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Project

Multi-Seller Coffee Store Website

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Abstract

This project is about creating a website where multiple coffee sellers can list and sell their products to customers. The platform allows different sellers to have their own individual space, known as an admin panel, where they can manage their products, track orders, and handle their sales. This gives each seller full control over their online store while still being part of a larger marketplace. Customers visiting the website can browse a variety of coffee products offered by different sellers in one place. They can view product details, add items to their shopping cart, and proceed with checkout in a seamless process. The website is built using simple yet powerful technologies, including HTML, CSS, PHP, JavaScript and MySQL. HTML and CSS, JavaScript are used for creating and styling the web pages, while PHP handles the backend functionality, like managing user logins, processing orders, and saving data to a MySQL database. The site has been designed to be secure, fast, and easy to use, providing a smooth experience for both sellers and customers. It ensures that each seller can run their business efficiently, while customers can easily find and purchase the coffee products they want. This platform brings together multiple sellers and buyers in a convenient and organized way, offering a wide range of coffee products all in one place.

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Introduction

The coffee industry is growing fast, with more people looking for high-quality coffee and unique blends. Many small coffee sellers, however, find it hard to sell their products online because big e-commerce websites focus on all kinds of products. This makes it difficult for coffee sellers to get noticed. To solve this problem, this project creates a website designed just for coffee. It’s a virtual marketplace where coffee sellers and buyers can connect easily. This platform helps coffee sellers showcase their products in a way that highlights their quality and uniqueness. It also provides coffee lovers with a better shopping experience by making it simple to find and compare different coffee products. Each seller will have their own admin panel to manage their store, upload products, set prices, and handle orders. Buyers can browse through a variety of coffee options, including beans, blends, and brewing equipment, all in one place. They can choose products that suit their taste and needs with ease. By focusing only on coffee, the website creates a space for small businesses to grow and reach more customers. It helps coffee lovers discover new and unique products while supporting sellers in building their brands. This project not only makes shopping easier but also builds a stronger connection between coffee sellers and customers.

Motivation

The idea behind creating a multi-seller coffee store website is to bring together various coffee sellers or roasters on a single platform. Instead of one seller owning the website, multiple sellers can list their coffee products, share their brand stories, and connect with coffee lovers. The motivation is to create a diverse and convenient shopping experience for customers, allowing them to explore a variety of coffee options from different sellers all in one place.

Objectives

1. **Help Sellers**: Provide a platform where many coffee sellers can sell products easily.
2. **Simple Shopping**: Make it easy for customers to find and buy coffee products.
3. **Data Security**: Keep customer and seller information safe.
4. **Easy to Manage**: Ensure smooth operations for sellers and the website admin.

Functional Requirements

- **User Registration and Login:**
    - Users should be able to register with their email address and password.
    - Users should be able to log in to their accounts.
    - Users should be able to reset their passwords.
- **Product Browsing and Search:**
    - Users should be able to view product details, including descriptions, images.
- **Product Purchase:**
    - Users should be able to add products to their shopping cart.
    - Users should be able to view their shopping cart and modify quantities.
- **Seller Management:**
    - Sellers should be able to register and create a seller account.

  - Sellers should be able to manage their product listings, including adding, editing, and deleting products.
  - Sellers should be able to manage their orders and fulfill them.
- **Admin Management:**
  - Admins should be able to manage user accounts, seller accounts, and product listings.
  - Admins should be able to process orders and manage payments.
  - Admins should be able to update website content and make configuration changes.

Non-Functional Requirements

- **Performance:**
  - The website should have fast loading times.
  - The website should be able to handle a large number of concurrent users.
- **Usability:**
  - The website should be easy to use and navigate.
  - The website should have a clear and intuitive user interface.
- **Scalability:**
  - The website should be able to scale to accommodate future growth.
- **Compatibility:**
  - The website should be compatible with different browsers and devices.
- **Accessibility:**
  - The website should be accessible to users with disabilities.

Advantages

1.With multiple sellers, customers can choose from a larger selection of coffee brands, blends, and flavors that they might not find in a single-brand store.

2.More sellers mean better competition, which can lead to better prices, promotions, and quality of products as each seller strives to offer the best for customers.

3.Customers can shop from different coffee brands without leaving the website, saving time by comparing different products easily in one place.

4.Sellers don’t need to create their own e-commerce website. They can simply list their products on the platform and reach a large audience, reducing the need for a big marketing budget.

5.Since multiple sellers can join the platform, there’s always potential for more growth in the business as new sellers join and bring fresh products.

Disadvantages

1.Since different sellers are in charge of their products, the overall quality of the store might vary, which can sometimes lead to customer dissatisfaction if a seller’s product doesn't meet expectations.

2.While competition can be an advantage, too much competition among sellers on the same platform may lead to price wars or make it hard for smaller sellers to stand out.

3.Managing multiple sellers and ensuring the smooth operation of the website can be difficult. This includes handling different pricing, inventory management, and customer service for each seller.

4.The platform needs to take a commission or fee from each sale, which may reduce the earnings for sellers. This could discourage some sellers from joining.

5.With many sellers, each seller may have their own shipping practices. This could create confusion for customers, especially if sellers have different shipping costs or policies.

Algorithm

Step 1: **Set Up the System**

- Create a database to store user details, products, orders, and cart items.
- Prepare the website for hosting on a server.

Step 2: **User Registration and Login**

1. Show options for users to register or log in on the homepage.
2. If the user wants to register:
    - Ask for details like name, email, password, and role (Admin, Seller, or Customer).
    - Save the details in the database.
3. If the user wants to log in:

  - Check the email and password with the database.
  - Send them to their dashboard (Admin, Seller, or Customer) based on their role.

Step 3: **Admin Features**

1. The admin can:
    - Manage users (Sellers and Customers).
    - Solve issues or complaints.
2. Admin can also add or remove sellers or products.

Step 4: **Seller Features**

1. The Seller can:
    - Add new products (like coffee types, price, stock, and description).
    - Update or delete their products.
    - See and manage orders from customers.
2. Changes made by the Seller are saved in the database.

Step 5: **Customer Features**

1. The Customer can:
    - Browse products from different sellers.
    - Add items to their shopping cart.
    - Go to checkout to confirm their order.
2. The website will ask for payment and delivery details.

Step 6: **Order Management**

1. Save all customer orders in the database.
2. Inform the Seller about new orders.
3. Update the status of orders.

Step 7: **Cart Features**

1. Customers can:
    - Add items to their cart.
    - Remove or change the number of items in the cart.
    - Check the total price before checkout.
2. Save cart details temporarily in the database.

Step 8: **Search and Filter**

- Let customers search for products by name, price, or category.
- Provide filters like price range, ratings, or availability.

Step 10: **Logout**

- Give all users (Admin, Seller, Customer) a logout option.
- Clear their session and return them to the homepage.

Step 11: **Maintain the System**

- Regularly back up data.
- Make sure the website is fast and easy to use on all devices.

This simple version makes the steps easier to understand while covering all important parts of the project. Let me know if you need further changes!

Class Diagram

Classes and Attributes:

1. Admin Class

   Attributes: name, id, email

   Methods: updatecatelog(), additems(), removeitems()

2. Customer Class

   Attributes: id, name, email, address

   Methods: viewitems(), buyitems(), addtocart(), makepayment()

3. Items class

   Attributes: id, name, category

4. Payment Class

   Attributes: customerid, name, cardtype, cardno

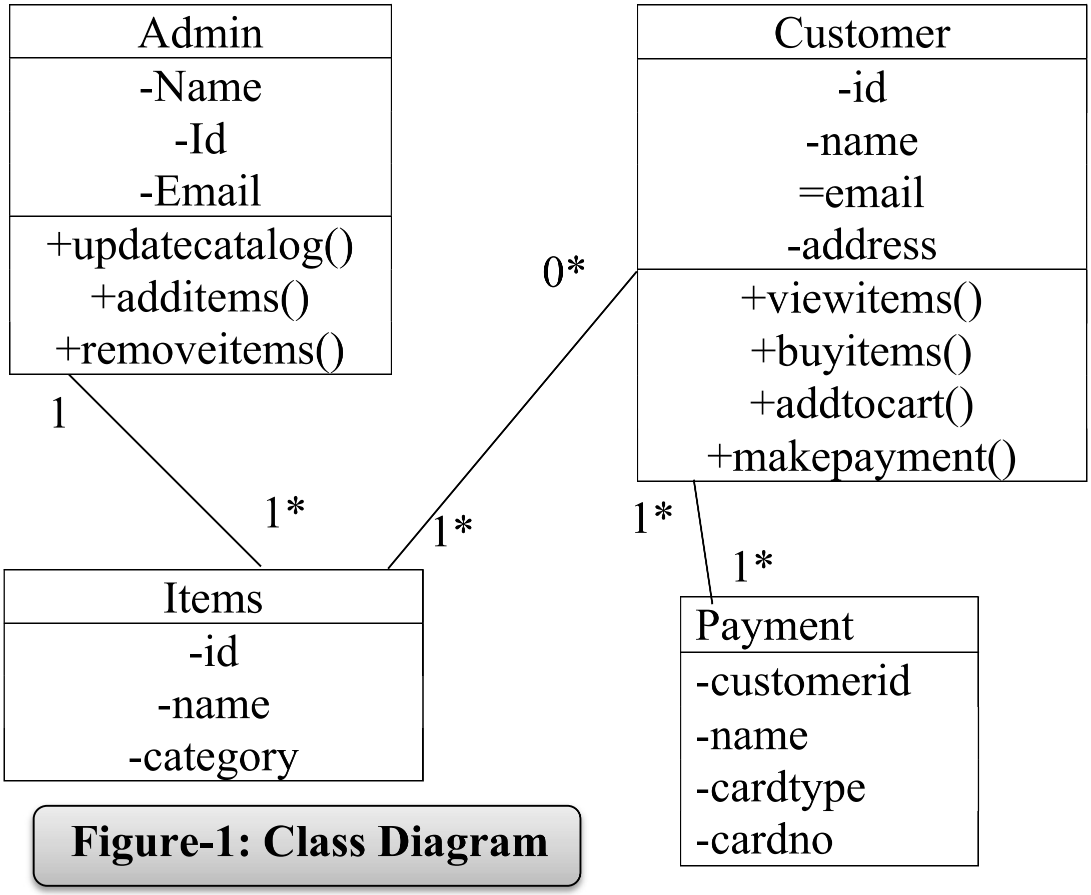


Figure-1: Class Diagram

Use-case diagram

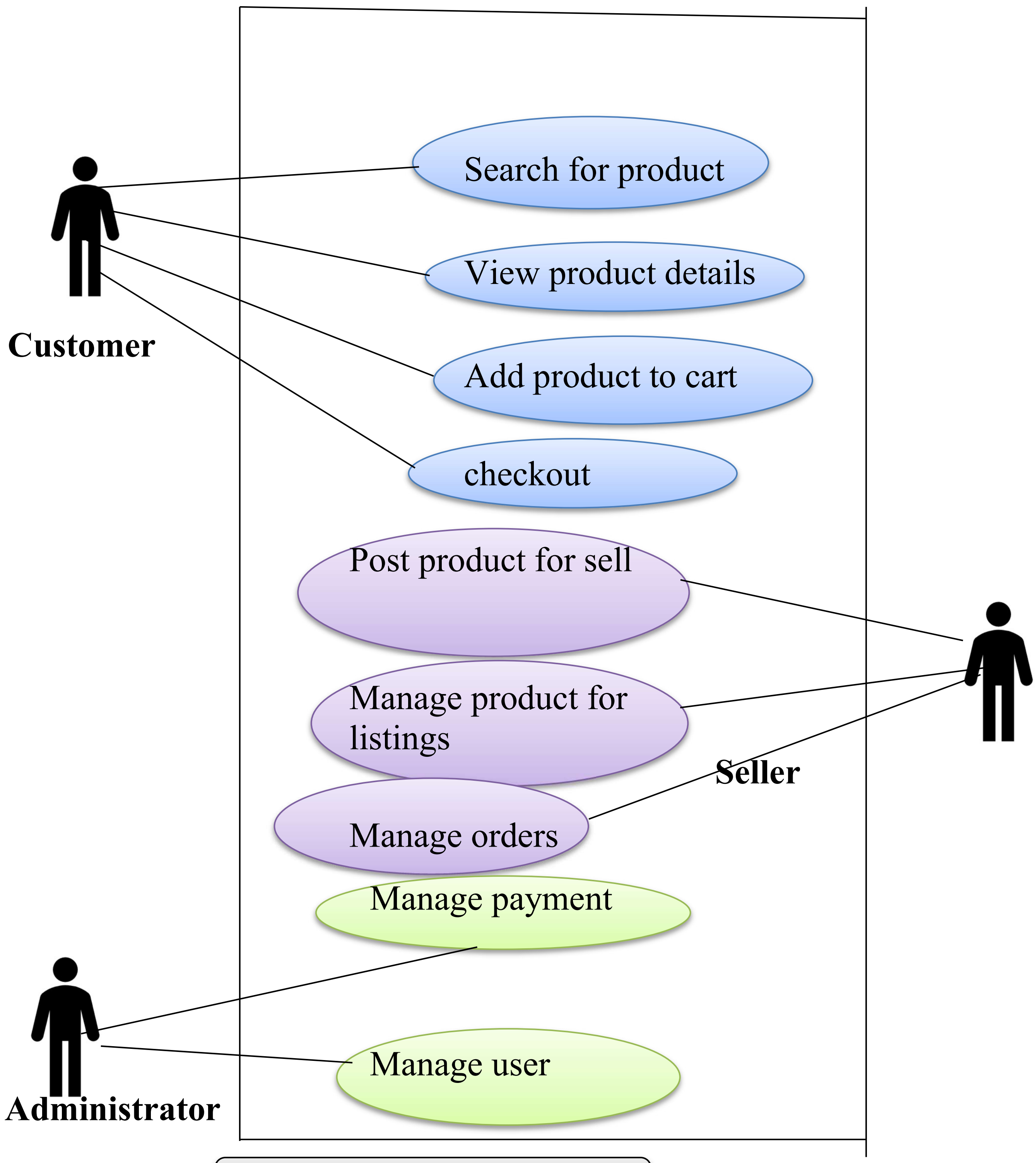


Figure-2: Usecase Diagram

Activity Diagram

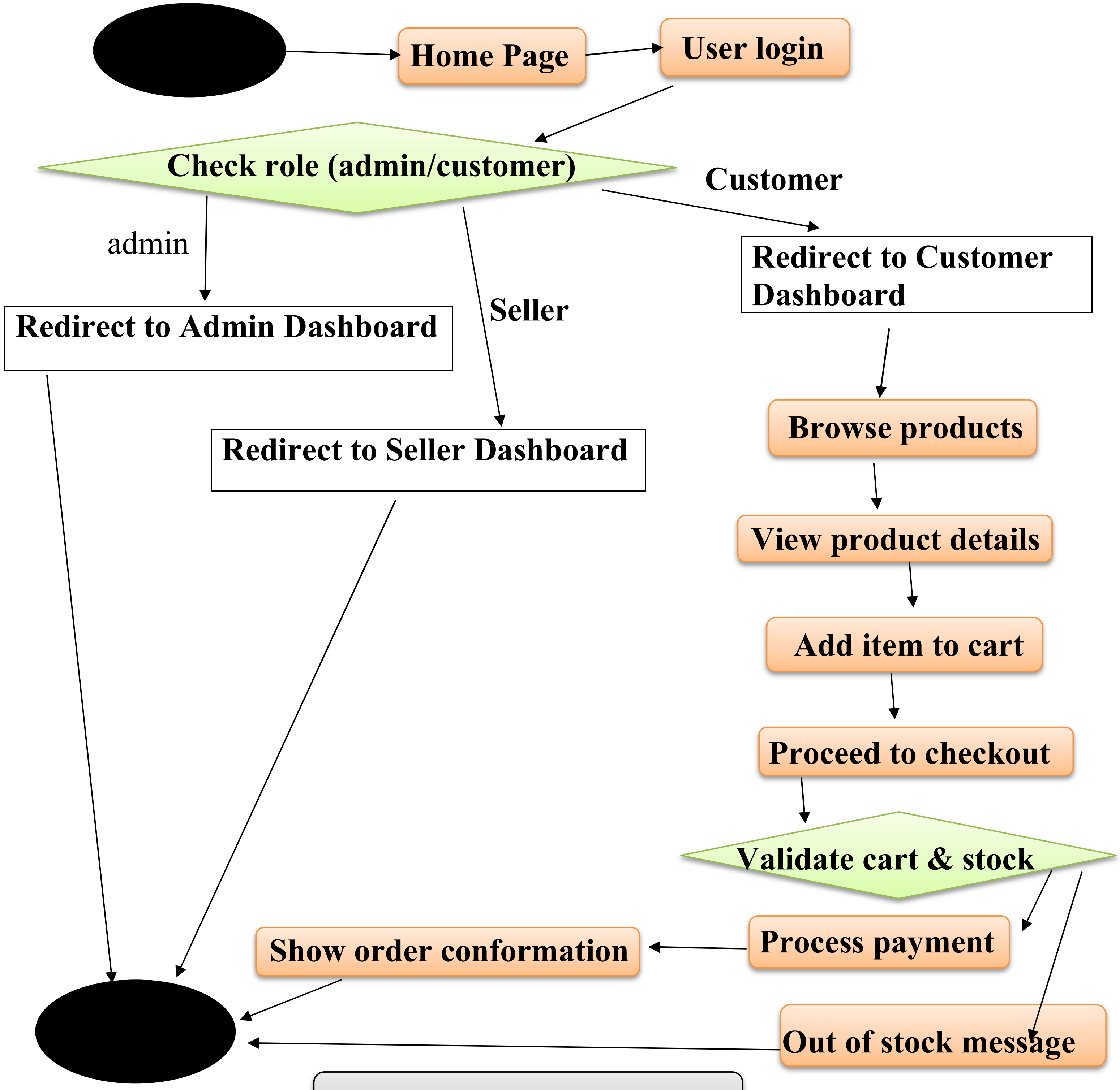


Figure-3: Activity Diagram

Methodology

The development of the multi-seller coffee store website follows a simple and organized process to ensure a user-friendly and efficient platform.

1. Gathering Requirements

We first collected ideas from users, sellers, and admins to decide on the features, such as:

- A dashboard for sellers to manage products.
- Options for customers to browse, search, and buy products.
- An seller admin panel to monitor everything.

2. Design

We created plans for how the website would look and work, including:

- **User Interface (UI):** Simple and responsive design to work well on all devices.
- **Database:** Organized structure to store details like products, orders, and users.
- **System Layout:** Divided into frontend, backend, and database for easy management.

3. Development

The project was built in small steps:

- **Frontend:** HTML, CSS, and JavaScript were used for creating the user-friendly website.
- **Backend:** PHP and MySQL handled actions like logging in, managing products, and placing orders.

4. Testing

We checked the website for any errors and ensured everything worked smoothly:

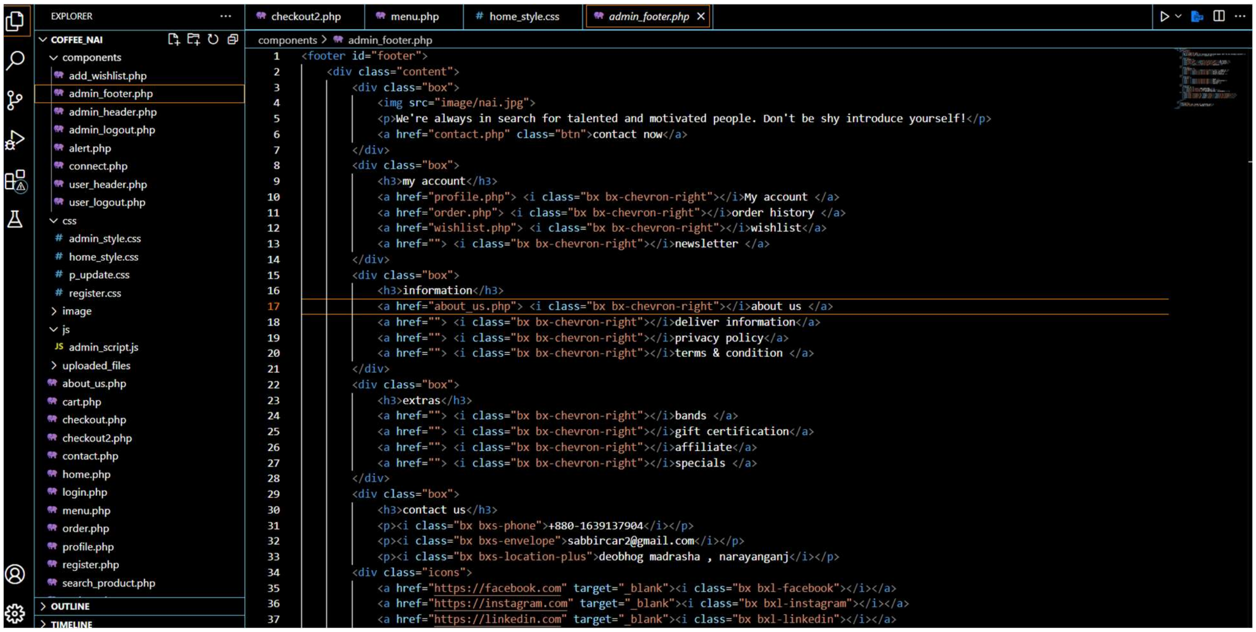
- **Unit Testing:** Checked small parts like login or search.
- **Integration Testing:** Ensured all features worked together.
- **Security Testing:** Protected data and payments with encryption.

5. Deployment

The website was launched using a local hosting service. It is regularly updated based on user feedback to add new features and fix bugs.

Code Overview

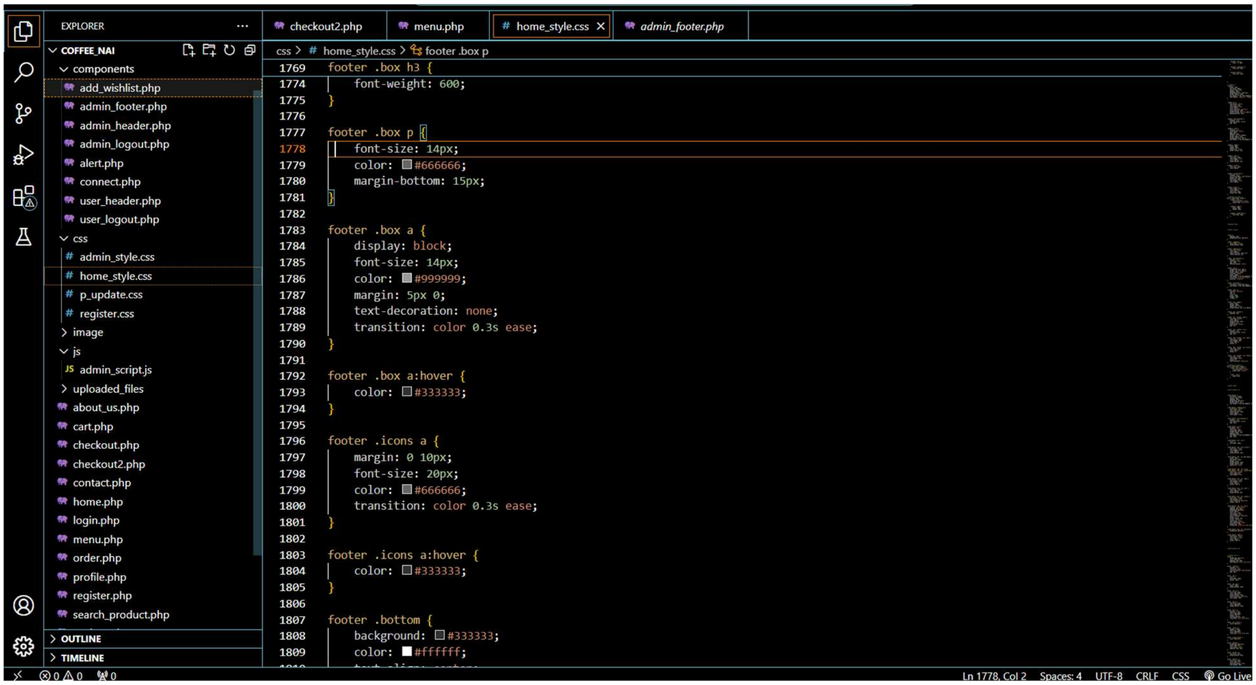
PHP Code: it used for backend



```html
<footer id="footer">
    <div class="content">
        <div class="box">
            <img src="image/nai.jpg">
            <p>We're always in search for talented and motivated people. Don't be shy introduce yourself!</p>
            <a href="contact.php" class="btn">contact now</a>
        </div>
        <div class="box">
            <h3>my account</h3>
            <a href="profile.php"> <i class="bx bx-chevron-right"></i>My account </a>
            <a href="order.php"> <i class="bx bx-chevron-right"></i>order history </a>
            <a href="wishlist.php"> <i class="bx bx-chevron-right"></i>wishlist</a>
            <a href=""> <i class="bx bx-chevron-right"></i>newsletter </a>
        </div>
        <div class="box">
            <h3>information</h3>
            <a href="about_us.php"> <i class="bx bx-chevron-right"></i>about us </a>
            <a href=""> <i class="bx bx-chevron-right"></i>deliver information</a>
            <a href=""> <i class="bx bx-chevron-right"></i>privacy policy</a>
            <a href=""> <i class="bx bx-chevron-right"></i>terms & condition </a>
        </div>
        <div class="box">
            <h3>extras</h3>
            <a href=""> <i class="bx bx-chevron-right"></i>bands </a>
            <a href=""> <i class="bx bx-chevron-right"></i>gift certification</a>
            <a href=""> <i class="bx bx-chevron-right"></i>affiliate</a>
            <a href=""> <i class="bx bx-chevron-right"></i>specials </a>
        </div>
        <div class="box">
            <h3>contact us</h3>
            <p><i class="bx bxs-phone">+880-1639137904</i></p>
            <p><i class="bx bxs-envelope">sabbircar2@gmail.com</i></p>
            <p><i class="bx bxs-location-plus">deobhog madrasha , narayanganj</i></p>
        <div class="icons">
            <a href="https://facebook.com" target="_blank"><i class="bx bxl-facebook"></i></a>
            <a href="https://instagram.com" target="_blank"><i class="bx bxl-instagram"></i></a>
            <a href="https://linkedin.com" target="_blank"><i class="bx bxl-linkedin"></i></a>
```

Fig4-php code

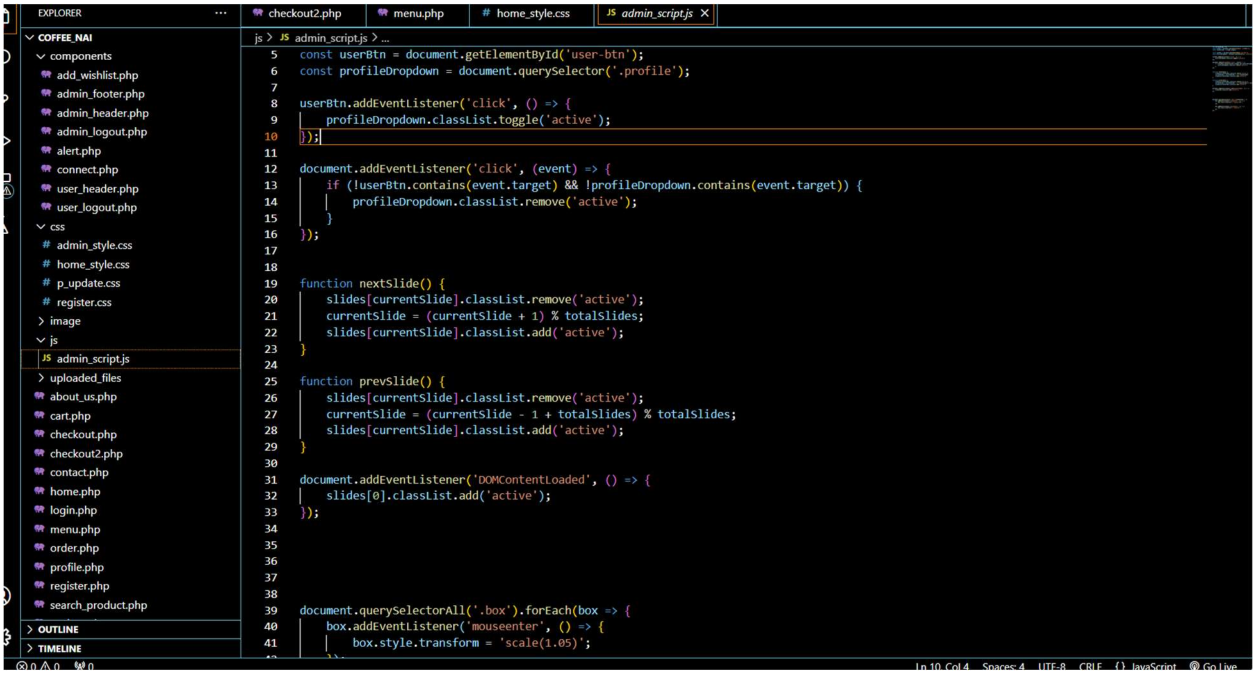
CSS Code: it used for frontend



```css
footer .box h3 {
    font-weight: 600;
}

footer .box p {
    font-size: 14px;
    color: #666666;
    margin-bottom: 15px;
}

footer .box a {
    display: block;
    font-size: 14px;
    color: #999999;
    margin: 5px 0;
    text-decoration: none;
    transition: color 0.3s ease;
}

footer .box a:hover {
    color: #333333;
}

footer .icons a {
    margin: 0 10px;
    font-size: 20px;
    color: #666666;
    transition: color 0.3s ease;
}

footer .icons a:hover {
    color: #333333;
}

footer .bottom {
    background: #333333;
    color: #ffffff;
```

Fig5-css code

JAVAScript Code: it used for fronted



```javascript
const userBtn = document.getElementById('user-btn');
const profileDropdown = document.querySelector('.profile');

userBtn.addEventListener('click', () => {
    profileDropdown.classList.toggle('active');
});

document.addEventListener('click', (event) => {
    if (!userBtn.contains(event.target) && !profileDropdown.contains(event.target)) {
        profileDropdown.classList.remove('active');
    }
});


function nextSlide() {
    slides[currentSlide].classList.remove('active');
    currentSlide = (currentSlide + 1) % totalSlides;
    slides[currentSlide].classList.add('active');
}

function prevSlide() {
    slides[currentSlide].classList.remove('active');
    currentSlide = (currentSlide - 1 + totalSlides) % totalSlides;
    slides[currentSlide].classList.add('active');
}

document.addEventListener('DOMContentLoaded', () => {
    slides[0].classList.add('active');
});





document.querySelectorAll('.box').forEach(box => {
    box.addEventListener('mouseenter', () => {
        box.style.transform = 'scale(1.05)';
```

Fig6-javascript code

Data-Base

For database use my-sql

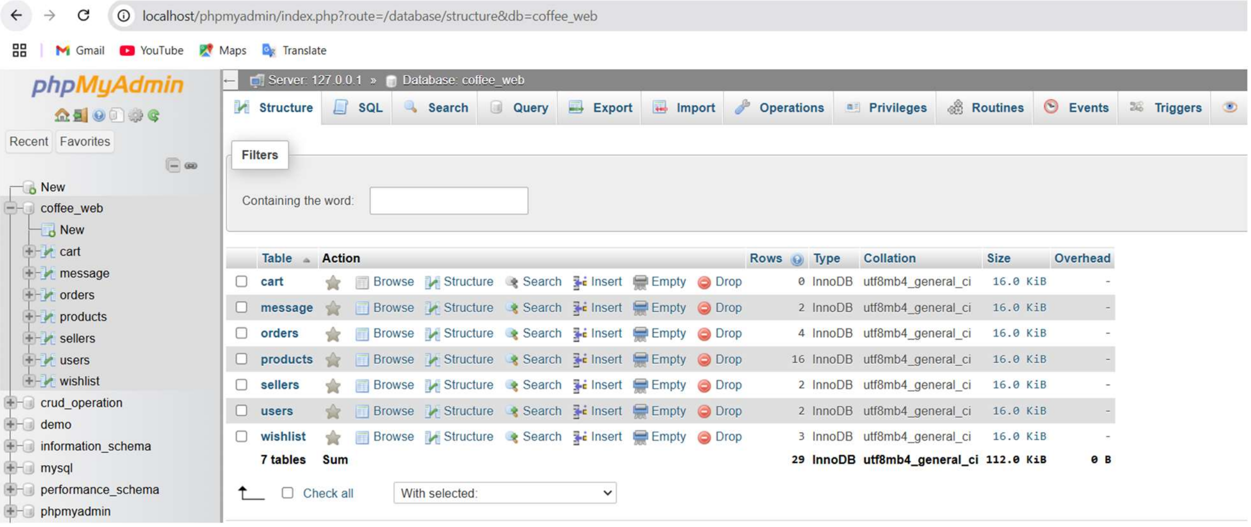


	Table	Action	Rows	Type	Collation	Size	Overhead
□	cart	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	16.0 KiB	-
□	message	Browse Structure Search Insert Empty Drop	2	InnoDB	utf8mb4_general_ci	16.0 KiB	-
□	orders	Browse Structure Search Insert Empty Drop	4	InnoDB	utf8mb4_general_ci	16.0 KiB	-
□	products	Browse Structure Search Insert Empty Drop	16	InnoDB	utf8mb4_general_ci	16.0 KiB	-
□	sellers	Browse Structure Search Insert Empty Drop	2	InnoDB	utf8mb4_general_ci	16.0 KiB	-
□	users	Browse Structure Search Insert Empty Drop	2	InnoDB	utf8mb4_general_ci	16.0 KiB	-
□	wishlist	Browse Structure Search Insert Empty Drop	3	InnoDB	utf8mb4_general_ci	16.0 KiB	-
	7 tables	Sum	29	InnoDB	utf8mb4_general_ci	112.0 KiB	0 B

□ Check all   With selected:

Fig7-my sql

OUTPUTS

Home: A simple home page

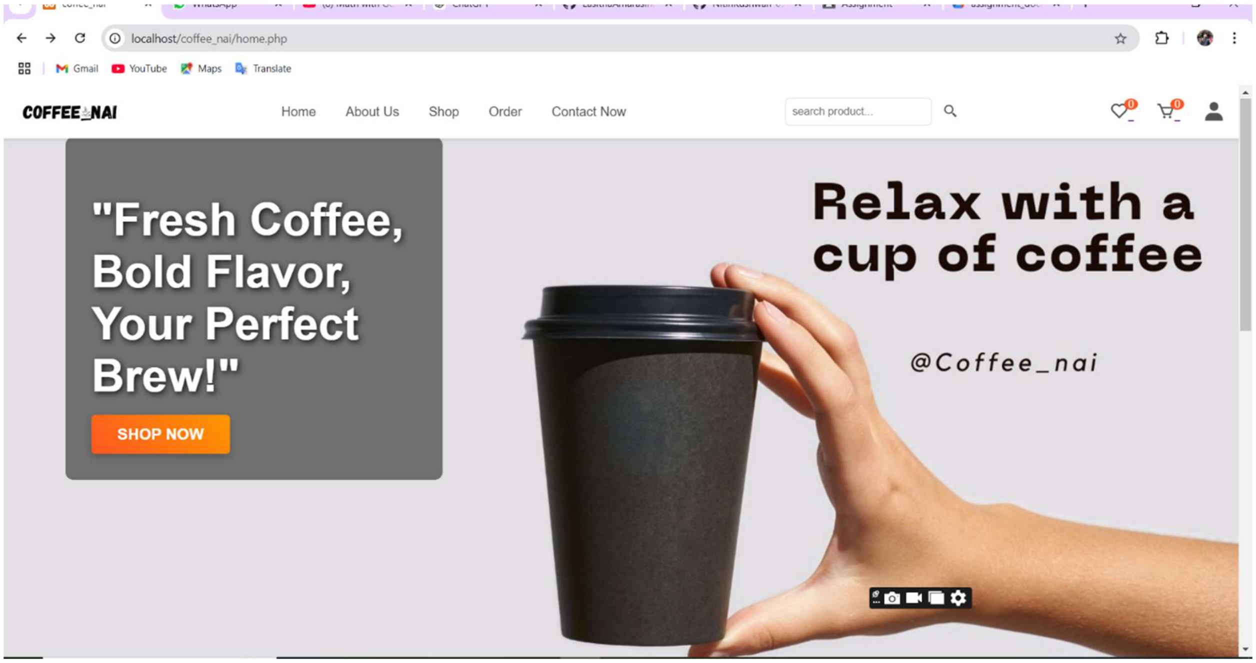
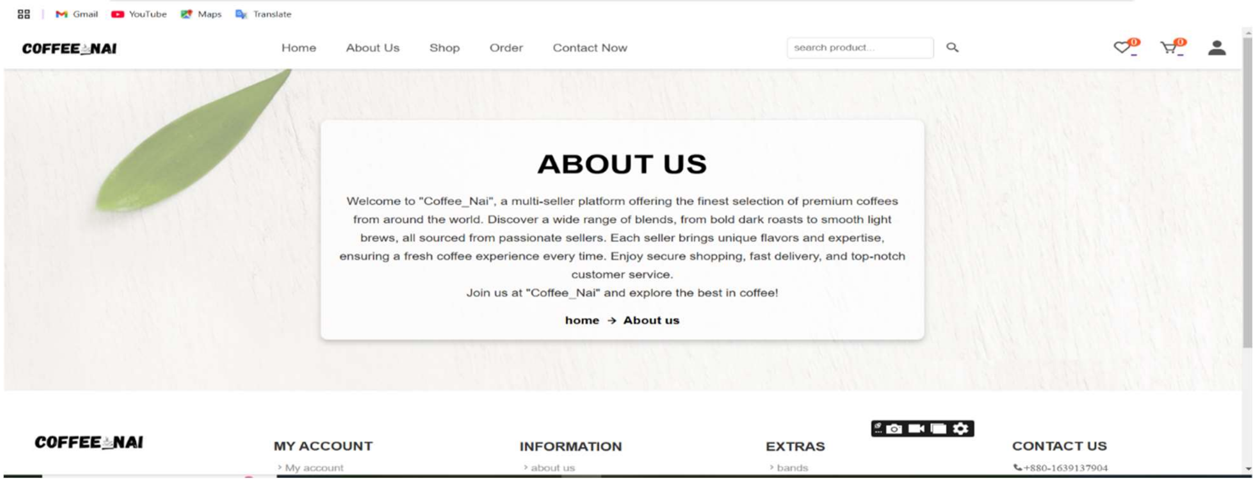


Fig8-home page

About Us: You can know about this website



ABOUT US

Welcome to "Coffee_Nai", a multi-seller platform offering the finest selection of premium coffees from around the world. Discover a wide range of blends, from bold dark roasts to smooth light brews, all sourced from passionate sellers. Each seller brings unique flavors and expertise, ensuring a fresh coffee experience every time. Enjoy secure shopping, fast delivery, and top-notch customer service.
Join us at "Coffee_Nai" and explore the best in coffee!

Fig9-about us

Shopping Products: where you can buy products

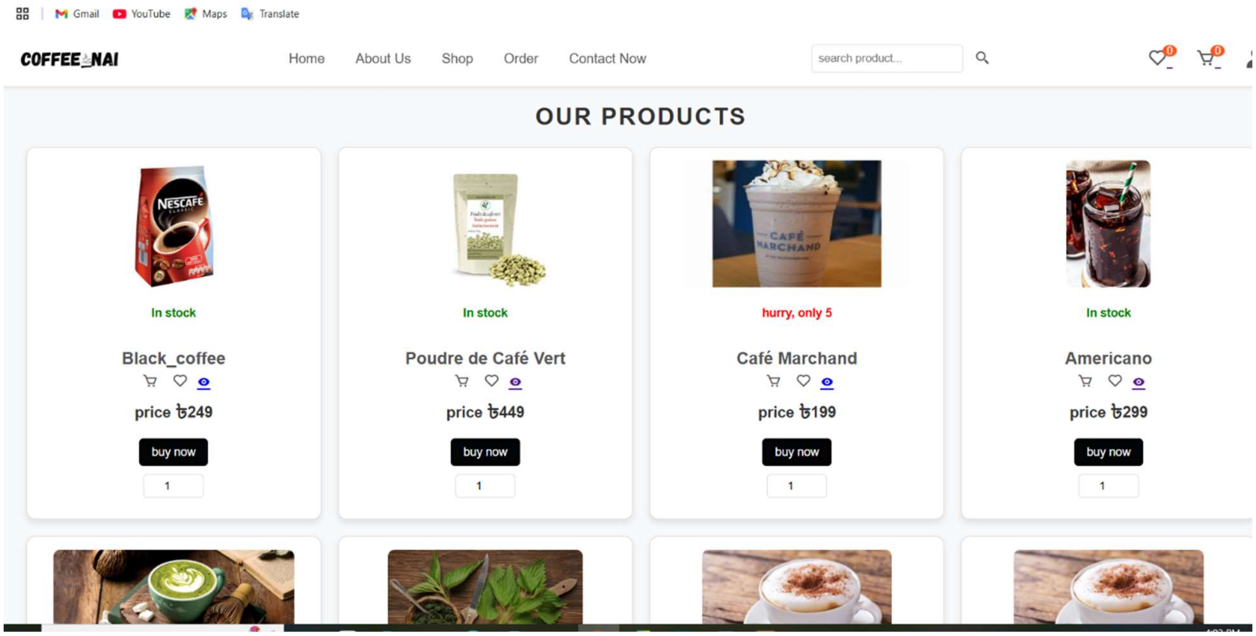


Fig10-shop page

Wishlist: add the product user’s wishlist

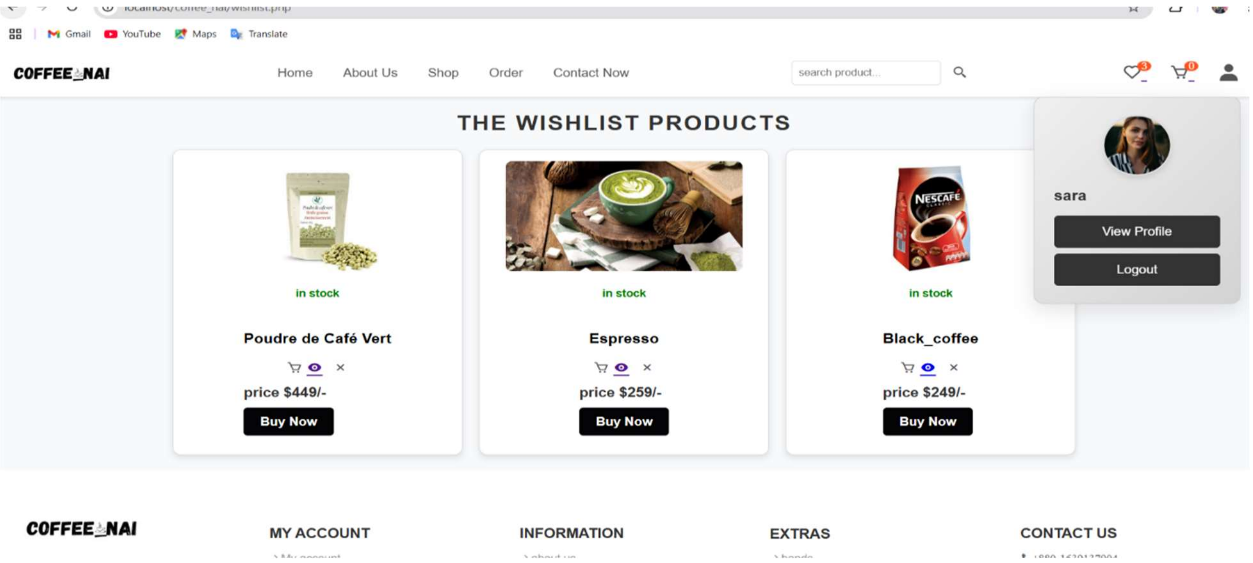
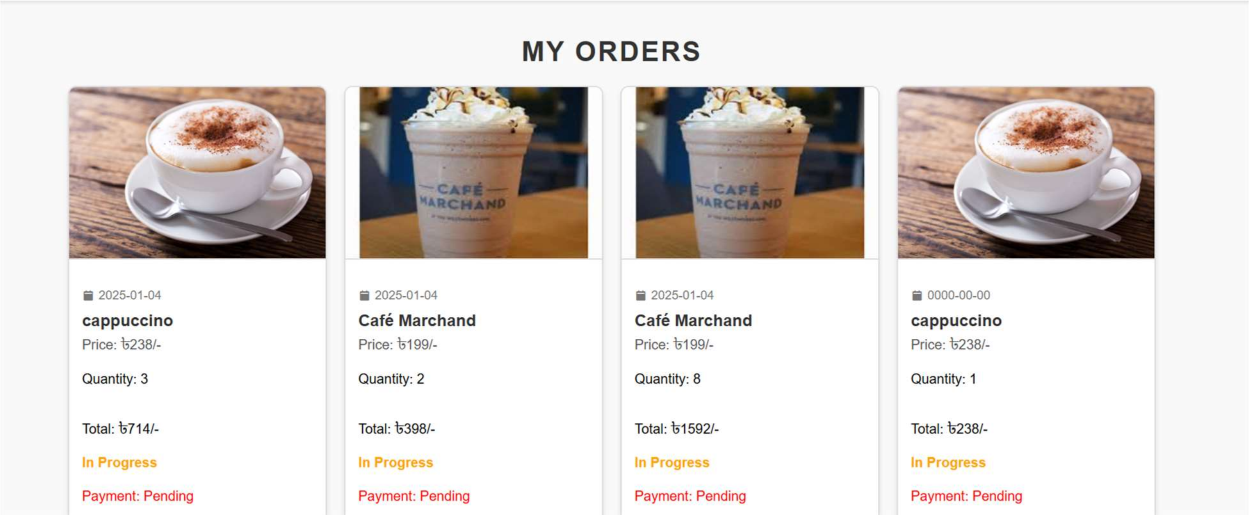


Fig11-wishlist

Ordered List: The order list should include the Order ID, Product Name, Quantity, Total Price, Order Date, and Order Status.



MY ORDERS

2025-01-04
cappuccino
Price: ৳238/-
Quantity: 3
Total: ৳714/-
In Progress
Payment: Pending

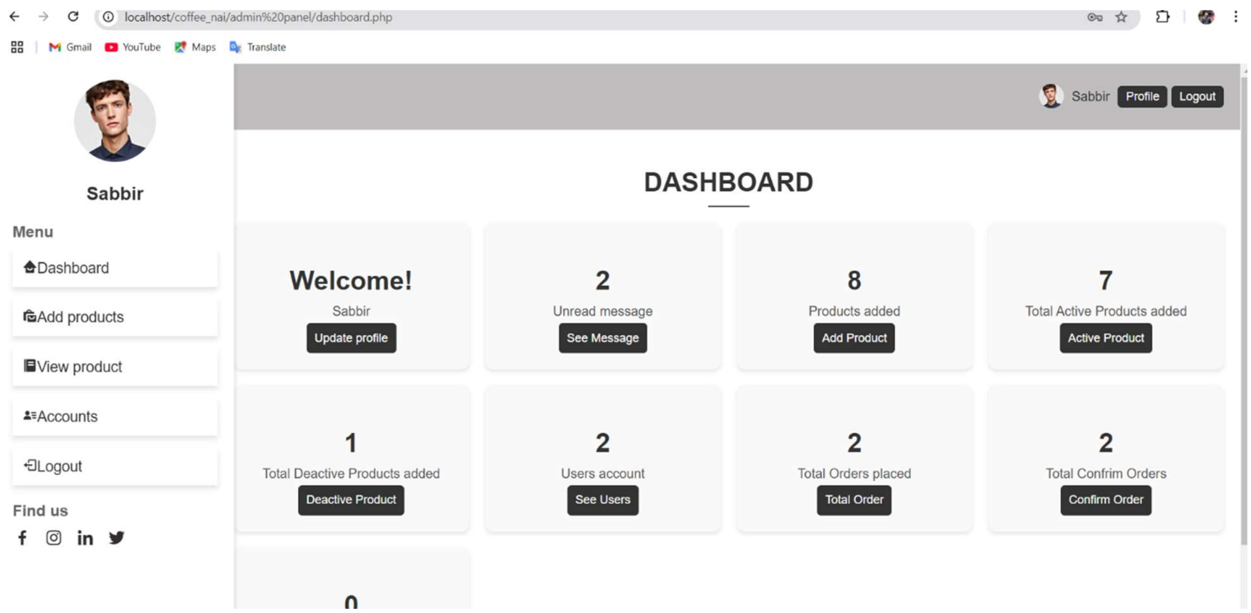
2025-01-04
Café Marchand
Price: ৳199/-
Quantity: 2
Total: ৳398/-
In Progress
Payment: Pending

2025-01-04
Café Marchand
Price: ৳199/-
Quantity: 8
Total: ৳1592/-
In Progress
Payment: Pending

0000-00-00
cappuccino
Price: ৳238/-
Quantity: 1
Total: ৳238/-
In Progress
Payment: Pending

Fig12-order list

Seller Dashboard: The seller dashboard should include the following sections: Product Management (Add, Edit, Delete Products), Order List (View and Update Order Status).



DASHBOARD

Welcome!
Sabbir
Update profile

2
Unread message
See Message

8
Products added
Add Product

7
Total Active Products added
Active Product

1
Total Deactive Products added
Deactive Product

2
Users account
See Users

2
Total Orders placed
Total Order

2
Total Confrim Orders
Confirm Order

0

Fig13-seller dashboard

Add products List: here add the products

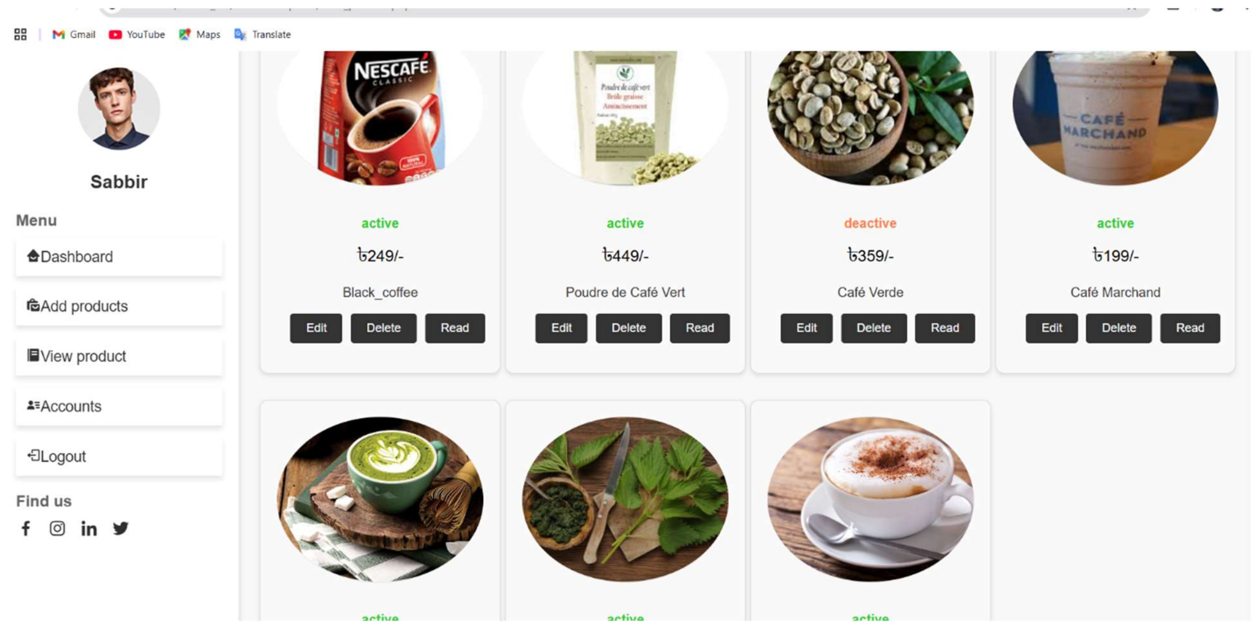


Fig14-add products

Profile Details: you can update your profile and see total orders

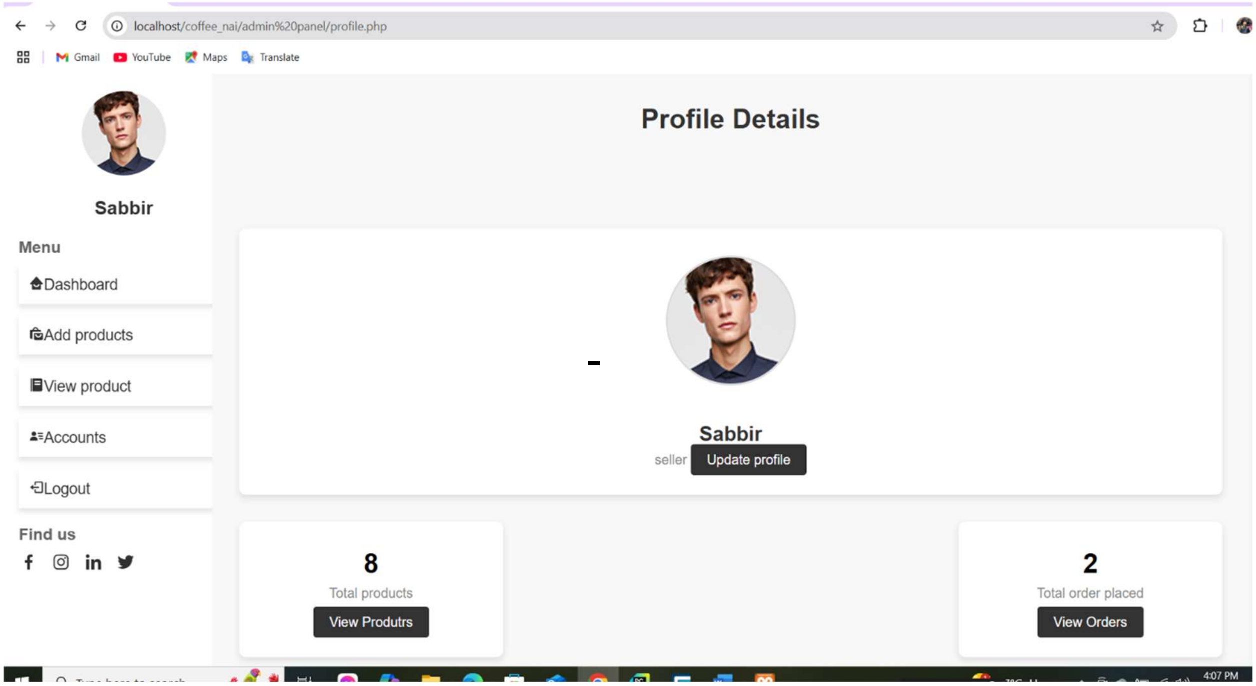


Fig15-profile

Problems and Solutions

Problem	Solution
Managing multiple sellers	Separate dashboards for each seller.
Data security	Used encryption and secure connections.
Slow loading time	Optimized images and database queries.

Conclusion

This project makes it easier for coffee sellers and buyers to connect through an online marketplace dedicated to coffee. It gives sellers a simple platform to showcase their products, manage their stores, and grow their businesses. Buyers, on the other hand, get a smooth and convenient shopping experience where they can explore a variety of coffee products all in one place. The website is designed to be user-friendly, so anyone can use it without trouble. It also keeps everything secure, ensuring that both sellers and buyers can trust the platform. The project focuses on making things simple and efficient, helping small coffee businesses reach more customers while giving coffee lovers an enjoyable way to shop for their favorite products. In the future, the website will get even better. New features like personalized recommendations, advanced search options, and faster browsing will make it more fun and useful for everyone. Regular updates will improve performance and add more tools for sellers to manage their stores. This project is more than just a shopping platform. it's a way to support small coffee businesses and create a community for coffee lovers. It helps sellers grow and customers find unique, high-quality coffee products they'll love.

Reference

1. https://www.w3schools.com/
2. https://www.php.net/manual/en/
3. https://dev.mysql.com/doc/