

**PROJECT REPORT
ON
MOBILESHOP-E**

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DEPARTMENT OF COMPUTER ENGINEERING

L.J.POLYTECHNIC, AHMEDABAD

2021-2022

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2021-2022

CERTIFICATE

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This is to certify that Mr. **DISHANT GAJERA**, Mr. **DHRUV PALIYA**, Mr. **KAXAK DOBARIYA**, Mr. **YUVRAJSINH RANA** and Mr. **MANAV SHAH** from LJ POLYTECHNIC having Enrollment No. **1963303075025, 196330307054, 196330307512, 196330307548 and 196330307556** have completed project documentation and development on the problem definition of semester VI during the academic year 2021-22 having Title **MOBILESHOP-E** in a group consisting of 5 members.

Institute Guide

Head of the Department

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This website is because of the dedication and encouragement of many individuals. We would like to thank our guide, the books which were very informative and the websites from where we got useful help in accomplishing the task of making this website. We are thankful to our faculties and those people who helped us, inspired us, given moral support to us and encouraged us and helped us in various ways to accomplish the task.

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ABSTRACT

MOBILESHOP-E is process of doing business through computer networks. A person sitting on his chair in front of a computer can access all the facilities of internet to shop for desired products. Unlike traditional way that's administered physically with effort of an individual to walk into the shop and buy products. E-commerce websites like this has made it easier for an individual to reduce physical work and save time. But the very fact that has hindered the growth of e-commerce websites is security reasons. The goal of creating this website is to provide a secure environment to prevent frauds like misuse of private data, phishing attacks etc... . The main advantage of e-commerce website over traditional way is that the user can browse products, compare prices and order products all by sitting home on their PC. The user-friendly design helps the users to accomplish their task without a problem. Attempts are made to keep the website simple and understandable.

CHAPTER 1

INTRODUCTION

1.1 Need of the system

- There are large numbers of commercial Online Electronic Shopping websites offering large number of products tailored to meet the shopping interests of large number of customers. These online marketplaces have thousands of products listed under various categories.

1.2 Detailed problem definition

- The basic problems with the existing systems are the non-interactive environment they provide to the users.
- The use of traditional user interfaces which make continuous post backs to the server; each post back makes a call to the server, gets the response and then refreshes the entire web form to display the result.
- A search engine that would display the results without allowing the users to further filter the results based on various parameters.
- Use of traditional and non-user-friendly interfaces that are hard to use.

Solution:

- The motive of this online electronic Shopping Web Website is to allow the user use the search tool and create different combinatorial search criterion to perform exhaustive search.
- Making the website AJAX enabled gets rid of these unnecessary delays letting the user to perform exhaustive search. The users of this

website can easily feel the difference between the Ajax empowered user interfaces vs. traditional user interfaces.

- Provide Interactive interface through which a user can interact with different areas of application easily.
- A search engine that provides an easy and convenient way to search for products specific to their needs. The search engine would list a set of products based on the search term and the user can further filter the list based on various parameters.

1.3 Viability of the system:

- This website not only provides all the required information about the available electronic products and the requirements to apply for it, but it also regularly provides students the updates and news, ability to read and write reviews about the electronic products, provides special help from experts etc. making it a complete website which provides the users a delightful experience.

1.4 Currently available system:

- RELIANCE DIGITAL
- U BUY
- Tata CLiQ
- SNAPDEAL
- CROMA

1.5 Future prospects

- We also aim to provide a forum where open discussion can be held amongst the customer.
- We can also provide Laptop, Desktop, TV, AC, Refrigerator, and other Many products to add in our website.

CHAPTER-2

ANALYSIS

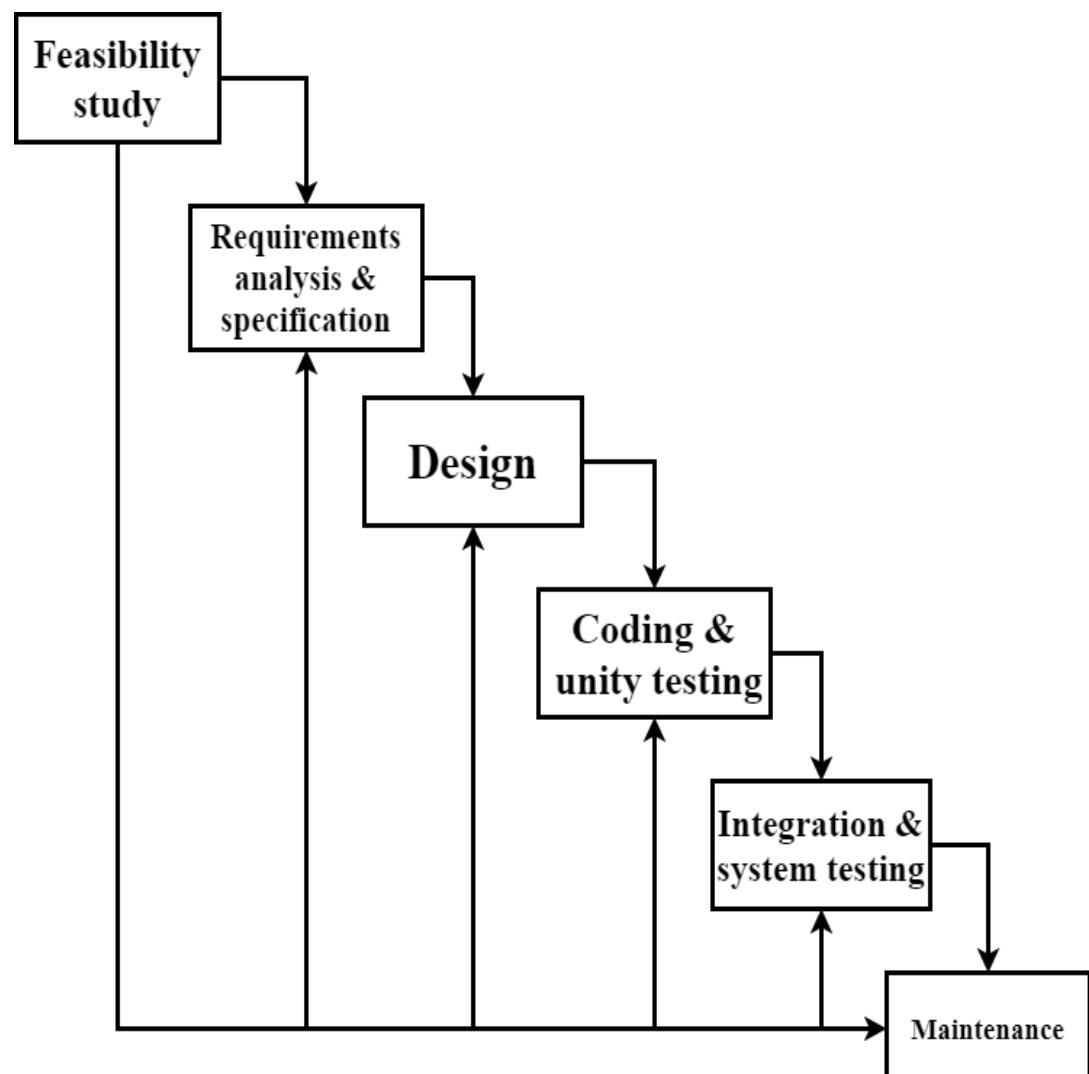
2.1 Requirement analysis:

- Users can be classified into two types based on their knowledge of the products that suit their needs. They can be classified as users who know about the product that would satisfy their needs and users who have to figure out the product that would satisfy their needs. Users who know about the product should be able to find the product easily with the click of a button. Such users can search for the product by using the product name as the search term. Users who have to figure out the product that would satisfy their needs could use a search term to find a list of products and then should be able to filter the results based on various parameters like product type, manufacturer, price range, platform supported etc.
- The users should be able to view the complete specification of the product and various images at different Zoom levels. The user should be able to read the reviews written by other users and also able to write their own reviews about the product.

2.2 Project model:

- In the Iterative model, iterative process starts with a simple implementation of a small set of the software requirements and iteratively enhances the evolving versions until the complete system is implemented and ready to be deployed.

- An iterative life cycle model does not attempt to start with a full specification of requirements.
- Instead, development begins by specifying and implementing just part of the software, which is then reviewed to identify further requirements.
- This process is then repeated, producing a new version of the software at the end of each iteration of the model.



[Figure 1: Iterative Waterfall Model]

Advantages:

- It is more cost effective to change the scope or requirements in Iterative model.
- Parallel development can be planned.
- Testing and debugging during smaller iteration is easy.
- Risks are identified and resolved during iteration; and each iteration is an easily managed.

Disadvantages:

- More resources may be required.
- Highly skilled resources are required for skill analysis.
- Project progress is highly dependent upon the risk analysis phase.

2.3 Schedule representation

Generalized project scheduling tools and technique can be applied with little modification to software projects.

Program evolution and review techniques (PERT) and critical path method (CPM) are two project scheduling method that can be applied to software development. Both techniques are driven by information already developed in earlier project planning activities:

- Estimate of effort.
- A decomposition of the product function.
- The selection of appropriate task set.
- Decomposition of tasks.

[Table 1: Schedule Representation]

ACTIVITY	DATE START	DATE FINISH
Requirement Analysis		
System Analysis		
System Design		
System Coding		
Testing and Integration		

2.4 Feasibility study

2.4.1 Technical Feasibility

This assessment is based on an outline design of system requirements, to determine whether the company has the technical expertise to handle completion of the project. When writing a feasibility report, the following should be taken to consideration:

- A brief description of the business to assess more possible factors which could affect the study.
- The part of the business being examined.
- The human and economic factor.
- The possible solutions to the problem.
- This system include firebase to store the information of user in the database easily.

2.4.2 Economic Feasibility:

In economic feasibility, cost benefit analysis is done in which expected costs and benefits are evaluated. Economic analysis is used for evaluating the effectiveness of the proposed system.

This system is made on low budget and it will allow its user to use various features at no cost.

2.4.3 Operational Feasibility:

A feasibility study is an assessment of the practicality of a proposed project or system. A feasibility study aims to objectively and rationally uncover the strengths and weaknesses of an existing business. In its simplest terms, the two criteria to judge feasibility are cost required and value to be attained.

The system is very efficient as the users can easily find what they are looking for and it would not take more than few minutes for them to find the exact device that they are looking for.

The system provides suggestions which help user to select the best suitable device for them.

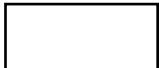
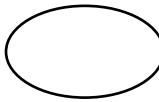
CHAPTER-3

DESIGN

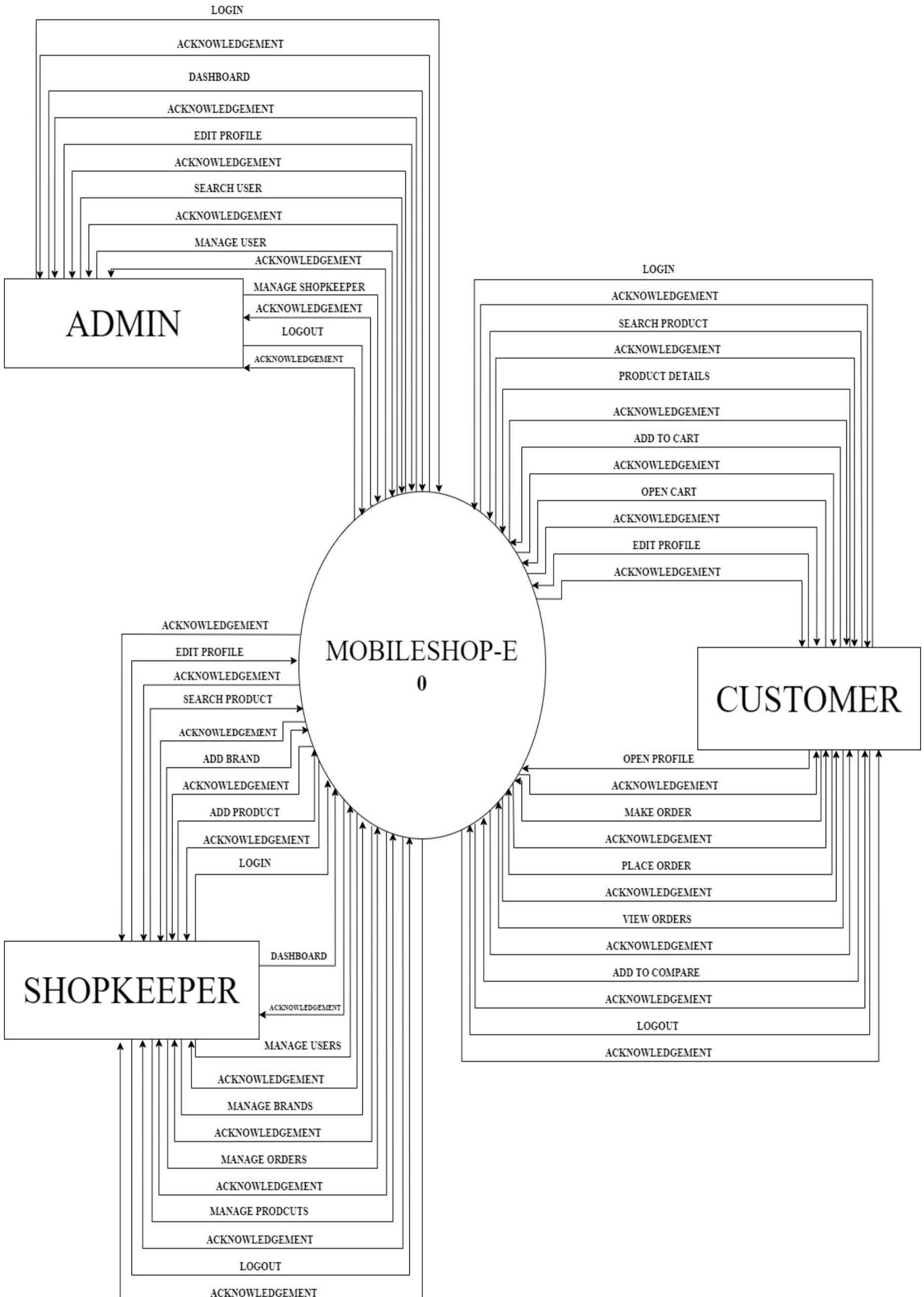
3.1 Data flow diagram

DFD (data flow diagram) is also known as bubble chart or data flow graph. DFD's are very useful in understanding the system and can be effectively used during analysis. It shows flow of data through a system visually. The DFD is a hierarchical graphical model of a system the different processing activities or functions that the system performs and the data interchange among these functions. It views a system as a function that transforms the inputs into desired output. Each function is considered as a process that consumes some input data and produces some output data. Function model can be represented using DFD.

[Table 2: data flow diagram symbols]

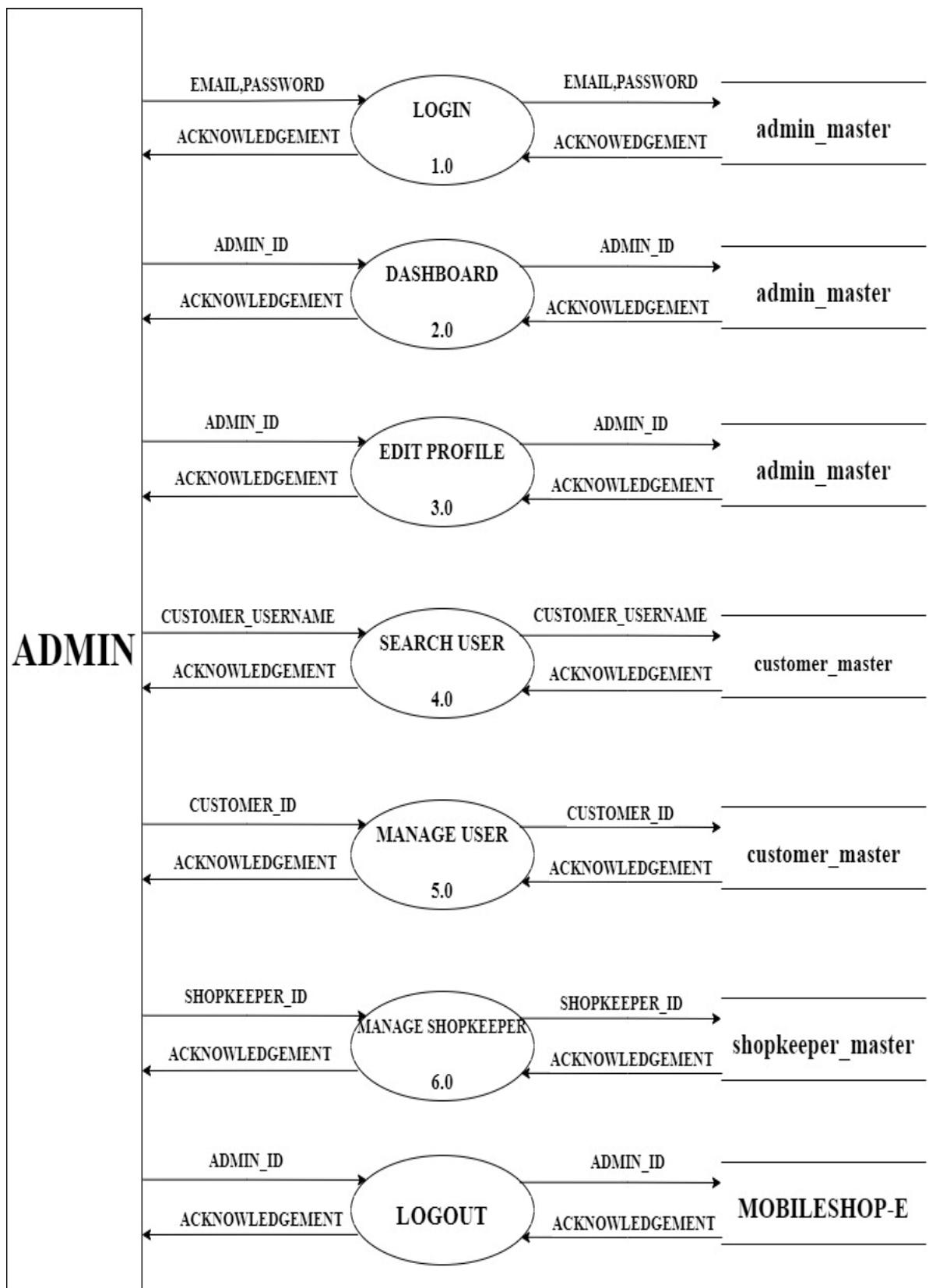
Symbols	Description
	Entity: Entities are external to the system which interacts by inputting the data.
	System: It shows the system name.
	Process: It shows the part of the system that transforms into outputs.
	Data Flow: It passes the data from one part to another.
	Data store: data store is represented by two databases.

1. DFD level 0:



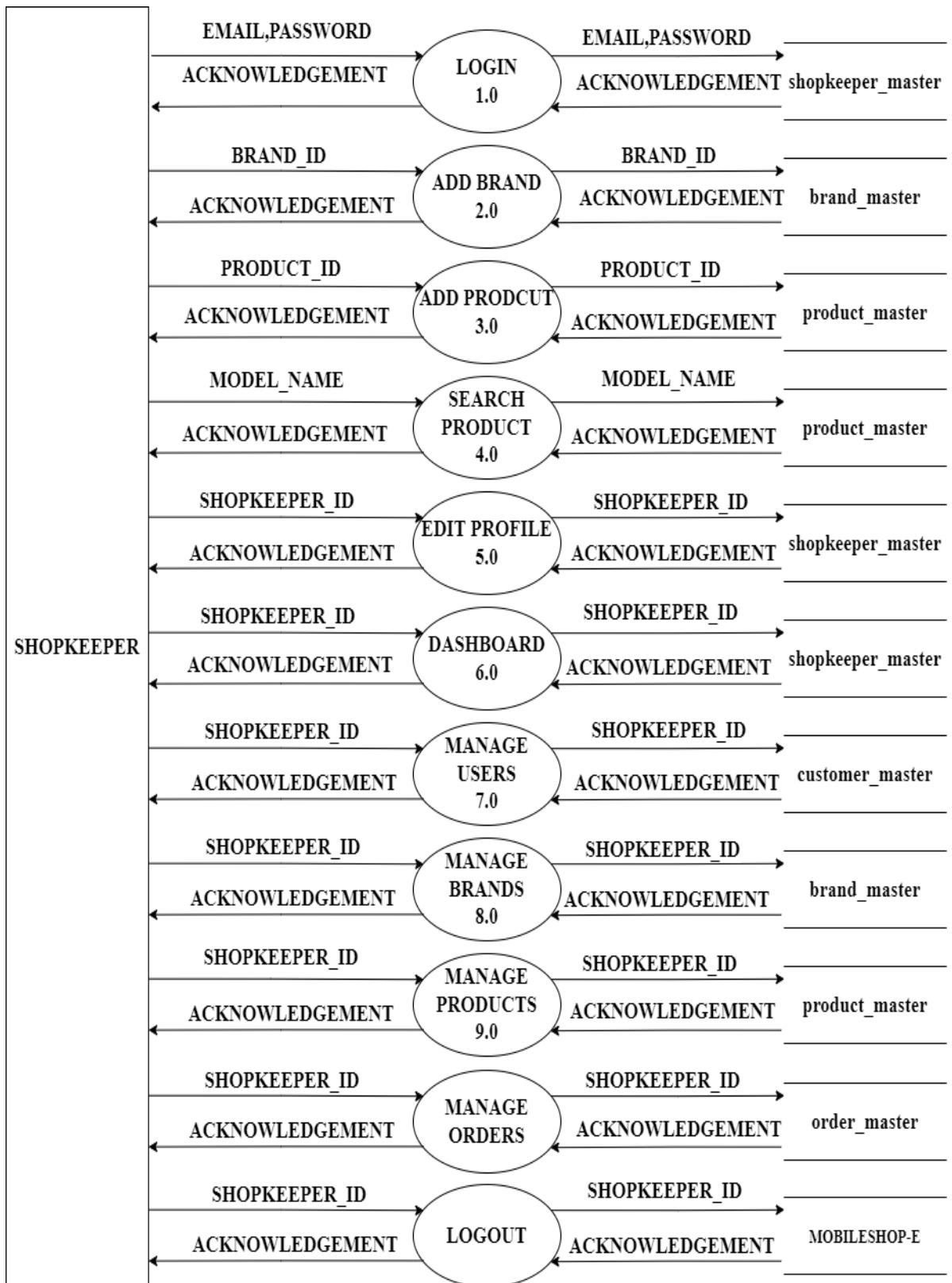
[Figure 2: DFD level 0]

2. Admin level 1:



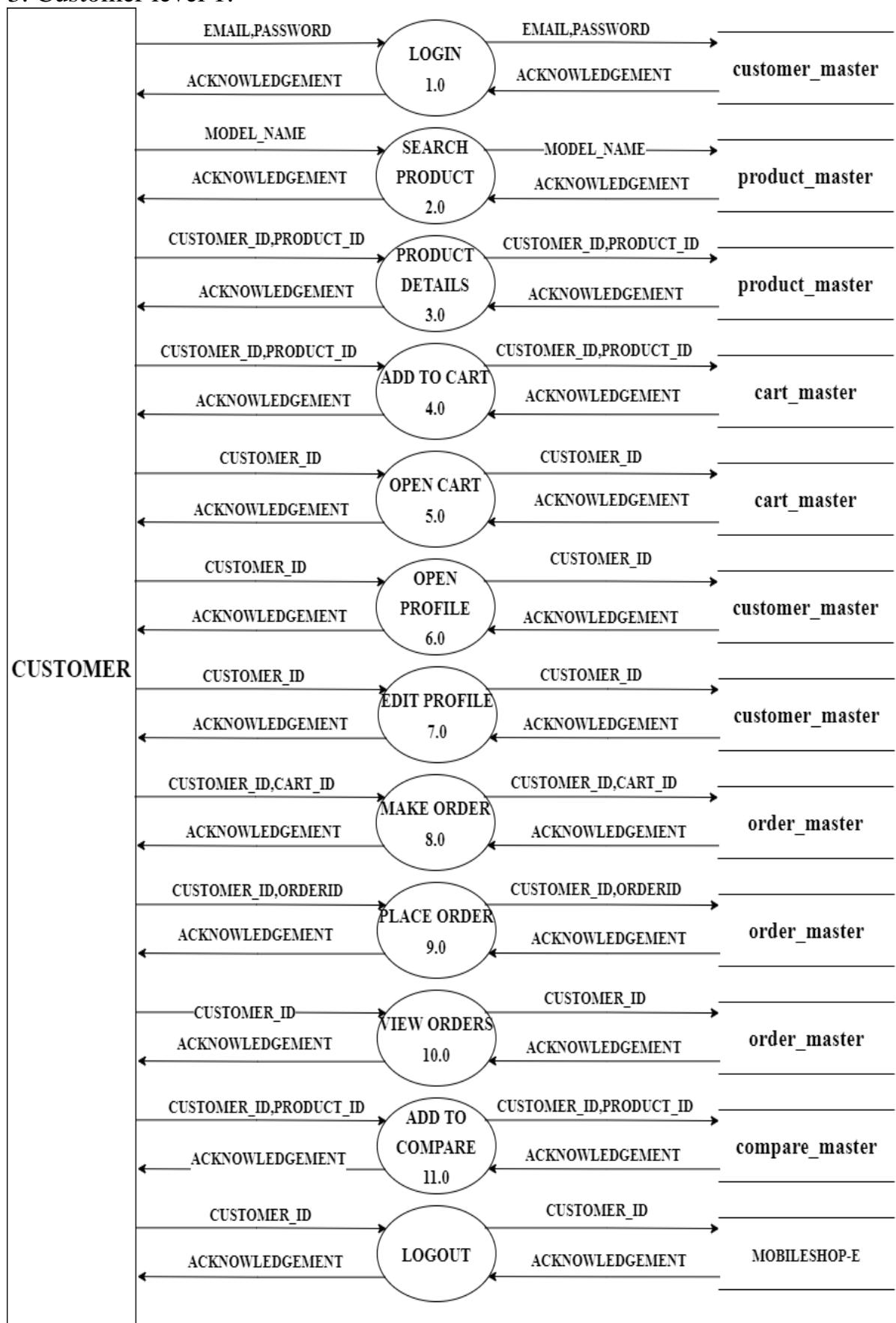
[Figure 3: Admin level 1]

3. Shopkeeper level 1:



[Figure 4: Shopkeeper level 1]

3. Customer level 1:



[Figure 4: Customer level 1]

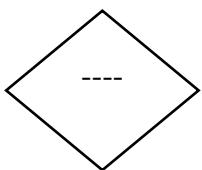
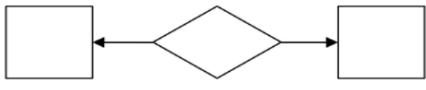
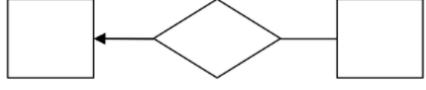
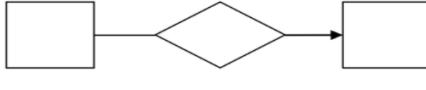
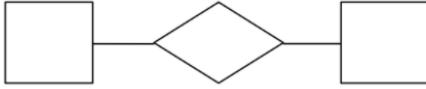
3.2 ER diagram

An Entity Relationship (ER) Diagram is a type of flowchart that illustrates how “entities” such as people, objects or concepts relate to each other within a system. ER Diagrams are most often used to design or debug relational databases in the fields of software engineering, business information systems, education and research. Also known as ERDs or ER Models, they use a defined set of symbols such as rectangles, diamonds, ovals and connecting lines to depict the interconnectedness of entities, relationships and their attributes. They mirror grammatical structure, with entities as nouns and relationships as verbs.

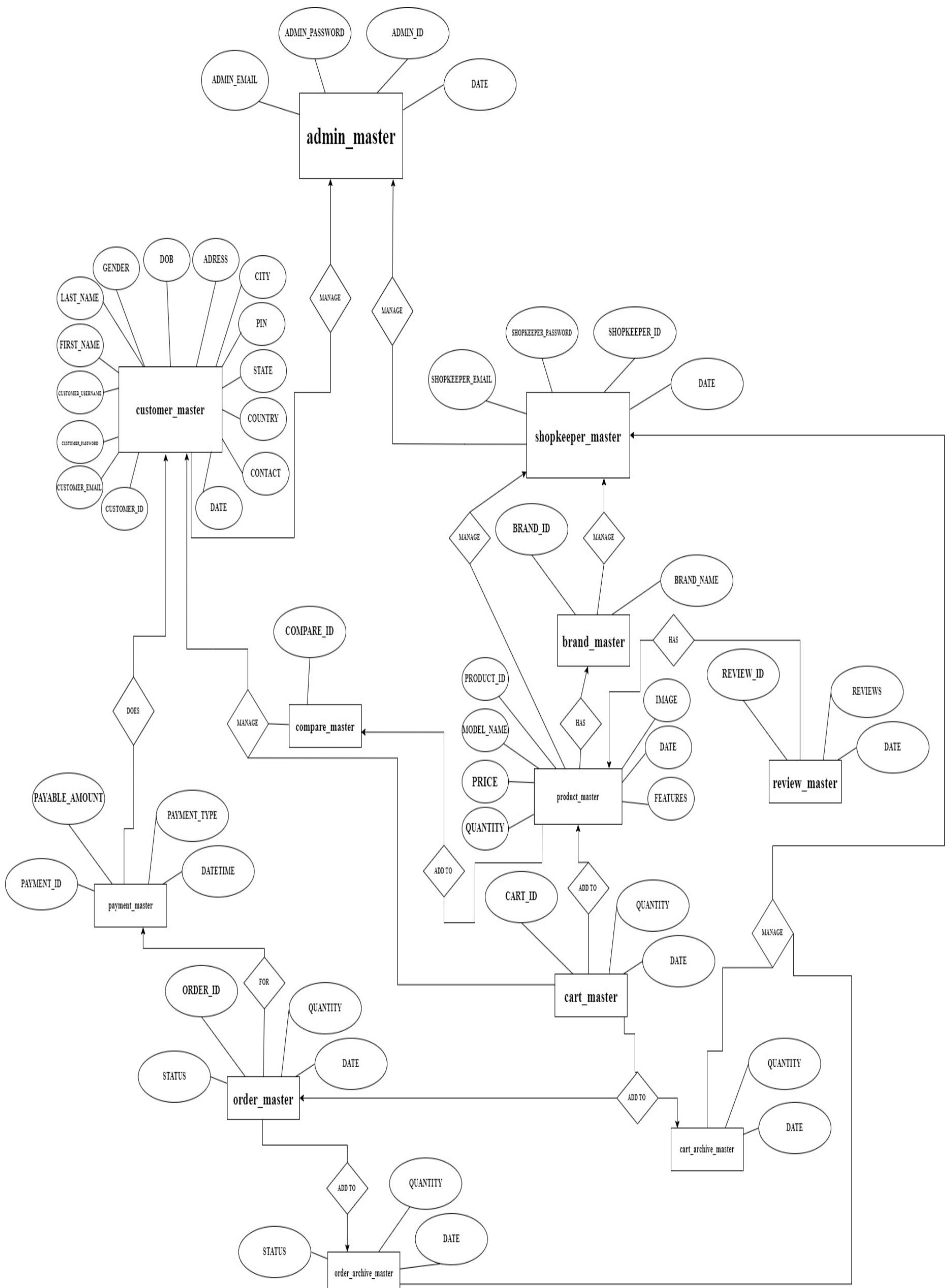
Peter Chen (a.k.a. Peter Pin-Shan Chen), currently a faculty member at Carnegie-Mellon University in Pittsburgh, is credited with developing ER modeling for database design in the 1970s. While serving as an assistant professor at MIT’s Sloan School of Management, he published a seminal paper in 1976 titled “The Entity-Relationship Model: Toward a Unified View of Data.”

- ER model allows you to draw Database Design
- It is an easy-to-use graphical tool for modeling data
- Widely used in Database Design
- It is a GUI representation of the logical structure of a Database
- It helps you to identify the entities which exist in a system and the relationships between those entities.

[Table 3: ER-Diagram symbols]

Symbols	Description
	Entity: Data object is real world entity or thing.
	Attributes: An attribute is property of Characteristic of an entity.
	Relationship: Entity are connected each other via relations. Generally, relationships in binary because there are two entities are Related to each other.
	Cardinality (One to One): An instance of entity A can relate to one only instance of B And vice versa.
	Cardinality (One to Many): An instance of entity A can relate to one or many instances of B but be can only relate one instance of A.
	Cardinality (Many to One): Many instances of entity A can relate to one instances of entity B and vice versa
	Cardinality (Many to Many): One or more instances of entity A can relate to one more instance of entity B and vice versa.

ER-Diagram:



[Figure 6: ER-Diagram]

CHAPTER-4

SYSTEM MODELING

4.1 Data dictionary

A data dictionary is a collection of descriptions of the data objects or items in a data model for the benefit of programmers and others who need to refer to them. A first step in analyzing a system of objects with which users interact is to identify each object and its relationship to other objects. This process is called data modeling and results in a picture of object relationships. After each data object or item is given a descriptive name, its relationship is described (or it becomes part of some structure that implicitly describes relationship), the type of data (such as text or image or binary value) is described, possible predefined values are listed, and a brief textual description is provided. This collection can be organized for reference into a book called a data dictionary.

When developing programs that use the data model, a data dictionary can be consulted to understand where a data item fits in the structure, what values it may contain, and basically what the data item means in real-world terms. For example, a bank or group of banks could model the data objects involved in consumer banking. They could then provide a data dictionary for a bank's programmers. The data dictionary would describe each of the data items in its data model for consumer banking (for example, "Account holder" and "Available credit").

4.2 Database designing

Data dictionary:

Database name: OEMS

Table name: -admin_master

Primary key: -ADMIN_ID

Foreign key: -N/A

[Table 4: admin_master]

Field name	Data type	Constraints	Description
ADMIN_ID	Int (10)	Primary key, auto increment	Admin id
ADMIN_EMAIL	Varchar (50)	Not null	Admin email
ADMIN_PASSWORD	Varchar (100)	Not null	Admin password
DATE	Timestamp (6)	Not null	Login date & time

Table name: -shopkeeper_master

Primary key: -SHOPKEEPER_ID

Foreign key: - ADMIN_ID

[Table 5: shopkeeper_master]

Field name	Data type	Constraints	Description
SHOPKEEPER_ID	Int (10)	Primary key, auto increment	Shopkeeper id
DATE	Timestamp(6)	Not null	Date & Time
SHOPKEEPER_EMAIL	Varchar (50)	Not null	Shopkeeper email
SHOPKEEPER_PASSWORD	Varchar (100)	Not null	Shopkeeper password

Table Name:-customer_master

Primary key:-CUSTOMER_ID

Foreign key:-ADMIN_ID

[Table 6: customer_master]

Field name	Data type	Constraints	Description
CUSTOMER_ID	Int (10)	Primary key, auto increment	Customer id
ADMIN_ID	Int (10)	Foreign key	Admin id
CUSTOMER_USERNAME	Varchar(50)	Not null	Customer username
CUSTOMER_EMAIL	Varchar (50)	Not null	Customer email
CUSTOMER_PASSWORD	Varchar (50)	Not null	Customer password
FIRST_NAME	Varchar (50)	Not null	First name
LAST_NAME	Varchar (50)	Not null	Last name
GENDER	Varchar (10)	Not null	Gender
DOB	Varchar (50)	Not null	Date of birth
ADDRESS	Longtext (100)	Not null	Store address
CITY	Varchar (10)	Not null	City
PIN	Int (6)	Not null	Pin code
STATE	Varchar (10)	Not null	State
COUNTRY	Varchar (10)	Not null	Country
CONTACT	Varchar (20)	Not null	Phone number

Date	Timestamp (6)	Not null	Signup date and time
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Table Name: -brand_master

Primary key: -BRAND_ID

Foreign key: -SHOPKEEPER_ID

[Table 7: brand_master]

Field name	Data type	Constraints	Description
BRAND_ID	Int (10)	Primary key, auto increment	Brand id
SHOPKEEPER_ID	Int (10)	Foreign key	Shopkeeper id
BRAND_NAME	Varchar (50)	Not null	Brand name

Table Name: -product_master

Primary key: -PRODUCT_ID

Foreign key: -BRAND_NAME, SHOPKEEPER_ID

[Table 8: product_master]

Field name	Data type	Constraints	Description
SHOPKEEPER_ID	Int (10)	Foreign key	Shopkeeper id
PRODUCT_ID	Int (10)	Primary key, auto increment	Product id
BRAND_ID	Int (10)	Foreign key	Brand id
MODEL_NAME	Varchar (100)	Not null	Model name
FEATURES	Longtext (1000)	Not null	Fetures of the product
IMAGE	Varchar (20)	Not null	Product images
PRICE	Varchar (20)	Not null	Price of the product
DATE	TIMESTAMP (6)	NOT NULL	Register date & time

Table Name: -review_master

Primary key: -REVIEW_ID

Foreign key: -PRODUCT_ID, CUSTOMER_ID

[Table 9: review_master]

Field name	Data type	Constraints	Description
REVIEW_ID	Int (10)	Primary key, auto increment	Review id
PRODUCT_ID	Int (10)	Foreign key	Product id
CUSTOMER_ID	Int (10)	Foreign key	Customer id
REVIEWS	Varchar (500)	Not null	Review of product
DATE	Timestamp (6)	Not null	Date and time of reviews

Table Name: -cart_master

Primary key: -CART_ID

Foreign key: -CUSTOMER_ID, PRODUCT_ID

[Table 10: cart_master]

Field name	Data type	Constraints	Description
CART_ID	Int (10)	Primary key, auto increment	Customer id
CUSTOMER_ID	Varchar (50)	Foreign key	Customer email
PRODUCT_ID	Varchar (100)	Foreign key	Customer password
QUANTITY	Int (10)	Not null	Quantity in cart
DATE	Timestamp (6)	Not null	Date and time of cart entry

Table Name:-cart_archive_master

Primary key:-CART_ID

Foreign key:-CUSTOMER_ID, PRODUCT_ID

[Table 11: cart_archive_master]

Field name	Data type	Constraints	Description
CART_ID	Int(10)	Primary key, auto increment	Customer id
CUSTOMER_ID	Varchar(50)	Foreign key	Customer email
PRODUCT_ID	Varchar(100)	Foreign key	Customer password
QUANTITY	Int(10)	Not null	Quantity in cart
DATE	Timestamp(6)	Not null	Date and time of deleted cart

Table Name:-order_master

Primary key:-ORDER_ID

Foreign key:-CART_ID,CUSTOMER_ID,SHOPKEEPER_ID

[Table 12: order_master]

Field name	Data type	Constraints	Description
ORDER_ID	Int(10)	Primary key, auto increment	Order id
CART_ID	Int(10)	Foreign key	Cart id
CUSTOMER_ID	Int(10)	Foreign key	Customer id
SHOPKEEPER_ID	Int(10)	Foreign key	Shopkeeper id
TOTAL	Varchar(20)	Not null	Total amount including taxes
STATUS	Varchar(20)	Not null	Current state of the order
QUANTITY	Int(10)	Not null	Product quantity in the product
DATE	Timestamp(6)	Not null	Date & time of order entry

Table Name:-order_archive_master

Primary key:-ORDER_ID

Foreign key:-CART_ID,CUSTOMER_ID,SHOPKEEPER_ID

[Table 13: order_archive_master]

Field name	Data type	Constraints	Description
ORDER_ID	Int(10)	Primary key, auto increment	Order id
CART_ID	Int(10)	Foreign key	Cart id
CUSTOMER_ID	Int(10)	Foreign key	Customer id
SHOPKEEPER_ID	Int(10)	Foreign key	Shopkeeper id
TOTAL	Varchar(20)	Not null	Total amount including taxes
QUANTITY	Int(10)	Not null	Product quantity in the product
DATE	Timestamp(6)	Not null	Date & time of order entry

Table Name:-payment_master

Primary key:-PAYMENT_ID

Foreign key:-ORDER_ID,CUSTOMER_ID

[Table 14: payment_master]

Field name	Data type	Constraints	Description
PAYMENT_ID	Int(10)	Primary key, auto increment	Payment id
ORDER_ID	Int(10)	Foreign key	Order id
PAYMENT_TYPE	Varchar(20)	Not null	Payment type
PAYABLE_AMOUNT	Varchar(10)	Not null	Payable amount
DATETIME	datetime	Not null	Date and time

CHAPTER 5

TECHNICAL SPECIFICATION

5.1 Hardware Specification

5.1.1 RAM: 1GB

5.1.2 Hardware storage needed: 500MB

5.1.3 Other hardware requirements: N\A

5.2 Platform

5.2.1 Supported Operating System: Windows XP and

Above, MAC OS, Linux.

5.2.2 Programming Server: APACHE Server 2.4.46

5.2.3 Framework: N\A.

5.3 Programming Language Used

5.3.1 Markup language: HTML 5

5.3.2 Programming Language: PHP 8.0.9, JavaScript ES2015

5.3.3 Style Sheet Language: CSS 4

5.4 Technical Specification

5.4.1 Front-End: HTML 5, CSS 4

5.4.2 Back-End: MySQL 5.7.23, PHP 8.0.9

5.4.3 IDE: Visual studio code

5.4.4 UML Tools: Draw.io 13.9.9

5.4.5 SRS Tools: Microsoft Word 2016

5.5 Design layout

5.5.1 Home page



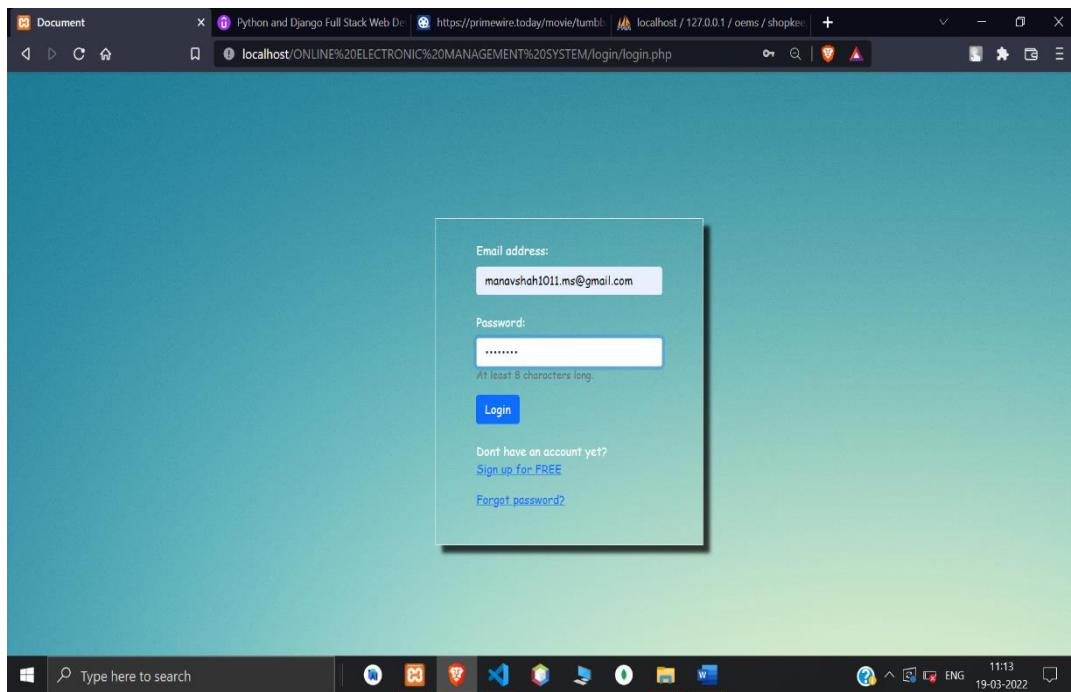
 Apple iPhone 13 pro max Price: 129900 6Gb ram,A15 bionic, 12+12+12MP camera,4352 mAh battery	 Samsung Galaxy S20 Ultra Price: 102990 Quad rear camera-108MP,12GB RAM 128GB internal,Android v10 operating system,Exynos 990 octo core processor,5000 mAh battery.	 Vivo x70 Pro Price: 46900 8 GB RAM,128 GB ROM,50MP +12 MP +12 MP+ 8MP Rear camera,32 MP front camera,4450 mAh battery,mediatek dimensity 1200 processor.	 Apple iPhone 12 Pro Max Price: 119 Apple A14 Bionic 6 GB RAM,128 GB internal storage,3687 mAh battery,Triple(12+12+12) MP rear, 12 MP Front Camera	 Samsung Galaxy Z Fold 3 Price: 179 Qualcomm Snapdragon 888 12GB RAM,256 GB internal storage,4400 mAh battery,Triple(12+12+12) MP Rear,Duo(10+4) MP Front camera
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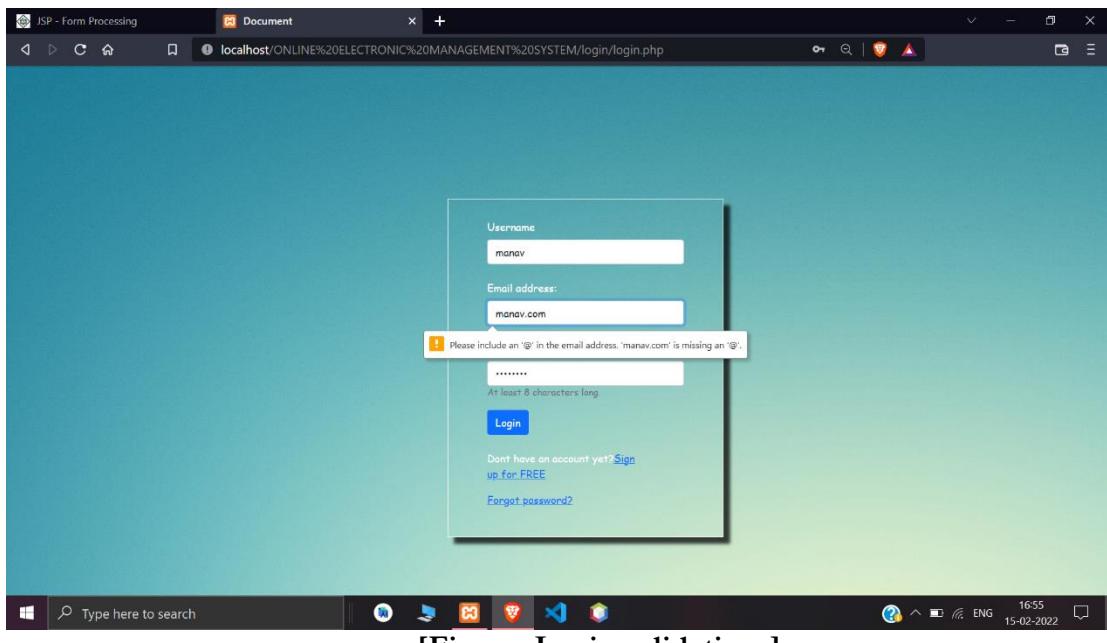
[Figure: Home page]

5.5.2 Customer login page

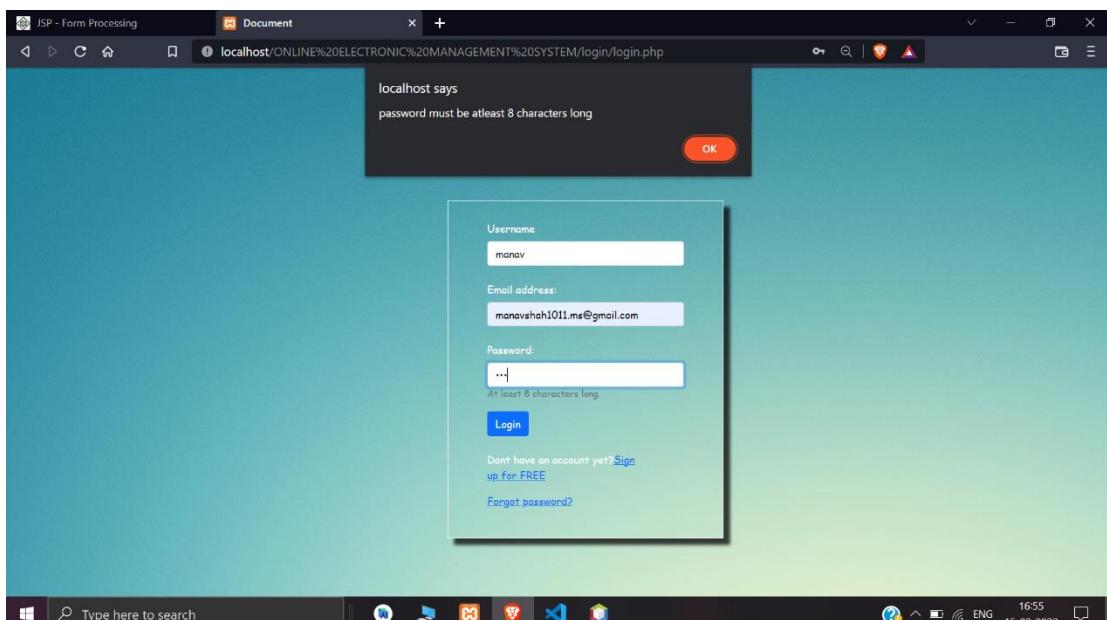


[Figure: Customer login page]

5.5.2 Login page validations



[Figure: Login validations]



[Figure: Login validations]

5.5.4 Sign-up page

The screenshot shows a sign-up form with a teal gradient background. The form is contained within a white rectangular box with a thin black border. It includes fields for Username, Email, Password, Confirm Password, First Name, Last Name, Gender (Male, Female, Other), Date Of Birth (dd-mm-yyyy), Address (with placeholder text 'Example:flatNo,area,landmark...'), Country (India), State (Gujarat), City (Ahmedabad), PIN, Contact (phone number), and a blue Submit button.

Username	Email	Password	
Confirm Password	First Name	Last Name	
Gender Male Female Other	Date Of Birth dd-mm-yyyy	Address Example:flatNo,area,landmark...	
Country India	State Gujarat	City Ahmedabad	PIN
Contact			

[Figure: Signup page]

5.5.5 Sign-up page validations

A screenshot of a web browser window displaying a sign-up form. The URL in the address bar is `localhost/ONLINE%20ELECTRONIC%20MANAGEMENT%20SYSTEM/signup/signup.php`. The form fields include:

- Username: `123` (highlighted in yellow with an error message: "Please match the requested format.")
- Email: `123.com` (highlighted in yellow with an error message: "Please include an '@' in the email address. '123.com' is missing an '@'.")
- Password: (empty field)
- First Name: (empty field)
- Last Name: (empty field)
- Gender: Male (radio button selected)
- Date Of Birth: (empty field)
- Address: (empty field)
- Country: India (dropdown menu)
- State: Gujarat (dropdown menu)
- City: Ahmedabad (dropdown menu)
- PIN: (empty field)
- Contact: (empty field)
- Submit: (blue button)

The browser status bar at the bottom shows the date and time as 15-02-2022 16:58.

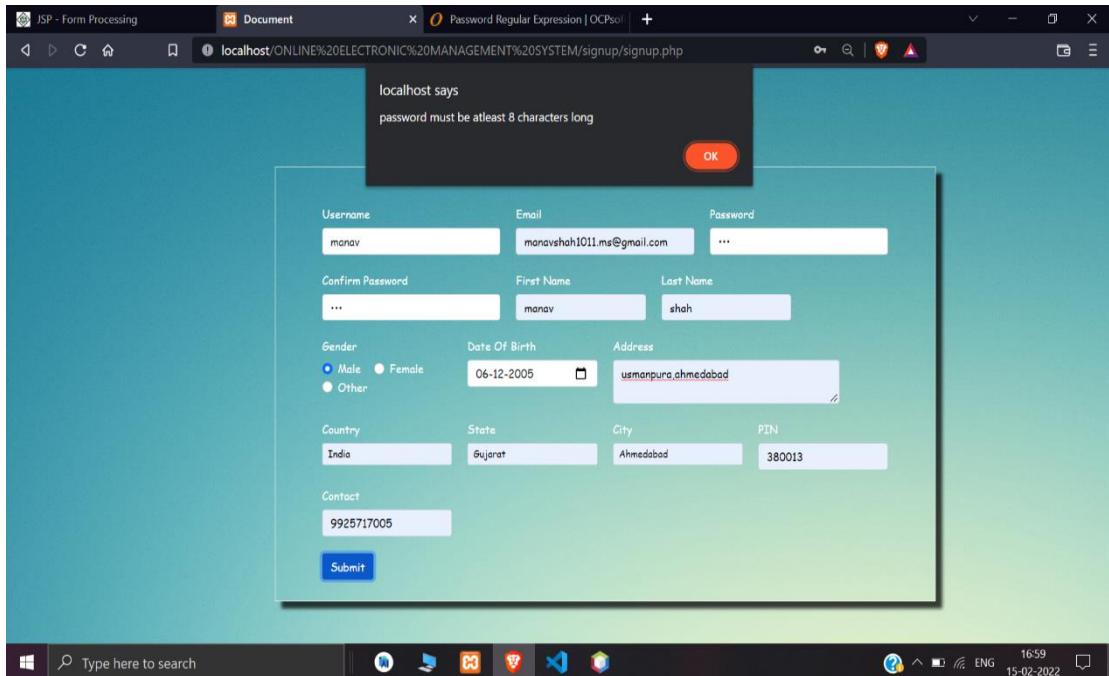
[Figure: Signup page validations]

A screenshot of a web browser window displaying a sign-up form. The URL in the address bar is `localhost/ONLINE%20ELECTRONIC%20MANAGEMENT%20SYSTEM/signup/signup.php`. The form fields include:

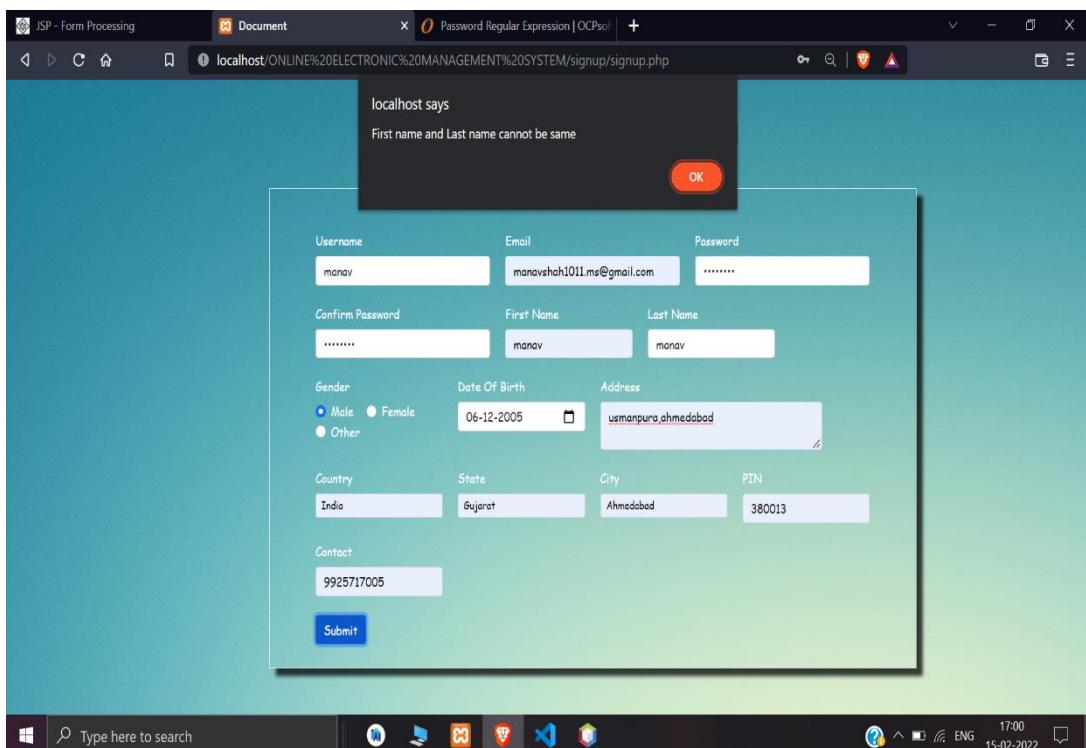
- Username: `manav`
- Email: `123.com` (highlighted in yellow with an error message: "Please include an '@' in the email address. '123.com' is missing an '@'.")
- Password: (empty field)
- Confirm Password: (empty field)
- First Name: (empty field)
- Last Name: (empty field)
- Gender: Male (radio button selected)
- Date Of Birth: (empty field)
- Address: (empty field)
- Country: India (dropdown menu)
- State: Gujarat (dropdown menu)
- City: Ahmedabad (dropdown menu)
- PIN: (empty field)
- Contact: (empty field)
- Submit: (blue button)

The browser status bar at the bottom shows the date and time as 15-02-2022 16:58.

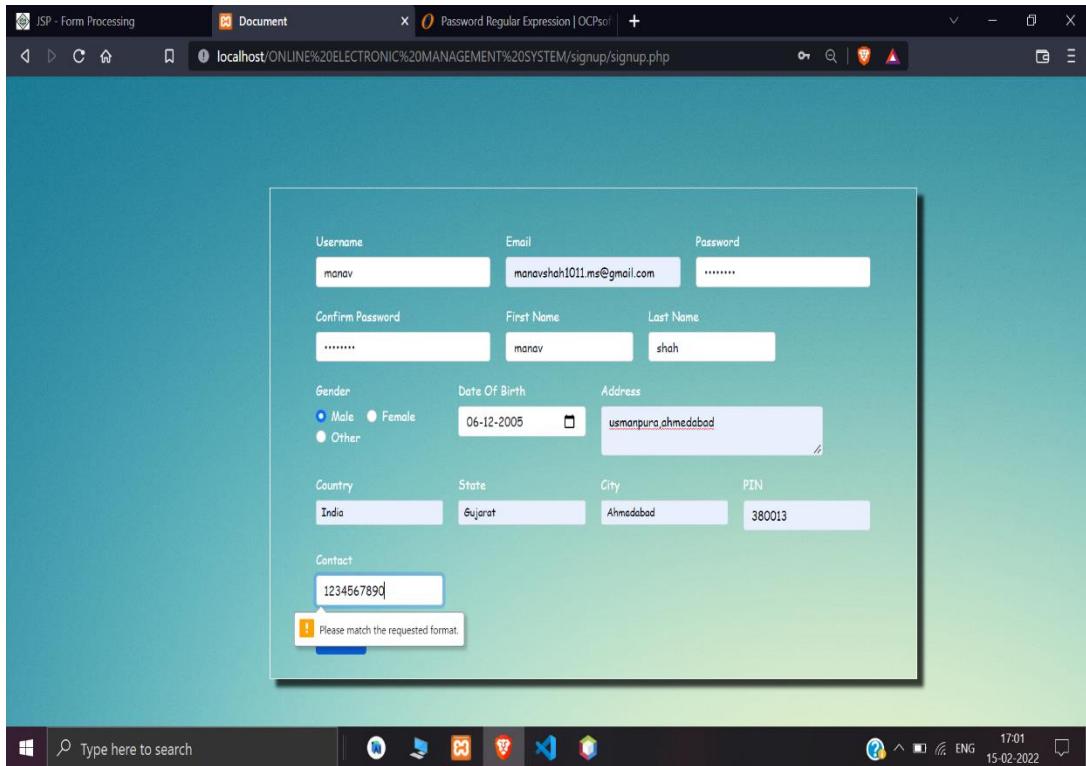
[Figure: Signup page validations]



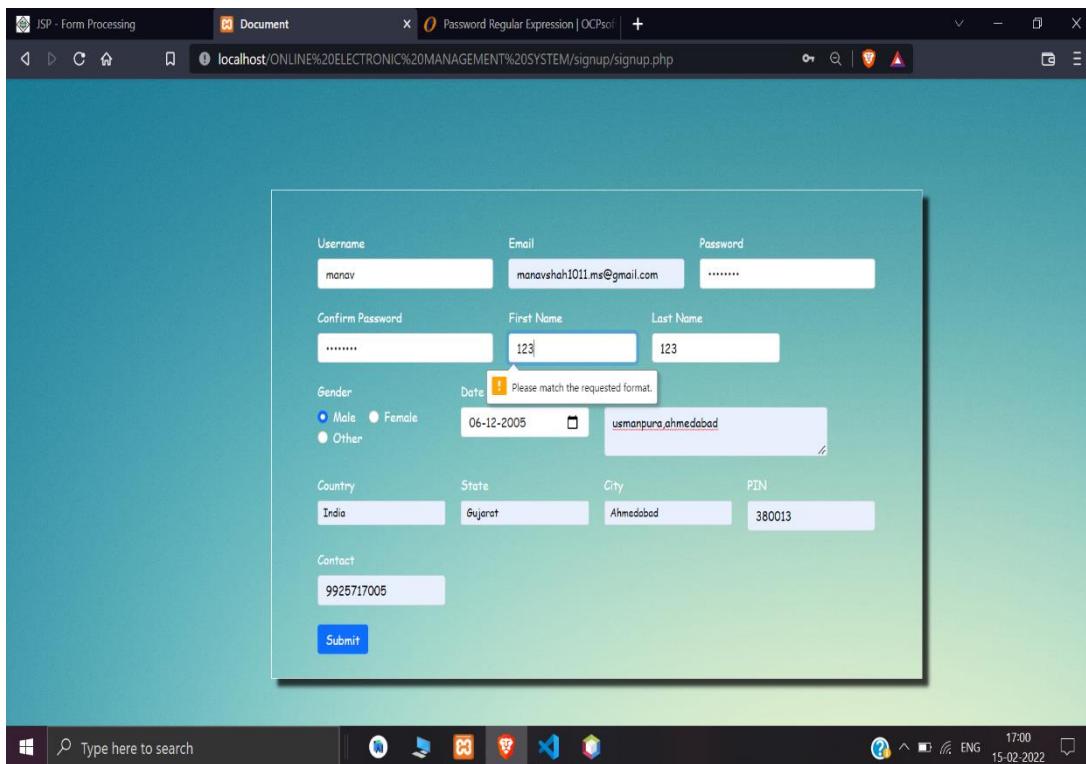
[Figure: Signup page validations]



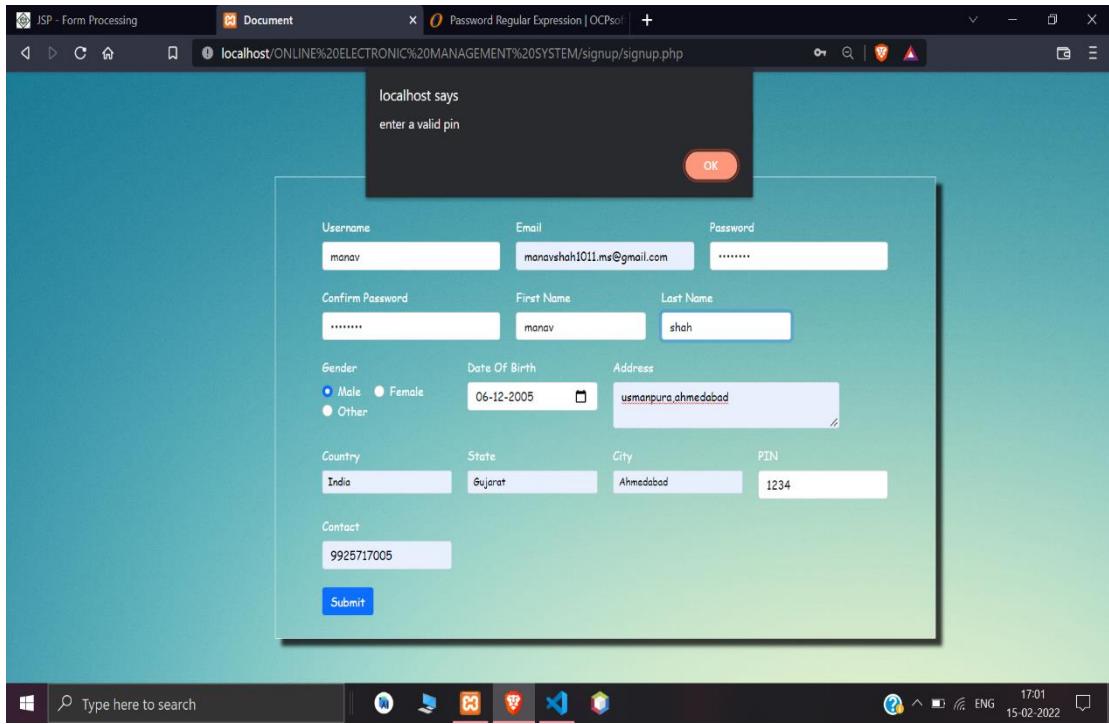
[Figure: Signup page validations]



[Figure: Signup page validations]

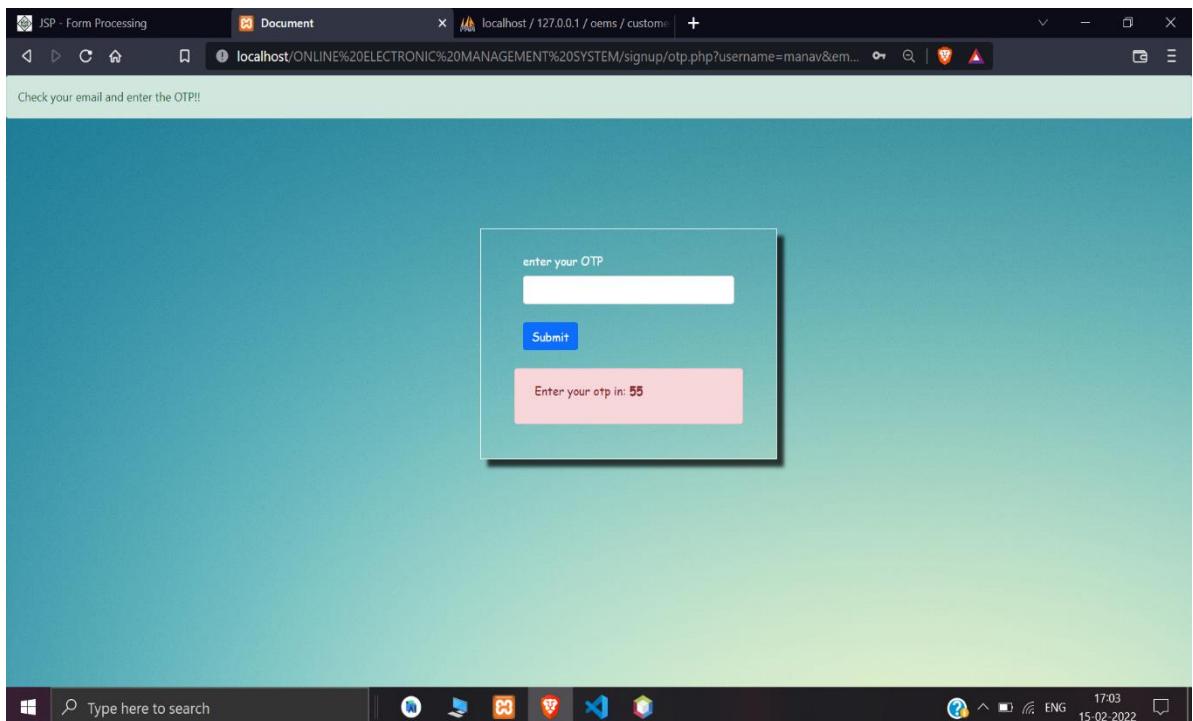


[Figure: Signup page validations]



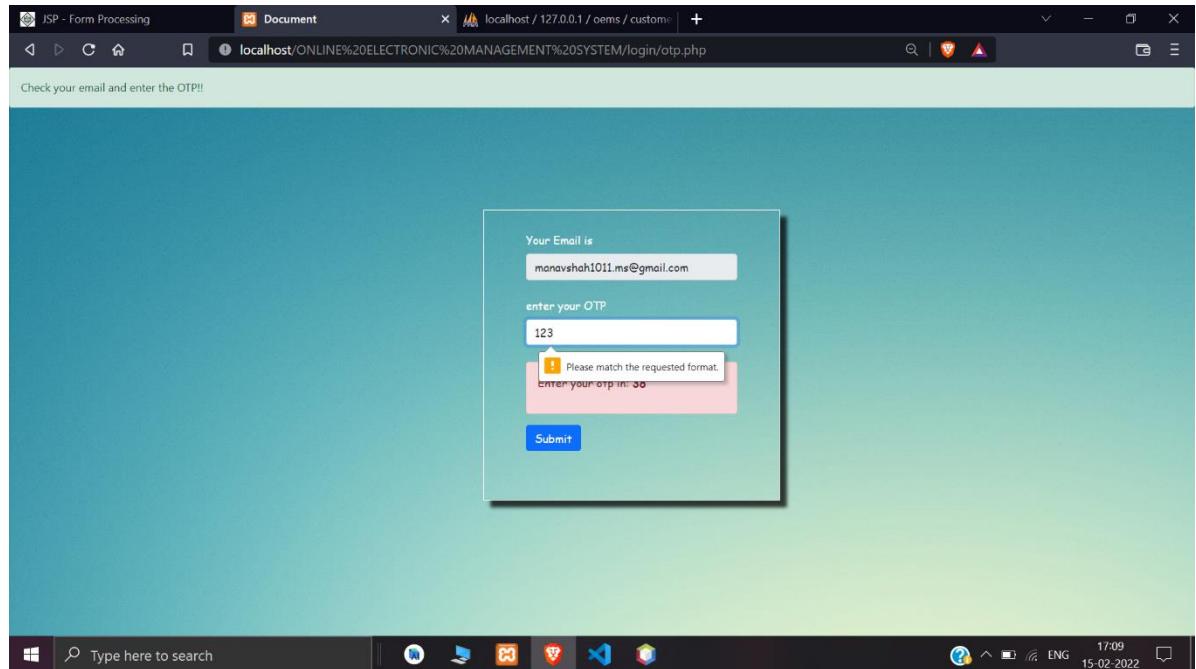
[Figure: Signup page validations]

5.5.6 Enter otp for signup



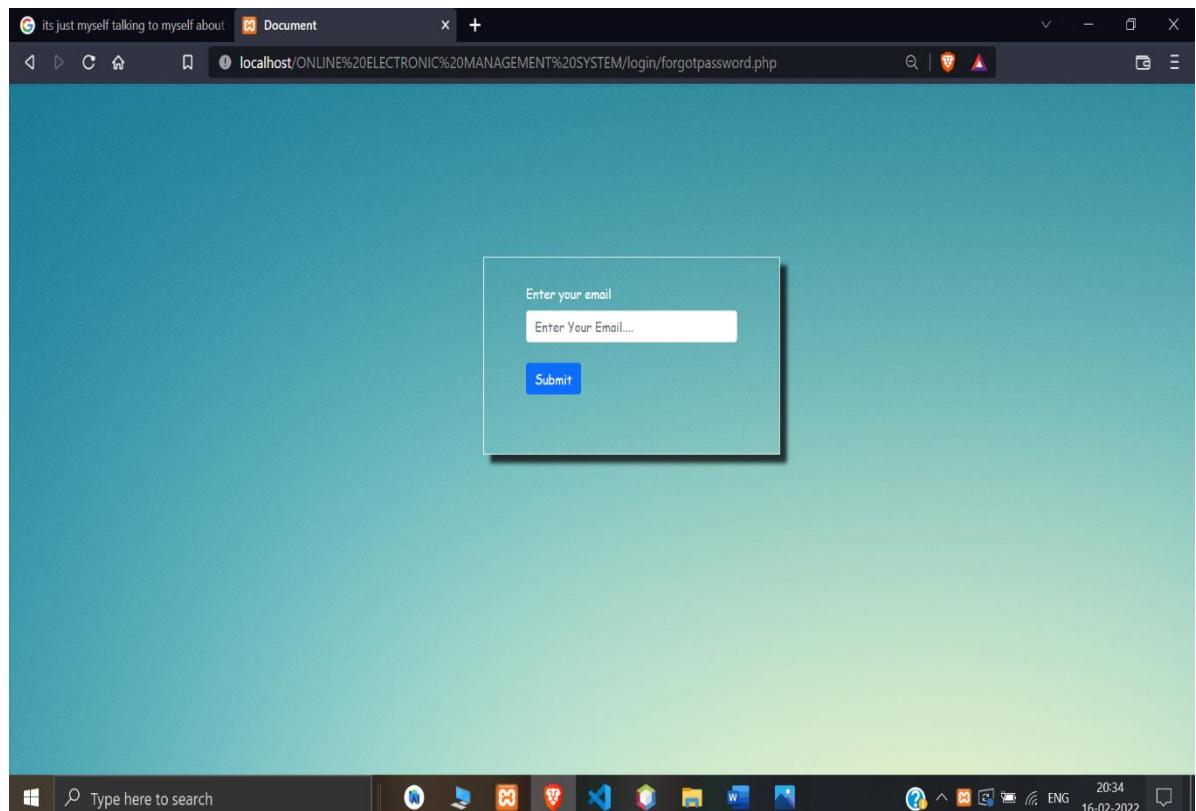
[Figure: Enter otp for signup page]

5.5.7 Otp validations



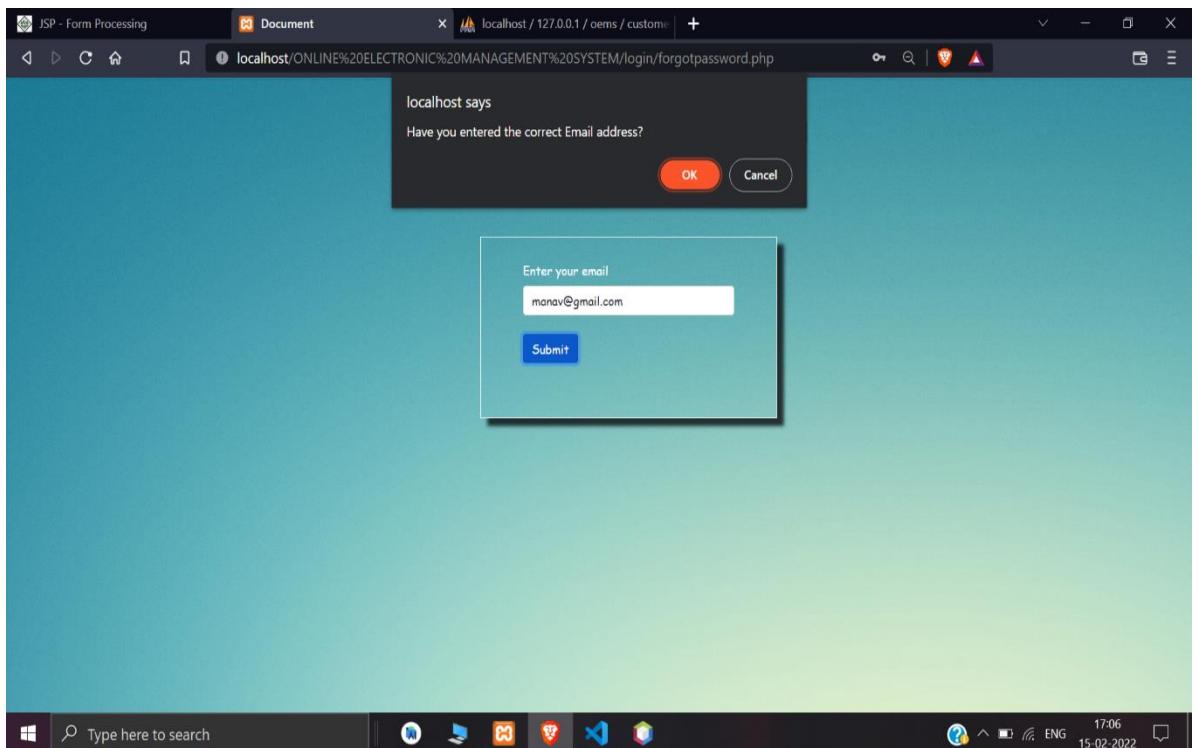
[Figure: Otp validations]

5.5.8 Forgot password page

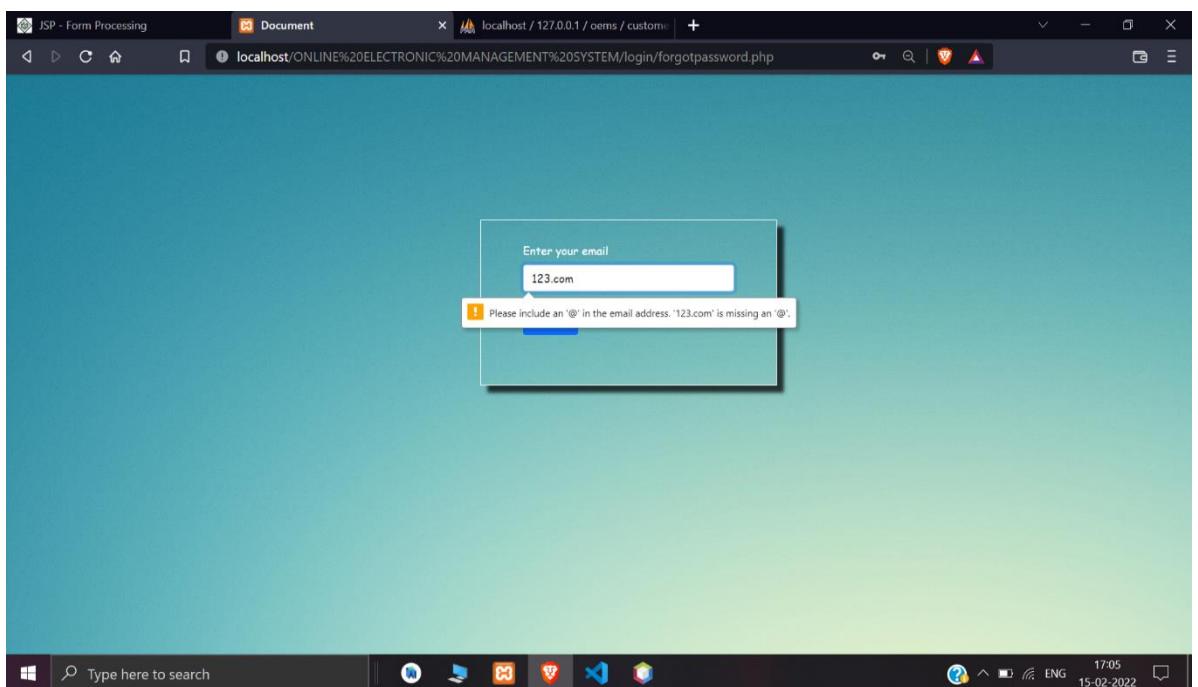


[Figure: Forgot password page]

5.5.9 Forgot password page validations

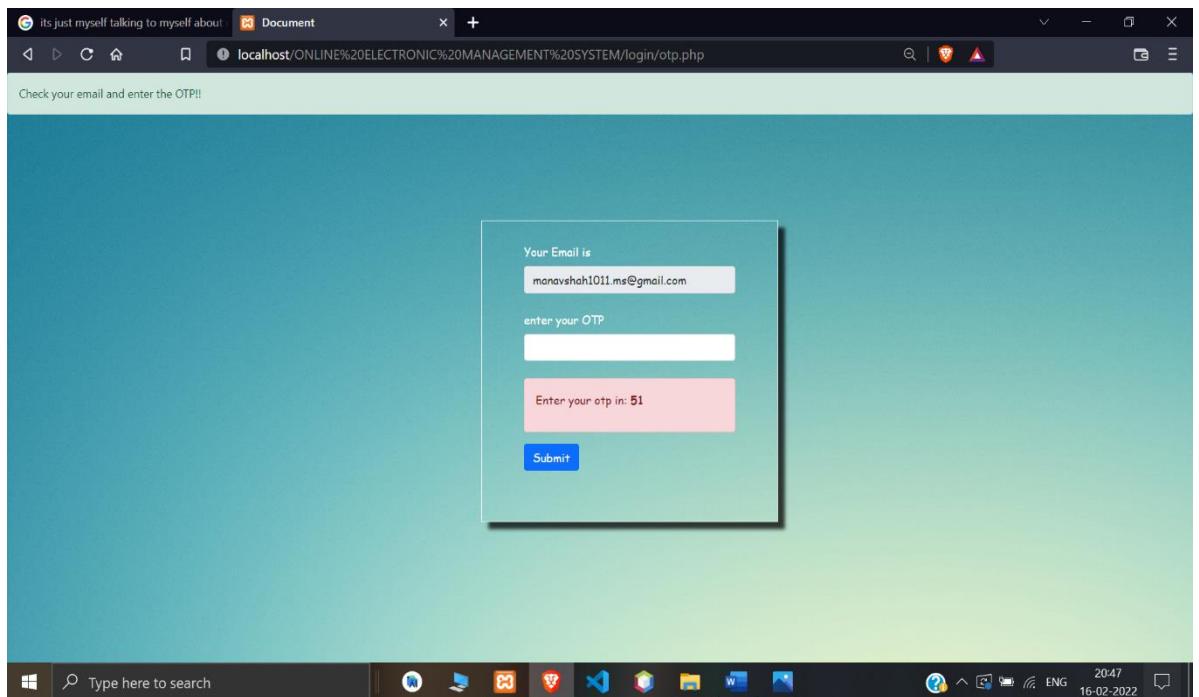


[Figure: Forgot password validations]



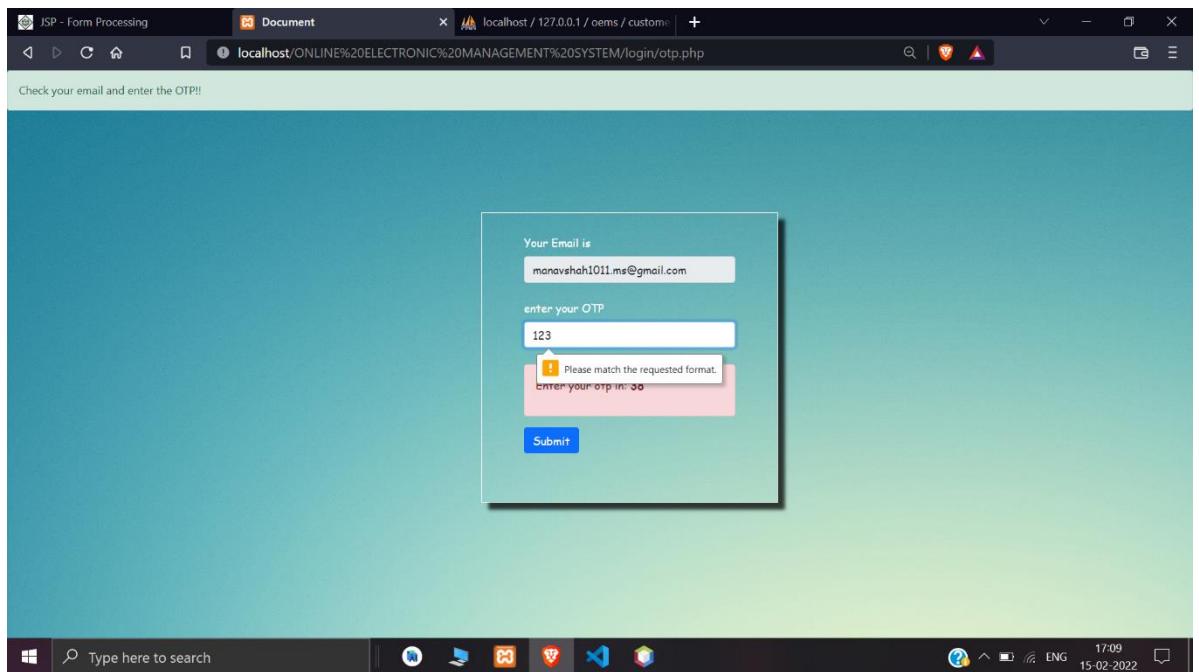
[Figure: Forgot password validations]

5.5.10 Enter otp for forgot password



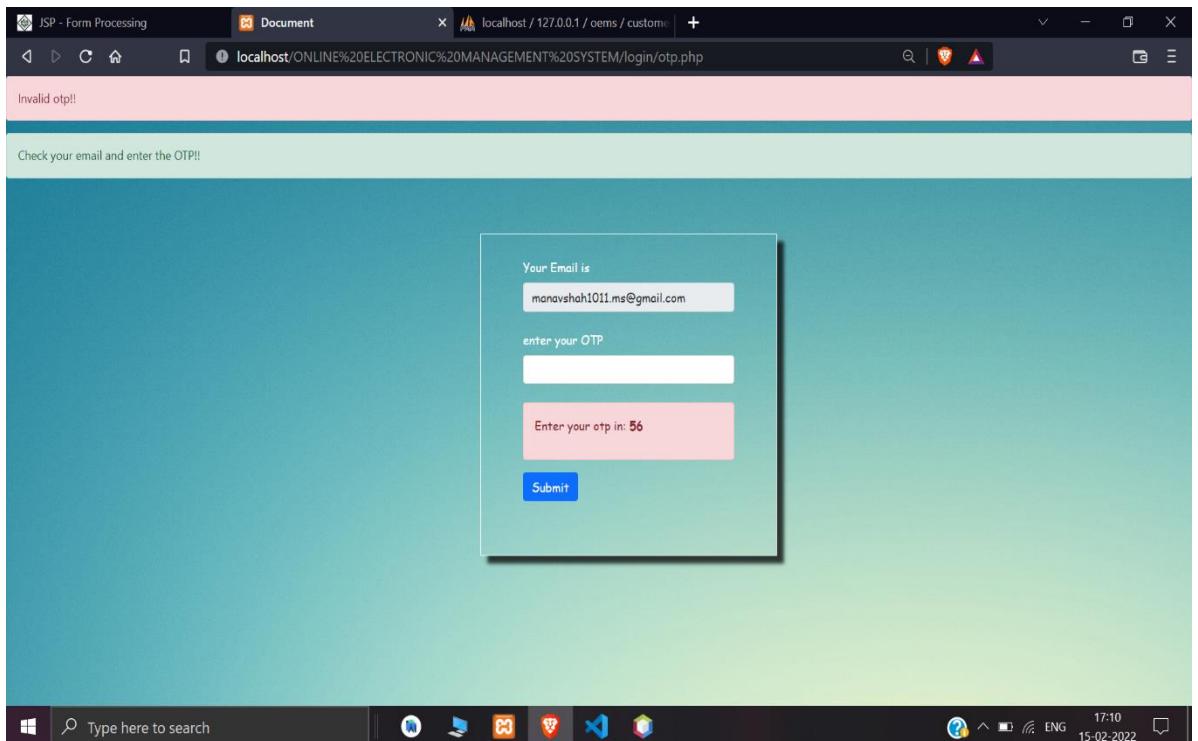
[Figure: Enter otp for forgot password]

5.5.11 Otp validation



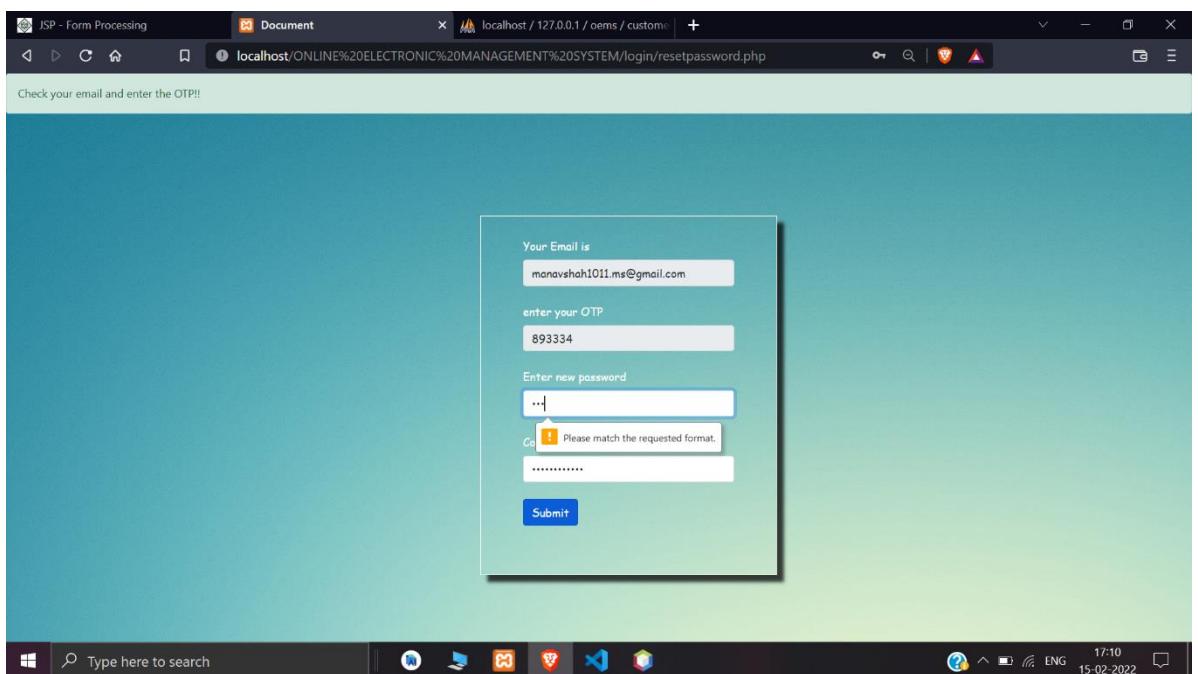
[Figure: Otp validations]

5.5.12 Invalid otp



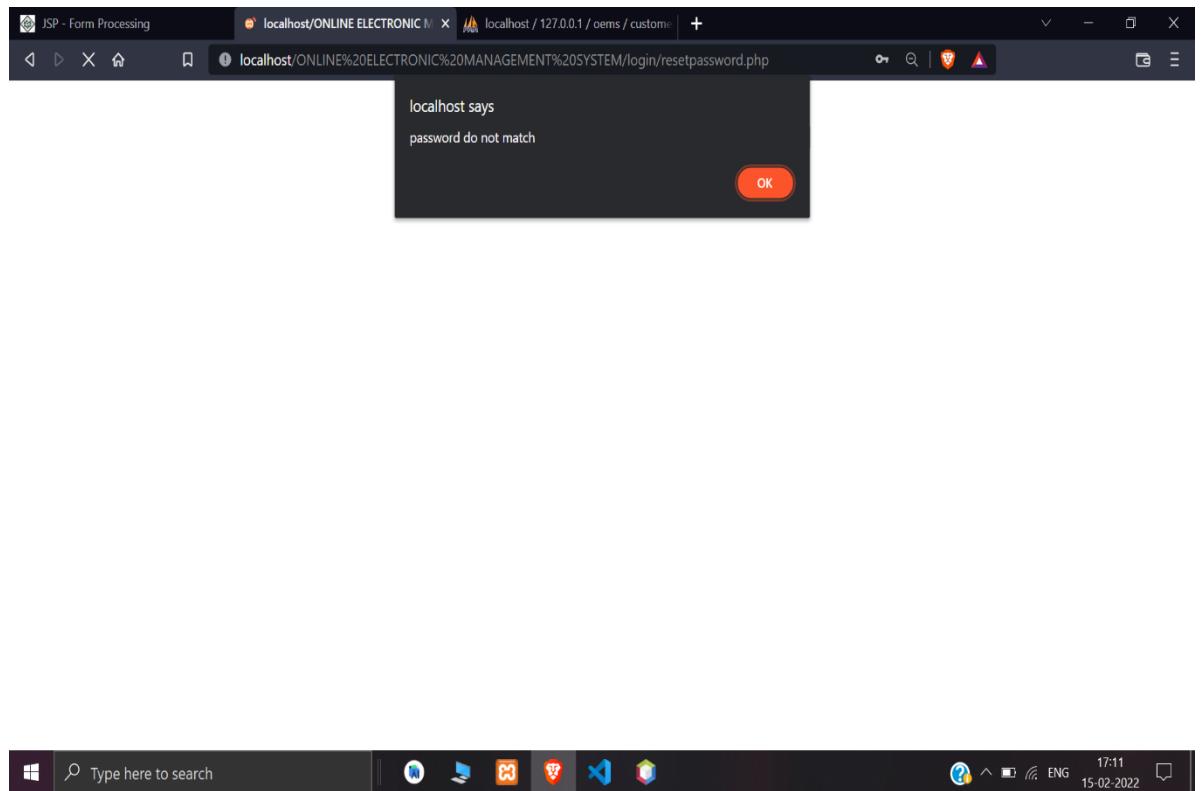
[Figure: Invalid otp]

5.5.13 Reset password



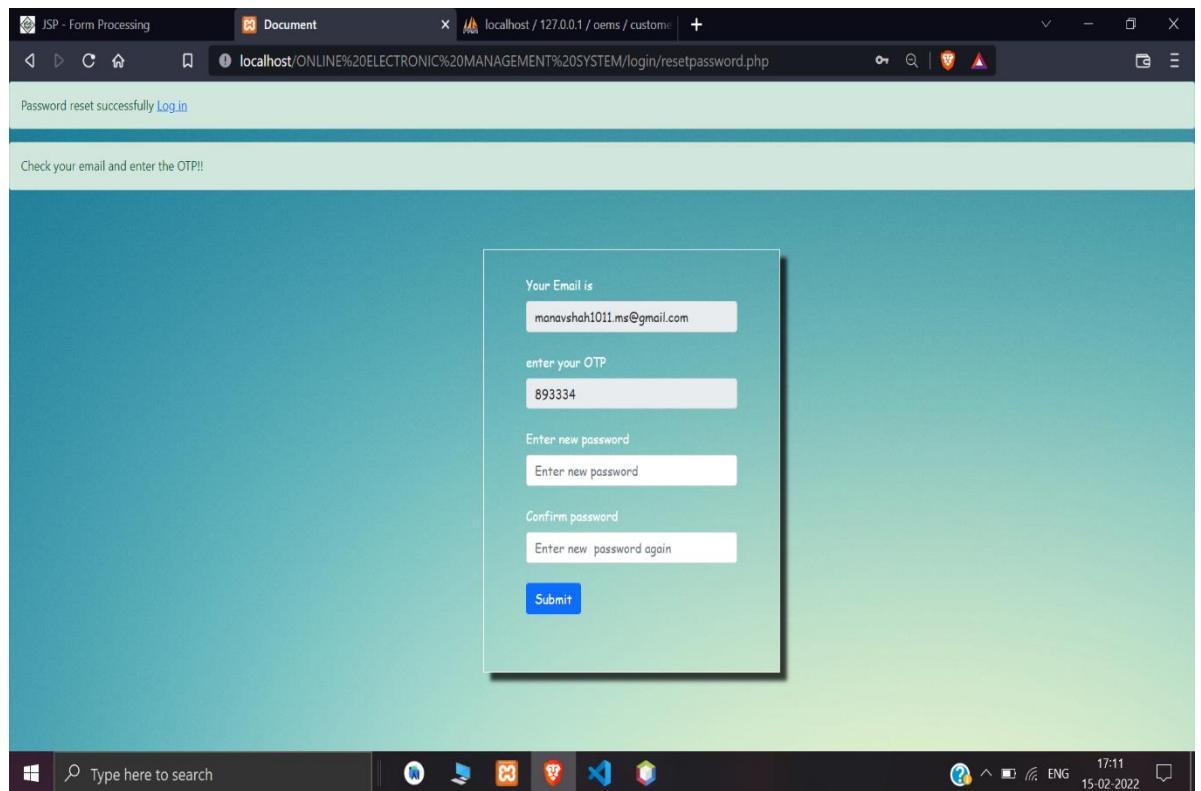
[Figure: Reset password]

5.5.14 Password do not match



[Figure: Password do not match]

5.5.15 Password reset successfully



[Figure: Password reset successfully]

5.5.16 Welcome page

The screenshot shows the mobileshop-e website's welcome page. At the top, there is a navigation bar with links for 'mobileshop-e', 'Log out', 'Search', 'Cart' (with 0 items), and a user profile for 'MANAV'. A prominent banner for the 'Galaxy Z Flip3 5G' is displayed, featuring four color variants of the phone. Below the banner, there is a section for Samsung phones, followed by a row of logos for various brands: realme, OnePlus, OPPO, SAMSUNG, vivo, Apple, MI, realme again, OnePlus again, and OPPO again. The main content area displays five mobile phones in a grid: Apple iPhone 13 Pro Max, Samsung Galaxy S20 Ultra, Vivo x70 Pro, Apple iPhone 12 Pro Max, and Samsung Galaxy Z Fold 3. Each phone has its name, price, and a brief description below it. Below each phone are 'Buy Now' and 'Add to cart' buttons, along with an 'Add to compare' button.

Phone Model	Price	Description	Action Buttons
Apple iPhone 13 pro max	129900	6GB RAM, A15 bionic, 12+12MP camera, 4352 mAh battery	Buy Now Add to cart Add to compare
Samsung Samsung galaxyS20 ultra	102990	Quad rear camera: 108MP, 12GB RAM 256GB internal, Android v10.0 operating system, Exynos 990 octa core processor, 5000 mAh battery.	Buy Now Add to cart Add to compare
Vivo x70 pro	46900	8 GB RAM, 128 GB ROM, 50MP + 12 MP + 12 MP + 8MP Rear camera, 32 MP front camera, 4450 mAh battery, mediatek dimensity 1200 processor.	Buy Now Add to cart Add to compare
Apple iPhone 12 Pro Max	119	Apple A14 Bionic 6 GB RAM 128 GB internal storage 3687 mAh battery Triple(12+12+12) MP rear, 12 MP Front Camera	Buy Now Add to cart Add to compare
Samsung Samsung Galaxy Z Fold 3	179	Qualcomm Snapdragon 888 12GB RAM 256 GB internal storage 4400 mAh battery Triple(12+12+12) MP rear, Dual(10+4) MP Front camera	Buy Now Add to cart Add to compare

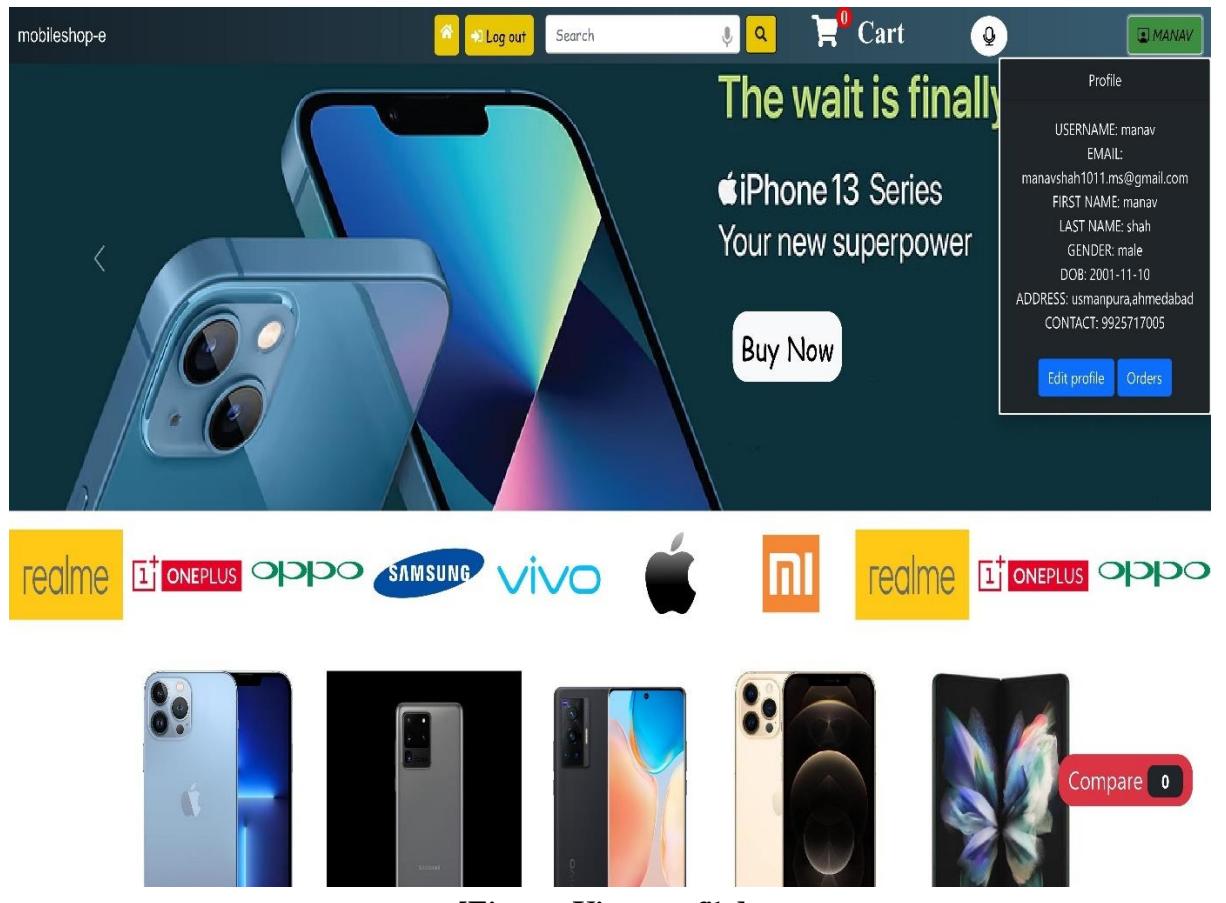
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The grid displays five student profiles:

- Dishant Gajera**
Enrollment No: 1963303075025
Institute: LJ POLYTECHNIC
Branch: COMPUTER ENGINEERING
Class: 5-A
- Dhruv Paliya**
Enrollment No: 196330307054
Institute: LJ POLYTECHNIC
Branch: COMPUTER ENGINEERING
Class: 5-A
- Kaxak Dobariya**
Enrollment No: 196330307512
Institute: LJ POLYTECHNIC
Branch: COMPUTER ENGINEERING
Class: 5-C
- Yuvrajsinh Rana**
Enrollment No: 196330307548
Institute: LJ POLYTECHNIC
Branch: COMPUTER ENGINEERING
Class: 5-C
- Manav Shah**
Enrollment No: 196330307556
Institute: LJ POLYTECHNIC
Branch: COMPUTER ENGINEERING
Class: 5-C

[Figure: Welcome page]

5.5.17 View profile



[Figure: View profile]

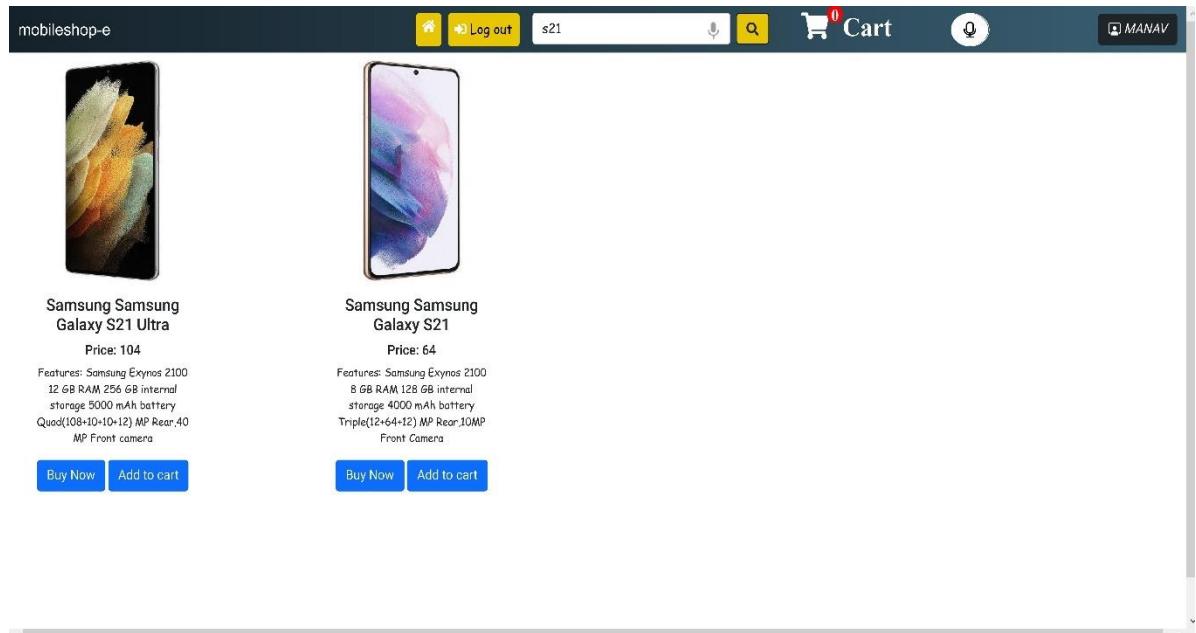
5.5.18 Edit profile

The screenshot shows a user profile page with the following details:

- Profile Picture:** A placeholder icon for a user named "manav".
- User Information:** manavshah1011.mn@gmail.com
- Personal Details Form:**
 - Username:** manav
 - Previous Password:** (redacted)
 - Confirm Password:** enter new password again...
 - Last Name:** shah
 - Date Of Birth:** 10-11-2001
 - Gender:** Male (radio button selected)
 - Email:** manavshah1011.mn@gmail.com
 - New Password:** enter new password...
 - First Name:** manav
 - Contact:** 9932717005
- Address:** usmanpura,ahmedabad
- Buttons:** Cancel, Update

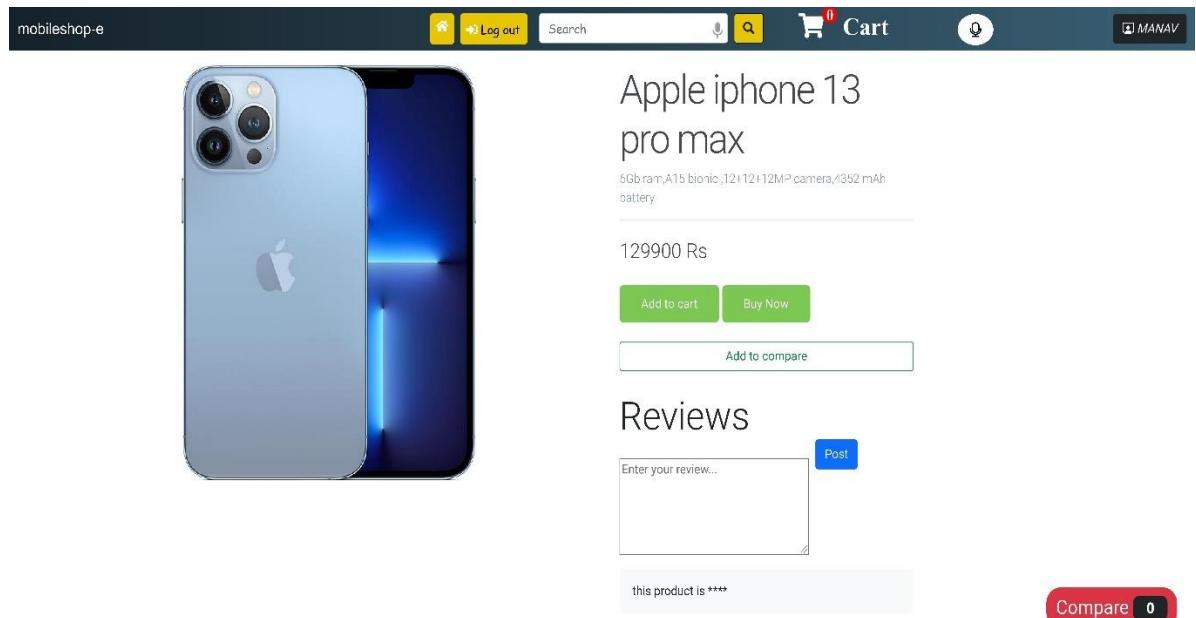
[Figure: Edit profile]

5.5.19 Search product



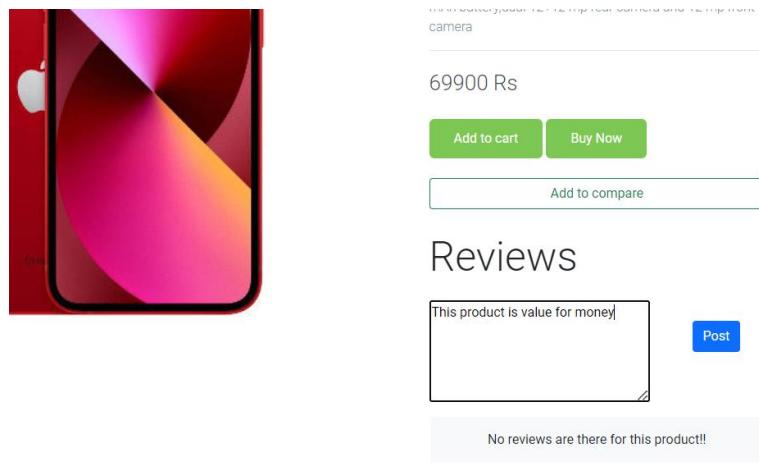
[Figure: Search product]

5.5.20 Product detail



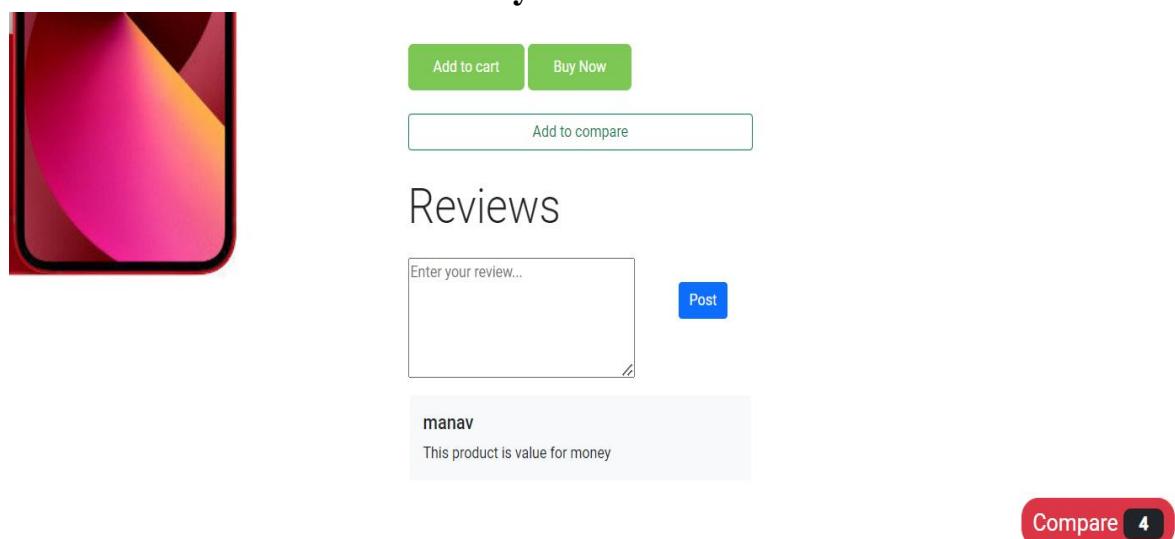
[Figure: Product detail]

5.5.21 Add review



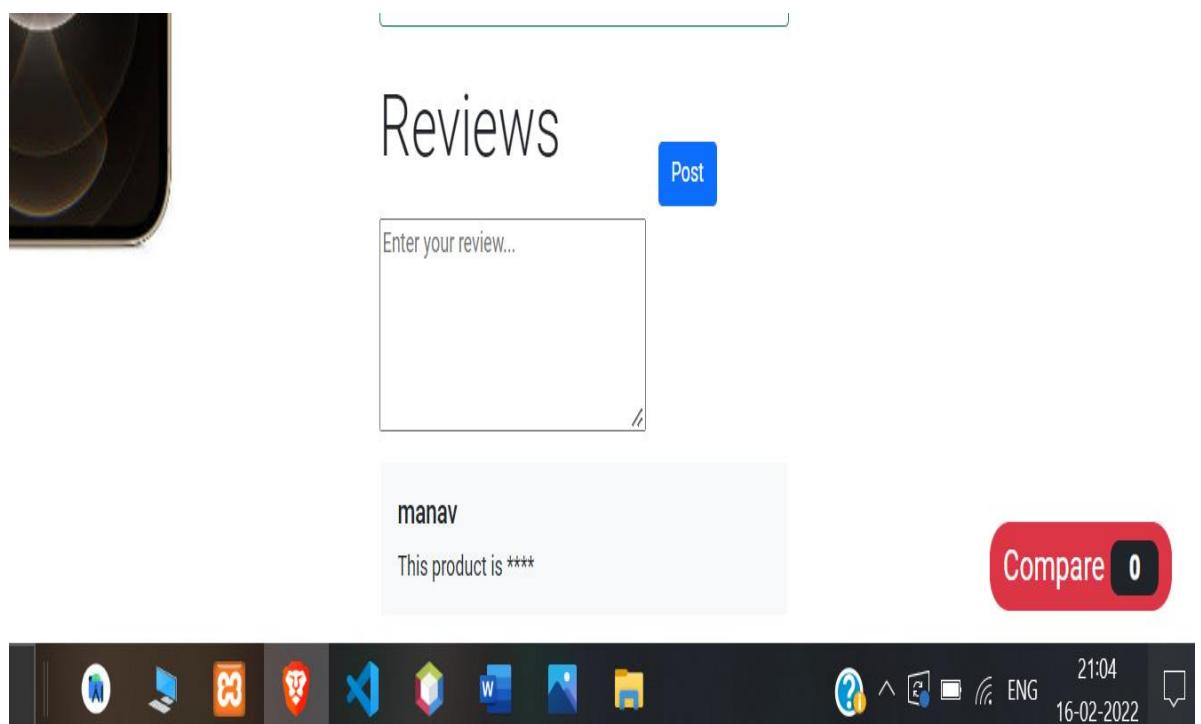
[Figure: Add review]

5.5.22 Review added successfully



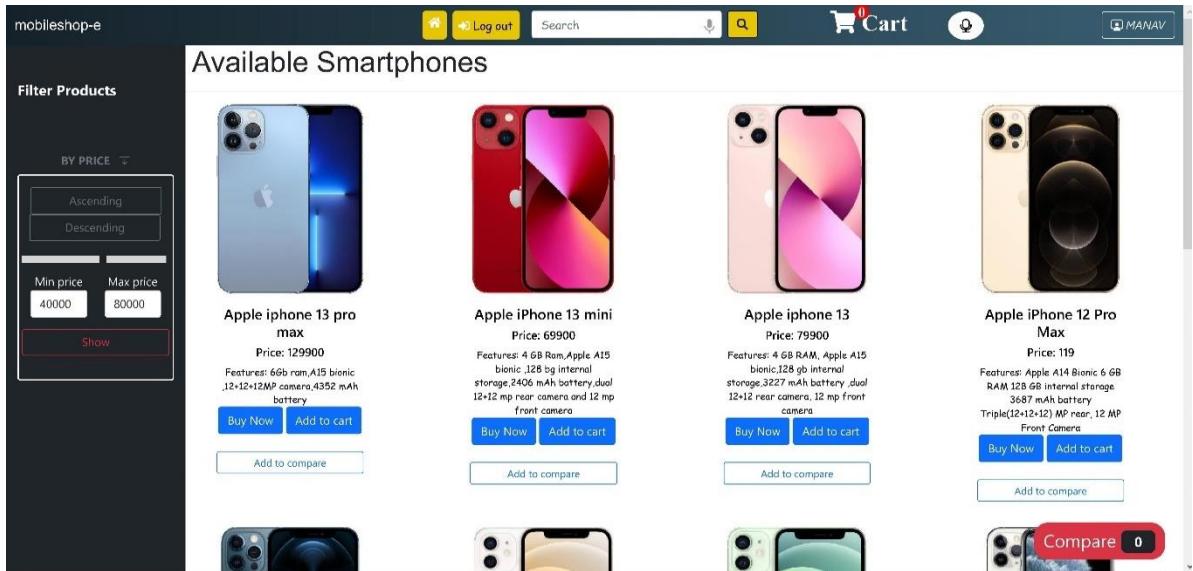
[Figure: Review added successfully]

5.5.23 Review validation for abusive words



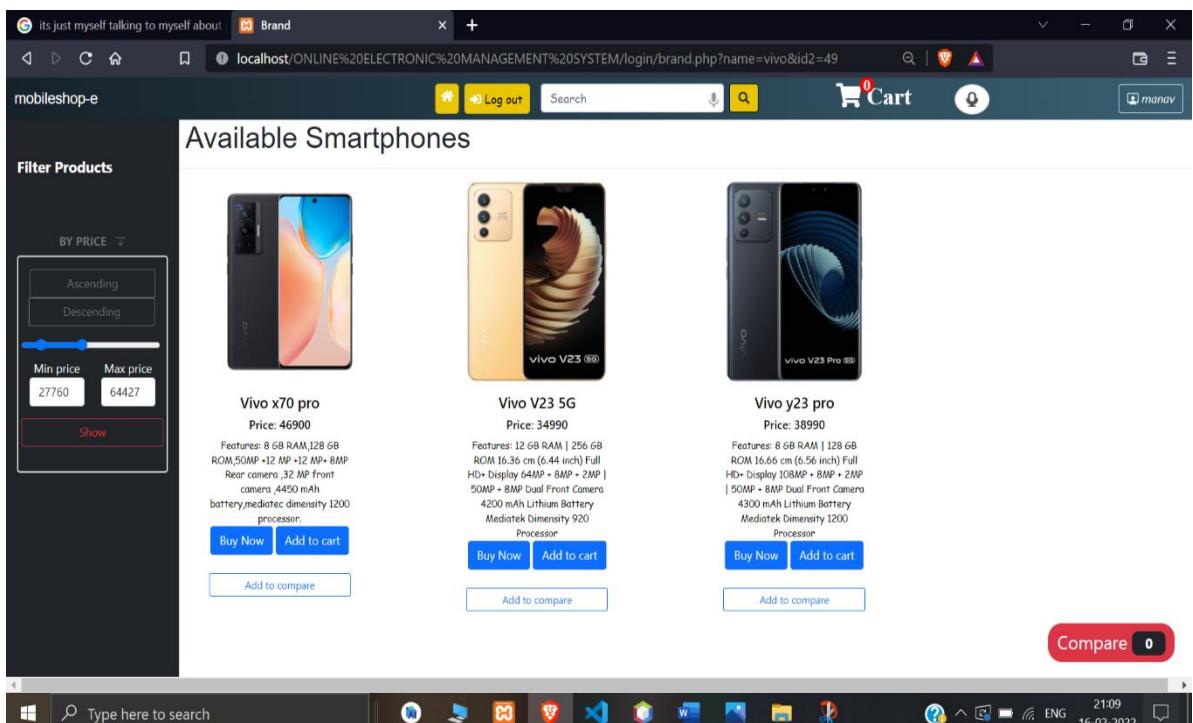
[Figure: Abusive review validations]

5.5.24 Products in different brands



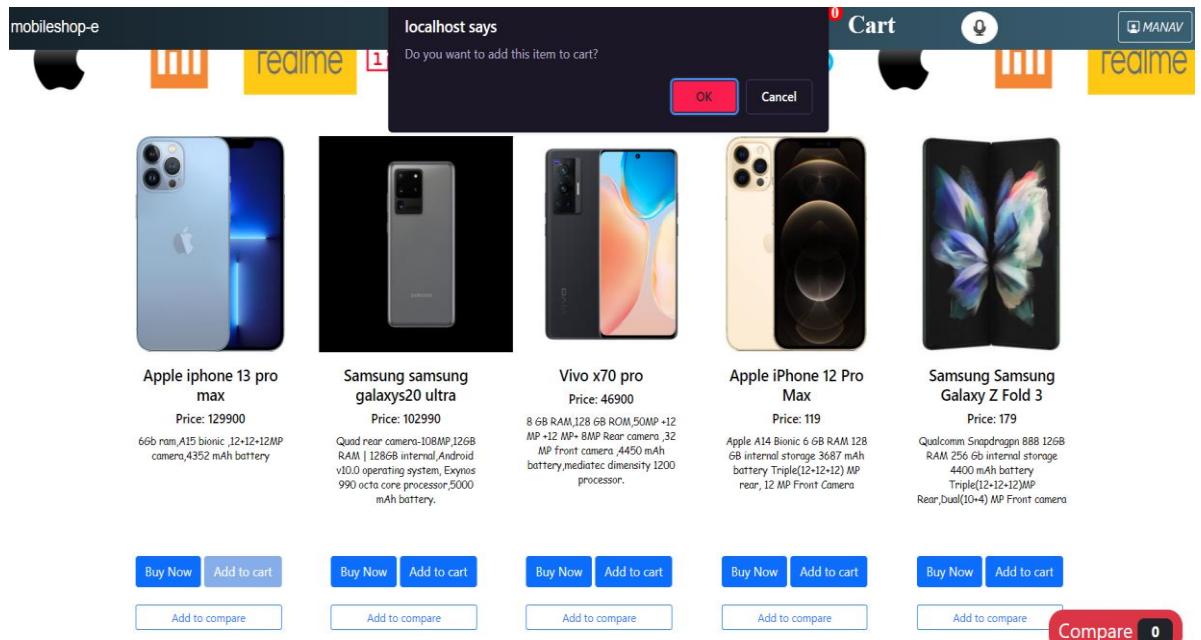
[Figure: Product by brand]

5.5.25 Filter products by price



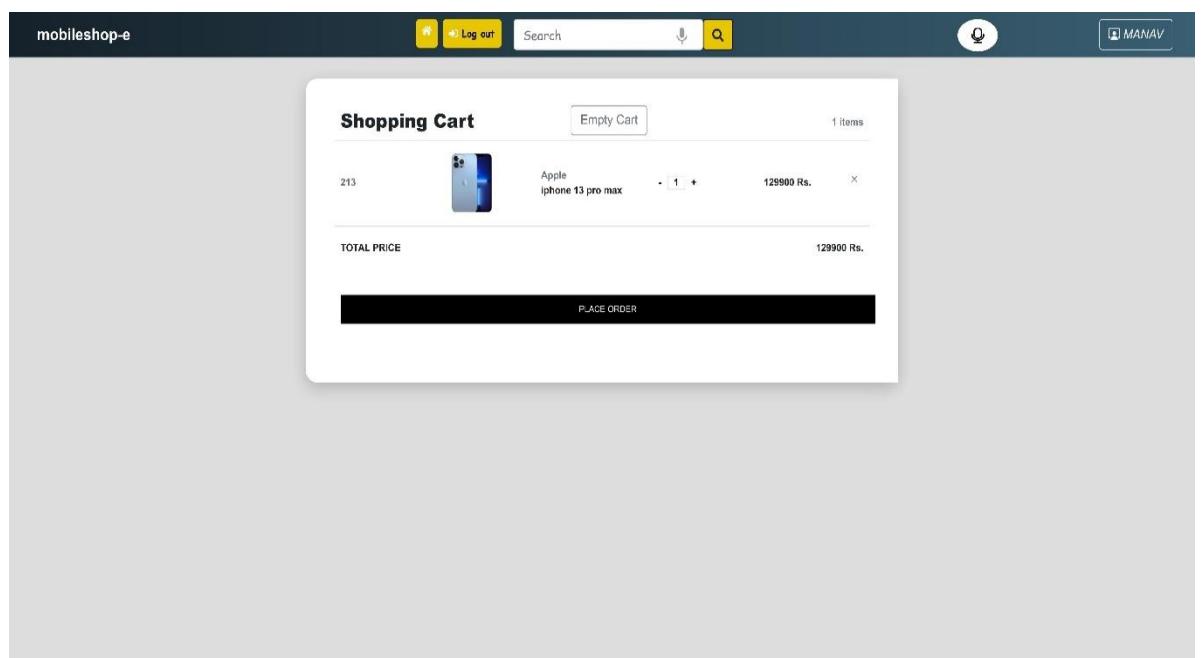
[Figure: Filter product]

5.5.26 Add to cart



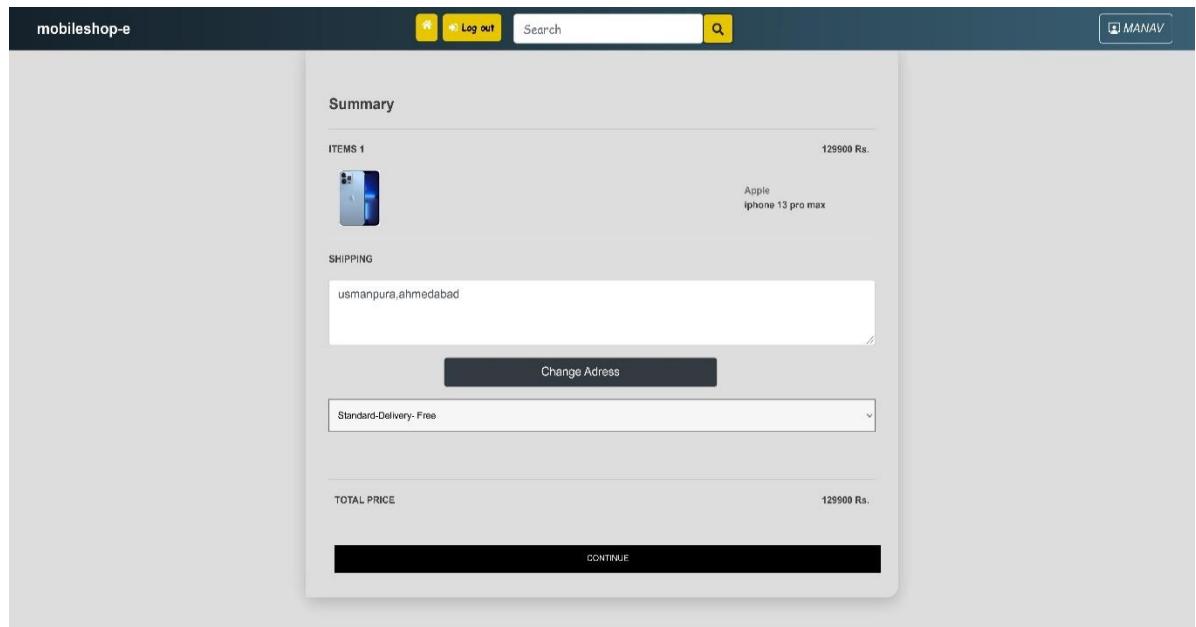
[Figure: Add to cart]

5.5.27 Open cart



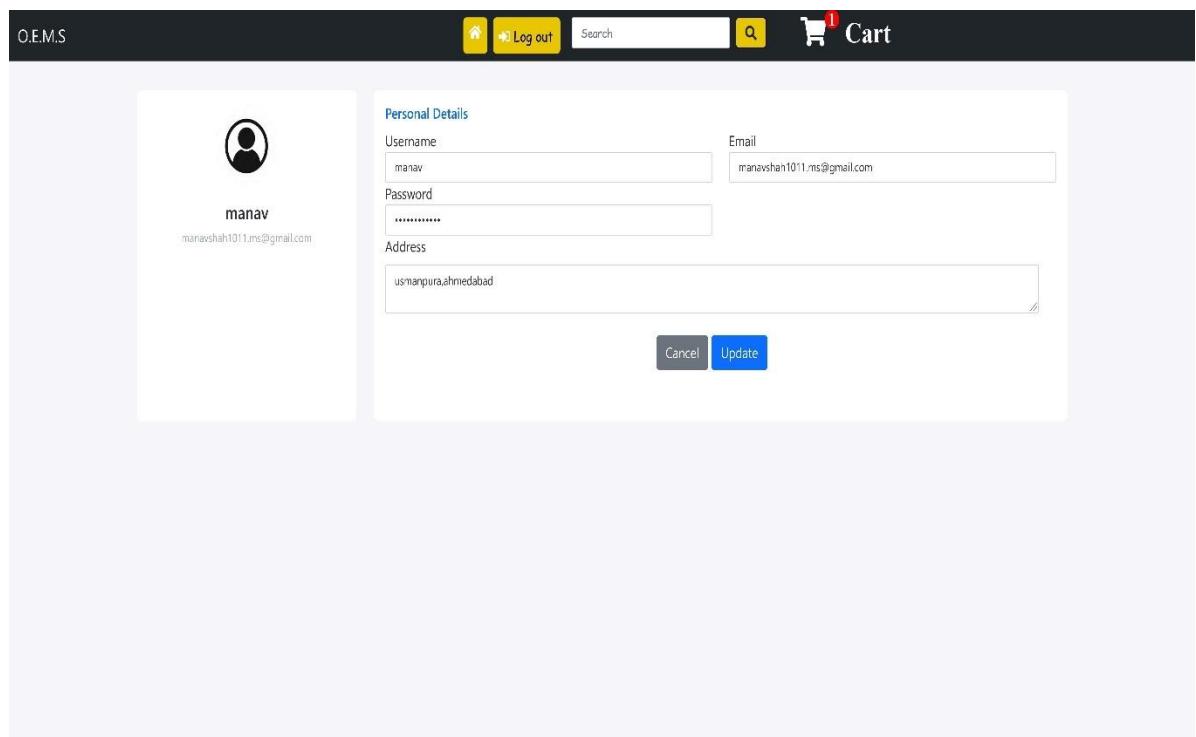
[Figure: Open cart]

5.5.28 Confirm order



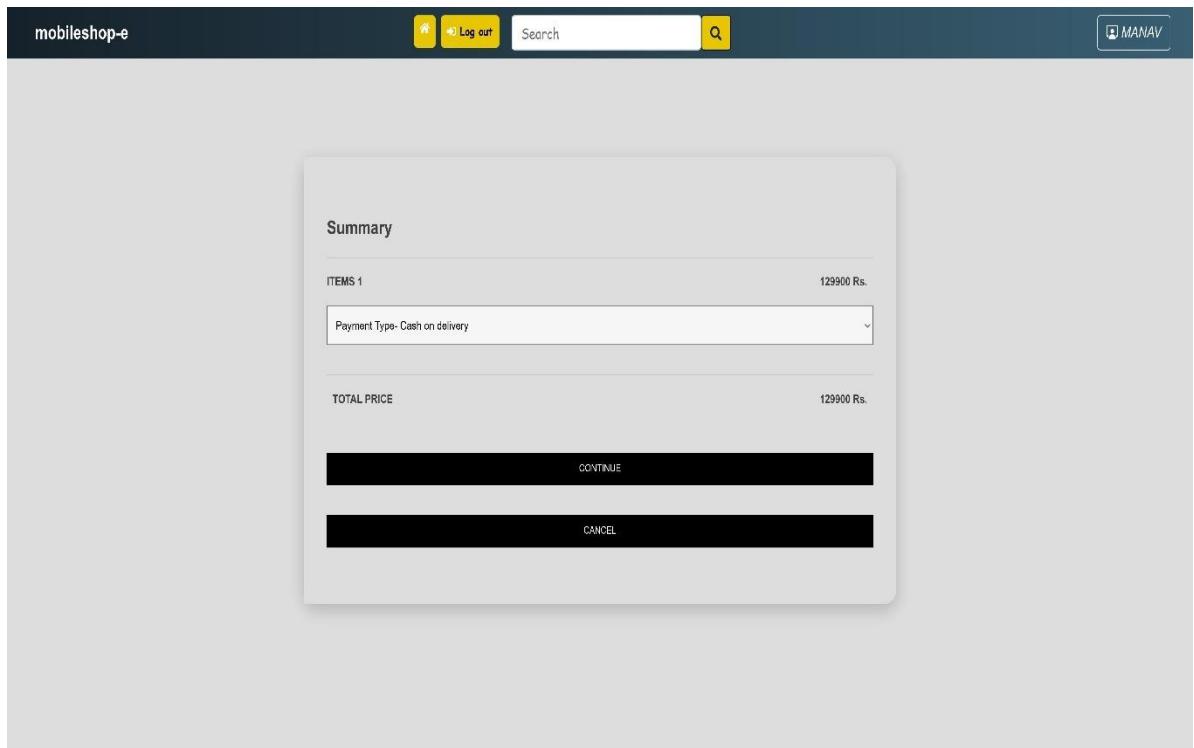
[Figure: Confirm order]

5.5.29 Change address for payment



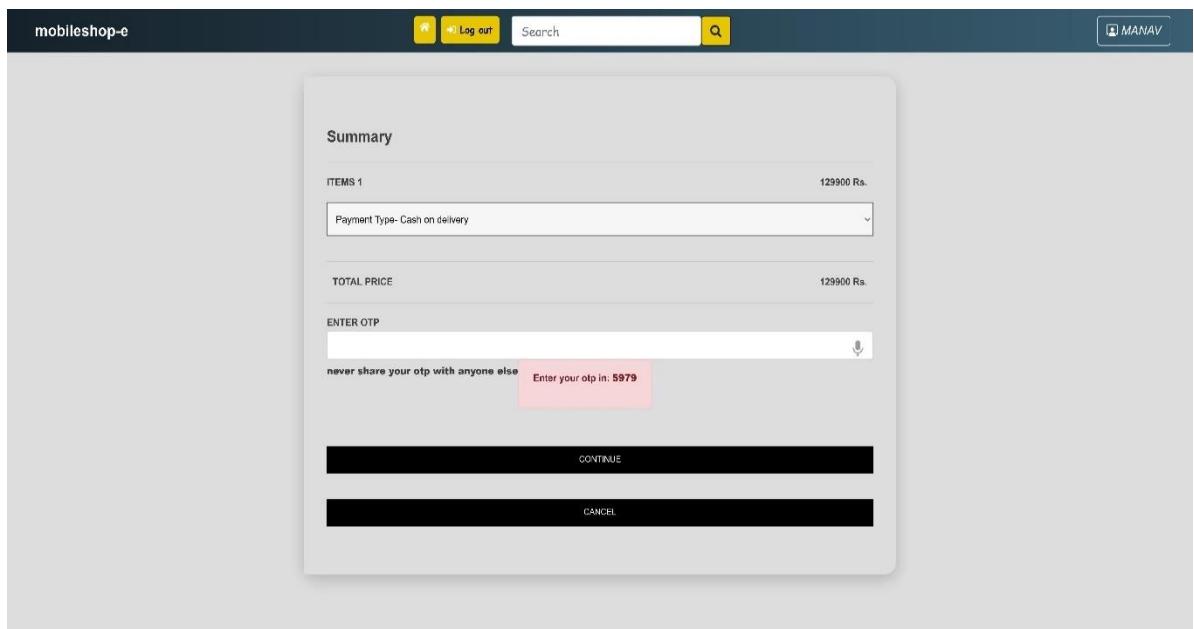
[Figure: Change address for payment]

5.5.30 Place order



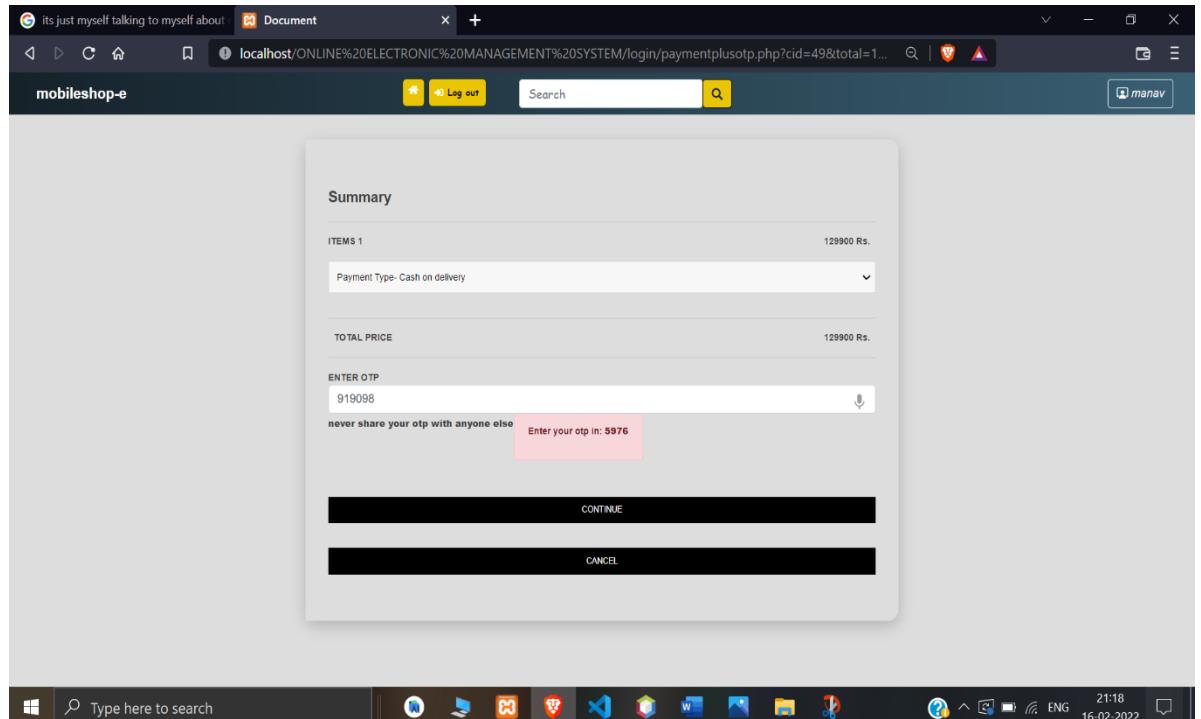
[Figure: Place order]

5.5.31 Confirm payment



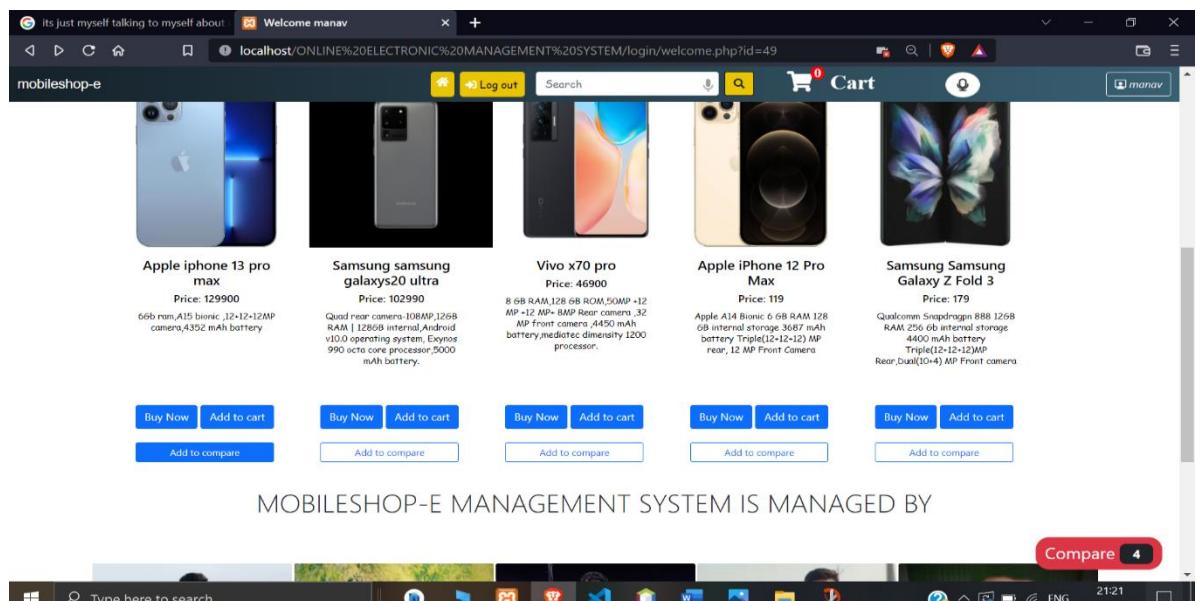
[Figure: Confirm payment]

5.5.32 Enter otp for payment



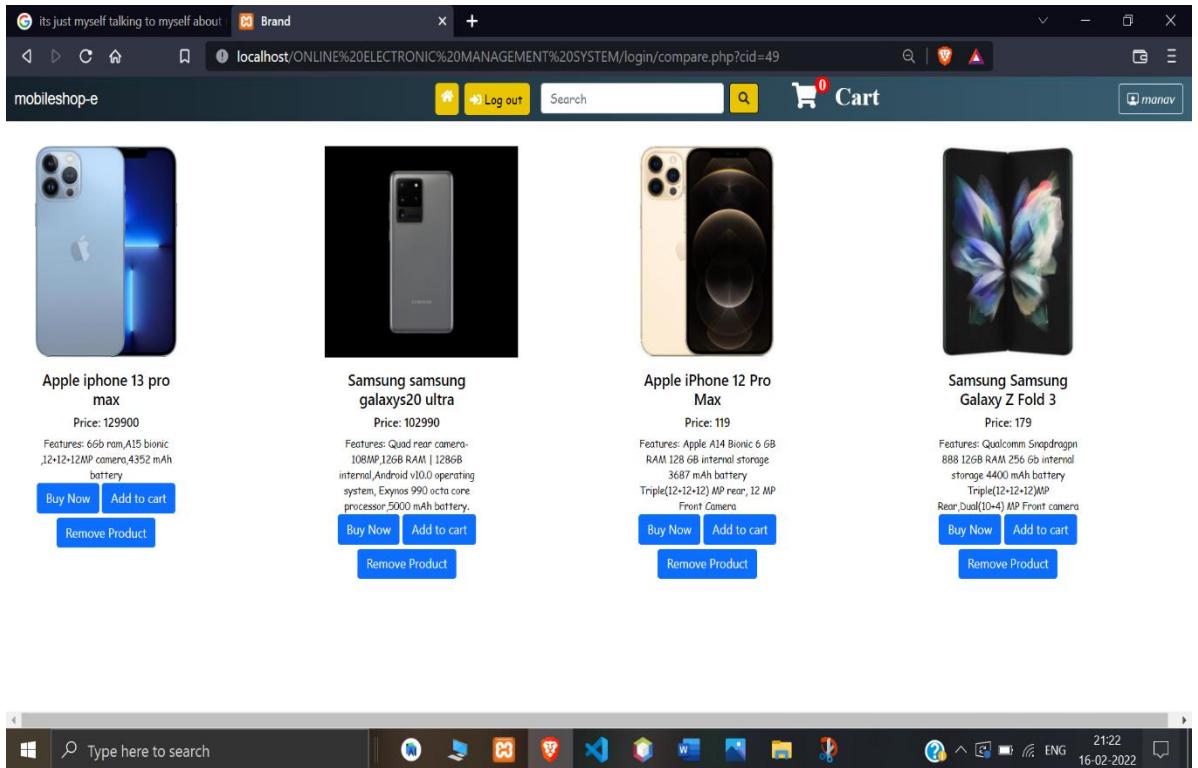
[Figure: Enter otp for payment]

5.5.33 Add to compare



[Figure: Add to compare]

5.5.34 Compare page



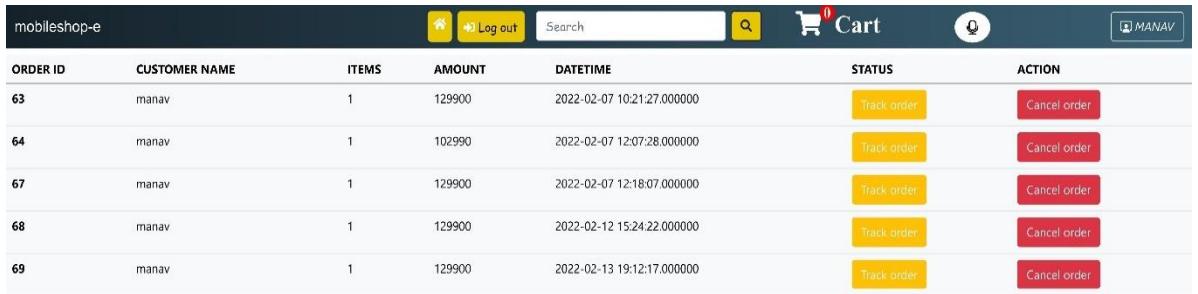
[Figure: Compare page]

5.5.35 Go to my orders page



[Figure: Go to my orders page]

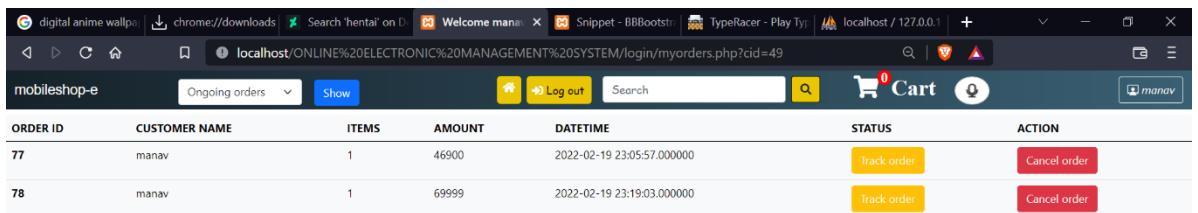
5.5.36 Go to my orders page



ORDER ID	CUSTOMER NAME	ITEMS	AMOUNT	DATETIME	STATUS	ACTION
63	manav	1	129900	2022-02-07 10:21:27.000000	<button>Track order</button>	<button>Cancel order</button>
64	manav	1	102990	2022-02-07 12:07:28.000000	<button>Track order</button>	<button>Cancel order</button>
67	manav	1	129900	2022-02-07 12:18:07.000000	<button>Track order</button>	<button>Cancel order</button>
68	manav	1	129900	2022-02-12 15:24:22.000000	<button>Track order</button>	<button>Cancel order</button>
69	manav	1	129900	2022-02-13 19:12:17.000000	<button>Track order</button>	<button>Cancel order</button>

[Figure: My orders page]

5.5.37 Ongoing orders

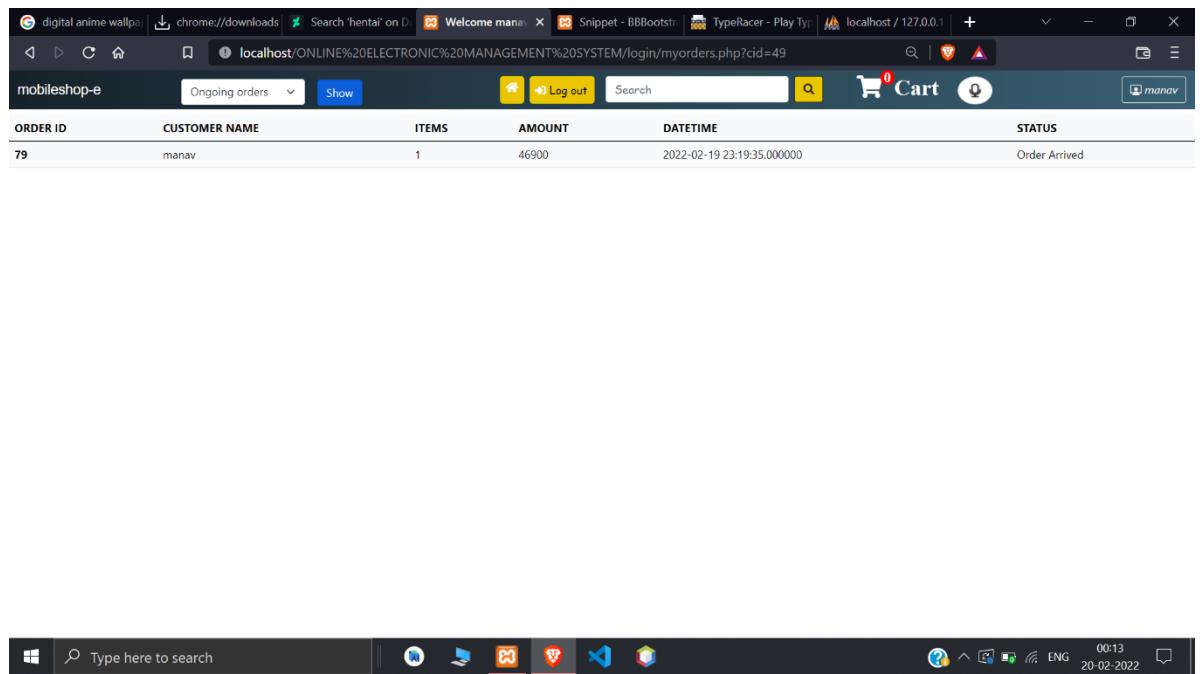


ORDER ID	CUSTOMER NAME	ITEMS	AMOUNT	DATETIME	STATUS	ACTION
77	manav	1	46900	2022-02-19 23:05:57.000000	<button>Track order</button>	<button>Cancel order</button>
78	manav	1	69999	2022-02-19 23:19:03.000000	<button>Track order</button>	<button>Cancel order</button>



[Figure: Ongoing orders]

5.5.38 Completed orders



[Figure: Completed orders]

5.5.39 Track order



[Figure: Track order]

5.5.40 Delete order

The screenshot shows a web-based application interface. On the left, there's a table titled "mobileshop-e" with columns "ORDER ID", "CUSTOMER NAME", and "ITEMS". It lists five orders from customer "manav". In the center, a modal window titled "localhost says" asks "Are you sure you want to delete this item?". On the right, a "Cart" section displays a table with columns "STATUS" and "ACTION". Each row in the cart table has two buttons: "Track order" (yellow) and "Cancel order" (red).

ORDER ID	CUSTOMER NAME	ITEMS
63	manav	1
64	manav	1
67	manav	1
68	manav	1
69	manav	1

Cart

STATUS	ACTION
Track order	Cancel order

[Figure: Delete order]

5.5.41 Logout for user

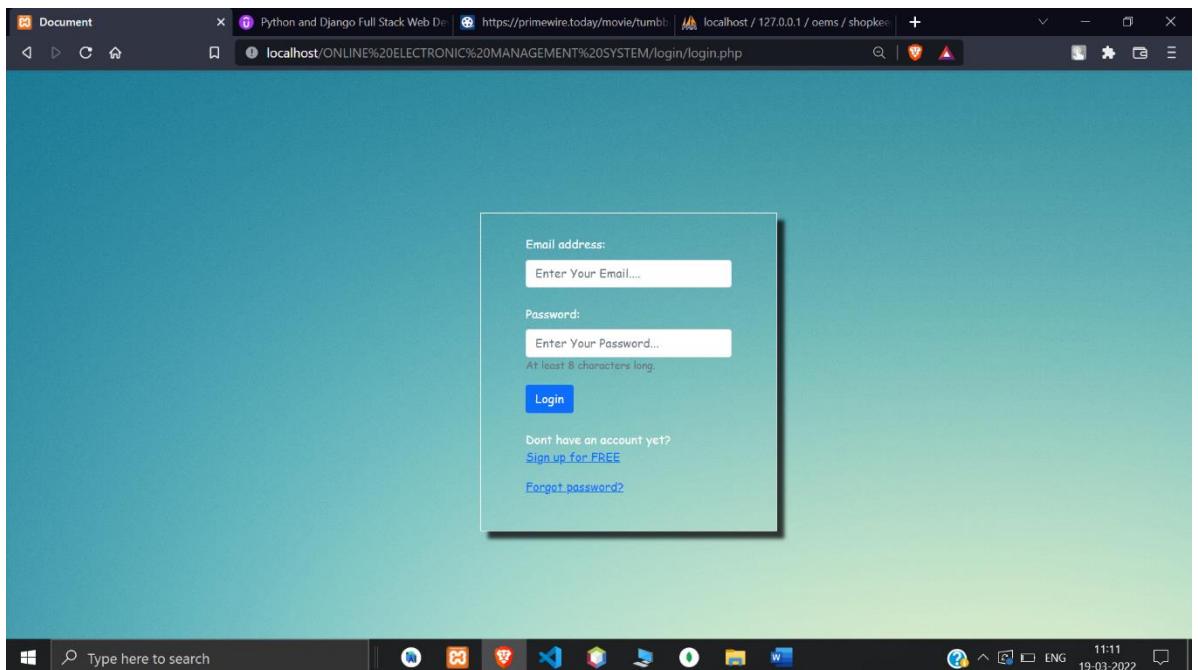
The screenshot shows a web-based application interface. A modal window titled "localhost says" asks "Do you want to logout?". Below the modal, there are several "Buy Now" and "Add to cart" buttons, and "Add to compare" buttons for different products.

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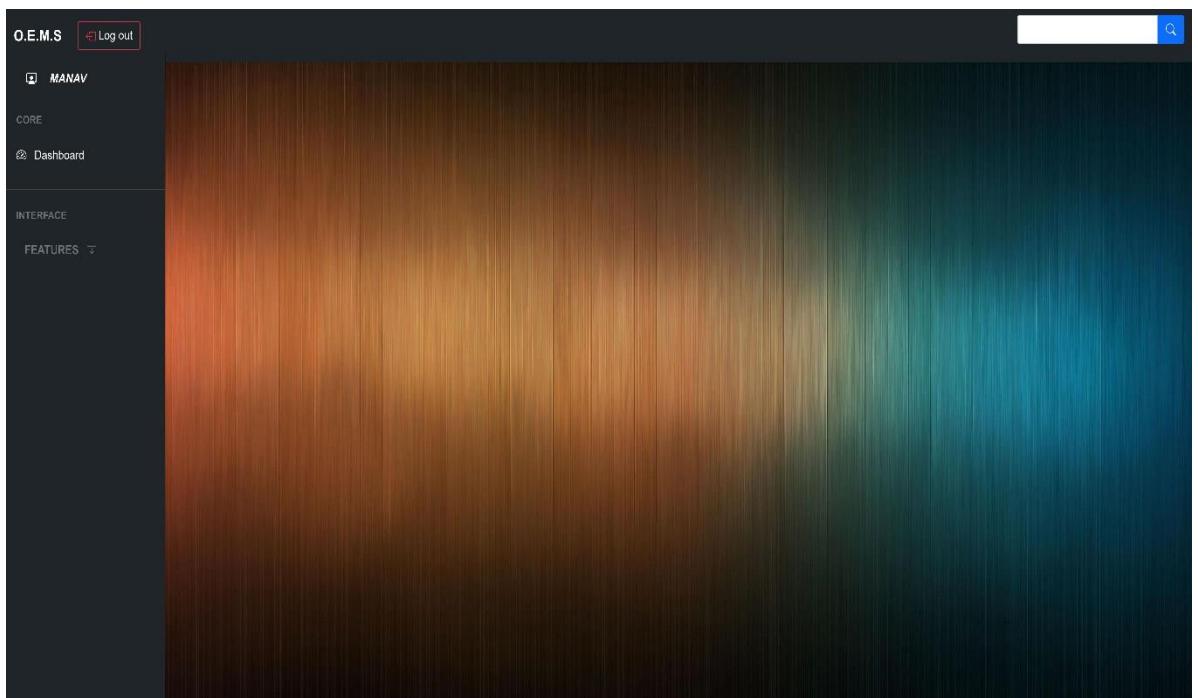
[Figure: Logout for user]

5.5.42 Admin login



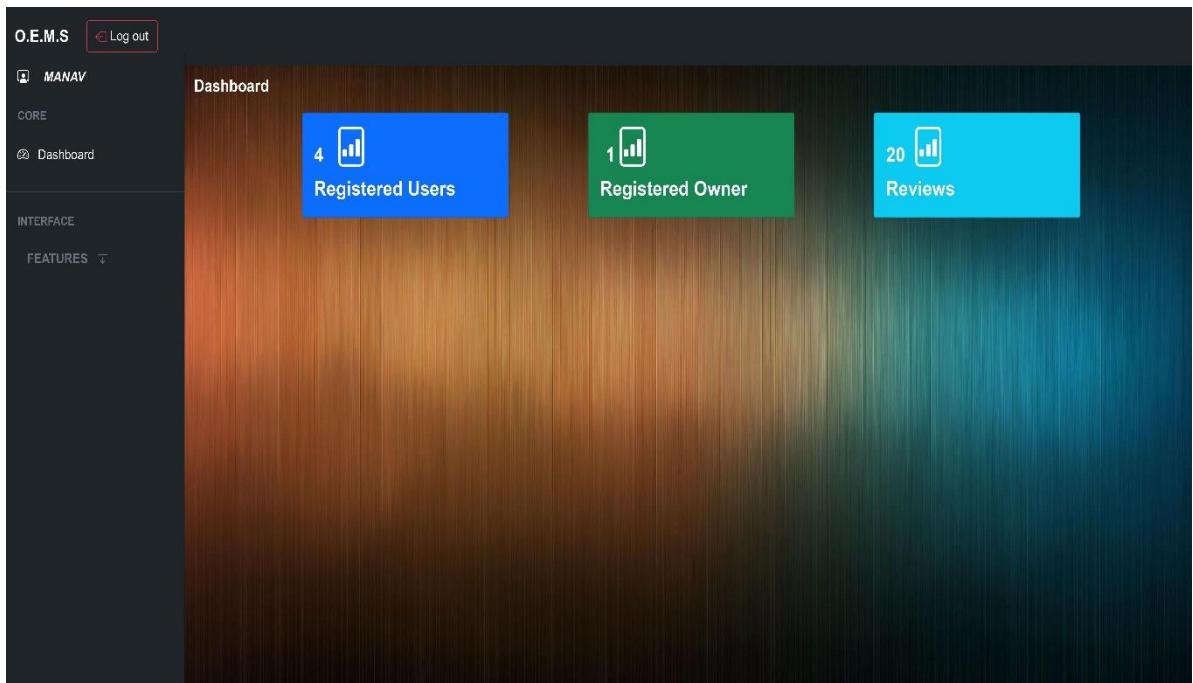
[Figure: Admin login]

5.5.43 Admin home page



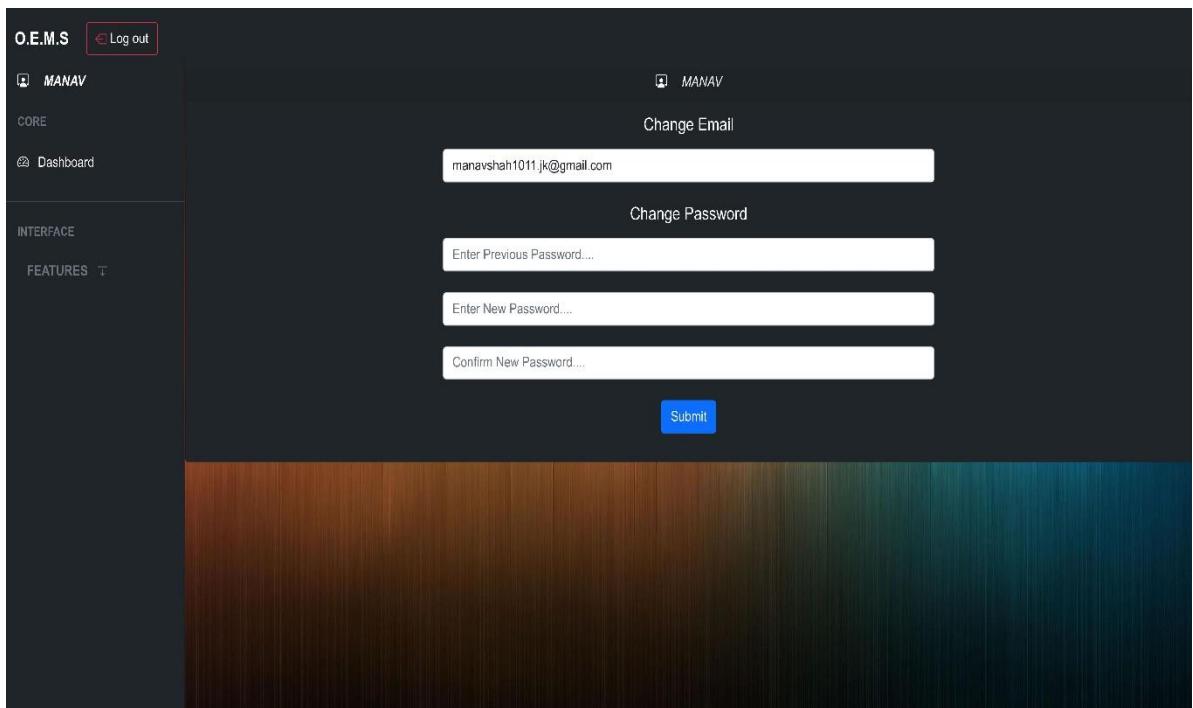
[Figure: Admin home page]

5.5.44 Admin dashboard



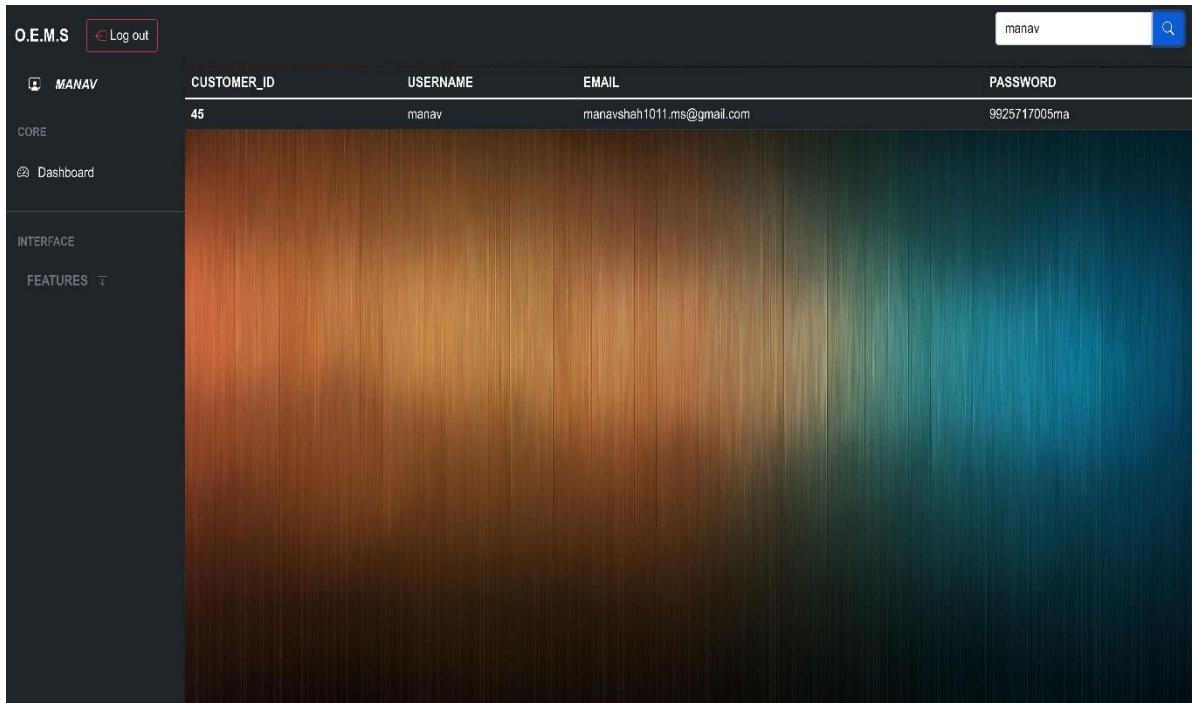
[Figure: Admin dashboard]

5.5.45 Change profile



[Figure: Change profile]

5.5.46 Search user



[Figure: Search user]

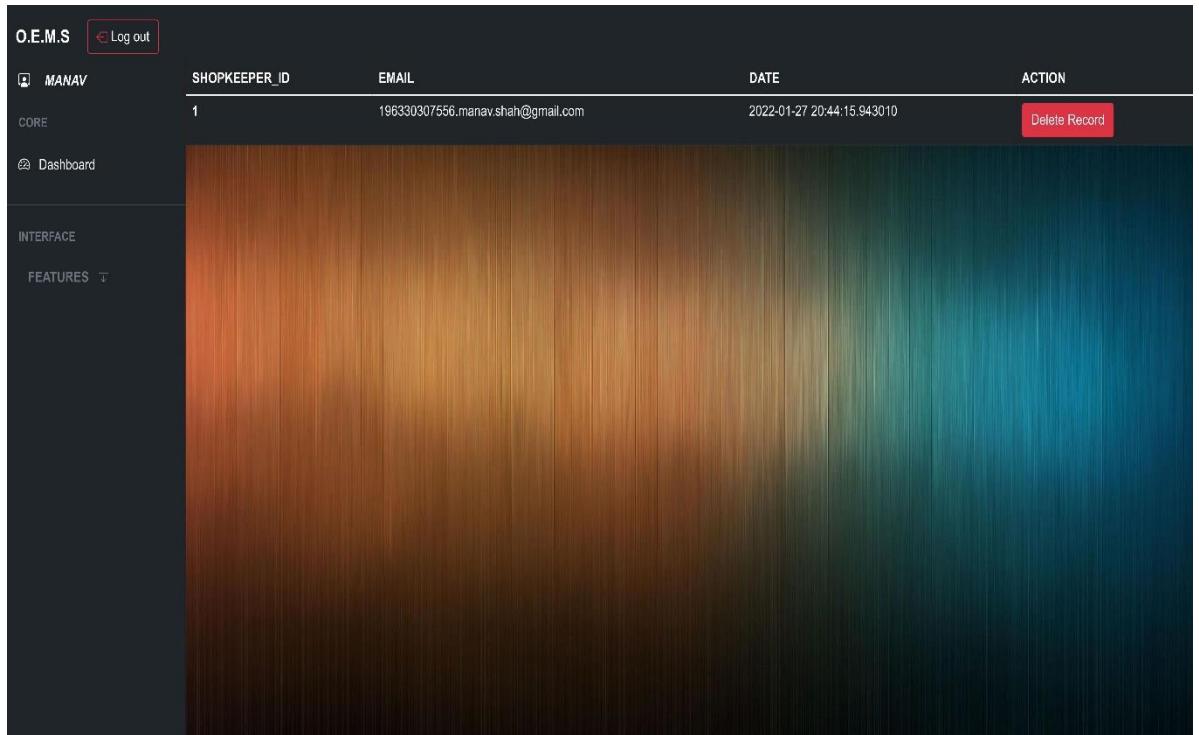
5.5.47 View users

The screenshot displays a list of four users: manav, kaxak, yuvraj, and harsh. Each user entry includes their CUSTOMER_ID, USERNAME, EMAIL, and DATE of creation. To the right of each entry are 'View details' and 'Delete Record' buttons.

CUSTOMER_ID	USERNAME	EMAIL	DATE	DETAILS	ACTION
45	manav	manavshah1011.ms@gmail.com	2022-02-02 14:49:12.975901	View details	Delete Record
46	kaxak	kaxakdodariya5112001@gmail.com	2022-01-29 10:11:37.000000	View details	Delete Record
47	yuvraj	yuvrajrana2014@gmail.com	2022-01-29 10:31:03.000000	View details	Delete Record
48	harsh	hrshshah27@gmail.com	2022-02-01 15:33:00.000000	View details	Delete Record

[Figure: View users]

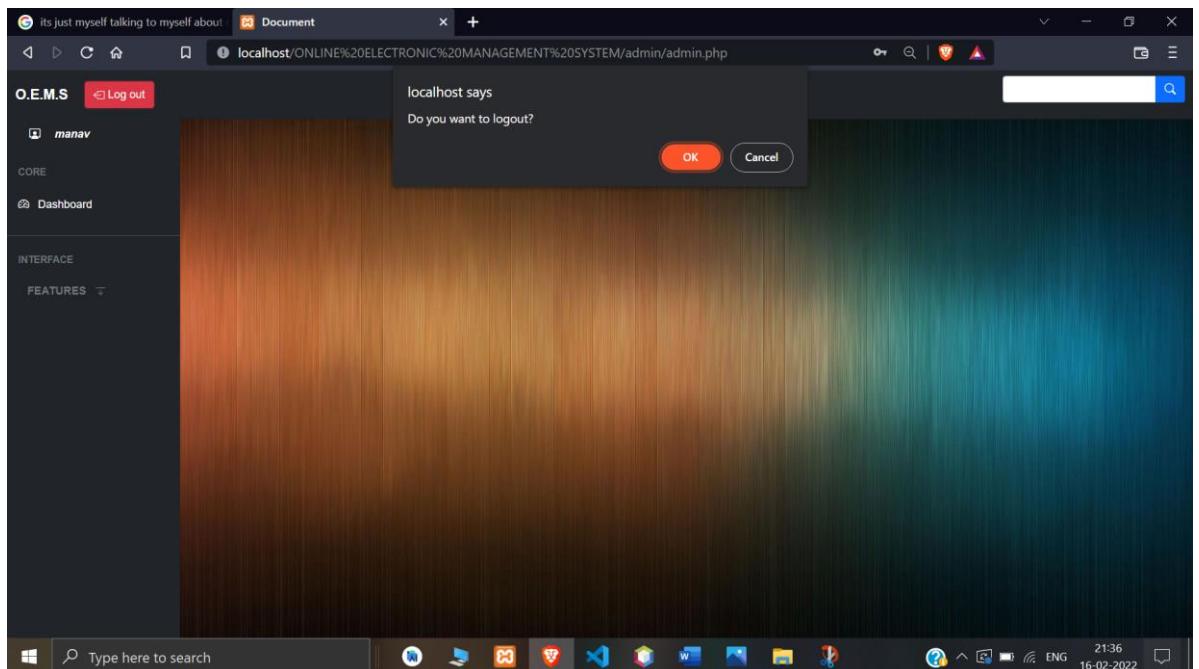
5.5.48 View shopkeeper



SHOPKEEPER_ID	EMAIL	DATE	ACTION
1	196330307556.manav.shah@gmail.com	2022-01-27 20:44:15.943010	<button>Delete Record</button>

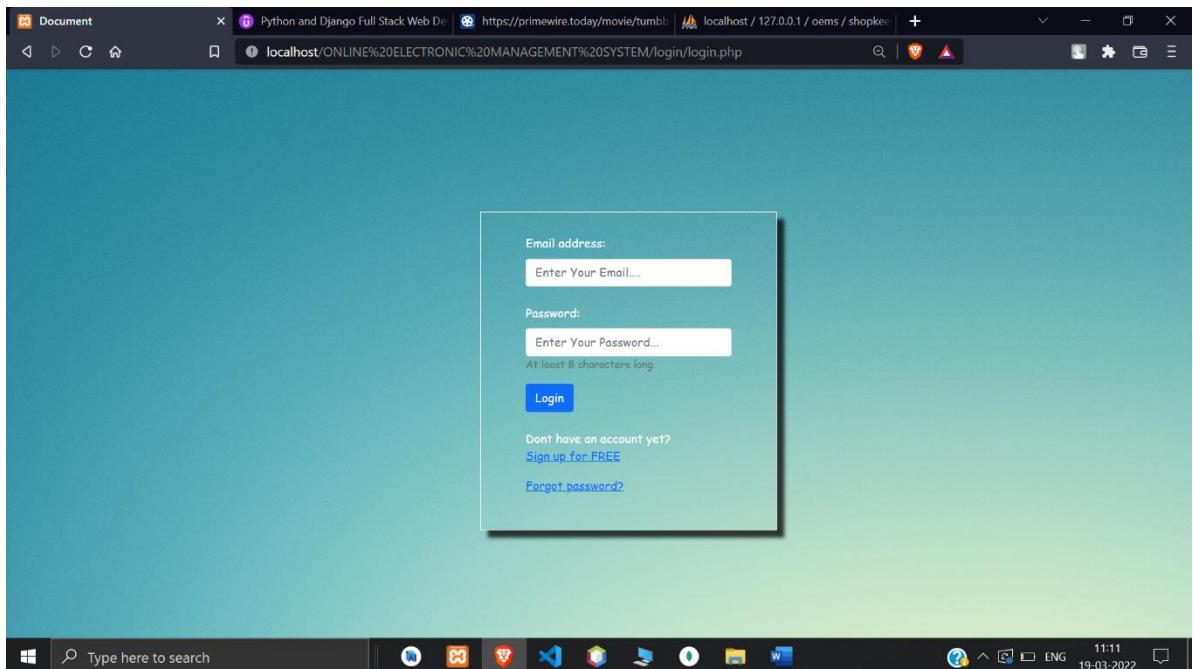
[Figure: View shopkeeper]

5.5.49 Logout for admin



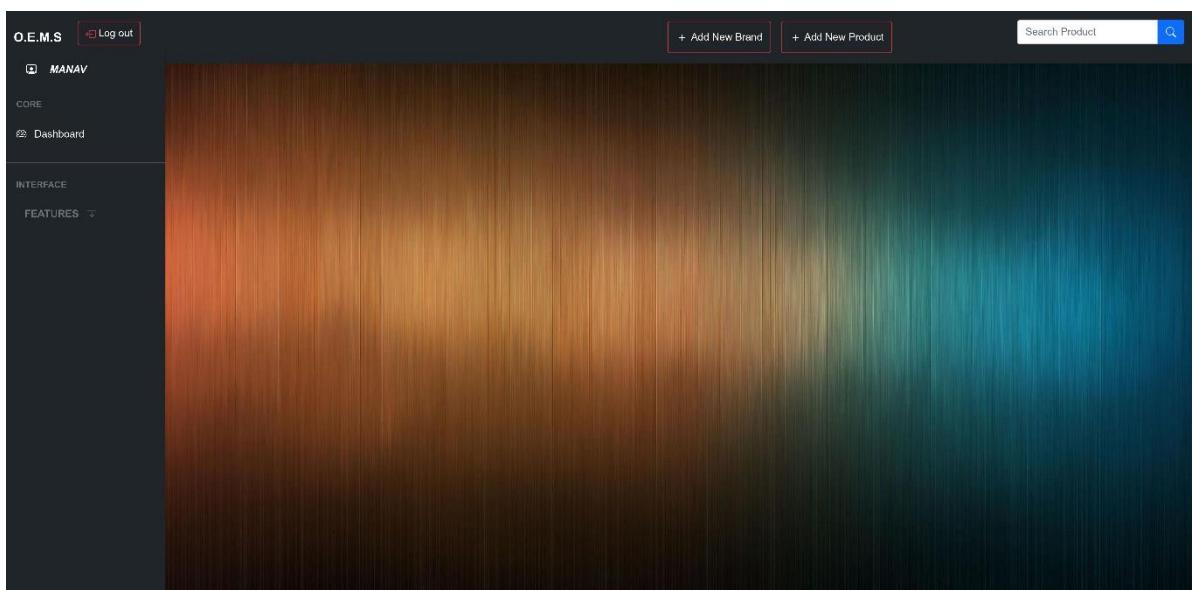
[Figure: Logout for admin]

5.5.50 Shopkeeper login



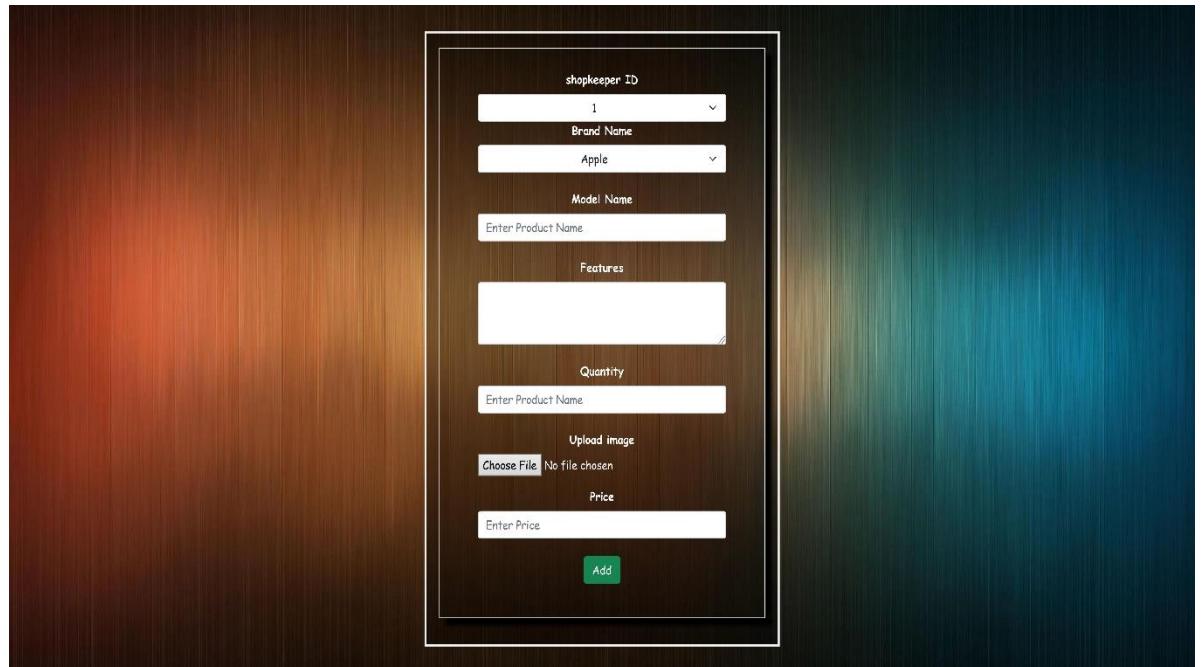
[Figure: Shopkeeper login]

5.5.51 Shopkeeper home



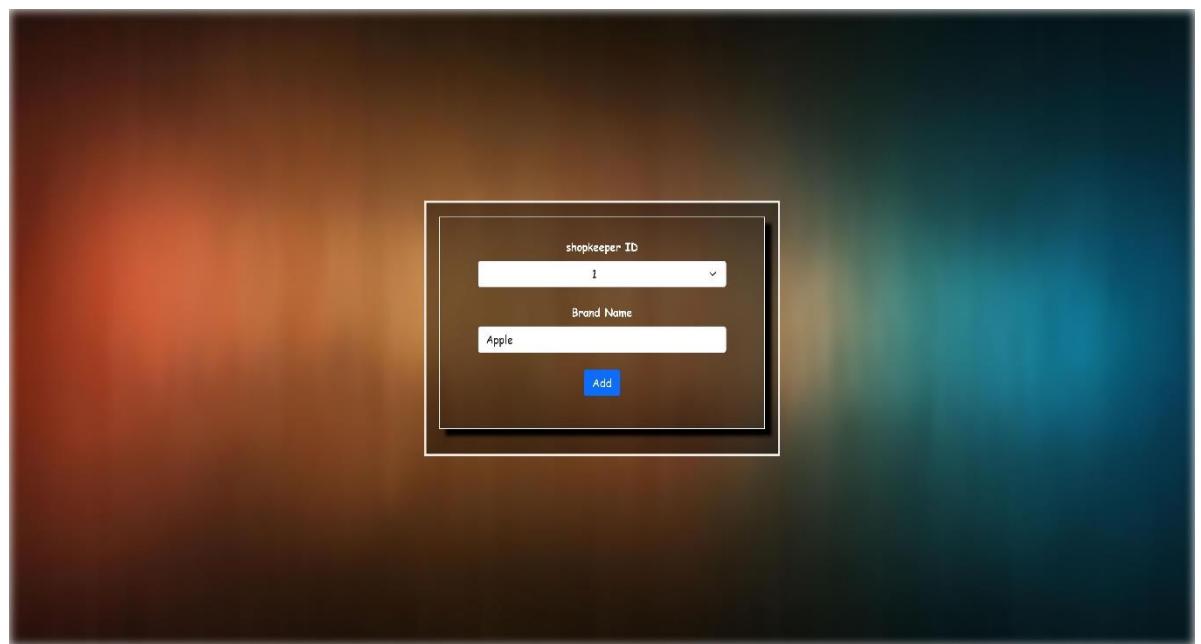
[Figure: Shopkeeper home]

5.5.52 Add product



[Figure: Add product]

5.5.53 Add brand



[Figure: Add brand]

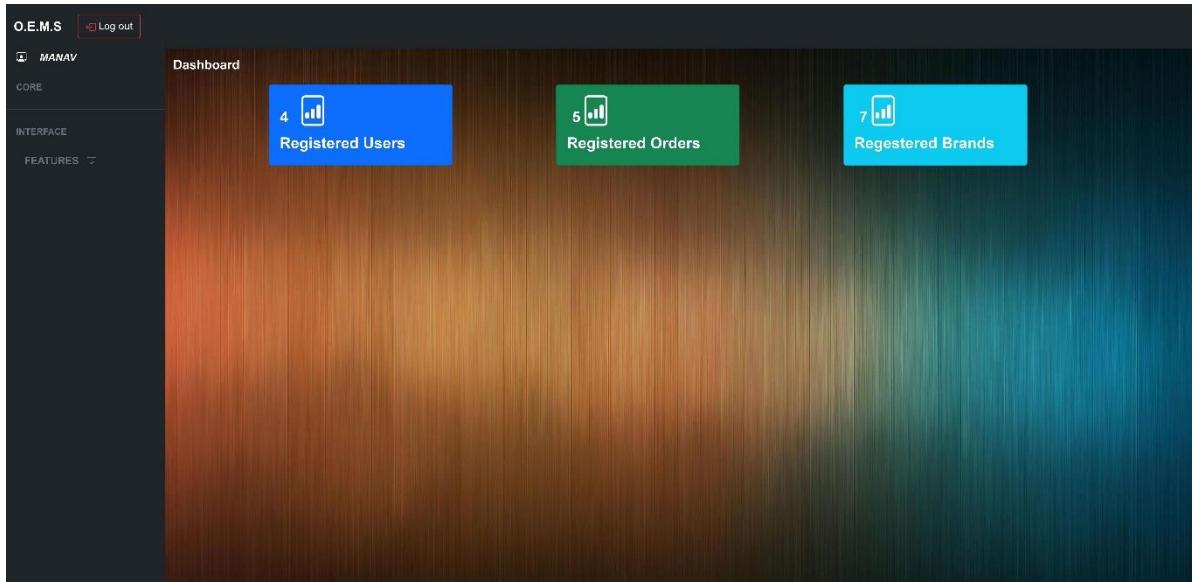
5.5.54 Search product

The screenshot shows a search results page for 'iphone 13'. The table has columns: PRODUCT ID, BRAND NAME, MODEL NAME, IMAGE, FEATURES, PRICE, QUANTITY, and DATE. The results are:

PRODUCT ID	BRAND NAME	MODEL NAME	IMAGE	FEATURES	PRICE	QUANTITY	DATE
2	Apple	iphone 13 pro max		6Gb ram,A15 bionic ,12+12+12MP camera,4352 mAh battery	129900	5	2022-02-13 19:12:06.372811
3	Apple	iPhone 13 mini		4 GB Ram,Apple A15 bionic ,128 gb internal storage,2406 mAh battery,dual 12+12 MP rear camera and 12 MP front camera	69900	5	2022-01-22 11:18:18.459101
4	Apple	iphone 13		4 GB RAM, Apple A15 bionic,128 gb internal storage,3227 mAh battery ,dual 12+12 rear camera, 12 mp front camera	79900	5	2022-01-22 11:18:18.459101
11	Apple	iPhone 13 Pro		Apple A15 Bionic 6 GB RAM 128 GB internal storage 3095 mAh battery Triple (12+12+12) Mp Rear,12MP Front camera	119	5	2022-01-02 13:34:50.601876

[Figure: Search product]

5.5.55 Shopkeeper Dashboard



[Figure: Shopkeeper dashboard]

5.5.56 Edit profile

The screenshot shows the OEMS application interface. On the left is a dark sidebar with the following navigation:

- O.E.M.S
- MANAV
- CORE
- Dashboard
- INTERFACE
- FEATURES

The main content area has a header "Change Email" with a field containing "196330307556.manav.shah@gmail.com". Below it is a "Change Password" section with three input fields: "Enter Previous Password....", "Enter New Password....", and "Confirm New Password....". A blue "Submit" button is at the bottom right of this section.

[Figure: Edit profile]

5.5.57 Registered users

The screenshot shows the OEMS application interface. On the left is a dark sidebar with the following navigation:

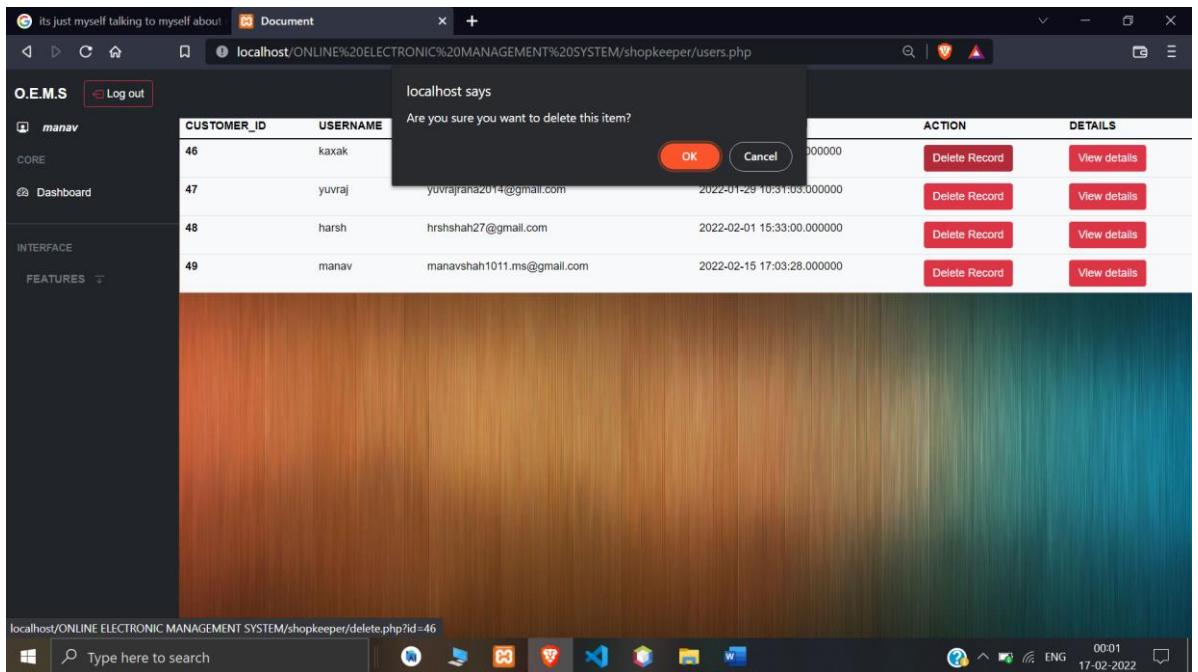
- O.E.M.S
- MANAV
- CORE
- Dashboard
- INTERFACE
- FEATURES

The main content area displays a table of registered users:

CUSTOMER_ID	USERNAME	EMAIL	DATE	ACTION	DETAILS
45	manav	manavshah1011.ms@gmail.com	2022-02-02 14:49:12.975901	Delete Record	View details
46	kaxak	kaxakdobarlya5112001@gmail.com	2022-01-29 10:11:37.000000	Delete Record	View details
47	yuvraj	yuvrajrana2014@gmail.com	2022-01-29 10:31:03.000000	Delete Record	View details
48	harsh	hrshshah27@gmail.com	2022-02-01 15:33:00.000000	Delete Record	View details

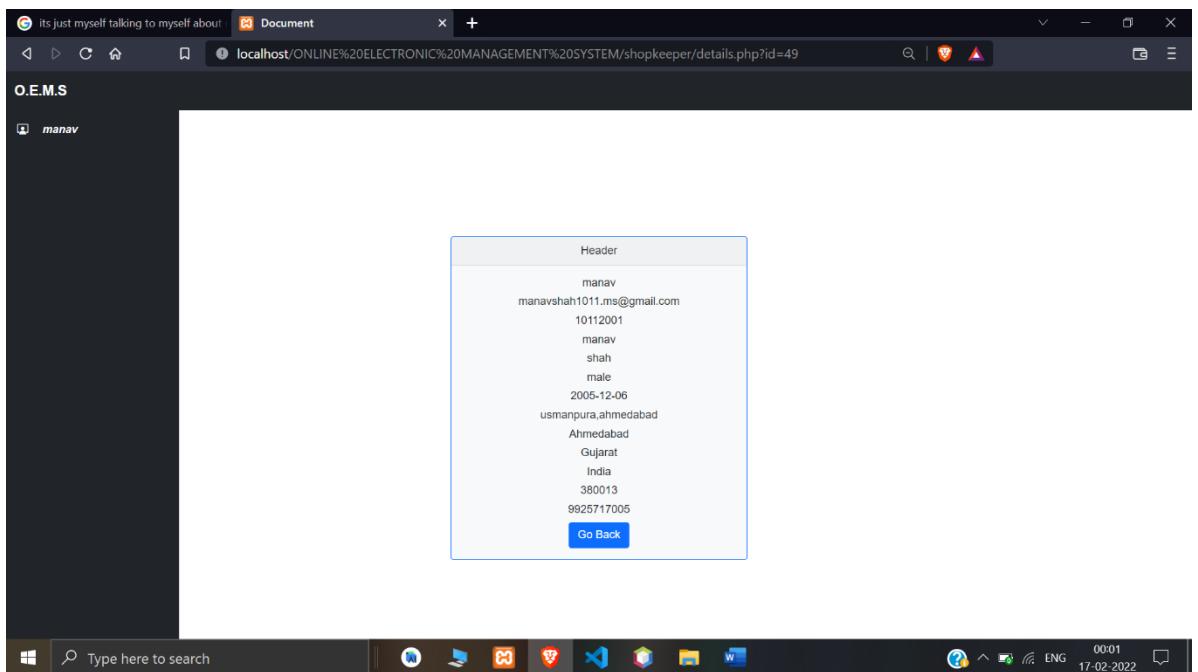
[Figure: Registered users]

5.5.58 Delete user



[Figure: Delete user]

5.5.59 User details



[Figure: User details]

5.5.60 Registered brands

The screenshot shows a web-based application interface for managing brands. On the left, there is a dark sidebar with the title 'O.E.M.S.' and a 'Log out' button. Below this are sections for 'MANAV', 'CORE', 'Dashboard', 'INTERFACE', and 'FEATURES'. The main content area has a header 'BRAND_ID' and 'NAME' with a 'ACTION' column containing red 'Delete Brand' buttons. The data listed is:

BRAND_ID	NAME	ACTION
1	Apple	Delete Brand
2	Samsung	Delete Brand
4	Realme	Delete Brand
5	Oneplus	Delete Brand
6	Redmi	Delete Brand
7	Oppo	Delete Brand
8	Vivo	Delete Brand

[Figure: Registered brands]

5.5.61 Delete brand

The screenshot shows the same application interface as the previous figure, but with a modal dialog box in the center. The dialog box has the text 'localhost says' at the top and 'Are you sure you want to delete this item?' below it. It contains three buttons: 'OK', 'Cancel', and a red 'Brand' button. The background table remains the same, listing the registered brands.

BRAND_ID	NAME	ACTION
1		OK Cancel Brand
2	Samsung	Delete Brand
4	Realme	Delete Brand
5	Oneplus	Delete Brand
6	Redmi	Delete Brand
7	Oppo	Delete Brand
8	Vivo	Delete Brand

[Figure: Delete brands]

5.5.62 Registered products

	PRODUCT ID	BRAND NAME	MODEL NAME	IMAGE	FEATURES	PRICE	QUANTITY	DATE	ACTION	ACTION
CORE	2	Apple	iphone 13 pro max		6Gb ram,A15 bionic ,12+12+12MP camera,4352 mAh battery	129900	9	2022-03-07 12:09:39.698603	Edit Product	Delete Product
INTERFACE	3	Apple	iPhone 13 mini		4 GB Ram,Apple A15 bionic ,128 bg Internal storage,2406 mAh battery,dual 12+12 mp rear camera and 12 mp front camera	69900	10	2022-02-19 22:15:56.132048	Edit Product	Delete Product
FEATURES	4	Apple	iphone 13		4 GB RAM, Apple A15 bionic,128 gb internal storage,3227 mAh battery ,dual 12+12 rear camera, 12 mp front camera	79900	10	2022-02-19 22:15:56.132048	Edit Product	Delete Product
	5	Apple	iPhone 12 Pro Max		Apple A14 Bionic 6 GB RAM 128 GB internal storage 3687 mAh battery Triple(12+12+12) MP rear, 12 MP Front Camera	74900	10	2022-03-19 10:49:02.683716	Edit Product	Delete Product
	6	Apple	iPhone 12 Pro		Apple A14 Bionic 6 GB RAM 128 GB internal storage 2815 mAh battery Triple(12+12+12) MP Rear, 12 MP Front Camera	109900	10	2022-03-19 10:49:24.309895	Edit Product	Delete Product
	7	Apple	iPhone 12		Apple A14 Bionic 4 GB RAM 64 GB internal storage 2815 mAh battery Dual(12+12) MP Rear, 12 MP Front Camera	53999	10	2022-03-19 10:49:35.511694	Edit Product	Delete Product

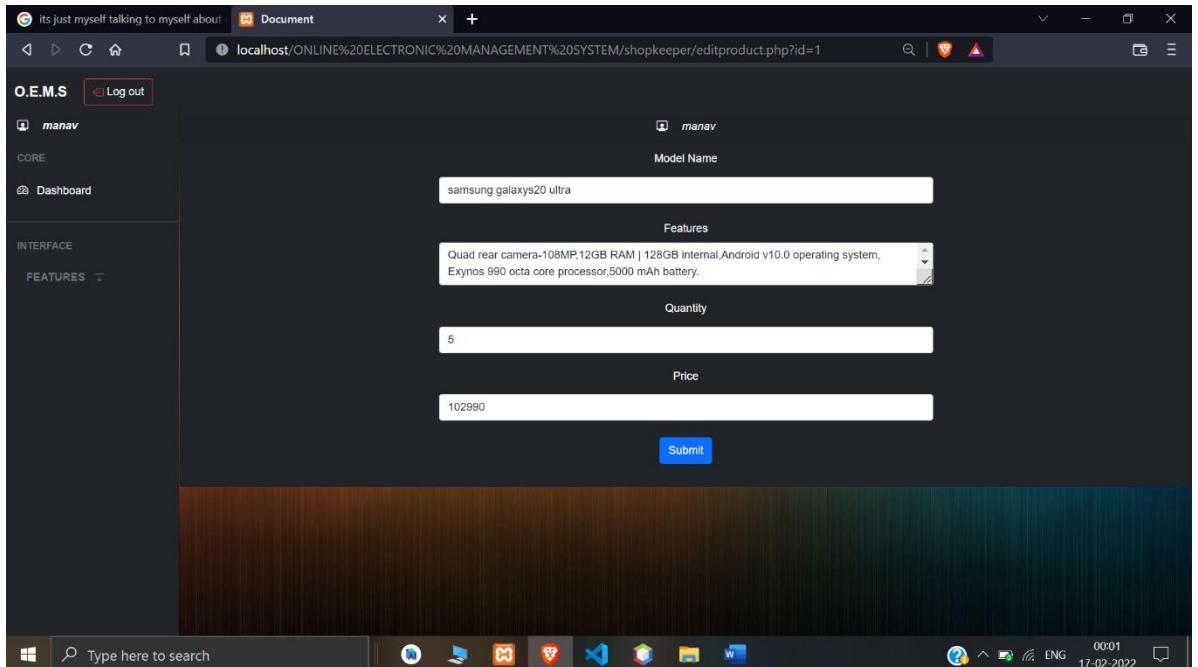
[Figure: Registered products]

5.5.63 Delete product

	PRODUCT ID	BRAND NAME	MODEL NAME	IMAGE	FEATURES	PRICE	QUANTITY	DATE	ACTION	ACTION
CORE	1	Samsung	samsung galaxy s20 ultra		6Gb ram, 128 bg Internal storage, 3227 mAh battery.	102990	5	2022-02-13 19:08:29.918363	Edit Product	Delete Product
INTERFACE	2	Apple	iphone 13 pro max		6Gb ram,A15 bionic ,12+12+12MP camera,4352 mAh battery	129900	2	2022-02-16 21:18:14.125145	Edit Product	Delete Product
FEATURES	3	Apple	iPhone 13 mini		4 GB Ram,Apple A15 bionic ,128 bg Internal storage,2406 mAh battery,dual 12+12 mp rear camera and 12 mp front camera	69900	4	2022-02-14 18:07:01.972906	Edit Product	Delete Product
	4	Apple	iphone 13		4 GB RAM, Apple A15 bionic,128 gb internal storage,3227 mAh battery ,dual 12+12 rear camera, 12 mp front camera	79900	5	2022-01-22 11:18:18.459101	Edit Product	Delete Product
	5	Apple	iPhone 12 Pro Max		Apple A14 Bionic 6 GB RAM 128 GB internal storage 3687 mAh battery Triple(12+12+12) MP rear, 12 MP Front Camera	119	5	2022-02-03 16:25:31.665989	Edit Product	Delete Product
	6	Apple	iPhone 12 Pro		Apple A14 Bionic 6 GB RAM 128 GB internal storage 2815 mAh battery Triple(12+12+12) MP Rear, 12 MP Front Camera	109	5	2022-01-02 13:34:50.466505	Edit Product	Delete Product

[Figure: Delete product]

5.5.64 Edit products



[Figure: Edit product]

5.5.65 Registered orders

The screenshot shows a web-based application interface for viewing registered orders. The URL in the browser is `localhost/ONLINE%20ELECTRONIC%20MANAGEMENT%20SYSTEM/shopkeeper/order.php`. The page has a dark theme with a sidebar on the left containing navigation links like 'manav', 'Dashboard', 'INTERFACE', and 'FEATURES'. The main content area displays a table of registered orders:

ORDER_ID	CUSTOMER_ID	AMOUNT	QUANTITY	STATUS	DATE
72	47	129900	1	Order Arrived	2022-02-15 12:13:42.000000
77	49	46900	1	Order Processed	2022-02-19 23:05:57.000000
78	49	69999	1	Order Processed	2022-02-19 23:19:03.000000
79	49	46900	1	Order Arrived	2022-02-19 23:19:35.000000

[Figure: Registered orders]

5.5.66 Ongoing orders

The screenshot shows a web browser window with the URL `localhost/ONLINE%20ELECTRONIC%20MANAGEMENT%20SYSTEM/shopkeeper/order.php`. The page title is "O.E.M.S". On the left, there is a sidebar with "manav" and "Dashboard" under "CORE", and "INTERFACE" and "FEATURES" under "FEATURES". The main content area displays a table with the following data:

ORDER_ID	CUSTOMER_ID	AMOUNT	QUANTITY	STATUS	DATE
77	49	46900	1	Order Processed	2022-02-19 23:05:57.000000
78	49	69999	1	Order Processed	2022-02-19 23:19:03.000000

[Figure: Ongoing orders]

5.5.67 Completed orders

The screenshot shows a web browser window with the URL `localhost/ONLINE%20ELECTRONIC%20MANAGEMENT%20SYSTEM/shopkeeper/order.php`. The page title is "O.E.M.S". On the left, there is a sidebar with "manav" and "Dashboard" under "CORE", and "INTERFACE" and "FEATURES" under "FEATURES". The main content area displays a table with the following data:

ORDER_ID	CUSTOMER_ID	AMOUNT	QUANTITY	STATUS	DATE
72	47	129900	1	Order Arrived	2022-02-15 12:13:42.000000
79	49	46900	1	Order Arrived	2022-02-19 23:19:35.000000

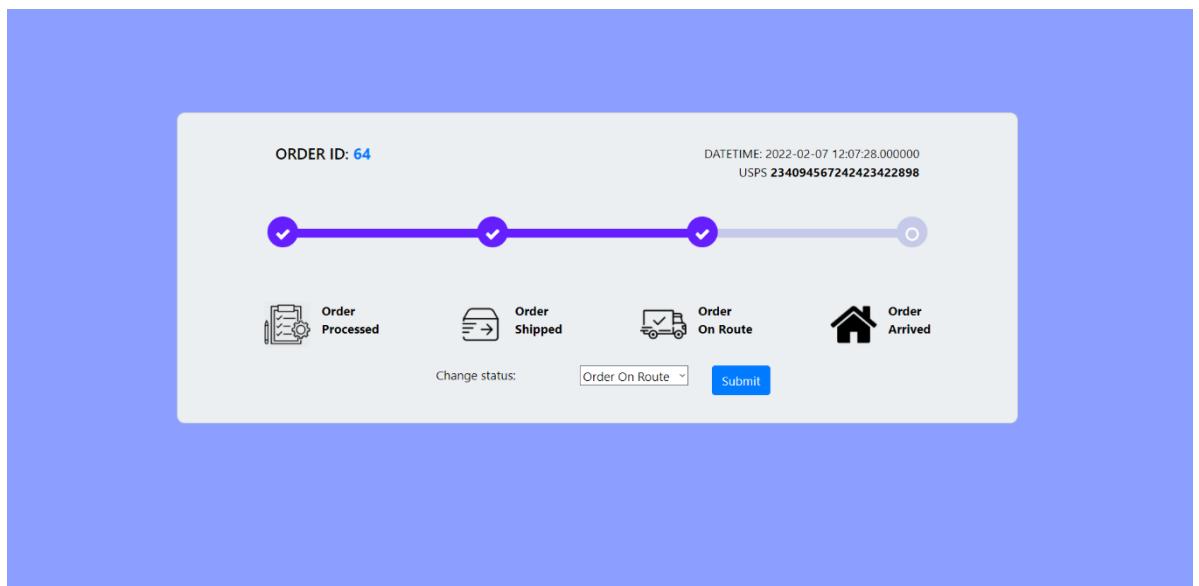
[Figure: Completed orders]

5.5.68 Deleted orders

ORDER_ID	CUSTOMER_ID	AMOUNT	QUANTITY	STATUS	DATE
66	45	102990	1	Deleted	2022-02-07 12:12:44 000000
73	49	129900	1	Deleted	2022-02-16 21:18:16 000000
74	49	79900	1	Deleted	2022-02-19 22:09:55 000000

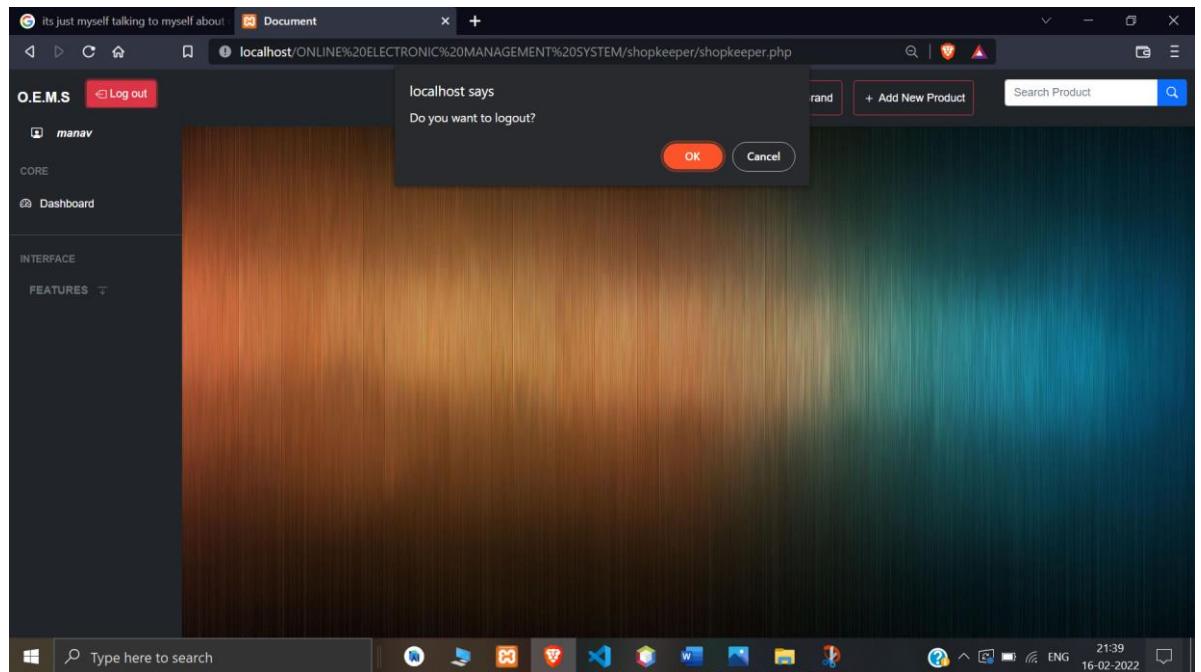
[Figure: Deleted orders]

5.5.69 Change order status



[Figure: Change order status]

5.5.70 Logout for shopkeeper



[Figure: Logout for shopkeeper]

CHAPTER 6

TESTING

6.1 Testing Methods

6.1.1 Black Box Testing

- Black Box Testing is also known as Behavioral Testing or Functional Testing. It is a technique of testing without having any knowledge of the internal working of the application.
- Black Box Testing treats the software as a “Black Box”- without any knowledge of internal working and it only examines the fundamental aspects of the system. This method of test can be applied to each and every level of software testing such as unit, integration, system and acceptance testing.



[Figure 7: Black box testing]

- This method attempts to find errors in the following cases:
- Incorrect or missing functions
- Interface Errors

- Errors in structures or external database access
- Behavior or performance errors
- Initialization and termination errors

Advantages:

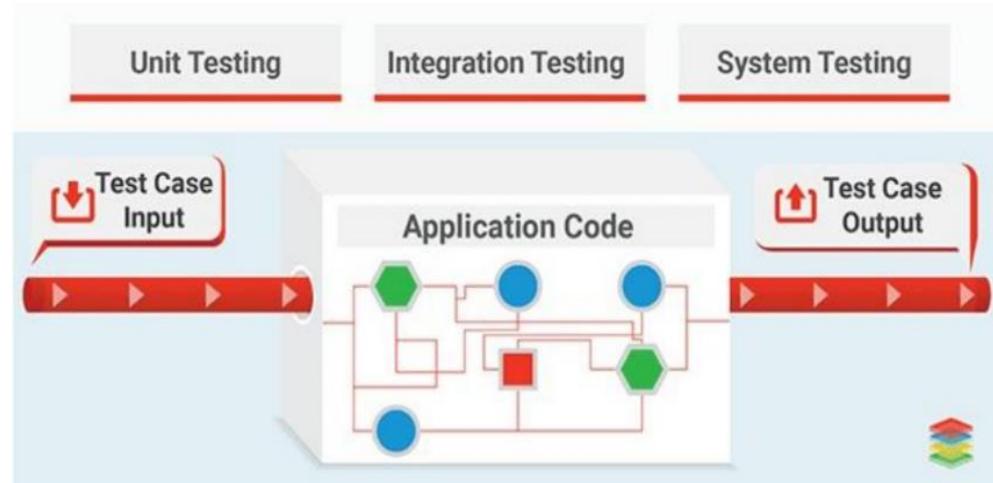
- Unbiased tests because the designer and tester work independently.
- Tester is free from any pressure of knowledge of specific programming languages to test the reliability and functionality of an application software.
- Test cases can be designed immediately after the completion of specifications.

Disadvantages:

- Testing every possible input stream is not possible because it is time-consuming and this would eventually leave many program paths untested.
- Test cases are extremely difficult to be designed without clear and concise specifications.
- Results might be overestimated at time.
- Cannot be used for testing complex segments of code.

6.1.2 White Box Testing

White Box Testing is a software testing method in which the internal structure/design/implementation of the item being tested is known to the tester. The tester chooses inputs to exercise paths through the code and determines the appropriate outputs. This method is named so because the software program, in the eyes of the tester, is like a white/transparent box; inside which one clearly sees.



[Figure 8: White box testing]

- The aim of this testing is to investigate the internal logic and structure of the code. That is why white box testing is also known as Structural Testing.
- Test Cases generated using White Box Testing can:
 - Guarantee that all independent paths within a module have been exercised at least once.
 - Exercise all decisions whether they are true or false.
 - Exercise external data structure of the program.

Advantages:

- Code optimization by revealing hidden errors.
- Transparency of the internal coding structure which is helpful in deriving the type of input data needed to test an application effectively.
- Covers all possible paths of a code thereby, empowering a software engineering team to conduct thorough application testing.
- Enables programmer to introspect because developers can carefully describe any new implementation.
- Gives engineering-based rules to stop testing an application.

Disadvantages:

- Since tests can be very complex, highly skilled resources are required with a thorough knowledge of programming and implementation.
- Test script maintenance can be a burden if the implementation changes too frequently.
- Necessity to create full range of inputs to test each path and condition make the white box testing method time-consuming.

Example:

In the following example, if the user enters a valid otp in 60 seconds then he will be able to reset his password but if the he enters the invalid the otp the user will be prompted to re-enter the otp.

Step 1: Start

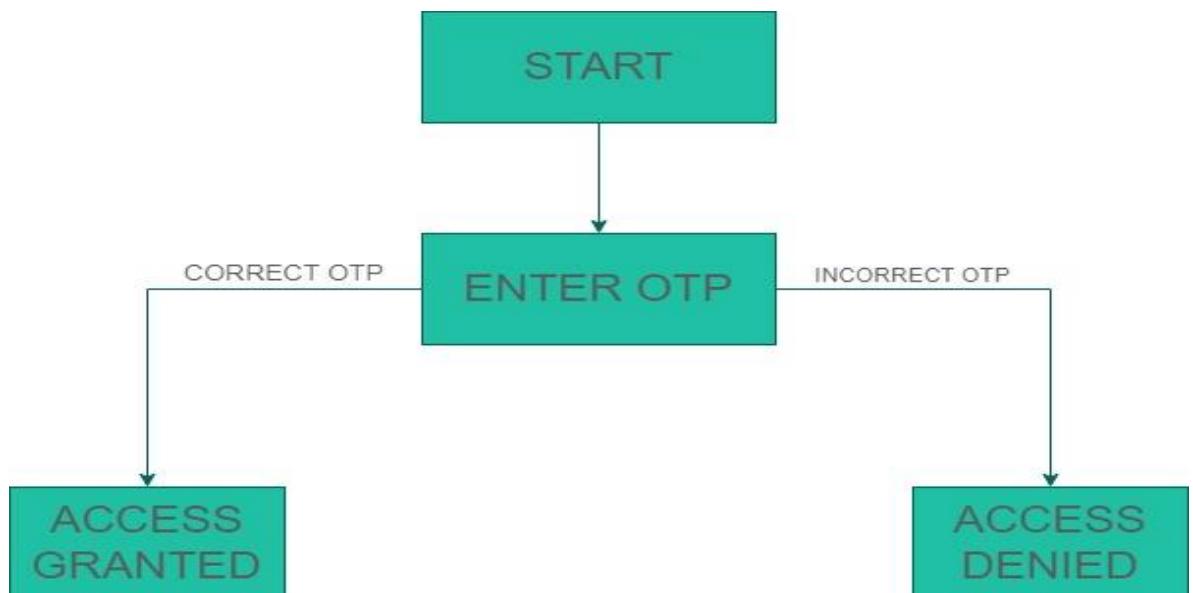
Step 2: Declare variable random

Step 3: Read value of variable otp

**Step 4: If otp==random
 SUCCESS**

**Else
 INVALID OTP**

Step 5: Stop|



[Figure 9: State transition diagram

CONCLUSION

It was a wonderful experience to work on this project. By doing so we have learnt a lot. This project has taken us into many phases of project development and gave us a real insight of how a website of particular shop is managed online. This project will result in people being able to buy their desired products easily without walking into the shop itself.

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