

Project Title: **Multi-Actor E-commerce System**

Description:

Objective: Develop a comprehensive e-commerce system using HTML, CSS, JavaScript, and Bootstrap. The system should cater to three main actors: Customers, Sellers, and Admins. Each actor will have specific functionalities and access levels.

Key Features:

1. User Authentication:

- Implement user authentication to distinguish between Customers, Sellers, and Admins.
- Provide secure access to different sections of the system based on user roles.

2. Home Page:

- Create a home page displaying featured products and promotions.
- Utilize Bootstrap components for a clean and responsive layout.

3. Product Catalog:

- Display a list of products with relevant details such as product name, image, price, and an "Add to Cart" button.
- Allow Customers and Sellers to browse and search for products.

4. Product Details Page:

- Create individual pages for each product, showing detailed information, images, and options.
- Include a "Back to Catalog" button for easy navigation.

5. Shopping Cart:

- Implement a shopping cart for Customers to keep track of selected items.
- Allow Customers to add or remove items from the cart.
- Display the cart contents, including product names, quantities, prices, and a total.

6. Checkout Process:

- Develop a checkout process with a form for Customers to enter shipping and payment details.
- Include a summary of the order before finalizing the purchase.

7. Seller Dashboard:

- Create a dashboard for Sellers with sections for managing products, processing orders, and viewing sales analytics.
- Allow Sellers to add, edit, and delete products.

8. Admin Panel:

- Implement an admin panel with access to all features.
- Admins can manage user accounts, review and moderate product listings, and handle customer service tasks.

9. Responsive Design:

- Ensure the system is responsive and works well on various devices, including desktops, tablets, and smartphones. **Technical Details:**

1. HTML:

- Structure the web pages using HTML, defining sections for the home page, product catalog, individual product pages, shopping cart, checkout process, and user dashboards.

2. CSS and Bootstrap:

- Style the pages using CSS, incorporating Bootstrap for a clean and responsive layout.
- Utilize Bootstrap's grid system for responsive design.

3. JavaScript:

- Use JavaScript for dynamic interactions, such as updating the cart, handling form submissions, and providing a smooth user experience.

4. Local Storage:

- Use local storage to store and retrieve product, user, and order data.

User-Specific Functionalities:

1. Customers:

- Can browse products, add items to the cart, and complete purchases.
- View order history and manage account details.

2. Sellers:

- Can add, edit, and delete products.
- Manage order processing and view sales analytics.

3. Admins:

- Have full access to all features.
- Manage user accounts (remove, reset password), moderate product listings, and handle customer service.

Documentation: Provide clear documentation with examples and usage guidelines for Customers, Sellers, and Admins. Include instructions on how to browse products, manage user accounts, and complete transactions.

Usage: Users can access the e-commerce system through a web browser. Customers, Sellers, and Admins will have different levels of access and functionalities based on their roles.

Project Duration: from 13/2/2026 to 1/3/2026

Note:

- You can use any JavaScript library for creating data visualizations (charts and graphs). Like: D3.js, Chart.js, plotly.js, or any other one.
- Try to use remote repo (**GitHub**) to organize your teamwork.
- Any other added features will be counted.