

PROJECT DOCUMENTATION

Project Title:

Responsive E-Commerce Website with Login and Signup System

Submitted By:

Name: Harsh Chandel
Student ID: 05073639
Batch Code: ANP-D3238

Project Guide:

Ms. Maseera Jamal Shaik

1. Introduction

This project titled “**Responsive E-Commerce Website with Login and Signup System**” is a front-end web development project developed using HTML, CSS, and JavaScript. The website simulates a basic online shopping platform where users can browse products, add items to a cart, register, login, and proceed to checkout.

The project demonstrates essential web development concepts including responsive design, dynamic content handling, form validation, local storage usage, and interactive user interface development.

2. Objective of the Project

The primary objectives of this project are:

- To design a responsive E-Commerce website interface.
- To implement Login and Signup functionality.
- To develop a dynamic shopping cart system.
- To use JavaScript for interactivity and data handling.
- To understand client-side storage using local Storage.
- To enhance front-end development skills.

3. Tools and Technologies Used

- **HTML5** – Structure of web pages
 - **CSS3** – Styling and responsive design
 - **JavaScript (script.js)** – Dynamic functionality and logic
 - **Visual Studio Code (VS Code)** – Development environment
 - **Web Browser** – Testing and execution
-

4. Project Description

The project is a complete front-end E-Commerce website consisting of multiple interconnected pages:

4.1 Home Page (index.html)

- Displays website introduction.
- Provides navigation to products, login, and signup pages.
- Contains featured products section.

4.2 Products Page (products.html)

- Displays all available products dynamically.
- Includes search functionality.
- Allows filtering by category.
- Allows sorting by price and name.
- Provides “Add to Cart” option.

4.3 Cart Page (cart.html)

- Displays selected products.
- Allows quantity update.
- Allows product removal.
- Automatically calculates subtotal, tax, shipping, and total.

4.4 Checkout Page (checkout.html)

- Collects shipping and payment details.
- Displays order summary.
- Simulates order placement.
- Clears cart after successful order.

4.5 Login & Signup Page (loginpage.html / Signup.html)

- Allows user authentication.

- Stores username in local storage.
 - Provides toggle between login and signup forms.
-

5. Explanation of script.js File

The **script.js** file is the core logic of the website. It controls all dynamic behaviour and user interactions.

Key Functionalities Implemented in script.js:

5.1 Shopping Cart Management

- Add products to cart
- Remove products from cart
- Update product quantity
- Store cart data in **local Storage**
- Update cart counts dynamically

5.2 Product Display

- Dynamically loads product data from `products-data.js`
- Displays products in grid layout
- Show ratings, price, and description

5.3 Filtering and Searching

- Search products by name or description
- Filter by category
- Sort products by:
 - Name
 - Price (Low to High)
 - Price (High to Low)

5.4 Cart Summary Calculation

- Calculates:
 - Subtotal
 - Shipping charges
 - Tax (10%)
 - Total amount
- Updates summary dynamically

5.5 Checkout Handling

- Validates required form fields
- Simulates order placement
- Displays confirmation message

- Clears cart after successful order

5.6 Login and Signup Handling

- Stores username in local Storage
- Validates password confirmation
- Redirects user after login/signup
- Toggles between login and signup forms

The script ensures smooth navigation and dynamic interaction across all pages of the website.

6. Features of the Project

- Fully responsive layout
- Dynamic product listing
- Shopping cart functionality
- Local storage integration
- Login and signup system
- Product filtering and sorting
- Checkout simulation
- Clean and modern UI design

7. Project Structure

The project consists of the following files:

- index.html – Home page
- products.html – Product listing page
- cart.html – Shopping cart page
- checkout.html – Checkout page
- loginpage.html – Login system
- Signup.html – Signup page
- products-data.js – Product data storage
- script.js – Core functionality logic
- style.css – Website styling

8. Learning Outcomes

Through this project, I have learned:

- Structuring multi-page websites
- Implementing dynamic JavaScript functionality

- Using local Storage for data persistence
 - Designing responsive layouts
 - Managing DOM manipulation
 - Creating interactive UI components
-

9. Conclusion

The “Responsive E-Commerce Website with Login and Signup System” project successfully demonstrates the practical implementation of HTML, CSS, and JavaScript in developing a functional front-end web application.

It provides a strong foundation in web development concepts such as dynamic content rendering, user authentication simulation, cart management, and responsive UI design.

This project enhanced my technical knowledge, logical thinking, and real-world development skills