INSTITUTE FOR ADVANCED COMPUTING AND SOFTWARE DEVELOPMENT AKURDI, PUNE

Documentation On

"E-RATION SHOP"

PG-DAC SEPT 2020

Submitted By:

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Project Guide

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1. Introduction

1 .1 **Purpose:**

The E-ration Shopping System for ration item shop web application is intended to provide complete solutions for vendors, supplier as well as customers through a single get way using the internet. It will enable vendors to setup online shops, customer to browse through the shop and purchase them online without having to visit the shop physically. This project is an attempt to provide the advantages of online shopping to customers of a real shop. It helps buying the products in the shop anywhere through internet by using an application. Thus, the customer will get the service of online shopping and home delivery from shop. The administration module will enable a system administrator to add new supplier and maintain various lists of suppliers, product category and delivery boy.

1 .2 **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 a home delivery system which can make customers happy. Shops providing online portal where their customers can enjoy easy shopping from anywhere, the shops won't be losing any more customers to the trending online shops. Since the application is available in the internet it is easily accessible and always available.

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1 .3 **Definitions:**

OSS- Online shopping System (for electronics item shop)

SRS- Software Requirement Specification

GUI- Graphical User Interface

User- The person who will participate in system

Ex. Customer, Administrator, Supplier, Delivery Boy etc.

1.4 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 and articles of their desire from the store. The information pertaining to the products are stores on an RDBMS at the server side (store). This online application provides an easy solution for customers to buy the product without going to the shop and also to shop owner to sale the product. This

proposed system can be used by any naïve users and it does not require any educational level, experience or technical expertise in computer field but it will be of good use if user has the good knowledge of how to operate a computer. The Server process the customers and the items are shipped to the address submitted by them

2. Overall Description

The Online Shopping system (OSS) application enables vendors to set up online shops, customers to browse through the shops, and a system administrator to approve and reject requests for new shops and maintain lists of shop categories. Also, the developer is designing an online shopping site to manage the items in the shop and also help customers to purchase them online without visiting the shop physically. The online shopping system will use the internet as the sole method for selling goods to its consumers.

2.1 Product Perspective:

This product aimed toward a person who don't want to visit the shop as he might don't get time for that or might not interested in visiting there and dealing with lot of formalities. Customers have effortless shopping experience and saving time through shopping online

2.2 Product Functions:

OSS should support this use case:

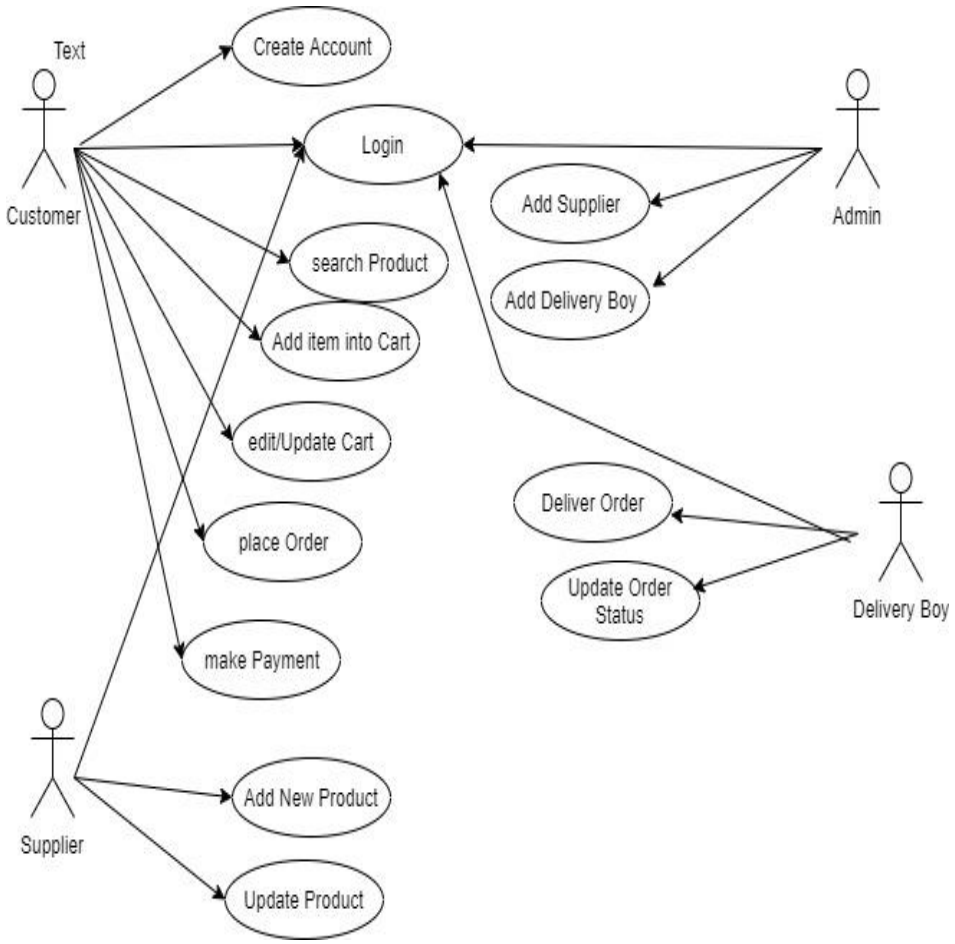

Fig 2.1: Use Case Diagram

2.3 User Characteristics:

User should be familiar with the terms like login, register, order system etc.

2.4 Principle Actors:

4 Principle Actors are Customer and Administrator, supplier, Delivery Boy.

2.5 General Constraints:

A full internet connection is required for OSS.

2.6 Assumptions and Dependencies:

Working of OSS need Internet Connection.

3. Specific Requirements

3.1 Functional Requirements:

This section provides requirement overview of the system. Various functional modules that can be implemented by the system will be –

3.1.1 Registration

If customer wants to buy the product then he/she must be registered, unregistered user can't go to the shopping cart.

3.1.2 Login

Customer logins to the system by entering valid user id and password for the shopping.

3.1.3 Changes to Cart

Changes to cart means the customer after login or registration can make order or cancel order of the product from the shopping cart.

3.1.4 Payment

In this system we are dealing the mode of payment by Cash. We will extend this to credit card, debit card etc in the future.

3.1.5 Logout

After ordering or surfing for the product customer has to logout.

3.2 Non-Functional Requirements:

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

1. Efficiency Requirement
   When an online shopping cart android application implemented customer can purchase product in an efficient manner.

2. Reliability Requirement
   The system should provide a reliable environment to both customers and owner. All orders should be reaching at the admin without any errors.

3. Usability Requirement
   The android application is designed for user friendly environment and ease of use.

4. Implementation Requirement

   Implementation of the system using css and html in front end as react with spring mvc as back end and it will be used for database connectivity. And the database part is developed by MySQL. Responsive web designing is used for making the website compatible for any type of screen.

5. Various other Non-Functional Requirements are:

Security

Reliability

Maintainability

Portability

Extensibility

Reusability

Compatibility

Resource Utilization

3.3 Performance Requirements:

In order to maintain an acceptable speed at maximum number of uploads allowed from a particular customer as any number of users can access to the system at any time. Also the connections to the servers will be based on the attributes of the user like his location and server will be working 24X7 times.

3.4 Interface Requirement

Various interfaces for the product could be

1). Login Page

2). Registration Form

3). There will be a screen displaying information about product that the shop having.

4). If the customers select the add to cart button then selected product item added into cart

5). After ordering for the product. Order details and address details send to administrator and delivery boy to deliver order

Software Interface:

1. Operating System: Windows 7 Ultimate which supports networking.
2. JAVA development toolkit.

Hardware Interface:

Hardware requirements for insurance on internet will be same for both parties which are as follows:

Processor: Dual Core

RAM:2 GB

Hard Disk:320 GB

4. System Design Specification

4.1 Architecture Design:

4.1.1 Data Flow Diagram (DFD):

It is a way of representing system requirements in graphical form; this led to modular design. A DFD describes a data flow(logical) rather than how they are processed. So, they do not depend upon software, hardware, data structure or file organization. A DFD is a structured analysis and a design tool that can be used for flowcharting in place of, or in association with, information-oriented and process-oriented system flowcharts. A DFD is considered as an abstract of the logic of information-oriented or process-oriented system flowchart.

1.Level 0:

Fig 4.1: Level 0 DFD

2. Level 1:

2.1 Admin

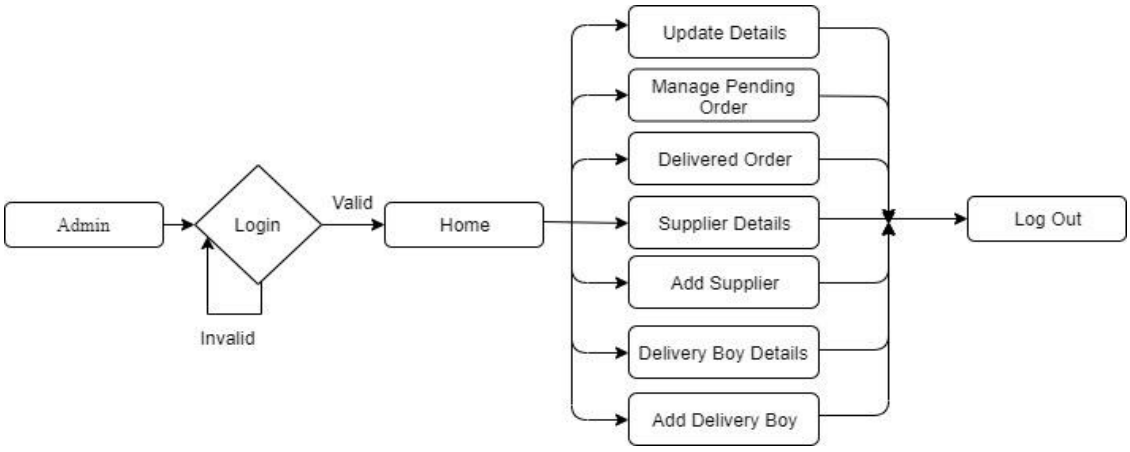

Fig 4.2: Level 1 DFD-Admin

2.2 Supplier

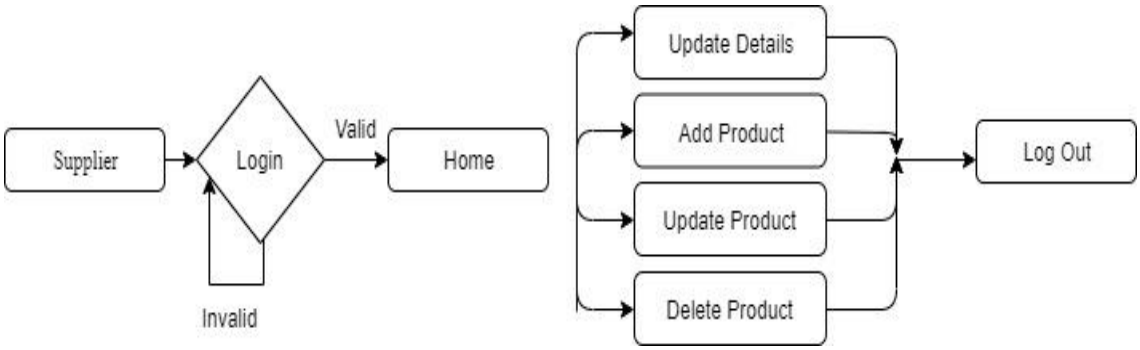

Fig 4.3: Level 1 DFD-Supplier

2.3 Customer

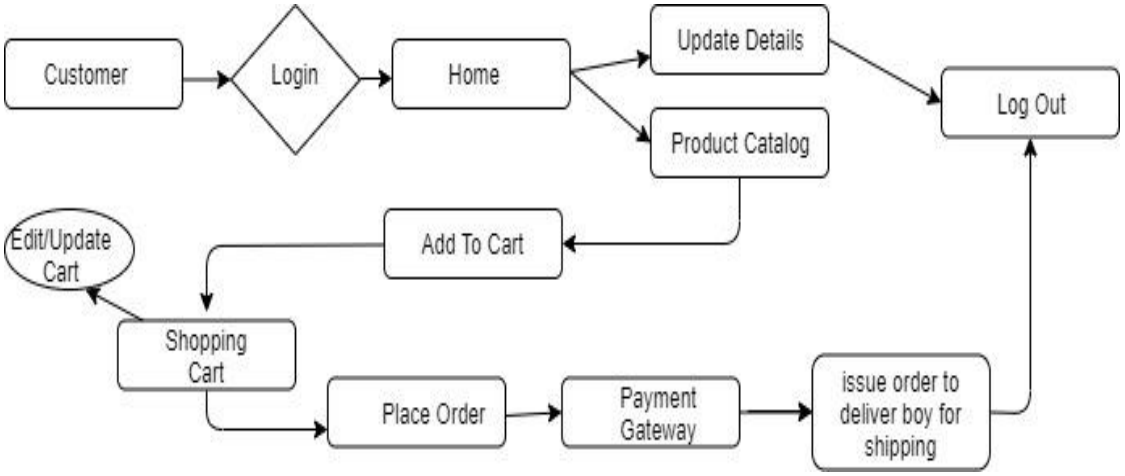

Fig 4.4: Level 1 DFD-Customer

2.4 Delivery Order

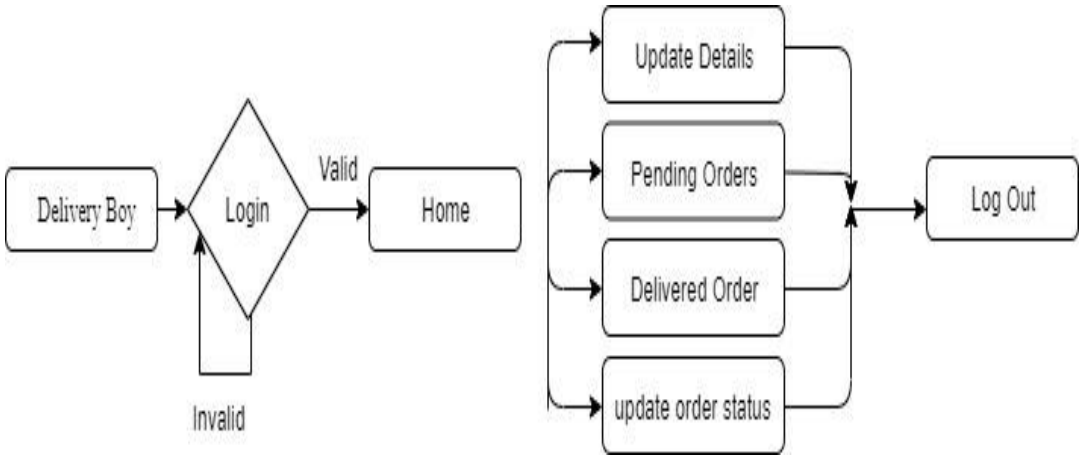

Fig 4.5: Level 1 DFD-Delivery Order

4.1.3 Sequence Diagram:

1. Admin

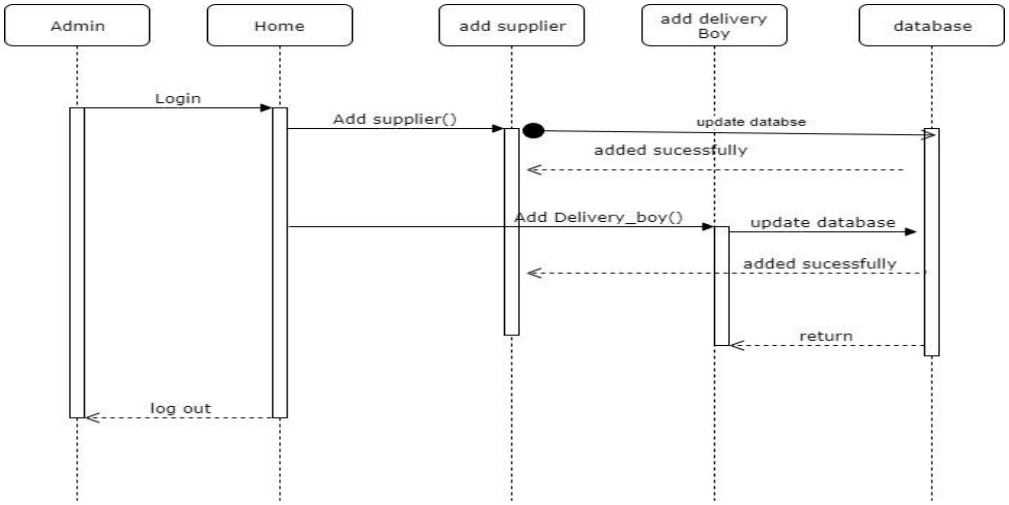

Fig 4.6: Admin Sequence Diagram

2. Supplier

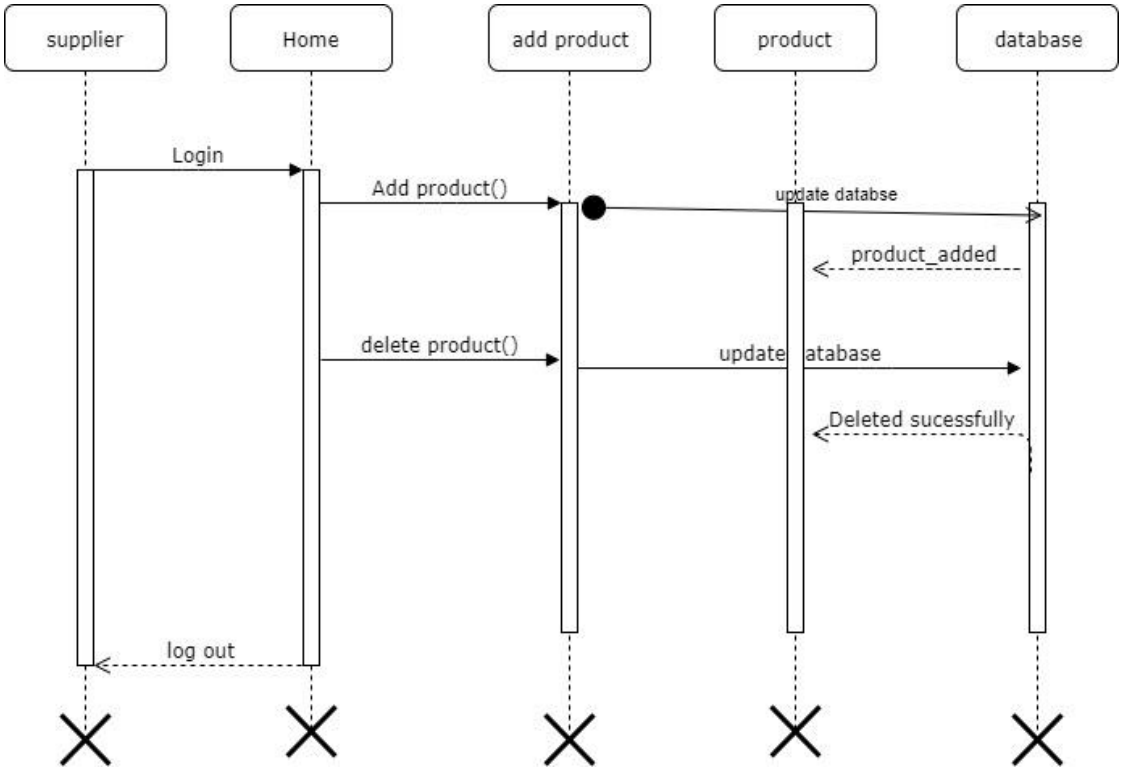

Fig 4.7: Supplier Sequence Diagram

3. Customer

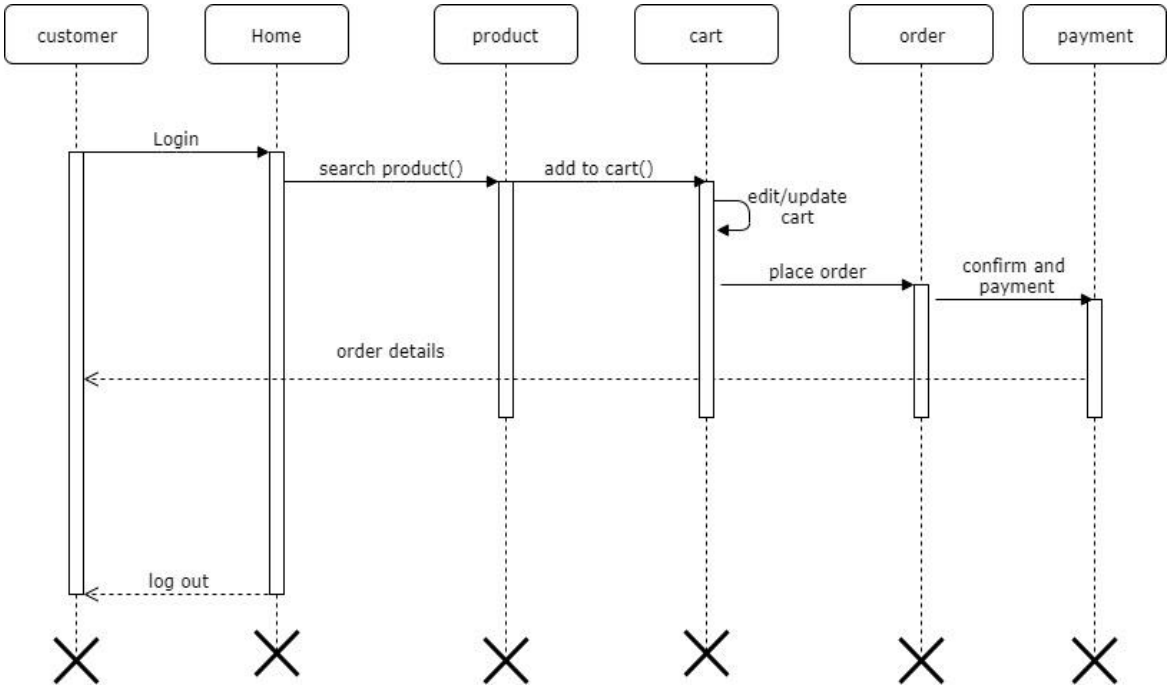

Fig 4.8: Customer Sequence Diagram

4.1.4 Component Diagram :

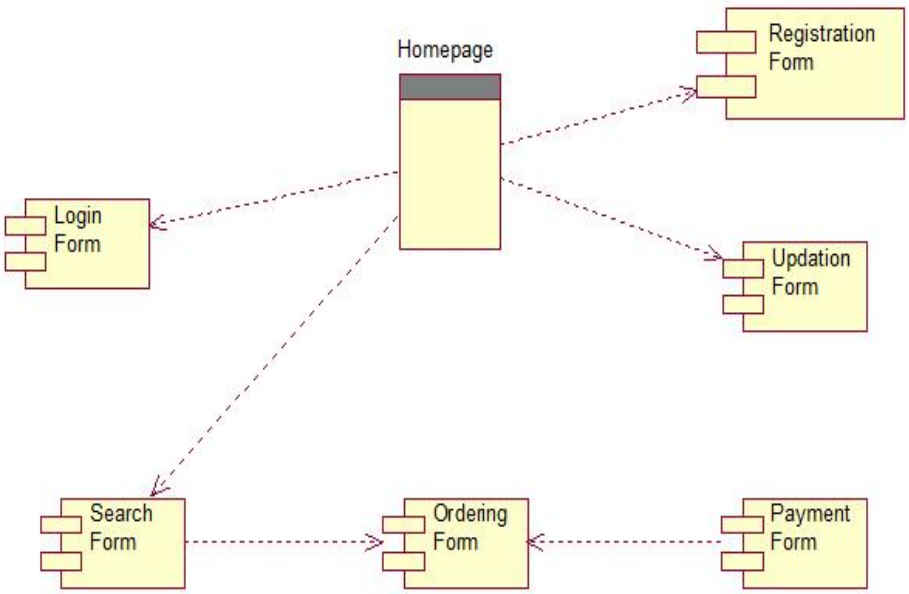

Fig 4.9: Component Diagram

4.1.5 Entity-Relationship Diagram (ER) :

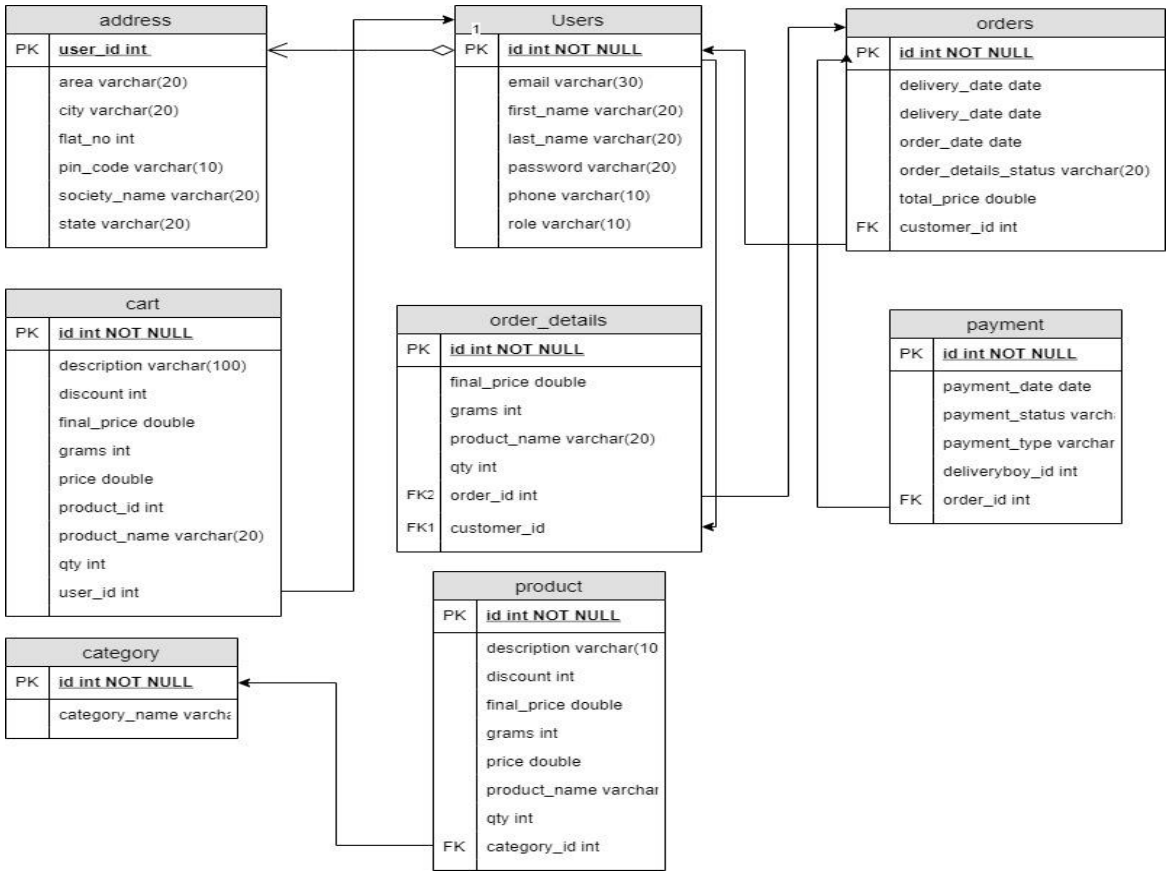

Fig 4.10: ER Diagram

4.1.6 Database Tables:

1) User:

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	

Table No. 4.1: User Details

2) Address

Field	Type	Null	Key	Default	Extra
User_id	Int	NO	PRI	NULL	
Area	Varchar(20)	YES		NULL	
City	Varchar(20)	YES		NULL	
Flat_no	int	NO		NULL	
Pin_code	Varchar(20)	YES		NULL	
Society_name	Varchar(20)	YES		NULL	
state	Varchar(20)	YES		NULL	

Table No. 4.2: Address Details

3) Category:

Field	Type	Null	Key	Default	Extra
Id	Int	NO	PRI	NULL	Auto_increment
Category_name	Varchar(20)	YES		NULL	

Table No. 4.3: Category Details

4) Products:

Field	Type	Null	Key	Default	Extra
Id	Int	NO	PRI	NULL	Auto_increment
Description	Varchar(20)	NO		NULL	
Discount	int	NO		NULL	
Final_price	double	NO		NULL	
Grams	int	NO		NULL	

Price	double	NO		NULL	
Product_name	Varchar(20)	NO		NULL	
Qty	Int	NO		NULL	
Rating	Int	NO		NULL	
Category_id	Int	NO	MUL	NULL	

Table No. 4.4: Product Details

5) Supplier

Field	Type	Null	Key	Default	Extra
Id	Int	NO	PRI	NULL	Auto_increment
User_id	int	YES	MUL	NULL	
Category_id	Int	YES	MUL	NULL	

Table No. 4.5: Supplier Details

6) Orders

Field	Type	Null	Key	Default	Extra
Id	Int	NO	PRI	NULL	Auto_increment
Delivery_date	Date	YES		NULL	
Order_date	Date	YES		NULL	
Oder_delivery_status	Varchar(25)	YES		NULL	
Total_price	Double	NO		NULL	
Customer_id	Int	NO	MUL	NULL	
Delivery_boy_id	Int	NO	MUL	NULL	

Table No. 4.6: Order

7) Order_Details

Field	Type	Null	Key	Default	Extra
Id	Int	NO	PRI	NULL	Auto_increment
Final_price	Double	NO		NULL	
Grams	Int	NO		NULL	
Product_name	Varchar(25)	YES		NULL	
Qty	Int	NO		NULL	
Order_id	Int	NO	MUL	NULL	

Table No. 4.7: Order Details

8) Cart

Field	Type	Null	Key	Default	Extra
Id	Int	NO	PRI	NULL	Auto_increment
Description	Varchar(100)	YES		NULL	
Discount	Int	NO		NULL	
Final_price	Double	NO		NULL	
Grams	Int	NO		NULL	
Price	Double	NO		NULL	

Product_id	Int	NO		NULL	
Product_name	Varchar(20)	NO		NULL	
Qty	Int	NO		NULL	
Rating	Int	NO		NULL	
User_id	Int	NO		NULL	

Table No. 4.8: Cart

9) Payment

Field	**Type**	**Null**	**Key**	**Default**	**Extra**
Id	Int	NO	PRI	NULL	Auto_increment
payment_date	date	YES		NULL	
payment_status	Varchar(20)	YES		NULL	
Payment_type	Varchar(20)	YES		NULL	
Delivery_boy_id	Int	NO	MUL	NULL	
order_id	Int	YES	MUL	NULL	

Table No. 4.9: Payment Details

5. Graphical User Interface (GUI)

5.1 Home Page:

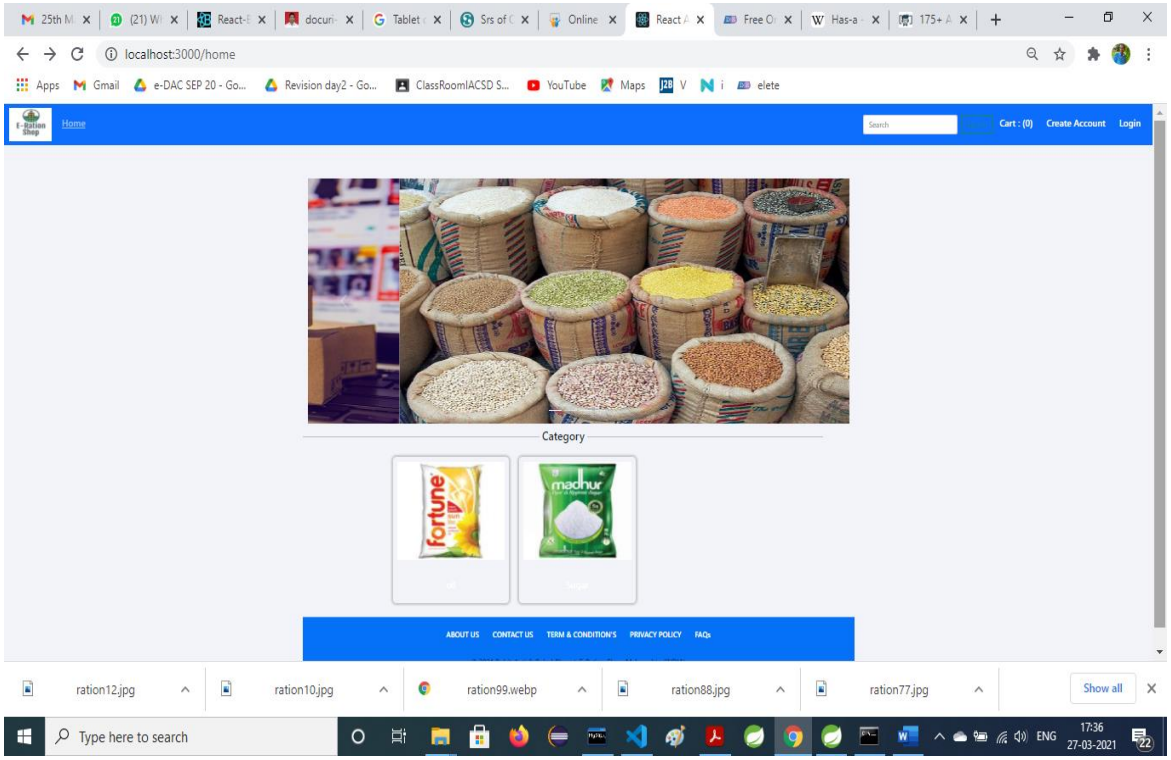

Fig 5.1: Home Page

5.2 Login Page

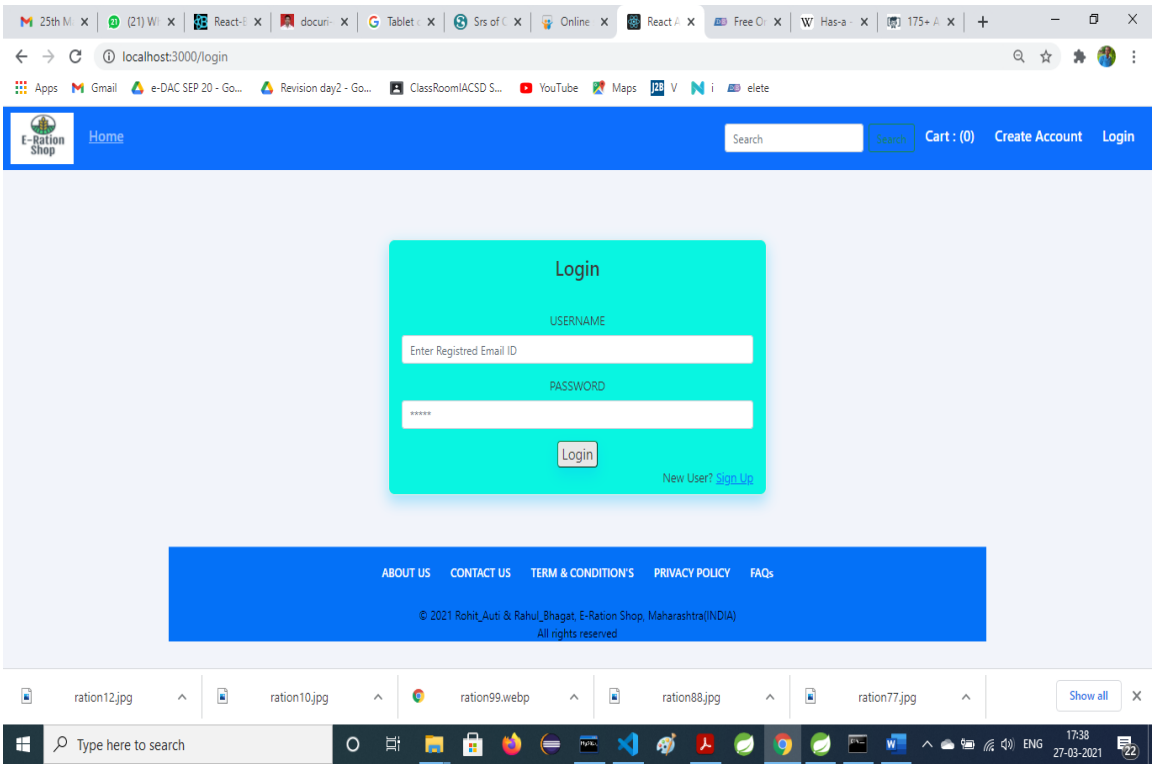

Fig 5.2: Login Page

5.3 Registration Page:

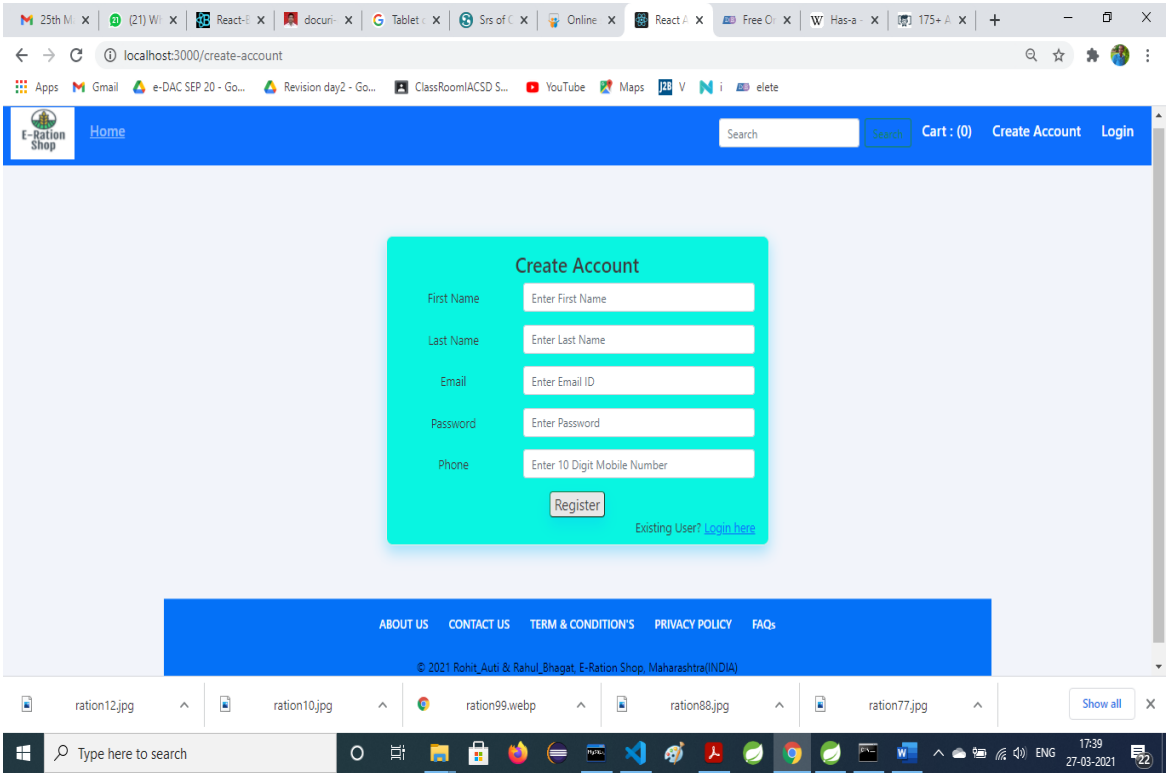

Fig 5.3: Registration Page

5.4 Admin Home Page

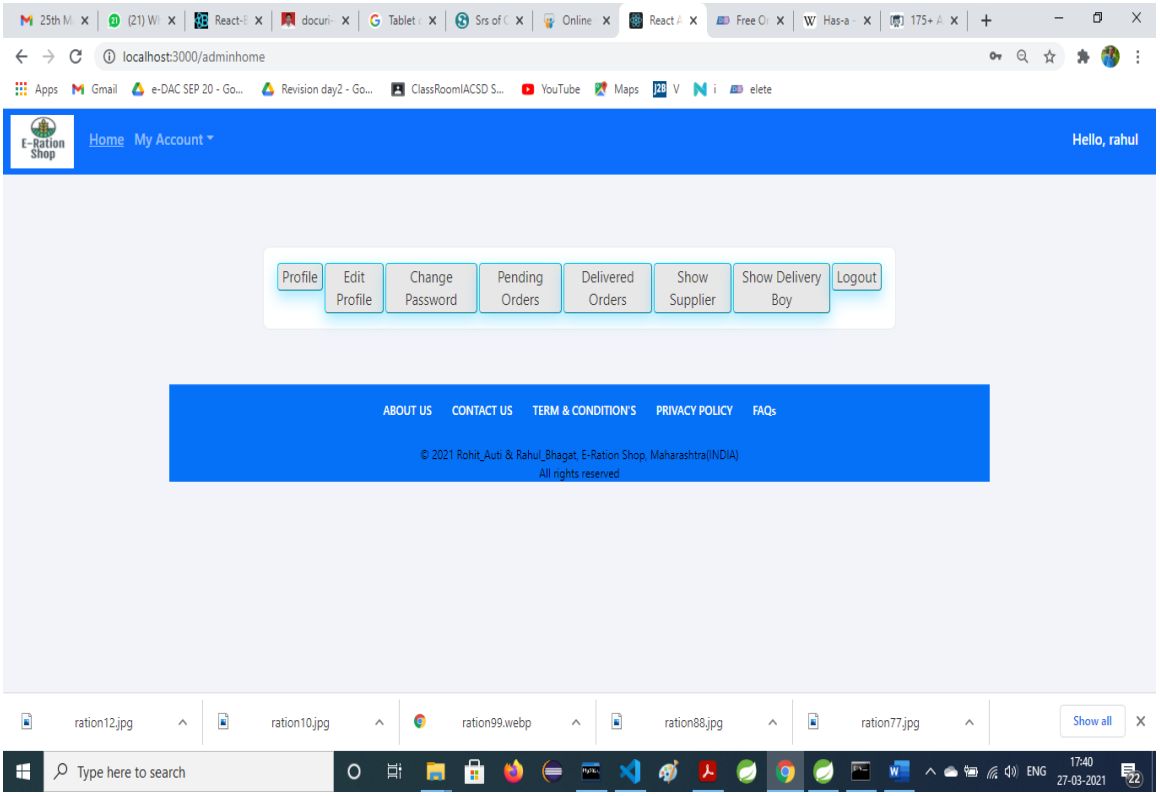

Fig 5.4: Admin Home Page

5.5 Add New Supplier

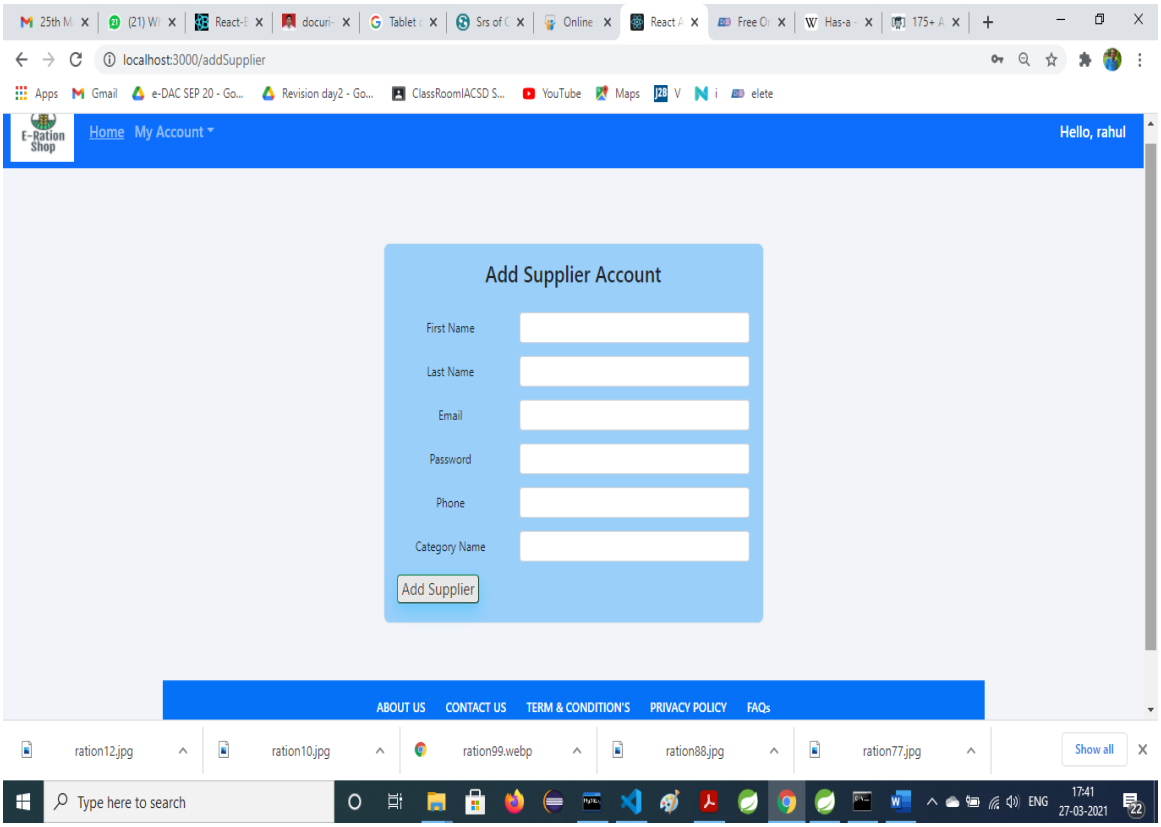

Fig 5.5: Add New Supplier

5.6 Add New Product

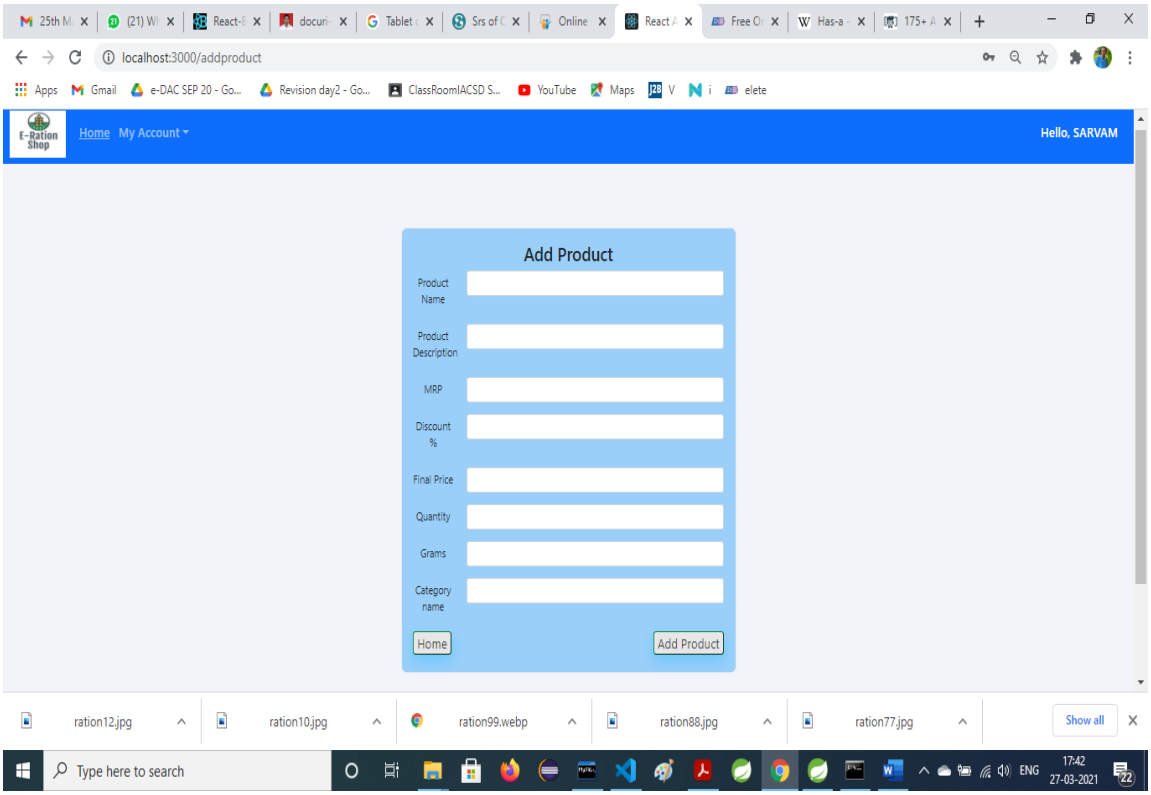

Fig 5.6: Add New Product

5.7 Product

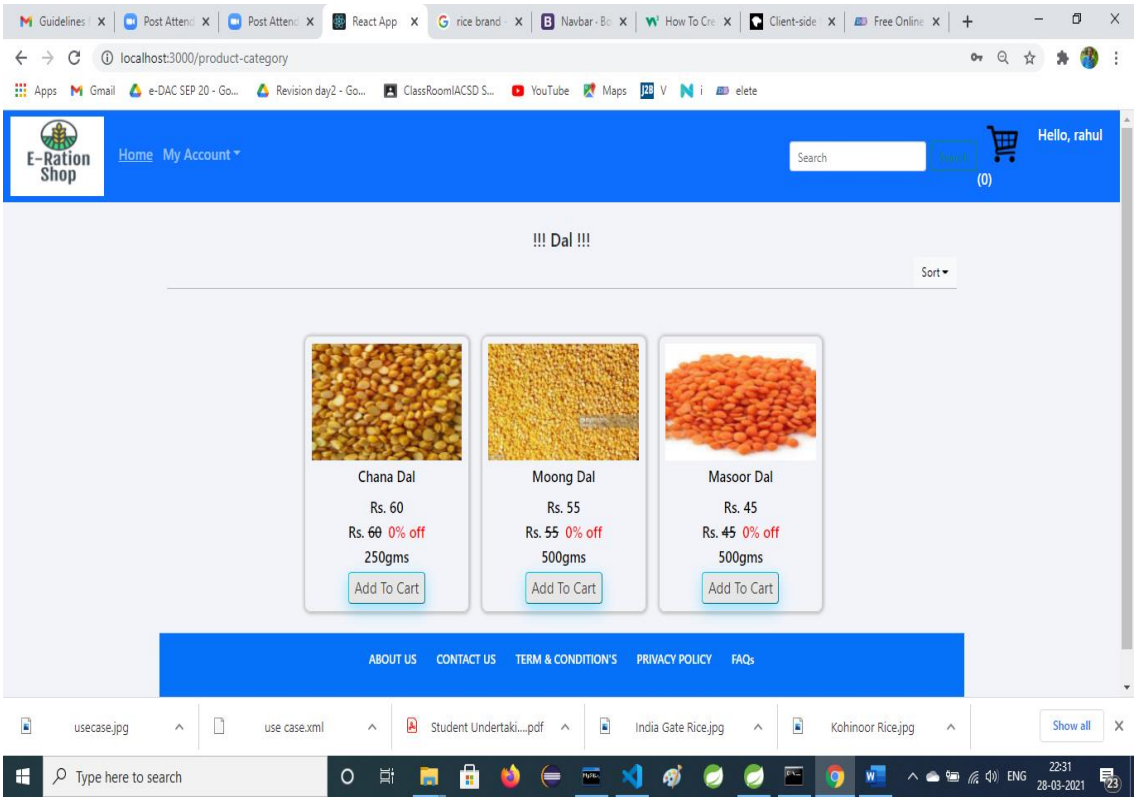

Fig 5.7: Product

5.8 Cart Details

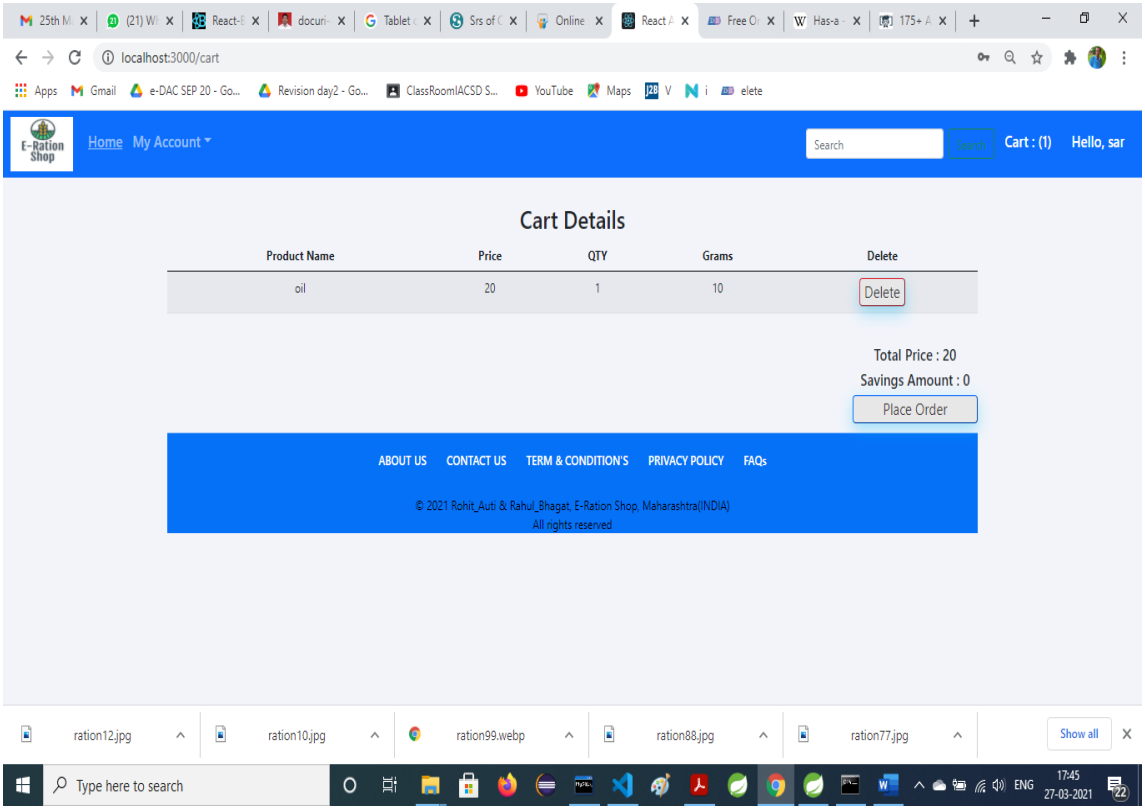

Fig 5.8: Cart Page

Conclusion

Technology has made significant progress over the years to provide consumers a better online shopping experience and will continue to do so for years to come. With the rapid growth of products and brands, people have speculated that online shopping will overtake in-store shopping. By delivering products to consumers' homes, the homebound aged and handicapped can participate in the shopping experience. The availability of online shopping has produced a more educated consumer that can shop around with relative ease without having to spend a large amount of time

References

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