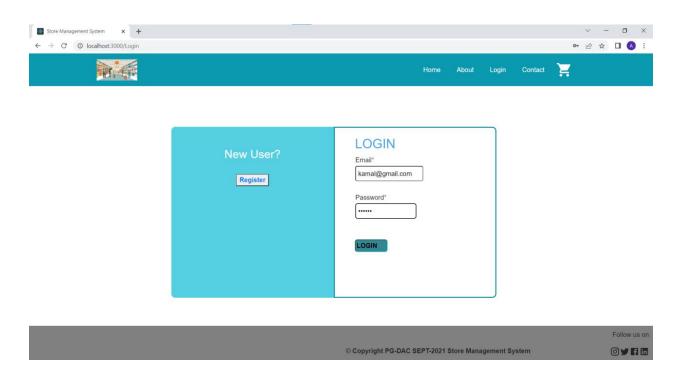


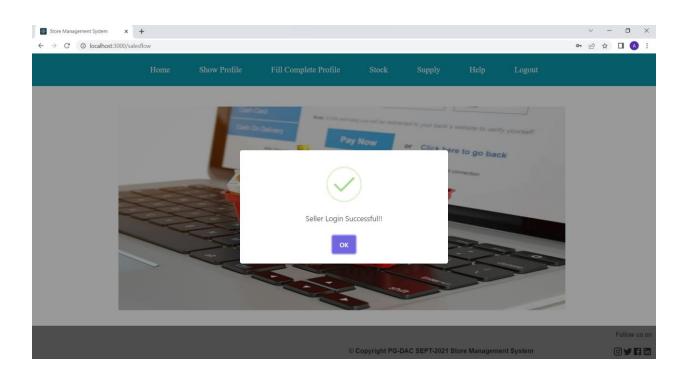


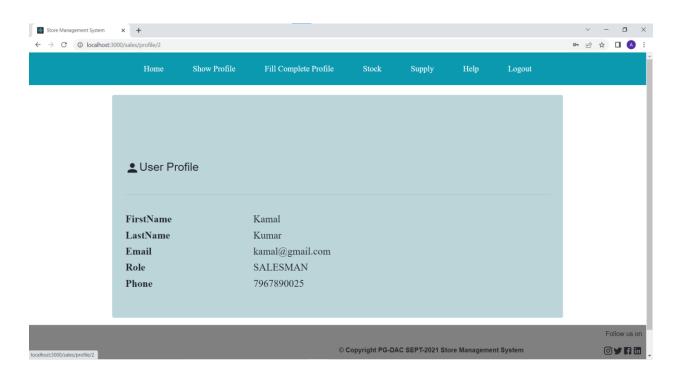


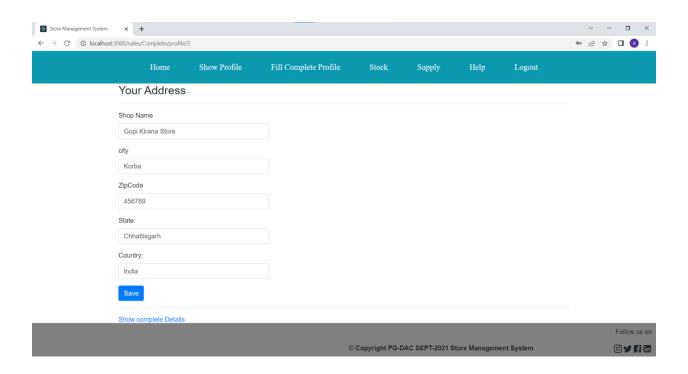
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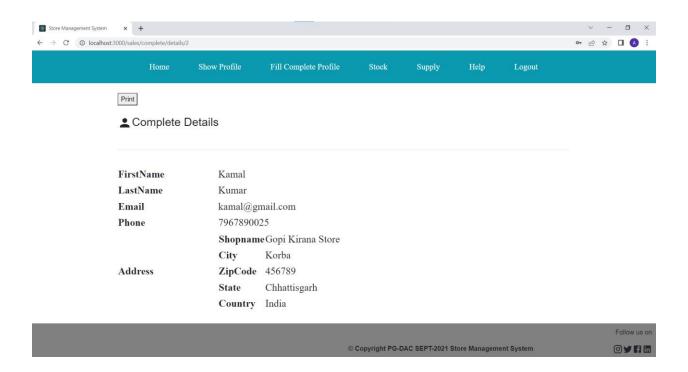
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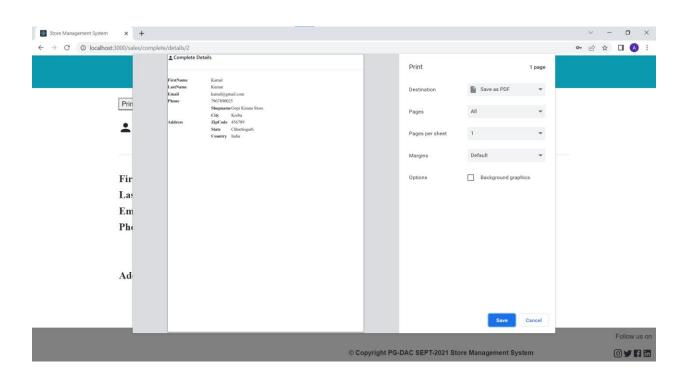


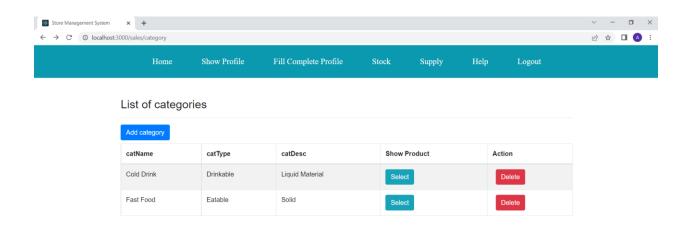




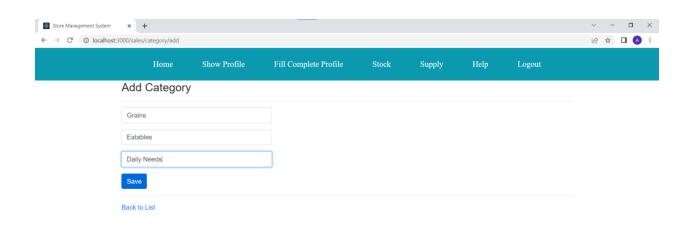




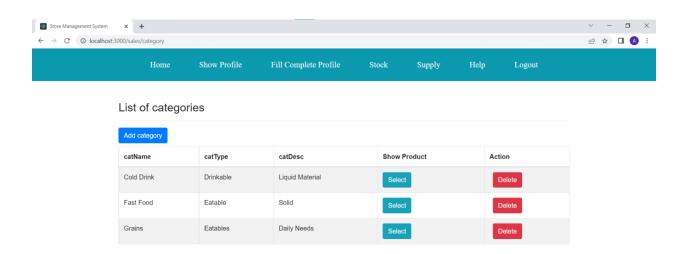




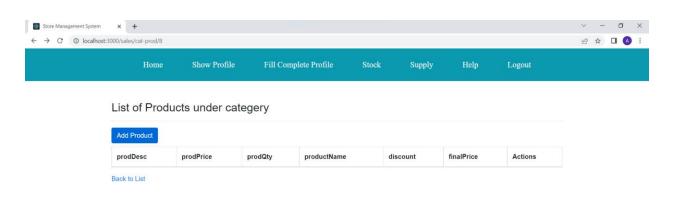




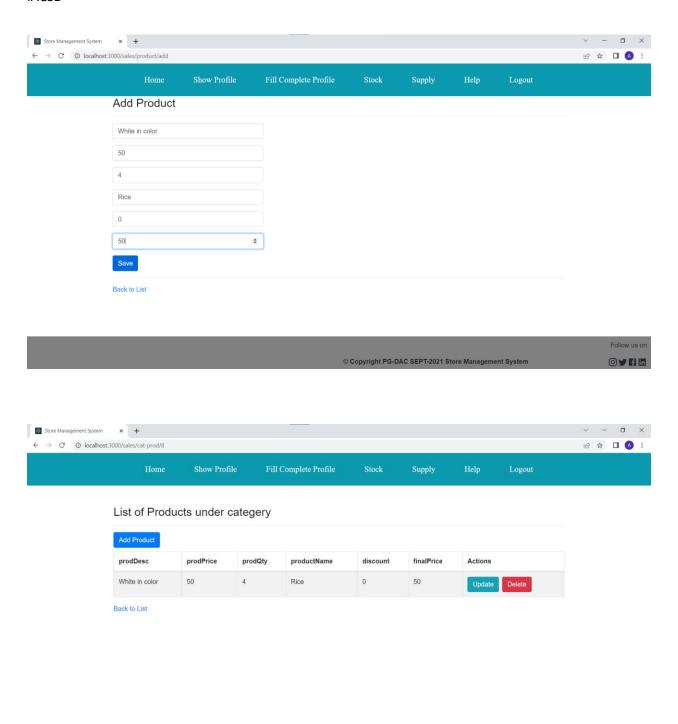




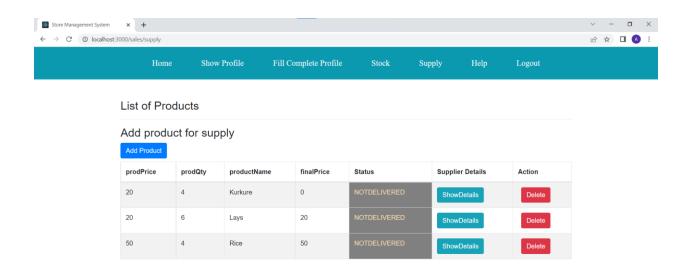




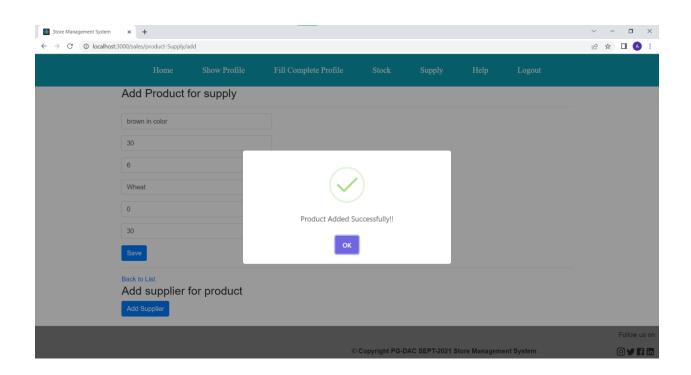


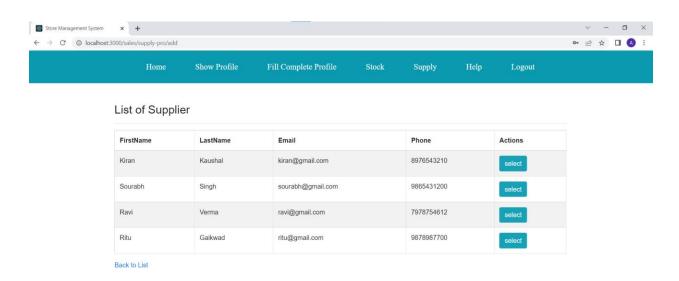


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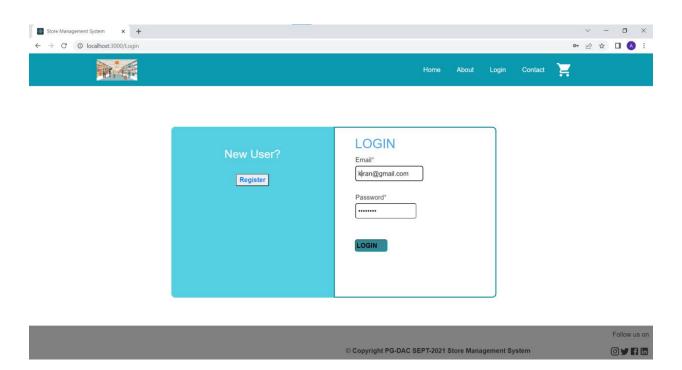


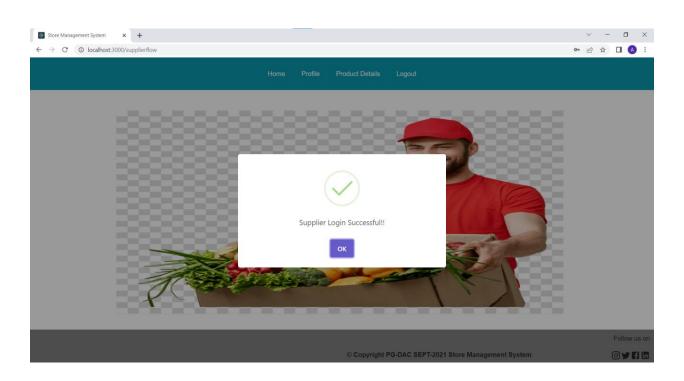


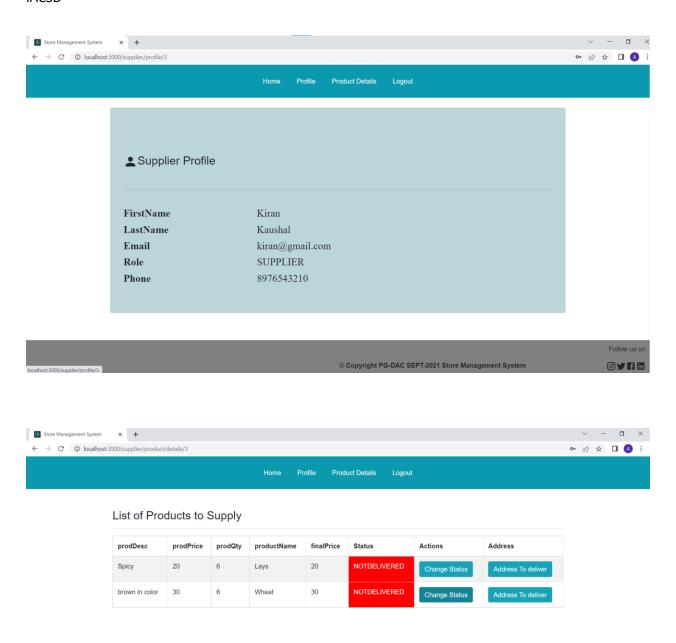




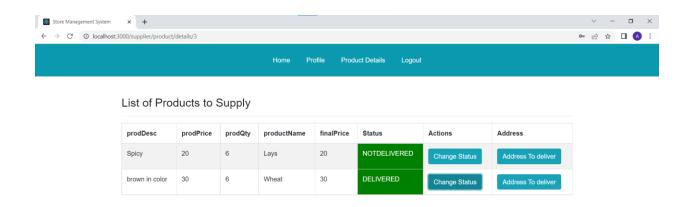


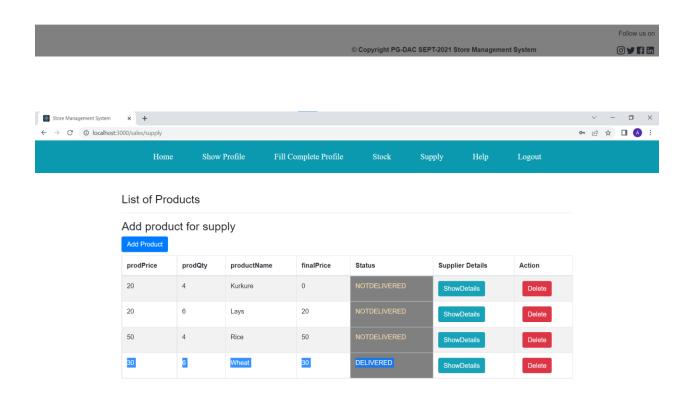














7.CONCLUSION and FUTURE SCOPE

The project titled "Store Management System" was successful.

The system is developed with much care and free of errors. It is efficient and less time consuming. The purpose of this project was to develop a web application for easy maintenance of all the products in a shop.

This project helps us in gaining practical knowledge and we a got a hands on experience on several topics like designing a web page using React.js,use of responsive templates ,using bootstrap components easily and helps in management of database using Mysql.The entire project helped us in understanding about the various phases of software development and software development life cycle.

This project can help various shopkeepers of big retail shop to easily maintain all the products category-wise. Also they can track whether their ordered product is delivered or not.

There is a scope for further development of this project like we can add a cart and can see the delivered items in one page and not delivered item in other page. Further we can calculate total amount of product to be delivered to the supplier for the ease.

8.REFERENCES

- [1] Mc GrawHill's , Java : The complete reference 7thEdition, Herbert Schildit
- [2] JavaScript Enlightenment ,Cody Lindley-First Edition, based on JavaScript 1.5, ECMA-262, Edition

ONLINE REFERENCE

- [1] www.Google.com
- [2] www.w3school.com
- [3] www.javatpoint.com
- [4]www.geeksforgeeks.com
- [6]Bootstrap.The most popular HTML,CSS,JS library in the world
- [5]React A JavaScript library for building user interfaces (reactjs.org)