Contents

Chapter No. 1 INTRODUCTION

- **Introduction of Project**

    The e-commerce website project aims to create an online platform for buying and selling products. Its objective is to provide a user-friendly interface that enables customers to conveniently browse and purchase products from the comfort of their homes. The website aims to overcome the limitations of traditional shopping methods by offering a wide range of products, secure transactions, and exceptional customer service. It breaks down geographical barriers, allowing businesses to expand their market reach globally. With 24/7 accessibility, customers can shop anytime, anywhere. The website also offers cost-effective operations for businesses, enhanced product information, and seamless marketing integration. Ultimately, the e-commerce website strives to revolutionize the shopping experience by providing a comprehensive and convenient online platform.

- **Existing System and Need for System**

  o **Existing System :-**

  The traditional shopping methods, such as physical stores and marketplaces, are limited by geographical boundaries and operating hours. Customers face challenges in accessing a wide variety of products and lack detailed product information, affecting their decision-making process.

  o **Need for System :-**

  The proposed e-commerce website aims to address the limitations of the existing system. It seeks to break geographical barriers, provide 24/7 accessibility, and offer detailed product information. The need for the e-commerce website arises from the demand for a convenient and comprehensive online shopping experience, enabling customers to access a wide range of products and make informed purchase decisions.

- **Scope of Work**

    The scope of the e-commerce website project includes the development of a user-friendly platform for buying and selling products online. The primary objective is to provide customers with a convenient and hassle-free shopping experience.

    The scope covers the implementation of various modules and functionalities, such as an admin panel for managing administrators and user accounts. The admin module allows for registering, updating, and deleting admin accounts, as well as updating admin profiles and managing user accounts.

    For users, the scope includes features like browsing and purchasing products, managing the cart and Wishlist, checking order status, and contacting site administrators.

    The website will offer essential features like product listings, detailed descriptions, pricing, and product images. Users will have the ability to add products to their cart, manage quantities, and proceed to checkout. A secure payment method, such as cash on delivery, will be implemented for transaction purposes.

    The scope also encompasses a messaging system that allows users to send queries, requests, or feedback to site administrators. However, it does not include features like online payment gateways, user registration, and login functionalities.

    In summary, the scope of work involves the development of a user-friendly e-commerce website with modules for admin and user management, product browsing and purchasing, cart management, order tracking, and communication with site administrators.

- **Operating Environment - Hardware and Software**
  - **Minimum Hardware Requirements :-**
    - Processor: Intel Core i3 or equivalent
    - RAM : 4GB or higher
    - Hard Disk : 500 MB or more of free space
    - Display : 1920 x 1080 screen resolution
    - Keyboard and Mouse

  - **Minimum Software Requirements :-**
    - Operating System :- Windows 10, macOS, or Linux
    - Web Server   :- Apache or Nginx
    - Database   :- MySQL
    - PHP   :- Version 7.0 or higher
    - HTML   :- HTML5
    - CSS   :- CSS3
    - JavaScript   :- ECMAScript 5.1 or higher
    - Browser   :- Latest versions of popular browsers such as Google Chrome, Mozilla Firefox, Safari, or Microsoft Edge

- **Detail Description of Technology Used**

The e-commerce website is developed using a combination of various technologies to ensure a robust and interactive user experience. The technologies used in the development of the website are as follows:

1) **PHP :-** PHP (Hypertext Preprocessor) is the primary server-side scripting language used for the back-end development of the website. It allows dynamic generation of web pages, handling form submissions, and interacting with the database.

2) **MySQL:-** MySQL is the chosen relational database management system (RDBMS) used to store and manage the website's data. It provides efficient data storage and retrieval capabilities for products, user information, orders, and other relevant data.

3) **HTML :-** HTML (Hypertext Markup Language) is used for structuring the content and defining the elements of the web pages. It provides the foundation for creating the layout, forms, text, images, and other visual elements of the website.

4) **CSS :-** CSS (Cascading Style Sheets) is used for styling the web pages, controlling the presentation and layout aspects of the website. It defines the visual design, including colors, fonts, spacing, and positioning of elements, to enhance the overall user interface.

5) **JavaScript :-** JavaScript is a client-side scripting language used to add interactivity and dynamic functionality to the website. It enables features such as form validation, product filtering, image sliders, and other interactive elements that enhance the user experience.

6) **XAMPP :-** XAMPP is a popular cross-platform web server solution that includes Apache, MySQL, PHP, and Perl. It provides a local development environment for testing and running the website before deploying it to a live server.

By leveraging these technologies, the e-commerce website offers a seamless and efficient platform for users to browse products, make purchases, manage their accounts, and communicate with the site administrators. The combination of PHP, MySQL, HTML, CSS, and JavaScript ensures a reliable and engaging user experience while maintaining a robust and scalable backend infrastructure.

Chapter 2 PROPOSED SYSTEMS

- **Proposed System**

    The proposed e-commerce website aims to provide an enhanced online shopping experience through a user-friendly platform. Key elements include an improved user interface, advanced product management, secure payment option, customer support, scalability, and mobile responsiveness. The user interface will be intuitive, allowing easy navigation. Advanced product management features will enable efficient handling of product updates and inventory. Secure payment options will ensure safe transactions. Customer support will be facilitated through a messaging system. The system will be designed for scalability and high performance. Mobile responsiveness will offer optimal user experience. Overall, the proposed system aims to create a seamless and convenient shopping platform.

    o **Admin Accounts:** Allows the admin to manage and control admin accounts, including registering, updating, and deleting admins.
    o **Admin Login:** Provides a secure login interface for admins to access the admin module using their username and password.
    o **Dashboard:** Serves as the main interface for admins, where they can access various admin-related modules.
    o **Update Profile:** Enables admins to update their username and password by entering the old password.
    o **Total Pendings:** Allows admins to view and manage pending orders.
    o **Completed Orders:** Provides admins with an overview of completed orders.
    o **Orders Placed:** Enables admins to check the total number of orders placed.
    o **AdminPanel:** Acts as a navigation panel for admins, providing quick access to home, products, orders, admins, users, and messages.
    o **Home:** Displays the products for both registered and non-registered users. It includes a home tab and the ability to click on the e-commerce name to return to the home page.
    o **About:** Provides information about the website, including its background and benefits of using an e-commerce platform.
    o **Orders:** Allows users to check their orders' status, such as pending and completed.
    o **Shop:** Displays all the listed products with options for a full description, quick view, add to cart, and add to the wishlist.
    o **Cart:** Allows users to view and manage the products added to their cart, including changing the quantity, subtotal, grand total, and options like continuing shopping or proceeding to checkout.
    o **Checkout:** Provides users with a form to enter their name, contact

information, payment method, and address to place their order.

- o **Wishlist:** Allows users to view and manage the products they wish to purchase later.
- o **Contact:** Provides a form for users to interact with the site administrator by entering their name, email, number, and message.
- o **User Login:** Allows users to log in to their accounts using their registered email and password. Provides a secure authentication process to ensure the privacy and security of user data. Grants access to user-specific features and functionality, such as viewing orders, managing the cart, and accessing the wishlist.
- o **User Register:** Enables new users to create an account by providing their name, email, and password. Performs validation checks on the provided information to ensure its accuracy and completeness. Stores the user's registration details securely in the database for future login and personalized user experience.
- o **Update Profile:** Allows users to modify their account information, such as their name, email, and password. Requires users to provide their current password for authentication and security purposes. Updates the user's profile data in the database, ensuring that the changes reflect across the website for a personalized experience.

- **Objectives of System :-**

  1) To provide a user-friendly interface for browsing and purchasing products: The system should have an intuitive interface that allows users to easily search for products, view product details, add items to the shopping cart, and complete the purchase process.

  2) To ensure secure and reliable online transactions: The system should implement secure payment gateways and encryption protocols to protect customer information during online transactions, ensuring the privacy and security of sensitive data.

  3) To manage inventory and product catalog: The system should provide functionalities to manage product inventory, including tracking stock levels, updating product information, and managing product variations such as size, color, etc.

  4) To enable user registration and account management: The system should allow users to create accounts, store their personal information, manage their preferences, and track their order history.
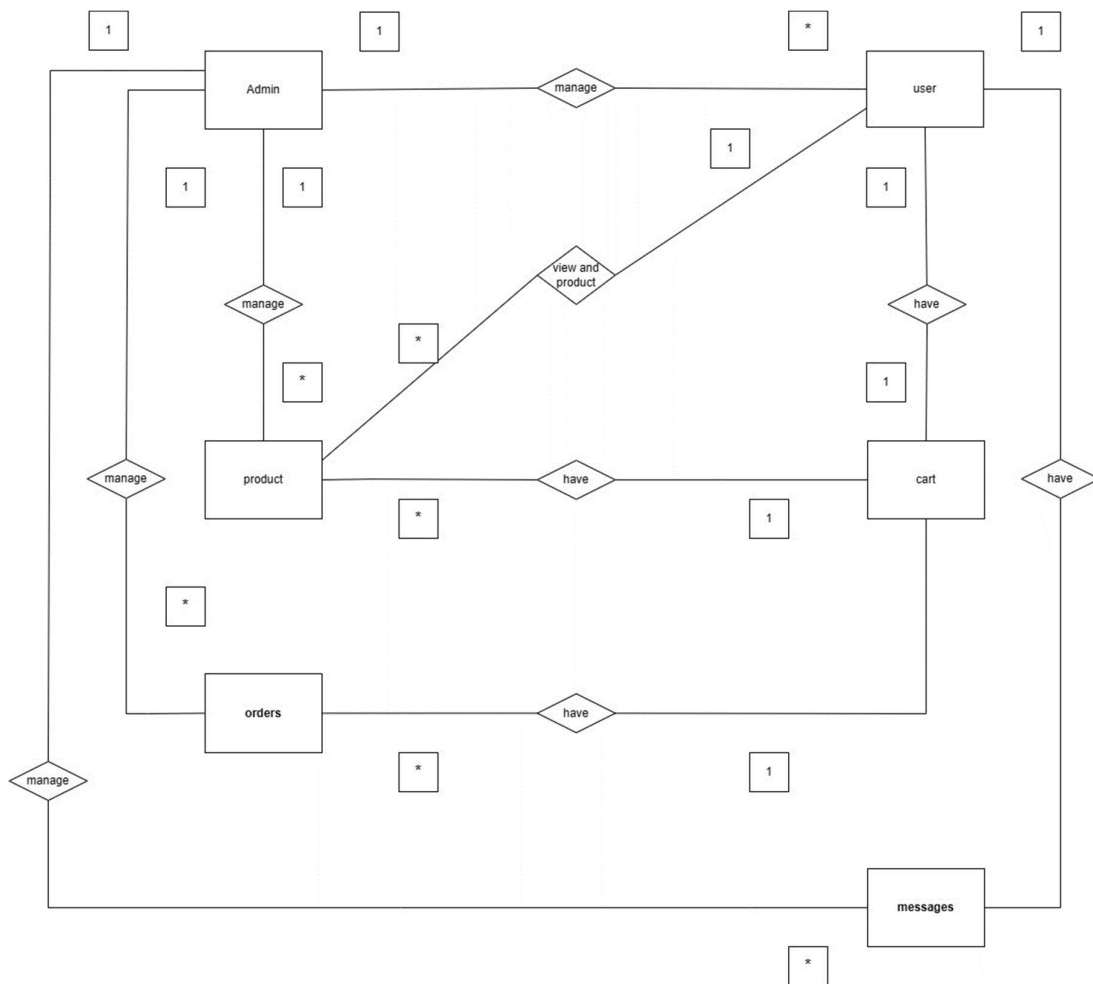
5) To facilitate order processing and fulfillment: The system should automate the order processing workflow, including order confirmation, payment verification, order tracking, and generating invoices. It should also provide functionalities to manage and track the fulfillment process, such as packaging, shipping, and delivery.

6) To provide customer support and communication channels: The system should include features like a messaging system, customer reviews and ratings, FAQs, and contact information to facilitate customer support and communication between buyers and sellers.

7) To analyze and generate reports: The system should collect data on sales, customer behavior, and product performance, and provide reporting functionalities to generate insights for business analysis and decision-making.

8) To integrate with external systems and services: The system should have the capability to integrate with third-party services such as payment gateways, shipping providers, and analytics tools to enhance its functionalities and provide a seamless experience for users.

9) To optimize website performance and scalability: The system should be designed to handle a large number of concurrent users and accommodate scalability as the business grows. It should be optimized for fast page load times, efficient database queries, and overall system performance.

10) To comply with legal and regulatory requirements: The system should adhere to applicable laws and regulations related to e-commerce, data privacy, consumer protection, and online transactions.

- **User Requirements :-**

  1) **User Registration :-** Users should be able to create an account by providing their name, email, and password to access the website's features.
  2) **User Login :-** Registered users should be able to log in to their accounts using their username/email and password.
  3) **User Profile Management :-** Users should have the ability to update their profile information such as name, contact number, and address. They should also be able to change their password.
  4) **Admin Management :-** The website should provide functionality for the admin to manage other admin accounts, including adding, deleting, and updating admin information.
  5) **Dashboard :-** Upon successful login, the admin should be directed to a dashboard that provides an overview of various modules and activities.
  6) **Update Profile :-** The admin should be able to update their own profile information, such as their username and password. The system should validate the old password before allowing any updates.
  7) **Pending Orders :-** The admin should be able to view and manage pending orders, including updating their status.
  8) **Completed Orders :-** The admin should be able to view a list of completed orders, allowing them to check the details of those orders.
  9) **Placed Orders :-** The admin should have access to a module where they can check all the orders placed, including details such as order date and time.
  10) **User Accounts :-** The admin should be able to view user accounts, including their IDs, names, and email addresses. The admin should have the ability to delete user accounts if necessary.
  11) **Messages :-** The admin should be able to view and manage messages sent by users, including registered and non-registered users. The admin should have the option to delete messages.
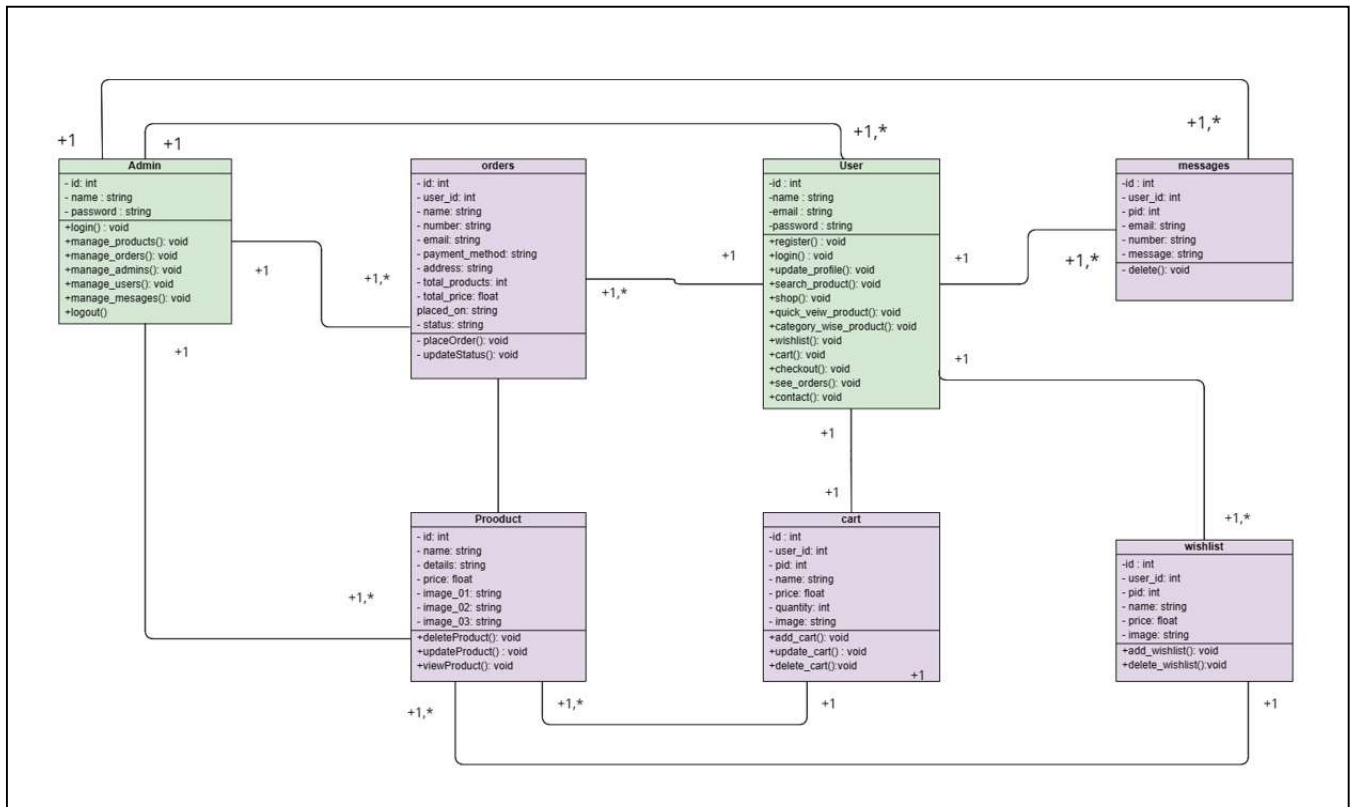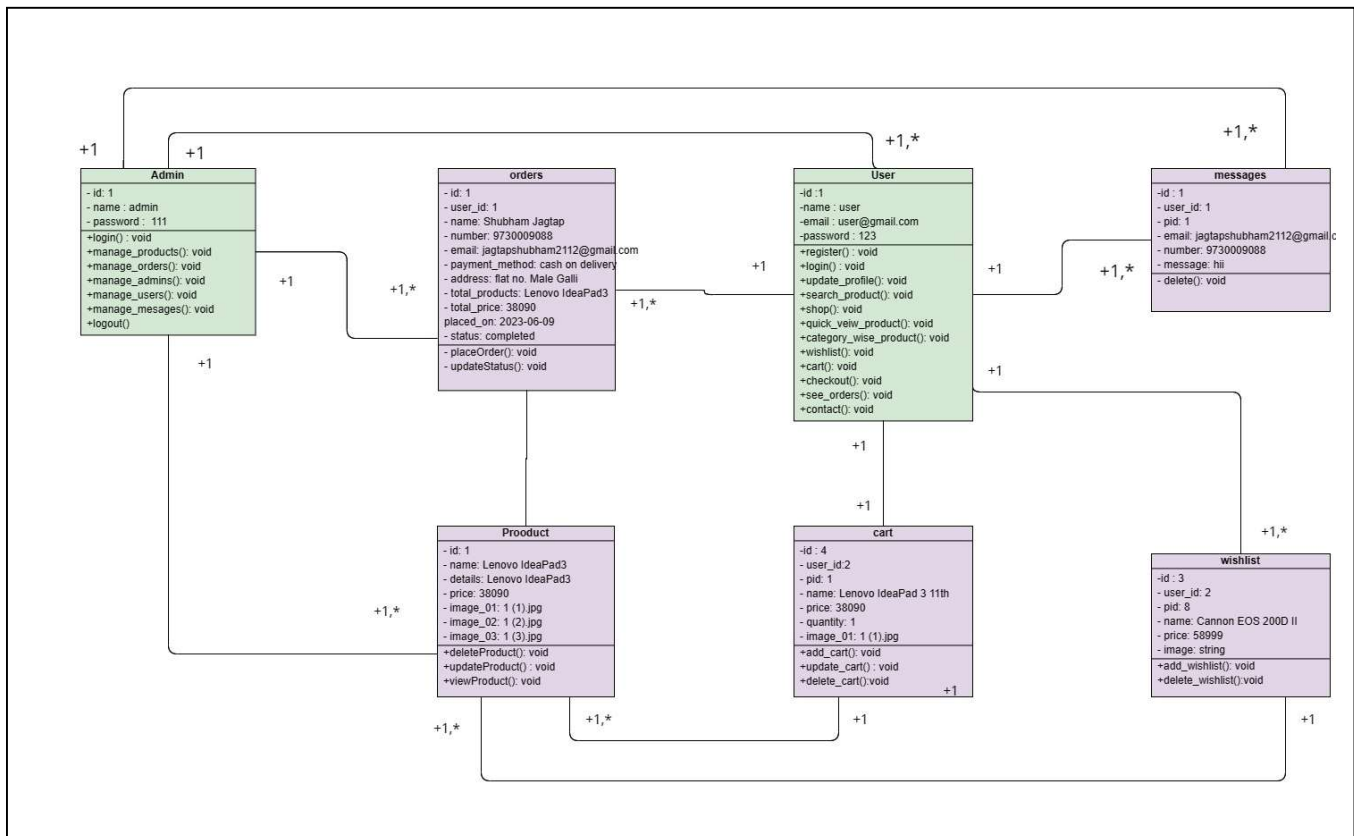
- **Entity Relationship Diagram (ERD)**

- **Class Diagram**

- **Object Diagram**

- **Use Case Diagrams For Admin Or User**

homepage

register

Login

update profile

orders

search

shop

shop by category

quick view

add to Wishlist

add to cart
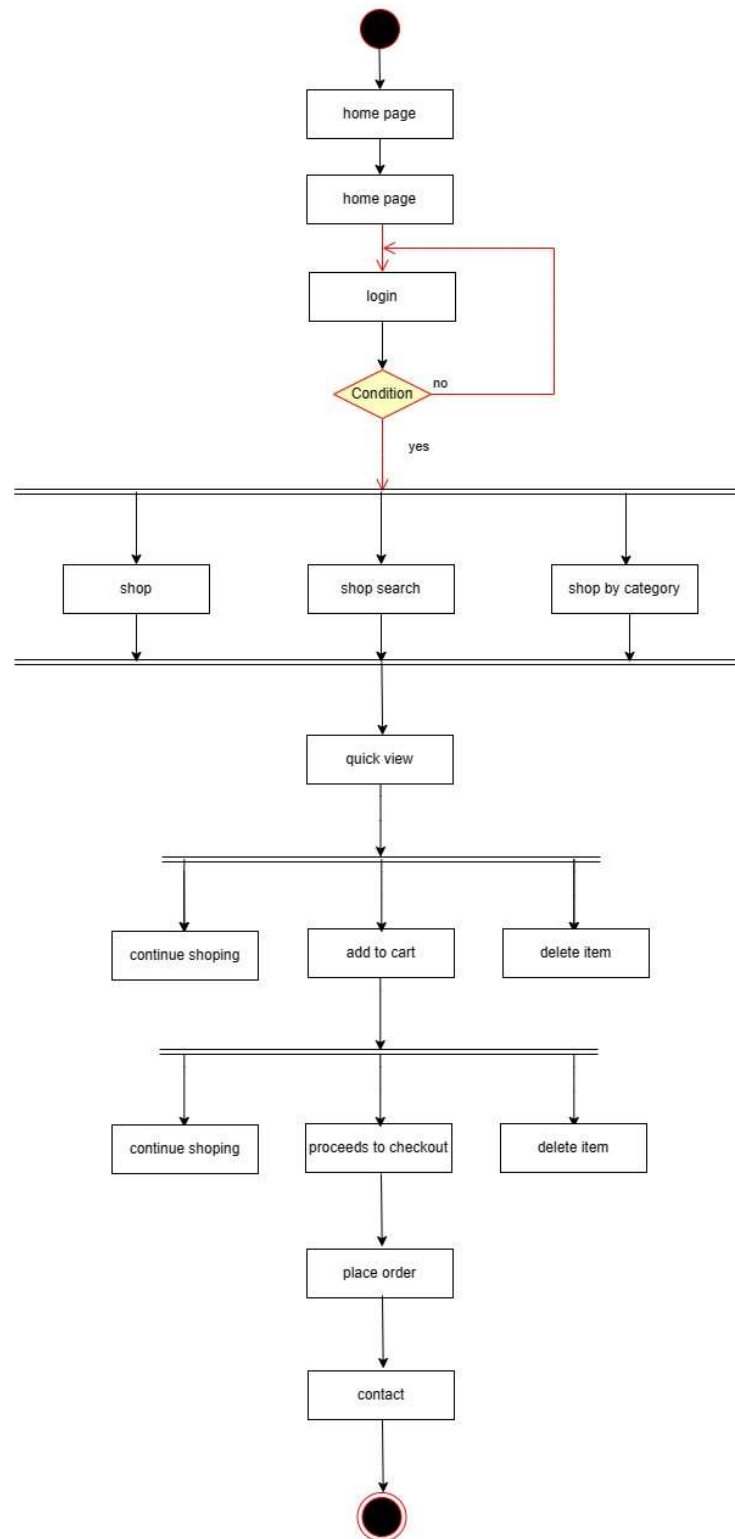
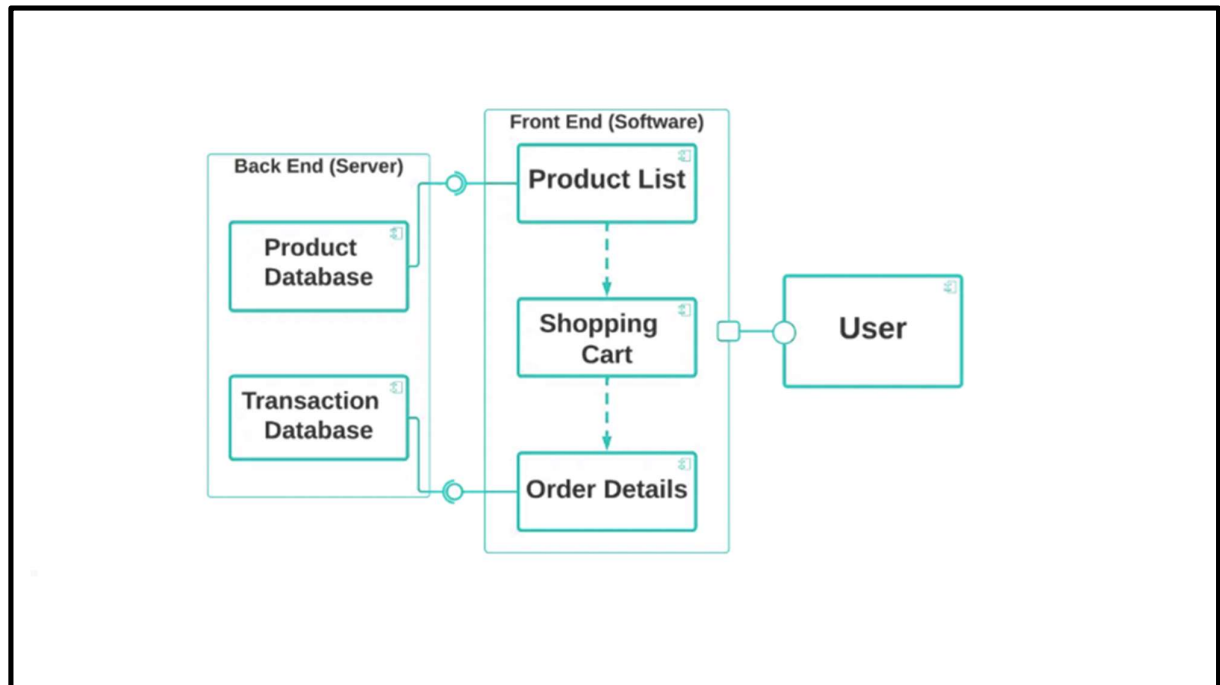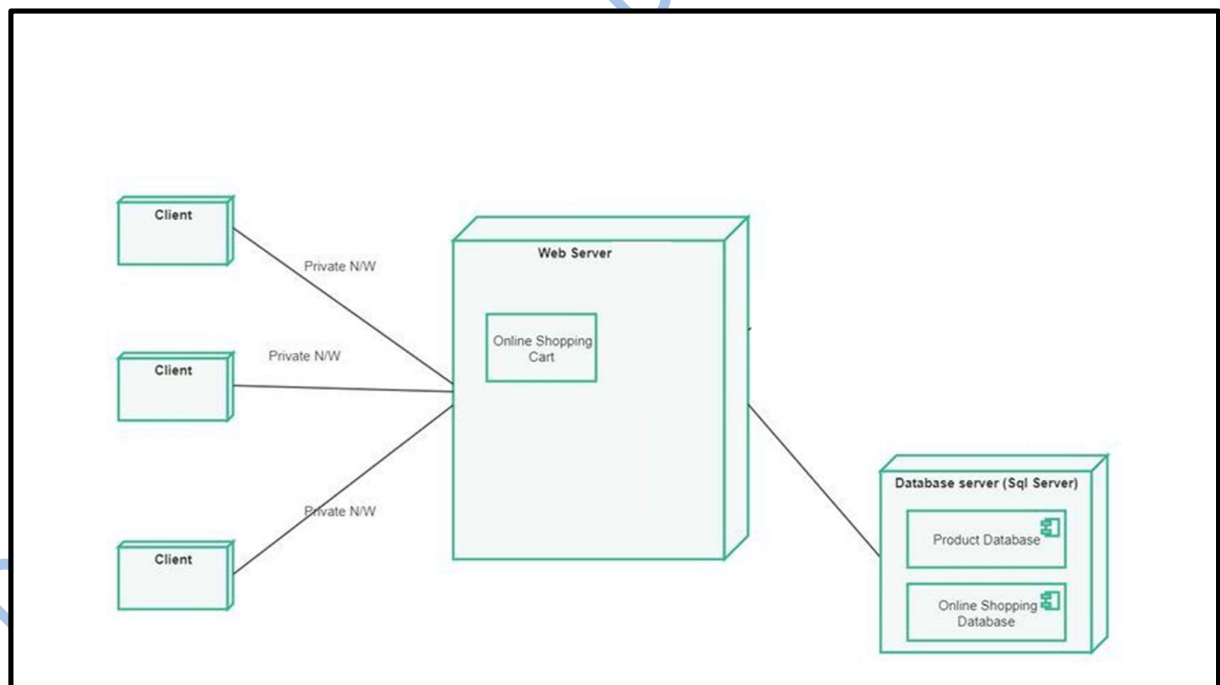checkout

place order

Logout

Logout
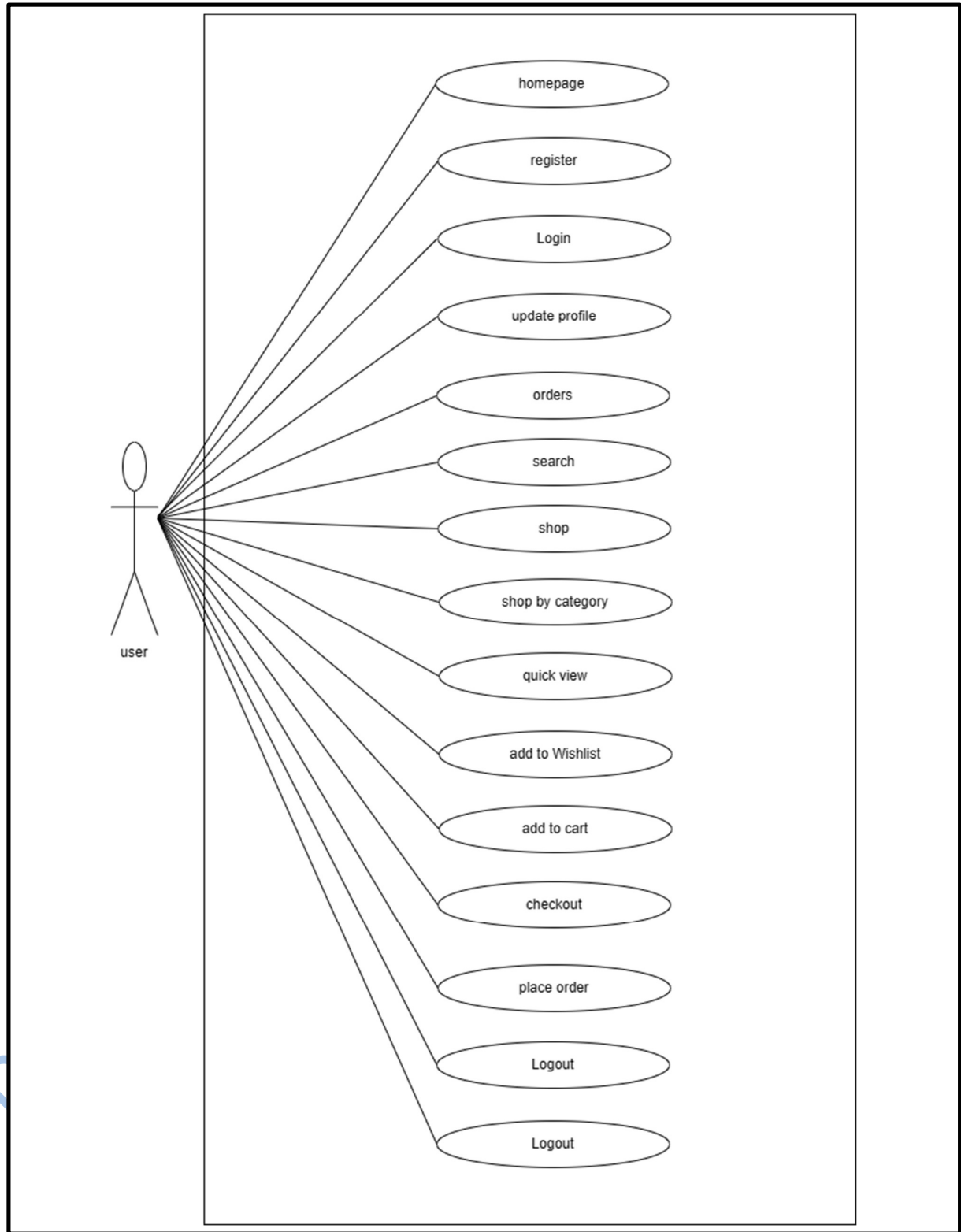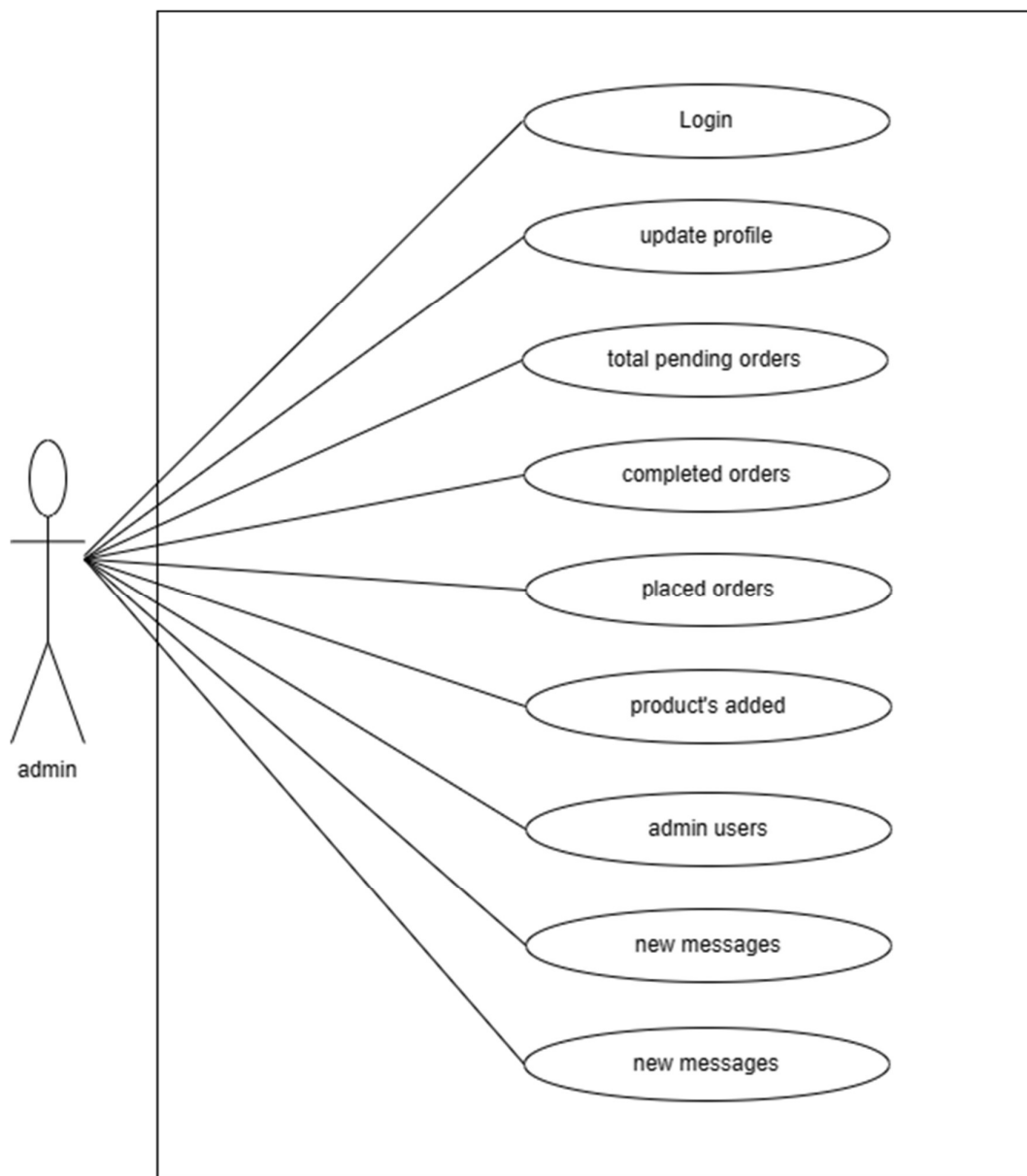
user

User

Admin

- **Activity Diagram**

Activity Diagram For User

- **Component Diagram**

- **Deployment Diagram**

• Table Design And Description :-

Sr. No.	Table Name	Table Description
1.	User	This table contains details of User.
2.	Product	This table contains details of Product.
3.	Cart	This table contains details of User Cart.
4.	Messages	This table contains details of User Messages.
5.	Order	This table contains details of Order.
6.	Wishlist	This table contains details of Wishlist.
7.	Admin	This table contains details of Admin.

o Users Table

Sr. No.	Filed Name	Data Type And Size	Extra	Constraints (Null)
1	id Primary	int(100)	AUTO_INCREMENT	Primary Key
2	name	varchar(20)		No
3	email	varchar(50)		No

o Product Table

Sr. No.	Filed Name	Data Type And Size	Extra	Constraints (Null)
1	id Primary	int(100)	AUTO_INCREMENT	Primary Key
2	name	varchar(100)		No
3	details	varchar(500)		No
4	price	int(10)		No
5	image_01	varchar(100)		No
6	image_02	varchar(100)		No
7	image_03	varchar(100)		No

o Cart Table

Sr. No.	Filed Name	Data Type And Size	Extra	Constraints (Null)
1	id Primary	int(100)	AUTO_INCREMENT	Primary Key
2	user_id	int(100)		Foreign Key
3	pid	int(100)		Foreign Key
4	name	varchar(100)		No
5	price	int(10)		No
6	quantity	int(10)		No
7	image	varchar(100)		No

o Messages able

Sr. No.	Filed Name	Data Type And Size	Extra	Constraints (Null)
1	id Primary	int(100)	AUTO_INCREMENT	Primary Key
2	user_id	int(100)		No
3	name	varchar(100)		No
4	email	varchar(100)		No
5	number	varchar(12)		No
6	message	varchar(500)		No

o Order Table

Sr. No.	Filed Name	Data Type And Size	Extra	Constraints (Null)
1	id Primary	int(100)	AUTO_INCREMENT	Primary Key
2	user_id	int(100)		Foreign Key
3	name	varchar(20)		No
4	number	varchar(10)		No
5	email	varchar(50)		No
6	method	varchar(50)		No
7	address	varchar(500)		No
8	total_products	varchar(1000)		No
9	total_price	int(100)		No
10	placed_on	date		No
11	payment_status	varchar(20)		No

o Wishlist Table

Sr. No.	Filed Name	Data Type And Size	Extra	Constraints (Null)
1	id Primary	int(100)	AUTO_INCREMENT	Primary Key
2	user_id	int(100)		Foreign Key
3	pid	int(100)		Foreign Key
4	name	varchar(100)		No
5	price	int(10)		No
6	quantity	int(10)		No
7	image	varchar(100)		No

o Admin Table

Sr. No.	Filed Name	Data Type And Size	Extra	Constraints (Null)
1.	id Primary	int(100)	AUTO_INCREMENT	Primary Key
2.	name	varchar(20)		No
3.	password	varchar(50)		No

- **Test cases :-**

1) Test case for "Update Profile":

Test Case ID: TC-008

Test Case Description: Test the functionality of the "Update Profile" module.

Test Steps:

i)   Log in as an admin.

ii)   Navigate to the "Update Profile" page.

iii)   Update the admin's username and password by entering the old password.

iv)   Click the "Save Changes" button.

Expected Result: The admin's profile should be updated successfully with the new username and password.

2) Test case for "Total Pending Orders":

Test Case ID: TC-009

Test Case Description: Test the functionality of the "Total Pending Orders" module.

Test Steps:

i)   Log in as an admin.

ii)   Navigate to the "Total Pending Orders" page.

iii)   Verify that all pending orders are displayed.

Expected Result: All pending orders should be listed on the page.

3) Test case for "Completed Orders":

Test Case ID: TC-010

Test Case Description: Test the functionality of the "Completed Orders" module.

Test Steps:

i)   Log in as an admin.

ii)   Navigate to the "Completed Orders" page.

iii)   Verify that all completed orders are displayed.

Expected Result: All completed orders should be listed on the page.

4) Test case for "Orders Placed":

Test Case ID: TC-011

Test Case Description: Test the functionality of the "Orders Placed" module.

Test Steps:

i)   Log in as an admin.

ii)   Navigate to the "Orders Placed" page.

iii)   Verify that all orders placed are displayed.

Expected Result: All orders placed should be listed on the page.

5) Test case for "Delete User":

Test Case ID: TC-012

Test Case Description: Test the functionality of the "Delete User" module.

Test Steps:

i)   Log in as an admin.

ii)   Navigate to the "Users Accounts" page.

iii)   Select a user and click the "Delete User" button.

iv)   Confirm the deletion.

Expected Result: The selected user should be successfully deleted from the system.

6) Test case for "Delete Message":

Test Case ID: TC-013

Test Case Description: Test the functionality of the "Delete Message" module.

Test Steps:

Test Steps:

i)   Log in as an admin.

ii)   Navigate to the "Messages" page.

iii)   Select a message and click the "Delete" button.

7) Test case for "Search Product":

Test Case ID: TC-014

Test Case Description: Test the functionality of the "Search Product" module.

Test Steps:

i)   Navigate to the "Shop" page.

ii)   Enter a product name in the search bar and click the search button.

Expected Result: The products related to the search keyword should be displayed.

8) Test case for "Quick View":
Test Case ID: TC-015
Test Case Description: Test the functionality of the "Quick View" module.
Test Steps:
i)   Navigate to the "Shop" page.
ii)   Click on the "Quick View" button of a product.

Expected Result: A popup should appear displaying the detailed information about the selected product.

Chapter 5 Drawbacks and Limitations

- o Lack of support for multiple languages
- o Limited payment options
- o Limited customization options for users
- o No mobile application support
- o Limited reporting capabilities
- o No integration with social media platforms.

Chapter 6 Proposed Enhancements

- o Enhanced User Authentication: Implement two-factor authentication and improved password policies.
- o Mobile-Friendly Design: Optimize the website for seamless browsing on all devices.
- o Personalized Product Recommendations: Introduce AI-driven product suggestions based on user behavior.
- o Real-time Order Tracking: Provide automated order status updates for customers.
- o Diverse Payment Options: Integrate multiple secure payment gateways for customer convenience.

Chapter 7 Conclusion

Based on the provided information and understanding, the e-commerce website project has been effectively developed using PHP, JavaScript, CSS, HTML, and MySQL on the XAMPP platform. The system showcases an intuitive interface and encompasses essential modules like login, sign up, place order, view order details, manage categories and products, and user verification. Despite its success, there are certain limitations such as the absence of external system integration and limited scalability. To address these concerns, proposed enhancements include integrating with popular online payment gateways and migrating to a cloud hosting environment. This project has been a valuable learning experience, significantly refining my software development skills.

Chapter 8 Bibliography

- Apache Friends. XAMPP. https://www.apachefriends.org/index.html
- Apache Friends. XAMPP Documentation. https://www.apachefriends.org/documentation.html
- MySQL. MySQL Documentation. https://dev.mysql.com/doc/
- PHP. PHP Documentation. https://www.php.net/docs.php
- JavaScript. JavaScript MDN Web Docs. https://developer.mozilla.org/en-US/docs/Web/JavaScript
- W3Schools. HTML Tutorial. https://www.w3schools.com/html/
- W3Schools. CSS Tutorial. https://www.w3schools.com/css/

ANNEXURE 1 : USER INTERFACE SCREENS

1. Home Page
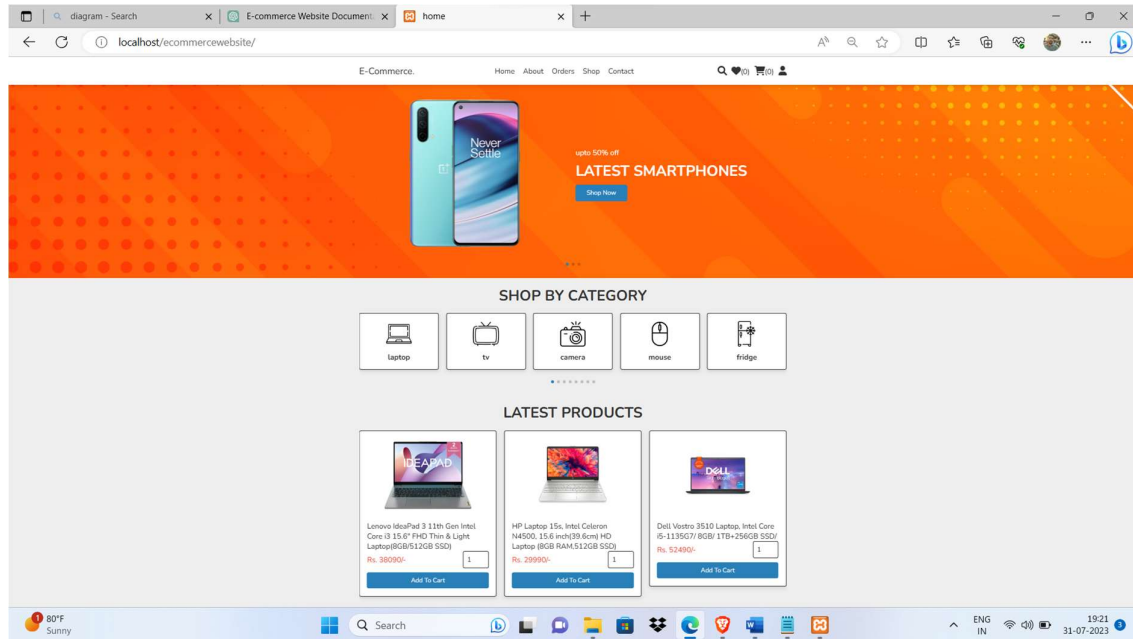
2. Login Page
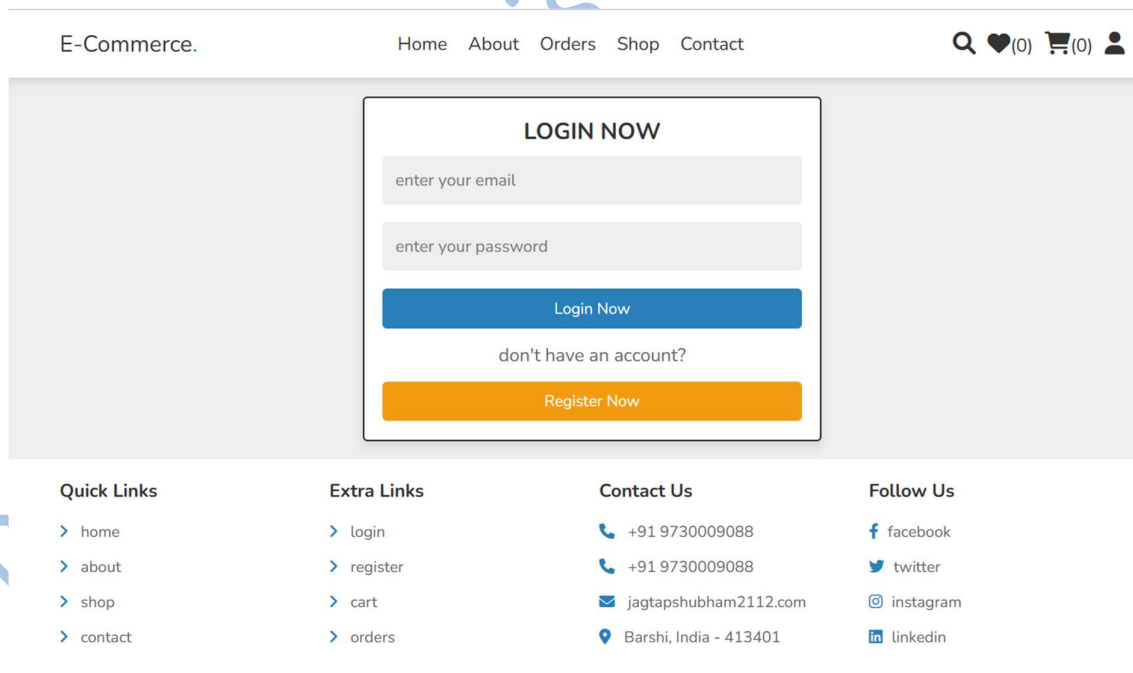
3. Register Page

E-Commerce.

Home About Orders Shop Contact

🔍 ❤(0) 🛒(0) 👤

REGISTER NOW

root

enter your email

....

confirm your password

Register Now

already have an account?

Login Now

Quick Links

> home
> about
> shop
> contact

Extra Links

> login
> register
> cart
> orders

Contact Us

📞 +91 9730009088
📞 +91 9730009088
✉ jagtapshubham2112.com
📍 Barshi, India - 413401

Follow Us

f facebook
🐦 twitter
📷 instagram
in linkedin

4. Cart Page

E-Commerce.

Home   About   Orders   Shop   Contact

🔍 ❤(0) 🛒(1) 👤

SHOPPING CART

Lenovo IdeaPad 3 11th Gen Intel Core i3 15.6" FHD Thin & Light Laptop(8GB/512GB SSD)

Rs. 38090/-   `1`   ✏

sub total : Rs. 38090/-

Delete Item

grand total : Rs. 38090/-

Continue Shopping

Delete All Item

Proceed To Checkout

Quick Links
- home
- about
- shop
- contact

Extra Links
- login
- register
- cart
- orders

Contact Us
- 📞 +91 9730009088
- 📞 +91 9730009088
- ✉ jagtapshubham2112.com
- 📍 Barshi, India - 413401

Follow Us
- facebook
- twitter
- instagram
- linkedin

5. Wishlist Page

E-Commerce.   Home About Orders Shop Contact   Q ♥(1) 🛒(1) 👤

YOUR WISHLIST

Samsung 80 cm (32 Inches)
Wondertainment Series HD
Ready LED Smart TV
UA32T4340BKXXL (Glossy
Black)

Rs. 10999/-   1

Add To Cart

Delete Item

grand total : Rs. 10999/-

Continue Shopping

Delete All Item

Quick Links	Extra Links	Contact Us	Follow Us
> home	> login	📞 +91 9730009088	f facebook
> about	> register	📞 +91 9730009088	🐦 twitter
> shop	> cart	✉ jagtapshubham2112.com	📷 instagram
> contact	> orders	📍 Barshi, India - 413401	in linkedin

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6. Shop Page

E-Commerce.   Home   About   Orders   Shop   Contact   🔍 ❤(1) 🛒(1) 👤

LATEST PRODUCTS

Lenovo IdeaPad 3 11th Gen Intel Core i3 15.6" FHD Thin & Light Laptop(8GB/512GB SSD)

Rs. 38090/-   [1]

Add To Cart

HP Laptop 15s, Intel Celeron N4500, 15.6 inch(39.6cm) HD Laptop (8GB RAM,512GB SSD)

Rs. 29990/-   [1]

Add To Cart

Dell Vostro 3510 Laptop, Intel Core i5-1135G7/ 8GB/ 1TB+256GB SSD/

Rs. 52490/-   [1]

Add To Cart

Samsung 80 cm (32 Inches) Wondertainment Series HD Ready LED Smart TV UA32T4340BKXXL (Glossy Black)

Rs. 10999/-   [1]

Add To Cart

OnePlus 80 cm (32 inches) Y Series HD Ready LED Smart Android TV 32Y1 (Black)

Rs. 12999/-   [1]

Add To Cart

Redmi 108 cm (43 inches) Android 11 Series Full HD Smart LED TV L43M6-RA/L43M7-RA (Black)

Rs. 19999/-   [1]

Add To Cart

7. Order Page

E-Commerce.   Home About Orders Shop Contact   🔍 ❤(1) 🛒(0) 👤

PLACED ORDERS

placed on : 2023-07-31

name : a

email : user1234@gmail.com

number : 1234567890

address : flat no. Pimpalwadi, Barshi, Tal. Barshi, Dist. Solapur, Paranda, Maharashtra, India - 413501

payment method : cash on delivery

your orders : Lenovo IdeaPad 3 11th Gen Intel Core i3 15.6" FHD Thin & Light Laptop(8GB/512GB SSD) (38090 x 1) -

total price : Rs. 38090/-

payment status : pending

Quick Links	Extra Links	Contact Us	Follow Us
❯ home	❯ login	📞 +91 9730009088	f facebook
❯ about	❯ register	📞 +91 9730009088	🐦 twitter
❯ shop	❯ cart	✉ jagtapshubham2112.com	📷 instagram
❯ contact	❯ orders	📍 Barshi, India - 413401	in linkedin

8. User Profile Update Page

E-Commerce.   Home About Orders Shop Contact   🔍 ❤(1) 🛒(0) 👤

UPDATE NOW

user

user1234@gmail.com

enter your old password

enter your new password

confirm your new password

Update Now

Quick Links	Extra Links	Contact Us	Follow Us
❯ home	❯ login	📞 +91 9730009088	f facebook
❯ about	❯ register	📞 +91 9730009088	🐦 twitter
❯ shop	❯ cart	✉ jagtapshubham2112.com	📷 instagram
❯ contact	❯ orders	📍 Barshi, India - 413401	in linkedin

9. Search Page

10.   Admin Login Page
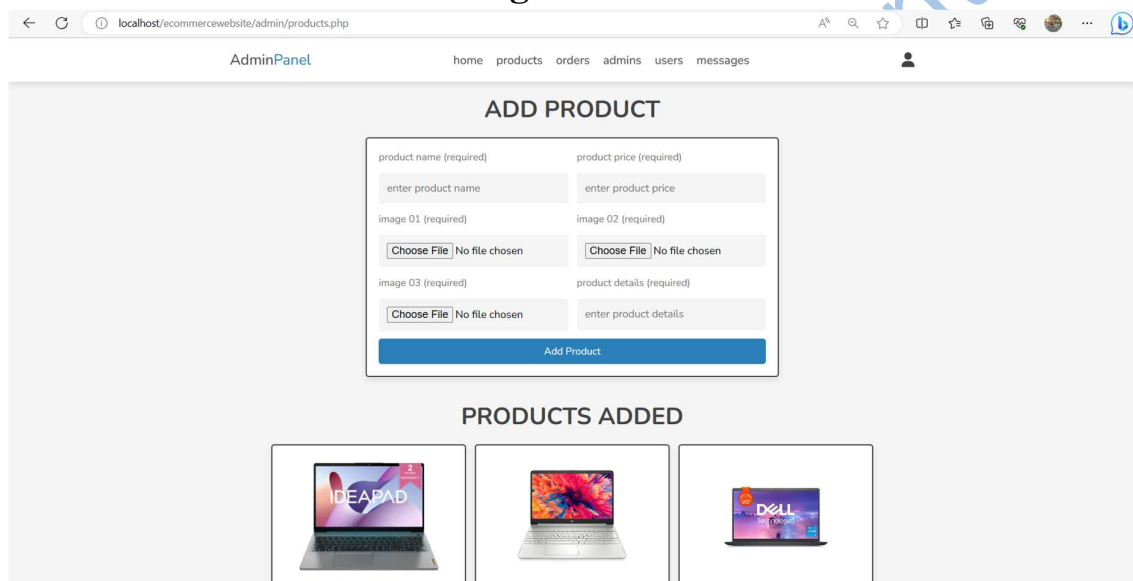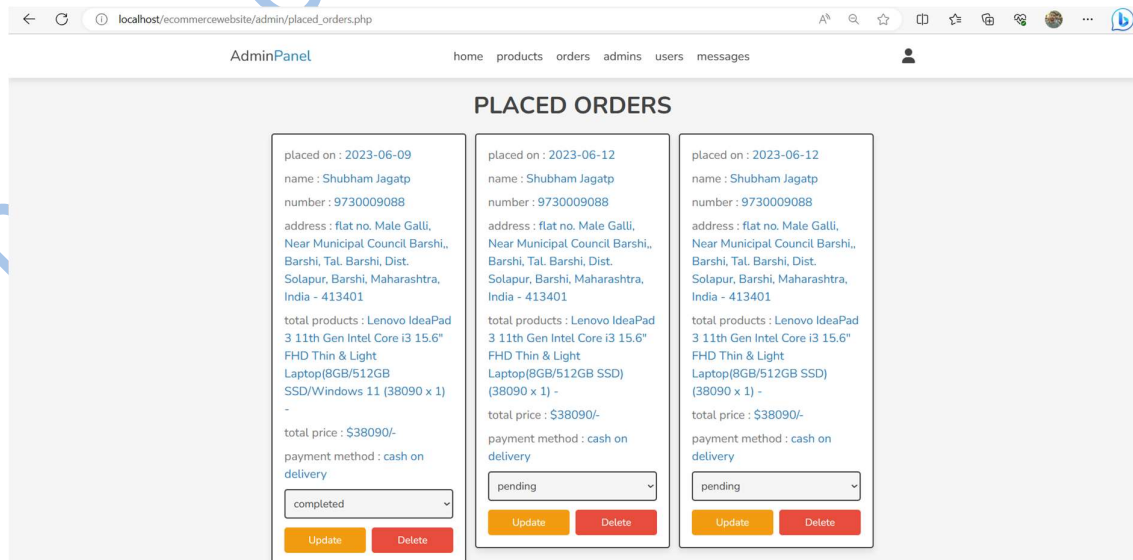
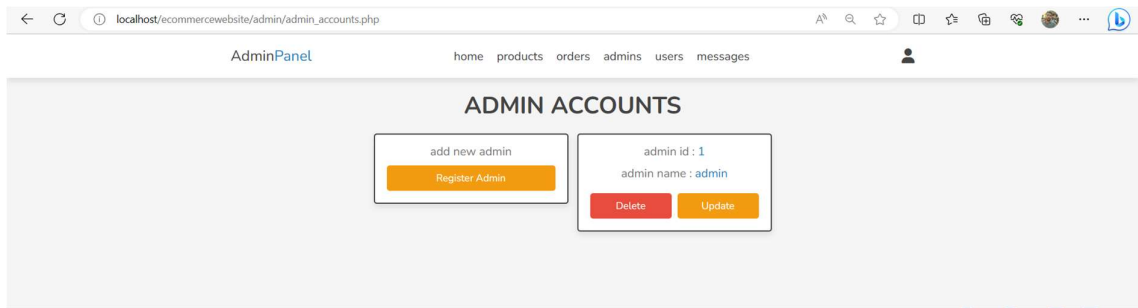## 11.   Admin Dashboard

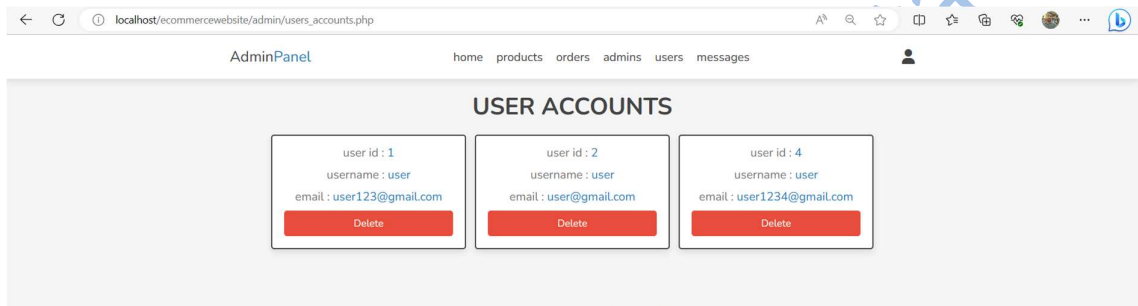## 12.   Admin Product Page

13.   Order Page

14. Admin Account Management Page

15. User Account Management Page

16. User Message Management Page