

**MIT Art, Design and Technology University**

**MIT School of Computing, Pune**

**Department of Information Technology**

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| **Lab Manual** |

# **Practical - Web Programming**

# **Class - S.Y. (SEM-IV), DA**

# **Batch - DA-I**

# **Name of the Student**

# **Ms. Disha Sampat Raskar**

**A.Y. 2024 – 2025**

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| **Web Programming**  **SEMESTER – IV** | | | | | |
| **Course Code:** | | 23IT2008 | **Course Credits:** | 02 | |
| **Teaching Hours / Week (L:T:P):** | | 0:0:4 | **CA Marks:** | 25 | |
| **Total Number of Teaching Hours:** | |  | **END-SEM Marks:** | 25 | |
| **Course Pre-requisites:** | | | | | |
| **Course Description:**  This course provides a comprehensive introduction to web technology, designed to help students develop a strong foundation in building and managing websites and web applications. The curriculum covers key topics such as HTML, CSS, and JavaScript,PHP, MySQL, which are essential for creating interactive, well-designed web pages. Students will also explore the principles of responsive design, ensuring that web applications are optimized for different devices and screen sizes.  The course dives deeper into server-side technologies, including HTTP, web servers, and databases, allowing students to understand how websites function behind the scenes. Emphasis is placed on practical learning, and students will gain hands-on experience by working on projects that showcase their ability to design, develop, and deploy websites.  By the end of the course, students will be proficient in using modern web technologies to create web applications. They will understand how to handle client-server interactions, manage user data, and implement various web technologies to enhance the functionality of their applications. | | | | | |
| **Course Learning Objectives:** This course will enable the students to:   1. Understand fundamental concepts of front-end web development. 2. Enable students to create basic web pages incorporating essential elements such as images, hyperlinks, lists, tables, and forms. 3. Teach students how to use CSS to manage fonts, lists, colors, text alignment, and background images for a cohesive and aesthetically pleasing web design. 4. Develop an understanding of JavaScript scopes to manage the visibility and lifetime of variables and functions effectively. 5. Equip students with the skills to implement and handle JavaScript events, enabling enhanced user interactions through event-driven programming. 6. Apply comprehensive knowledge of HTML, CSS, and JavaScript to develop a complete front-end application. Utilize project-based learning to showcase problem-solving skills and creativity in web development projects. 7. Configure server environments with Apache/TOMCAT. 8. Set up a PHP development environment and write basic PHP scripts. 9. Master PHP programming constructs for web development tasks. 10. Create and process HTML forms, and manage MySQL database operations. 11. Develop comprehensive back-end applications using PHP and MySQL. | | | | | |
| **Course Outcome:** After taking this course, Students will be able to :   1. Apply knowledge of HTML to create the structure of the webpage and CSS to style and layout the elements, making the application visually appealing. 2. Apply comprehensive knowledge of HTML, CSS, and JavaScript to develop a complete front-end application and utilize project-based learning to showcase problem-solving skills and creativity in web development projects. 3. Set up and configure a server environment using tools like Apache or TOMCAT and set up a PHP development environment. Write & execute simple PHP scripts, understanding PHP syntax and basic features, create HTML forms to collect user data and integrate with PHP for processing. 4. Design and develop a back-end application using PHP and MySQL, implementing CRUD operations to manage data effectively. | | | | | |
| **UNIT – I** | **Introduction to HTML and Cascading Style Sheet** | | | | **09 Hours** |
| Module 1 - Markup Language (HTML): Introduction to HTML, Formatting and Fonts, Commenting Code, Anchors, Backgrounds, Images, Hyperlinks, Lists, Tables, Frames, HTML Forms  Module 2 - CSS: Need for CSS, introduction to CSS, basic syntax and structure, Levels of style sheets, Style specification formats, BOX Model, Selector forms, Property value forms, Font properties, List properties, Color, Alignment of text, Background images | | | | | |
| **Pedagogy** | **ICT Teaching / PowerPoint Presentation and Videos:**  **Use tools like Visual Studio Code (free).**  **Videos:**  [**https://www.coursera.org/learn/html-css-javascript-for-web-developers**](https://www.coursera.org/learn/html-css-javascript-for-web-developers) | | | | |
| **Self-study / Do it yourself /:**  **Practice creating basic HTML pages and enhancing them using CSS.** | | | | |
| **Experiential Learning Topics:**  **Design a simple webpage for coffee shop website** | | | | |
| **PBL - Project Based Learning:**  **Create a multi-page website (e.g., coffee shop website) using HTML and CSS.** | | | | |
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| **UNIT – II** | **Front-End Development** | | | | **09 Hours** |
| Module 3 - Overview of JavaScript, including JS in an HTML (Embedded, External), Basic JS syntax, basic interaction with HTML  Module 4 - Core features of JavaScript: Data types, Control Structures, Arrays, Functions and Scopes | | | | | |
| **Pedagogy** | **ICT Teaching / PowerPoint Presentation and Videos:**  **Use tools like Visual Studio Code (free).**  **Videos:**  [**https://www.coursera.org/learn/javascript-basics**](https://www.coursera.org/learn/javascript-basics) | | | | |
| **Self-study / Do it yourself /:**  **Solve exercises on JavaScript syntax, control structures, and functions** | | | | |
| **Experiential Learning Topics:**  **Build a web page with interactive elements (e.g., a simple calculator).** | | | | |
| **PBL - Project Based Learning:**  **Develop an interactive webpage that uses JavaScript to validate form inputs or perform basic calculations.** | | | | |
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| **UNIT – III** | **Advanced Front-End Development** | | | | **09 Hours** |
| Module 5 - DOM: DOM levels, DOM Objects and their properties and methods, Manipulating DOM  Module 6 - JavaScript Events: JavaScript Events, Types of JavaScript Events, Objects in JS, Event Handling | | | | | |
| **Pedagogy** | **ICT Teaching / PowerPoint Presentation and Videos:**  [**https://www.coursera.org/learn/building-interactive-web-pages-using-javascript**](https://www.coursera.org/learn/building-interactive-web-pages-using-javascript)  **Use tools like Visual Studio Code (free).** | | | | |
| **Self-study / Do it yourself /:**  **Practice exercises on DOM traversal and event handling.** | | | | |
| **Experiential Learning Topics:**  **Add dynamic behavior to a webpage using DOM and events (e.g., a to-do list app).** | | | | |
| **PBL - Project Based Learning:**  **Develop a web page with dynamic content (e.g., a task manager or interactive quiz) using DOM manipulation and event handling.** | | | | |
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| **UNIT – IV** | **Server Side Scripting** | | | | **09 Hours** |
| Module 7 - Set up and configure a server environment using tools like Apache or TOMCAT, set up a PHP development environment.  Module 8 -Introduction to PHP: : Introduction to PHP, Server side scripting Vs Client side scripting, Basic Development Concepts (Mixing PHP with HTML), Creating, Writing & Running First PHP Script, PHP syntax, conditions & Loops, Functions, String manipulation, Arrays & Functions,  Module 9 - Form handling with HTML and PHP: Designing of Forms using HTML, Form Handling using GET and POST methods of Form | | | | | |
| **Pedagogy** | **ICT Teaching / PowerPoint Presentation and Videos:**  [**https://www.coursera.org/learn/web-applications-php**](https://www.coursera.org/learn/web-applications-php)  **Use tools like Visual Studio Code (free), XAMPP/WAMP for PHP server setup, and MySQL Workbench for database management** | | | | |
| **Self-study / Do it yourself /:**  **Practice exercises on form handling and server-side scripting with PHP.** | | | | |
| **Experiential Learning Topics:**  **Create a basic form for data submission and handle it using PHP (e.g., feedback form).** | | | | |
| **PBL - Project Based Learning:**  **Develop a small server-side application (e.g., a contact form with email validation and submission).** | | | | |
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| **UNIT – V** | **Working with Databases and Web Application Development** | | | | **09 Hours** |
| Module 10 - Working with databases using MySQL with PHP: MySQL database, create database, create table, primary key with AUTO\_INCREMENT setting, Insert Data Into a Database Table, Select Data From a Database Table, Open or close a Connection to the MySQL Server.  Module 11 - Web Application Development (Project): Develop the web application to handle client-server interactions, manage user data, and implement various web technologies to enhance the functionality of their applications. Example: Website for a Coffee Shop | | | | | |
| **Pedagogy** | **ICT Teaching / PowerPoint Presentation and Videos:**  **Use tools like Visual Studio Code (free), XAMPP/WAMP for PHP server setup, and MySQL Workbench for database management**  **Videos:**  [**https://www.coursera.org/learn/web-app**](https://www.coursera.org/learn/web-app) | | | | |
| **Self-study / Do it yourself /:**  **Exercises on creating and manipulating databases using PHP and MySQL.** | | | | |
| **Experiential Learning Topics:**  **Create a database and design a webpage to display its data dynamically.** | | | | |
| **PBL - Project Based Learning:**  **Develop a fully functional web application (e.g., a Coffee Shop website or e-commerce platform) that integrates database functionality for data management.** | | | | |

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| 1. | Create the basic structure of the coffee shop website, including the home page layout with a header, main content area, and footer.  Prepare a common project website design and plan document for all assignments. Consider following points:   1. Brief information about the project. 2. Set the goals & deliverables. 3. Finalize the modules of the project. 4. Define the audience. 5. Describe pain points & the ideal experience (On the basis of existing systems) 6. Set the visual direction 7. Map out the Project structure. 8. Plan the content for each page. 9. Add ideas for content, images & layout. 10. Determine your site structure or Create content for your core website pages:     1. Home page     2. About page     3. Product/Service page     4. Testimonial/review page     5. Contact page     6. Starter blog posts 11. Create and collect design elements   These design elements define your brand personality and help customers feel what your brand represents through the use of:   * 1. Colors   2. Fonts and typography   3. Logos   4. Images and photos |
| 2. | HTML   1. Create a detailed home page for the coffee shop website. 2. Create a detailed menu/product page for the coffee shop website, listing all available items categorized appropriately. 3. Create a cart page that allows customers to review and manage the items they wish to purchase before proceeding to checkout. 4. Create an about us page that provides detailed information about the coffee shop’s history, mission, and team. 5. Create a contact page that allows customers to easily get in touch with the coffee shop through a form. 6. Design and implement admin/user registration form for the coffee shop website. 7. Design and implement admin/user login form for the coffee shop website. |
| 3. | CSS   1. Enhance the layout of the coffee shop website using CSS Grid for the home page. 2. Use CSS Grid to layout the menu/product items in a structured and style the menu categories with appropriate headings, spacing, separators, images, descriptions, and prices. |
| 4. | CSS   1. Enhance the cart page to make it user-friendly and visually appealing. Style the cart items with appropriate margins, paddings, and input field styles to provide a seamless shopping experience. 2. Enhance and style the about us page with appropriate margins, paddings, and input field styles. 3. Enhance and style the contact page to make it user-friendly and visually appealing. Style the contact form with appropriate margins, paddings, and input field styles. 4. Enhance and style the admin/user registration form with appropriate margins, paddings, and input field styles. 5. Enhance and style the admin/user login form with appropriate margins, paddings, and input field styles. |
| 5. | JavaScript   1. Implement user registration and login forms for the coffee shop website. These forms will allow users to create an account, log in, and access personalized features, such as saving favorite items or viewing order history.   User Registration Form will allow new customers to sign up and create an account on the website. The form will capture basic user details, including the name, email address, and password (not limited to these fields).  User Login Form will allow registered users to log into their accounts. The form will require an email address and a password to authenticate the user.   1. Provide validations for user registration and login forms to validate the input to ensure that all required fields are filled and that the email format is valid. (**Contents beyond Syllabus)** 2. Develop cart functionality to allow users to add items, update quantities, and remove items. |
| 6. | JavaScript   1. The user login form will allow registered users to log into their accounts. The form will require an email address and a password to authenticate the user. 2. If the login is successful, the user should be redirected to the homepage or their user dashboard. (**Contents beyond Syllabus)** 3. Use localStorage or sessionStorage to store authentication data, such as the user’s email and login status. This ensures that once a user is logged in, they remain authenticated even after the page reloads or when they visit the site again. (**Contents beyond Syllabus)** 4. Save the cart data to local storage when items are added, updated, or removed. Retrieve and load the cart data from local storage when the page loads. (**Contents beyond Syllabus)** |
| 7. | PHP   1. Develop a PHP script to handle user registration for the Coffee Shop website. The script should accept input from users for their name, email address, password, etc. (all required fields for registration). 2. Implement error handling to notify users of any issues during registration, such as validation errors. 3. Provide feedback to the user upon successful registration, either through a confirmation message or a redirect to a login page. |
| 8. | PHP   1. Develop a PHP script to handle user login for the Coffee Shop website. The script should accept input from users for their login credentials. (all required fields for login). 2. Provide feedback to the user upon successful login, either through a confirmation message or a redirect to a welcome page. 3. Implement error handling to notify users of login failures due to incorrect credentials or other errors. 4. Provide feedback to the user upon successful login, either through a welcome user name message or a redirect to a home page. |
| 9. | PHP and MySQL   1. Develop a PHP script that allows users to manage their shopping cart for an e-commerce website (e.g., a Coffee Shop store). The script should allow users to add items to their cart, view their cart contents, and remove items if needed. 2. Develop a PHP script to manage the shopping cart for an e-commerce website (e.g., a Coffee Shop store) using MySQL. This script should allow users to add items to their cart, view their cart contents, and remove items from the cart. The cart data should be stored in the MySQL database to allow persistence across sessions. |
| 10. | PHP and MySQL   1. Develop a PHP script to handle the checkout process for users who are ready to complete their purchase. The script should process the cart data and provide feedback to the user upon successful or failed checkout. 2. Develop a PHP script that processes the checkout process for users who are ready to complete their purchase, integrating the MySQL database for handling user and order information. The script should validate user input, process the cart data, and provide feedback upon successful or failed checkout. |

## **Experiment No.1**

## 

## **Problem Statement:**

## Create the basic structure of the Modiwear website, including the home page layout with a header, main content area, and footer.

## Prepare a common project website design and plan document for all assignments. Consider following points:

1. Brief information about the project.
2. Set the goals & deliverables.
3. Finalize the modules of the project.
4. Define the audience.
5. Describe pain points & the ideal experience (On the basis of existing systems)
6. Set the visual direction
7. Map out the Project structure.
8. Plan the content for each page.
9. Add ideas for content, images & layout.
10. Determine your site structure or Create content for your core website pages:
11. Home page
12. About page
13. Product/Service page
14. Testimonial/review page
15. Contact page
16. Starter blog posts
17. Create and collect design elements
    1. These design elements define your brand personality and help customers feel what your brand represents through the use of:
18. Colors
19. Fonts and typography
20. Logos
21. Images and photos

## **Objective:**

## To design the basic structure of the **ModiWear** fashion e-commerce website by planning its layout, content, and visual elements, ensuring it meets user needs and effectively represents the brand’s customizable fashion offerings.

## **Theory:**

### Project Design and Plan Document for Modiwear Website

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#### 1. Brief Information about the Project

The **ModiWear** project is focused on creating a modern, user-friendly, and visually captivating website for a fashion e-commerce brand. The website highlights customizable apparel, promotes personalized designs, and offers an engaging online shopping experience. It includes essential features such as customer login, registration (with email), personalized greetings, and a local storage-based cart system to enhance user engagement and satisfaction.

**2.Goals and Deliverables**

**Goals:**

* Develop an interactive, trendy, and functional website for fashion lovers.
* Display the brand story, product catalog, customer reviews, and contact details.
* Allow users to register (with email) and log in to customize their experience.
* Implement a cart system using local storage for order management.
* Deliver a fully responsive design compatible across all devices.

**Deliverables:**

**Website Pages:**

* Home Page
* About Page
* Product/Services Page
* Testimonials Page
* Contact Page
* Login Page
* Registration Page (with Email)
* Starter Blog Section (optional for future trends and styling posts)

**Core Features:**

* Consistent header and footer with navigation.
* Functional login/registration system (with email + local storage).
* Personalized welcome message after login.
* Mobile-friendly, responsive layout.
* Professional use of brand colors, fonts, and images.

### ****3.Finalize the Modules of the Project:****

The **ModiWear** website uses a modular approach for better scalability and easy maintenance. Each module is responsible for a specific functionality.

**Website Modules:**

1. Home Page Module

The landing page introduces the brand and highlights fashion collections and offers.  
Features:

* Hero section with slogan and buttons like “Shop Now” or “Explore Styles.”
* Showcasing featured outfits and promotional banners.
* Navigation bar for quick access to other pages.
* Footer with social links, contact, and policy links.

#### 2. About Page Module

#### Tells the brand’s backstory, mission, and ethical fashion approach. Features:

#### Introduction to the brand’s journey and design philosophy.

#### Highlights on sustainable fashion and personalization.

#### Visual storytelling with model shots and studio photos.

3. Products/Services Page Module

Displays the catalog of fashion items, customizable designs, and special collections.  
Features:

* Categorized product listings (e.g., T-Shirts, Hoodies, Accessories).
* Product cards with images, price, and description.
* Add to Cart button storing data in local storage.

4. Testimonials Page Module

Builds trust through real customer reviews and style stories.  
Features:

* Customer testimonials shown in slider or card layout.
* Optional form for new users to submit reviews.

5. Contact Page Module

Connects users to the brand for queries and feedback.  
Features:

* Contact form with Name, Email, Subject, and Message fields.
* Embedded Google Map for showroom locations.
* Display customer care email and social handles.

6. Login Page Module

Secure login for returning users to access their accounts.  
Features:

* Login form with Email and Password input.
* "Forgot Password?" link (future enhancement).
* Redirect link to Registration Page for new users.
* After login: show a Welcome Message using the stored username.

7. Registration Page Module

Enables new users to create an account with email verification.  
Features:

* Form with Name, Email, and Password fields.
* Terms and Conditions checkbox.
* Submit button to store the data in local storage.

8. Footer Module

Common footer for all pages offering essential links and information.  
Features:

* Links to Privacy Policy, Terms of Use, and Social Pages.
* Brand logo and address.
* Subscription prompt for the latest fashion news.

**4. Define the audience**

### 

### ****Target Audience****

The website for **ModiWear** is designed to cater to a diverse group of fashion-conscious users, each with their own style preferences and shopping behaviors. Understanding the target audience helps in shaping the website’s design, content, and features to ensure it delivers a smooth, attractive, and user-focused experience.

a. Fashion Enthusiasts

Characteristics:

* Passionate about staying updated with the latest fashion trends.
* Interested in unique, customizable, and limited-edition apparel.

Needs:

* High-quality product images and detailed descriptions.
* Style tips, fashion blogs, and design customization options.

b. Young Adults & College Students

Characteristics:

* Trend-driven, budget-conscious, and socially active.
* Seek fashionable outfits that reflect their personality and fit casual, campus, and party wear.

#### Needs:

#### Easy-to-navigate product categories (e.g., streetwear, casuals, accessories).

#### Discount offers, group deals, and seasonal sales prominently displayed.

#### c. Working Professionals

#### Characteristics:

#### Look for sophisticated, comfortable, and formal wear for office or hybrid work environments.

#### Needs:

#### Sleek product filters for categories like business casuals and office attire.

#### Style recommendations and size guides for convenience.

#### d. Customization Lovers

#### Characteristics:

#### Value individuality and uniqueness in their clothing choices.

#### Keen on customizing apparel such as T-Shirts, Hoodies, and Accessories with personal text or graphics.

#### Needs:

#### Customization tools and preview features before purchase.

#### Guidance on fabric, color, and print options.

#### e. Eco-Conscious Shoppers

#### Characteristics:

#### Interested in ethically sourced, eco-friendly, or sustainable fashion.

#### Needs:

#### Clear labeling for sustainable products.

#### Brand’s commitment to eco-friendly practices displayed on About and Product pages.

#### f. New Visitors / First-Time Buyers

#### Characteristics:

#### Unfamiliar with ModiWear and looking for reliable, stylish, and affordable clothing.

#### Needs:

#### A polished “About Us” page showcasing the brand’s mission and story.

#### Trust-building elements like customer reviews and testimonials.

### g. Frequent Online Shoppers

### Characteristics:

### Prioritize seamless, secure, and fast shopping experiences.

### Likely to return for new drops and seasonal collections.

### Needs:

### Secure login and registration system.

### Easy cart access (local storage or backend) and personalized welcome message.

### Notifications for new arrivals and offers.

| **Audience Segment** | **Key Features Needed** |
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| Fashion Enthusiasts | Blog posts, product galleries, trend alerts, and style guides. |

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| Young Adults & Students | Highlighted discounts, group deals, and filterable modern styles. |

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| Working Professionals | Category filtering for formal, casual, and business looks, size guides. |

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| Customization Lovers | Custom design upload option and product preview before checkout. |

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| Eco-Conscious Shoppers | Badges for sustainable/eco-friendly products and brand transparency section. |

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| New Visitors | A warm and professional About page, simple UI, customer reviews. |

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| Frequent Online Shoppers | Login/Registration, personalized greetings, easy cart access, seamless checkout. |

* Helps craft personalized and relevant content tailored to fashion interests and shopping habits.
* Enhances user satisfaction by offering a smooth, stylish, and trustworthy experience.
* Builds long-term customer loyalty through thoughtful design, clear communication, and value-driven marketing.
* Enables targeted promotional campaigns — for example, discounts for students, eco-fashion campaigns for sustainability supporters, or special drops for frequent shoppers.

**5. Describe pain points & the ideal experience (On the basis of existing systems)**

### 1. Identifying Pain Points of Existing Systems

#### a. Pain Point: Poor Navigation and Overwhelming Product Layout Issue: Many fashion websites suffer from cluttered interfaces with poorly organized categories and filters. Impact: Customers struggle to find their desired products, often leading to abandoned visits.b. Pain Point: Limited Online Ordering Functionality

b. **Pain Point: Complicated Checkout Process**  
**Issue:** Lengthy or confusing checkout flows discourage buyers from completing orders.  
**Impact:** Cart abandonment rates increase, reducing sales and user satisfaction.

c. **Pain Point: Lack of Mobile Optimization**  
**Issue:** Non-responsive or poorly scaled designs hinder browsing and shopping on smartphones.  
**Impact:** Mobile users leave the site out of frustration, hurting sales and brand reputation.

d. **Pain Point: Incomplete Product Information**  
**Issue:** Many platforms provide limited information — lacking size charts, material details, washing instructions, or style tips.  
**Impact:** Customers hesitate to buy, unsure of fit, quality, or compatibility with their personal style.

e. **Pain Point: Weak Engagement Strategies**  
**Issue:** Lack of loyalty programs, promotional alerts, or user-centric campaigns.  
**Impact:** Low return rate from existing customers and missed opportunities for cross-selling.

f. **Pain Point: Inaccessible Support and Contact Info**  
**Issue:** Hidden or hard-to-find support channels and contact details.  
**Impact:** Users get frustrated and shift to competitors with better service accessibility.

g. **Pain Point: No Personalization Options**  
**Issue:** Absence of features like “Wishlists,” “Order History,” or personalized product recommendations.  
**Impact:** The shopping experience feels generic, leading to lower customer retention.

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### 2. Crafting the Ideal Experience

To overcome these common issues, the **ModiWear** website should prioritize a smooth, customer-friendly, and visually engaging shopping journey.

a. **Intuitive Navigation and Clean Design**

* Use a minimalistic layout with clear categories like: Men, Women, Accessories, Customize, and Sale.
* Include an always-visible menu bar and search function.

b. **Streamlined Checkout Process**

* One-click “Add to Cart” and a fast, guest-friendly checkout.
* Provide clear options for payment, delivery, and returns.

c. **Mobile-First Responsive Design**

* Design for all devices using flexible grids, scalable images, and optimized loading speed.
* Include large, clickable buttons and intuitive swiping on mobile.

d. **Detailed Product Information**

* Add rich product descriptions including size charts, washing instructions, and material specifications.
* Allow zoomable product images and videos for real-world previews.
* Add badges like “New,” “Best Seller,” and “Sustainable.”

e. **Customer Engagement Features**

* Introduce loyalty points and discount codes for registered users.
* Feature fashion blogs, trend guides, and style tips.
* Integrate customer reviews and photo-based testimonials.

f. **Quick Access to Support and Contact Info**

* Add a dedicated "Contact Us" page with chat support, email, and a simple contact form.
* Display the brand’s social media handles and customer care number in the footer.

g. **Personalized Shopping Experience**

* Let users create accounts to save favorites, past orders, and wishlist items.
* Use data-driven suggestions: “You might also like...” or “Complete the Look.”
* Send personalized email updates about new arrivals, cart reminders, and special offers.

**3.The Ideal User Journey**

**Step 1: Visiting the Website**  
Users are welcomed by a modern, aesthetic homepage with clear navigation and banners for new collections or sales.

**Step 2: Browsing Products**  
Users filter clothing by type, price, style, size, and trends — with real-time previews and comprehensive details.

**Step 3: Adding to Cart and Checkout**  
Users enjoy a simple, secure checkout process with minimal steps and multiple payment options.

**Step 4: Engaging with Support or Finding Help**  
Users easily access customer service, return policies, and order tracking through clearly labeled links.

**Step 5: Building Brand Relationship**  
Users read blogs, follow style guides, or engage with lookbooks and product reviews to deepen trust.

**Step 6: Creating Loyalty**  
Registered users receive personalized recommendations and offers, while loyalty points encourage repeat purchases.

**6. Set the visual direction**

### 1. Visual Design Goals

The visual design of the **ModiWear website** should reflect its brand personality — modern, stylish, youthful, and trustworthy — while delivering a smooth and premium shopping experience.

### Key Principles:

### Trendy and Stylish: The website should give off a modern, fashion-forward vibe with sleek and minimal design.

### Clean and Sophisticated: Simplicity in design to highlight product beauty and craftsmanship.

### Brand Consistency: Visual elements like colors, fonts, logos, and photos should clearly communicate the essence of ModiWear — fashionable, customizable, and user-centric.

### 2. Defining the Core Visual Elements

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#### a. Color Palette

A balanced and chic palette that resonates with modern fashion and style-conscious users.

|  |  |  |
| --- | --- | --- |
| Color | Hex Code | Usage |
| Midnight Black | #1C1C1C | Header, footer, navigation, buttons. |
| Pure White | #FFFFFF | Background for product pages and content. |
| Soft Ash Gray | #E0E0E0 | Section dividers and backgrounds. |
| Royal Gold | #D4AF37 | Call-to-action buttons and highlights. |
| Deep Burgundy Red | #7B1E3A | Accent color for banners or sale tags. |

#### b. Typography

#### Typography should be minimal, clean, and reflect an urban fashion feel.

#### Primary Font:

#### Montserrat or Poppins (Sans-serif) — for headlines, product names, and banners. Stylish yet readable.

#### Secondary Font:

#### Open Sans or Roboto (Sans-serif) — for body text, descriptions, and checkout pages.

#### Attributes:

#### Bold headlines for product categories, light-to-regular weight for paragraphs, and medium weight for CTAs.

#### c. Logos and Branding

#### Logo Design:

#### Should include a modern wordmark — "ModiWear" with sleek, custom lettering.

#### Optional icon: A minimalist symbol like a hanger, thread loop, or stylized “M” representing customization.

#### Variants: Full-color for digital, monochrome for watermarks, black-and-white for packaging.

#### Logo Placement:

#### Always at the top left of the website, repeated in the footer for brand recall.

#### d. Imagery and Icons

#### Photography:

### High-quality product images featuring diverse models showcasing different styles.

### Flat lay shots for catalog pages, lifestyle images for banners.

### Behind-the-scenes photos for the "About Us" page (tailoring, design sketches, fabrics).

### Icons:

### Simple, thin-line icons for navigation like cart, wishlist, login, and size guide.

### Fashion-themed icons for category highlights like “New Arrivals,” “Trending,” or “Sale.”

### Hero Images:

### Bold, seasonal collections featured on the homepage.

### Rotating banners for ongoing promotions or new drops.

### 3. Applying Visual Design to Pages

### Home Page:

### Hero section featuring flagship collections or seasonal sales.

### Colorful banners with Royal Gold CTAs like "Shop Now" or "Customize Yours."

### About Page:

### Use authentic, behind-the-scenes imagery.

### Soft ash gray backgrounds for a sophisticated storytelling tone.

### Product Page:

### Clean grid layout with product cards.

### Hover effect: Zoom-in on product images with subtle shadow effects.

### Testimonial Page:

### Grid or slider featuring customer reviews with profile photos.

### Highlight positive experiences with fashion styling stories.

### Contact Page:

### Clean form design with input fields outlined in Soft Ash Gray.

### Interactive map and clear Royal Gold “Submit” buttons.

### Login & Registration Pages:

### Simple, intuitive layout.

### Consistent use of black/white backgrounds and golden buttons for sign-up and login.

### 4. Layout and Design Hierarchy

### Headers & Banners: Large, bold, and image-centric for instant attention.

### Navigation Bar: Sticky, minimal — always visible on scroll.

### Sections & Grids: Well-structured with breathing space between product tiles.

### CTAs: Bold and vibrant, especially for "Shop Now," "Add to Cart," and "Customize."

### 5. Expected Impact of Visual Direction

* Enhanced Engagement: A stylish and trendy look will attract fashion-conscious users.
* Stronger Branding: Consistent use of fonts, colors, and photography builds trust and recognition.
* Better Retention: User-friendly navigation and clean layouts encourage visitors to browse longer.
* Higher Conversions: Eye-catching CTAs and beautiful product presentation inspire action.

**7. Map out the Project structure**

modiwear/

│

├── index.html # Home page

├── about.html # About page

├── products.html # Products page

├── customizer.html # Clothing customization page

├── cart.html # Shopping cart page

├── checkout.html # Checkout page

├── login.html # Login page

├── register.html # Registration page

│

├── assets/

│ ├── css/

│ │ ├── style.css # Global CSS

│ │ ├── responsive.css # Mobile optimization

│ │

│ ├── js/

│ │ ├── main.js # Interactive elements and animations

│ │

│ ├── images/

│ ├── logo.png # Logo image

│ ├── banner.jpg # Banner image for homepage

│ ├── product\_images/ # Product images for e-commerce

│

└── README.md # Project documentation

**8. Plan the content for each page**

The website will include a minimum of 5 core pages, along with additional Login and Registration pages. This plan details the content for each page.

### 1. Home Page

### Purpose:

### Welcome visitors.

### Highlight the main features and offerings of ModiWear.

### Content Plan:

### Header:

### Logo on the left.

### Navigation menu: Home, About, Products, Customizer, Testimonials, Contact, Blog (optional).

### Login/Sign-Up button on the top right.

### Hero Section:

### High-quality banner image (e.g., a model wearing a customized product).

### Tagline like: “Design Your Style with ModiWear.”

### CTA button: “Start Customizing Now.”

### Introduction Section:

### Brief description of ModiWear (e.g., “Your one-stop shop for custom fashion.”).

### CTA: “Browse Our Collection” linking to the Products page.

### Featured Products Section:

### Grid or carousel of featured custom products (e.g., t-shirts, hoodies).

### Short descriptions of the customization process.

### CTA button: “Shop Now” linking to the Products page.

### Footer:

### Quick links, social media links, contact information.

### Links to Terms of Service, Privacy Policy, etc.

### 2. About Page

### Purpose:

### Share the story, mission, and people behind ModiWear.

### Content Plan:

### Header: (same as home page)

### About Us Section:

### A short introduction to ModiWear’s history (e.g., “Founded with a vision to revolutionize fashion through customization.”).

### Emphasis on values such as creativity, quality, and customer satisfaction.

### Meet the Team Section:

### Photos and short bios of the founders and key team members.

### Highlight their roles and contributions to the brand.

### Mission & Vision Section:

### Statement about the brand's mission and its vision for the future of fashion.

### Footer: (same as home page)

### 3. Products Page

### Purpose:

### Showcase the various products and services offered by ModiWear.

### Content Plan:

### Header: (same as home page)

### Product Categories Section:

### Categories like T-shirts, Hoodies, Accessories, etc.

### Product tiles: Images, names, short descriptions, and prices.

### Featured Products Section:

### Highlight seasonal items, new arrivals, or popular customizations.

### Customization CTA:

### Button: “Design Your Product Now” linking to the Customizer page.

### Footer: (same as home page)

### 4. Customizer Page

### Purpose:

### Allow customers to customize their clothing or accessories.

### Content Plan:

### Header: (same as home page)

### Product Selection Section:

### Display a list of available products for customization (e.g., T-shirts, hoodies).

### Customization Tools:

### Color options, size selection, text input for adding personalized messages.

### Option to upload a design or use a pre-made template.

### Preview Section:

### Real-time preview of the customized product.

### CTA Section:

### Button: “Add to Cart” to proceed to the shopping cart.

### Footer: (same as home page)

### 5. Testimonials Page

### Purpose:

### Build trust by showcasing feedback from happy customers.

### Content Plan:

### Header: (same as home page)

### Customer Feedback Section:

### Quotes or testimonials from satisfied customers.

### Display customer photos and their custom products.

### Option to display Google or Yelp reviews.

### Submit a Testimonial:

### Simple form to allow visitors to submit reviews.

### CTA: “Share Your Experience” for customers to submit their feedback.

### Footer: (same as home page)

### 6. Contact Page

### Purpose:

### Provide a way for customers to reach out for inquiries, custom requests, or feedback.

### Content Plan:

### Header: (same as home page)

### Contact Form:

### Form fields: Name, Email, Subject, Message.

### Submit button with form validation.

### Location Section:

### Embedded Google Map showing the office or warehouse location.

### Operating Hours Section:

### Business hours clearly listed (e.g., “Monday to Friday: 9 AM – 6 PM”).

### Footer: (same as home page)

### 7. Login Page

Purpose:

* Allow existing users to log into their accounts.

Content Plan:

* Form:
  + Email and Password fields.
  + Submit button for login.
* Forgot Password Link:
  + Redirect to password recovery page.
* CTA Section:
  + Link to the Registration page: “Don’t have an account? Sign Up Now!”
* Footer: (same as home page)

8. Registration Page

Purpose:

* Allow new users to create an account.

Content Plan:

* Form Fields:
  + Full Name.
  + Email.
  + Password and Confirm Password.
* Form Validation:
  + Ensure strong password requirements (e.g., at least 8 characters, one uppercase letter, etc.).
* Submit Button:
  + Button to register and create a new account.
* Footer: (same as home page)

**9. Add ideas for content, images & layout**

### Here are the ideas for crafting content, selecting images, and structuring the layout for the *ModiWear* website, which will incorporate various sections, including pages for home, about, products, testimonials, and contact.

### 1.Home Page

### Layout Ideas:

### Header Section:

### Navigation Bar: Logo on the left, menu items in the center, and Login/Register button on the right.

### Hero Section:

### Full-width background image of a product display or fashion collection.

### Overlay text with a tagline (e.g., “Where Style Meets Comfort”).

### A call-to-action button like “Shop Now” or “Browse Collection.”

### Featured Section:

### Use cards to display popular collections or seasonal collections.

### Each card will have an image and short description with a “Shop Now” button.

### Content Ideas:

### Brief welcome message emphasizing the uniqueness of ModiWear and its fashion offerings.

### Announcements for sales, special offers, or new arrivals.

### Highlight a featured category (e.g., New Arrivals, Sale, Best Sellers).

### Image Ideas:

### High-quality lifestyle images of people wearing ModiWear products in various settings (outdoor, casual, professional).

### Close-up shots of fabric textures, accessories, and unique design features.

### 2. About Page

### Layout Ideas:

### Story Section:

### A section introducing the brand’s origins, vision, and values.

### Timeline or column layout detailing the journey from inception to now.

### Dividers/icons to break up different milestones or story events.

### Team Section:

### A grid layout showcasing the team behind ModiWear with photos and short bios.

### Focus on design, production, and customer experience team members.

### Feature Section:

### Icons or bullet points displaying the key features of ModiWear: Sustainable fashion, trendy designs, affordable pricing, etc.

### Content Ideas:

### Mission statement, brand story, and values.

### Insights into sustainability and the brand’s commitment to quality.

### Vision of inclusivity and style for everyone.

### Image Ideas:

### Founders’ photos, behind-the-scenes shots of the design process.

### Images of the workspace, team working, or design sketches.

### 3. Products/Services Page

### Layout Ideas:

### Categories Section:

### Split the page into categories like “Tops,” “Bottoms,” “Dresses,” “Accessories,” and “Sales.”

### Each category will have product images, names, brief descriptions, and prices.

### Add filters to allow users to sort by size, color, or price range.

### Highlight Section:

### Slider showing the best-sellers or limited-time offers.

### Option to feature new arrivals or seasonal collections.

### CTA Section:

### “Shop Now” or “Add to Cart” buttons under each item.

### “Learn More” links to product detail pages.

### Content Ideas:

### Focus on the variety and uniqueness of the products, like fabric quality, custom designs, or exclusive collections.

### Feature seasonal or limited edition items.

### Image Ideas:

### High-resolution images of products with models wearing them in real-life scenarios.

### Close-up shots of fabric, stitching, and design details.

### 4. Testimonials/Reviews Page

### Layout Ideas:

### Feedback Section:

### Carousel or grid layout to rotate customer reviews with star ratings.

### A “Submit Your Testimonial” button at the bottom.

### Featured Reviews:

### Pull in feedback from external review platforms like Google and Instagram.

### CTA Section:

### A form or link to allow customers to submit their own testimonials.

### Content Ideas:

### Highlight customer satisfaction with product quality, style, and fit.

### Include any positive media mentions or features in publications.

### Image Ideas:

### Photos of happy customers showcasing ModiWear in real-world settings.

### Stylized images or icons representing positive reviews.

### 5. Contact Page

### Layout Ideas:

### Form Section:

### Simple contact form (fields for name, email, message, and subject).

### “Submit” button to send inquiries.

### Map Section:

### Embed a Google Map showing store locations or a showroom address.

### Info Section:

### Display phone number, email address, and operating hours using icons.

### Content Ideas:

### A welcoming message like “Get in Touch – We’d Love to Hear From You.”

### A FAQ section for common questions about orders, shipping, returns, etc.

### Image Ideas:

### Photos of the storefront or offices (if applicable).

### Icons for contact methods (e.g., phone, email, social media).

### 6. Login Page

### Layout Ideas:

### Minimalist login form interface.

### Content Ideas:

### Fields for email and password.

### Links for account recovery or to create a new account.

### A reminder saying “New to ModiWear? Register Now!”

### Image Ideas:

### Background image of a cozy home or fashion-forward setup with a transparent overlay for text fields.

### 7. Registration Page

### Layout Ideas:

### Clean, centered form layout with easy-to-fill fields.

### Content Ideas:

### Tagline: “Join ModiWear to Access Exclusive Styles and Offers!”

### A checkbox to subscribe to the newsletter or loyalty program.

### A password strength indicator.

### Image Ideas:

### A welcoming banner image of models in various ModiWear outfits.

### Icons for form fields (e.g., a lock icon for passwords).

**8. Visual Design Ideas for All Pages**

Colors:

* Primary Colors:
  + Black (#000000): Elegant, timeless, and versatile.
  + White (#FFFFFF): Clean, minimalistic, and modern.
* Accent Colors:
  + Gold (#FFD700): Luxurious touch for buttons, accents, and highlights.
  + Deep Green (#006400): A subtle nod to sustainability and eco-consciousness.

Fonts and Typography:

* Heading Font:
  + Playfair Display (Serif) for an elegant and upscale feel.
* Body Font:
  + Lato or Helvetica (Sans-serif) for easy readability.
* Font Weights:
  + Bold for headings to create a clear hierarchy, regular weight for body text.

Logo:

* The logo should reflect modern elegance with a stylish twist.
  + A minimalistic logo featuring a custom symbol related to clothing (e.g., hanger, sewing needle).
  + Clean, modern typography that matches the brand’s luxury appeal.

Images:

* Product images featuring high-quality, realistic photography with natural lighting.
* Showcasing real people of various backgrounds wearing the designs.
* Background images that reflect the trendy, high-fashion vibe of ModiWear.

**10. Determine your site structure or Create content for your core website pages:**

1. **Home page**
2. **About page**
3. **Product/Service page**
4. **Testimonial/review page**
5. **Contact page**
6. **Starter blog posts**

Home Page:

* Introduction to the brand.
* Featured products and call-to-action buttons for shopping.

About Page:

* Story of ModiWear, the mission, and the team behind the brand.

Product/Service Page:

* Categories of clothing with descriptions, pricing, and shopping options.

Testimonial/Review Page:

* Customer reviews and feedback to build trust.

Contact Page:

* Contact form, company details, and map for store locations.

Starter Blog Posts:

* Articles on fashion trends, styling tips, and behind-the-scenes looks at the brand.

11. Create and collect design elements

These design elements define your brand personality and help customers feel what your brand represents through the use of:

1. Colors
2. Fonts and typography
3. Logos
4. Images and photos

### The design elements of a website play a vital role in creating identity and establishing a strong emotional connection between the brand and its visitors. For ModiWear, the goal is to create a platform that feels modern, trendy, and customer-focused — much like the personalized fashion experience the brand aims to deliver.

### 1. Colors

### Colors set the emotional tone of your fashion brand and influence customer perception about style, quality, and trendiness.

### Primary Colors:

### Classic Black (#1C1C1C): Represents modern elegance and timeless fashion. Perfect for headers, menus, and product card backgrounds.

### Elegant White (#FAFAFA): Clean, simple, and versatile. Ideal for page backgrounds, highlighting simplicity and clarity in showcasing products.

### Royal Beige (#D9CAB3): A neutral and warm tone that gives a polished, luxurious feel — great for banners and section backgrounds.

### Accent Colors:

### Bold Gold (#FFD700): Reflects luxury and confidence. Used for buttons (like "Customize Now") and special offers.

### Trendy Teal (#3EB489): Signifies freshness, creativity, and personalization — use it for highlights, icons, and key sections.

### Psychological Impact: This color palette creates a sense of premium quality, sophistication, and fashion-forward thinking, which perfectly suits the ModiWear brand’s mission to offer tailored fashion solutions.

### 2. Fonts and Typography

### Typography defines the brand tone — sleek, modern, and confident.

### Heading Font:

### Poppins (sans-serif) — Modern, bold, and geometric. Perfect for titles and product names to convey style and structure.

### Body Font:

### Roboto (sans-serif) — Clean, minimal, and easy to read, ideal for product descriptions, FAQs, and user instructions.

### Font Weights:

### Bold or Semi-bold for headings.

### Regular or Light for descriptive text.

### Impact: The combination of Poppins and Roboto creates a clean, fashion-forward aesthetic — balanced between bold statements and smooth readability.

### 3. Logo: The logo is the cornerstone of your brand’s identity.

### Logo Design:

### Minimalistic and modern, using elements like a hanger, stitching icon, or stylized initials ("M" and "W") to represent both fashion and customization.

### Emphasis on sharp lines and geometric balance to convey precision and modern elegance.

### Logo Colors:

### Use Classic Black and Bold Gold to signify luxury and reliability.

### Teal accents can be added if highlighting the customizable aspect.

### Logo Usage:

### The logo should appear consistently in the website header and footer.

### Scalable for use on social media, packaging, and advertisements.

### Impact: A well-designed logo for ModiWear will convey trust, style, and the idea of tailored experiences at first glance.

### 4. Imagery and Photos

### Visuals represent the fashion lifestyle and the personalized journey ModiWear offers.

### Product Photography:

### High-quality, model-worn images of customizable clothing.

### Close-up shots of fabrics, stitching, and design options.

### Flat-lay shots for product catalogues.

### Brand Imagery:

### Photos that reflect the "customization journey" — designers sketching, fitting rooms, and satisfied customers.

### Lifestyle images: People confidently wearing ModiWear clothes at events, workspaces, or social settings.

### Impact: These visuals help visitors imagine themselves as part of the ModiWear brand, experiencing the premium feel and personal touch.

### 5. Interactive Elements and Buttons

A fashion customization site must guide users smoothly through selections, designs, and orders.

Navigation Buttons:

* Use Bold Gold or Trendy Teal for important CTAs like:
  + "Customize Now"
  + "Start Designing"
  + "View Collection"

Hover Effects:

* Soft glows or color transitions (e.g., from Beige to Gold) when hovering to create a dynamic, modern feel.

Icons:

* Simple, clean icons representing:
  + T-shirt or hanger for Products
  + Ruler or pencil for Customization
  + Shopping bag for Cart
  + Human silhouette for Profile/Login

Impact:  
Intuitive and stylish interactive elements help customers enjoy both aesthetics and seamless functionality, enhancing trust and engagement.

**Conclusion:**

The **ModiWear website** embodies the essence of a coffee shop that values quality, comfort, and community. Its combination of a well-structured site layout, inviting color scheme, and high-quality imagery ensures a pleasant browsing experience, while its functionality allows customers to seamlessly interact with the brand. By focusing on user experience and clear brand messaging, the website successfully creates an inviting digital space that not only showcases products but also fosters a strong emotional connection with visitors.

## **Experiment No.2**

## **Problem Statement:**

**HTML**

1. Create a detailed **Home Page** for the ModiWear website.
2. Create a detailed **Menu/Product Page** for the ModiWear website, listing all available items categorized appropriately.
3. Create a **Cart Page** that allows customers to review and manage the items they wish to purchase before proceeding to checkout.
4. Create an **About Us** page that provides detailed information about the ModiWear history, mission, and team.
5. Create a **Contact Page** that allows customers to easily get in touch with the ModiWear through a form.
6. Design and implement **Admin/User Registration Form** for the ModiWear website.
7. Design and implement **Admin/User Login Form** for the ModiWear website.

## **Objective:**

To create a **Modiwear Webpage** using HTML. The goal is to build an attractive and functional web layout.

## **Theory:**

HTML (**HyperText Markup Language**) is the standard markup language used to create the structure of web pages. It provides a way to define the different elements of a webpage, such as text, images, links, forms, and multimedia.

A well-structured coffee shop website aims to provide users with easy navigation, clear product listings, and essential business information, creating a positive browsing and shopping experience.

**Key Elements of HTML for this Experiment:**

* **<!DOCTYPE html>** – Declares the document type.
* **<html>** – Root of the HTML document.
* **<head>** – Contains meta-information, title, and links to stylesheets.
* **<body>** – Contains the actual content that users see on the page.
* **<header>, <nav>, <main>, <footer>** – Semantic tags that improve structure and readability.
* **<h1> to <h6>** – Heading tags.
* **<p>** – Paragraphs.
* **<img>** – Embeds images.
* **<a>** – Hyperlinks.
* **<form>** – Used to collect user input.
* **<input>, <textarea>, <button>, <select>** – Form controls.

**Introduction to Modiwear**

Modiwear is a modern fashion customization website project designed to offer users a unique and personalized shopping experience. Unlike traditional online stores, Modiwear empowers customers to customize the designs, colors, sizes, and patterns of clothing before purchasing.

This project focuses on developing a stylish, user-friendly, and functional web layout that caters to both fashion-conscious customers and administrative users. The website aims to reflect modern UI principles, responsive design, and essential e-commerce functions.

**E-Commerce in the Modern Fashion Industry**

E-commerce platforms have transformed the way fashion brands interact with customers. Modiwear focuses on the latest trend: personalized fashion.

Traditional fashion businesses only offer ready-made designs, but modern customers expect to:

* Choose fabric and color.
* Select sizes tailored to their measurements.
* Combine styles like collar types, sleeves, and fit.
* Preview changes before placing orders.

This demand for customization is what sets Modiwear apart in the digital fashion landscape.

**Why is Customization Crucial?**

Customization allows customers to express their personal style, which is especially important in the fashion world. Offering customization through an easy-to-use web interface builds brand loyalty and increases sales.

Benefits:

* Higher customer satisfaction.
* Reduced product returns.
* Unique value proposition in a competitive market.
* Word-of-mouth marketing and social sharing.

**The Role of HTML in Web Development**

HTML (HyperText Markup Language) is the fundamental technology that structures every webpage on the internet. It helps web browsers interpret and display the content of a website. Without HTML, there would be no way to create and format websites for users.

In the Modiwear website project, HTML plays the role of creating:

* Homepage layout
* Product pages for clothing items
* Customization forms
* Cart and checkout pages
* Contact and about pages
* Login and registration forms for both users and admins.

**Importance of Semantic HTML**

Semantic HTML involves using HTML5 elements (<header>, <footer>, <article>, <section>, <nav>) that describe the meaning of the content inside them, rather than using generic <div> or <span> elements.

Benefits of semantic HTML in the Modiwear project:

* Improves website readability for both developers and users.
* Enhances SEO (Search Engine Optimization).
* Makes the site accessible to users with disabilities using assistive technologies.
* Reduces the need for excessive div elements, making the code cleaner.

**HTML in Modiwear: A Deeper Dive**

HTML is not just for layout — it defines the skeleton of the entire website. Without a clean HTML structure, CSS and JavaScript won't work effectively.

Key reasons for structured HTML in Modiwear:

1. **Maintainability**: Future developers can easily update the website.
2. **Responsiveness**: Adapts across smartphones, tablets, and desktops.
3. **SEO Optimized**: Google bots can read the site for indexing.
4. **Accessibility**: Screen readers can help visually impaired users navigate the site.

**Page Overview for Modiwear**

Each page serves a specific business function.

|  |  |
| --- | --- |
| **Page Name** | **Purpose** |
| Home Page | Showcases products, featured offers, and brand identity. |
| Product Page | Lists fashion items with customization options. |
| Cart Page | Reviews items before purchasing. |
| About Us | Describes the brand story, mission, and vision. |
| Contact Page | Provides contact form and location information. |
| Registration | Allows new customers or admins to register securely. |
| Login Page | Authenticates users and directs them to their dashboard. |

**HTML5 Features Used in Modiwear**

HTML5 introduced several new features that are used in Modiwear:

* <section>, <article>, <aside> for better content division.
* <video> and <audio> for fashion promotional content.
* <canvas> for potential interactive design previews.
* Native form validation attributes like required and pattern.

**HTML Forms & Data Collection**

Forms are one of the most important parts of any web project. In Modiwear, forms are used for:

* User registrations.
* Logins.
* Product customization.
* Contact and feedback.
* Newsletter subscriptions.

**Security Features for Forms:**

* Input validation (required, pattern, maxlength).
* Use of proper input types (email, password, tel) to avoid errors.
* Placeholder text to guide users.

**Modiwear Product Showcase and Customization**

The core concept of Modiwear is to display a variety of fashion items that users can customize before purchase. The website uses HTML to present:

* High-quality product images (<img>).
* Descriptive product titles and prices (<h1>, <p>).
* Customization dropdowns using <form>, <select>, and <option> tags.
* User-friendly navigation using <nav> and anchor (<a>) tags.

**UI/UX Design Principles**

Even though HTML handles structure, designing a fashion website like Modiwear also requires understanding user needs:

* **Clarity**: Simple, minimal layouts.
* **Consistency**: Uniform style across all pages.
* **Feedback**: Alert messages for errors or successful actions.
* **Visual Hierarchy**: Using headings (<h1>, <h2>) and images effectively.
* **Accessibility**: ARIA roles and alt attributes for images.

Example:

<img src="custom-shirt.jpg" alt="White cotton customizable men's shirt">

**Forms and User Interaction**

Forms are crucial for enabling interaction between the user and the website.

* **User Registration Forms**: Allows new customers to create accounts.
* **Login Forms**: Authenticates returning users.
* **Customization Forms**: Lets users select fabric, color, size, and pattern before adding items to the cart.
* **Contact Forms**: Enables customers to send feedback or inquiries.

The following elements are essential for form building:

* <form>
* <input> (text, email, password, etc.)
* <textarea>
* <button>
* <select> and <option>.

**Cart Page and Checkout Flow**

Once a user customizes a product, it is added to the cart. HTML structures the cart page so that users can:

* Review selected items.
* Update quantities.
* Remove items.
* Proceed to checkout.

Proper use of <table>, <div>, and <button> tags makes the shopping flow smooth and intuitive.

**Responsive Web Design in Modiwear**

In today’s multi-device world, websites must adjust smoothly to various screen sizes, from smartphones to laptops. Modiwear uses a **mobile-first design approach** supported by CSS but the structural foundation must be well prepared with HTML:

* Avoids fixed-width containers.
* Uses semantic and flexible tags.
* Leverages responsive images using the <picture> and <img> elements with the srcset attribute.

**The Role of CSS with HTML**

While HTML handles structure, CSS (Cascading Style Sheets) adds design and style. In the Modiwear project, CSS is responsible for:

* Font selection and typography.
* Color schemes that reflect the fashion brand.
* Layout arrangements using Flexbox and Grid.
* Transitions and hover effects.

But without properly structured HTML, CSS cannot function effectively.

**CSS Selectors**

Selectors target HTML elements to apply styles:

* Element Selector: Targets all elements of a type.  
  p { color: gray; }
* Class Selector: Targets elements with a specific class.  
  .product { border: 1px solid #ccc; }
* ID Selector: Targets an element by its ID.  
  #header { background: #000; }
* Universal Selector: Targets all elements.  
  \* { margin: 0; padding: 0; }

**Box Model**

Every element in HTML is a rectangular box, made up of:

1. Content
2. Padding
3. Border
4. Margin

Understanding the box model is crucial for precise layout and spacing on the Modiwear site.

.product-card {

padding: 10px;

border: 1px solid black;

margin: 15px;

}

**CSS Layout Techniques**

For Modiwear’s professional design, modern layout methods are a must:

* **Flexbox**: Aligns items in rows and columns.
* **CSS Grid**: Handles complex layouts with multiple dimensions.
* **Positioning**: Controls the exact position of elements.
* **Float & Clear**: Older method, still used occasionally.

**Responsive Design with CSS**

Modiwear must work on all devices — mobile, tablet, and desktop. CSS enables this using Media Queries.

Example:

@media (max-width: 768px) {

.product-list {

flex-direction: column;

}

}

This allows the website to adapt and stay user-friendly across devices.

**CSS Animations and Transitions**

Modiwear can use CSS animations to:

* Make buttons glow on hover.
* Fade images in and out.
* Create smooth transitions between product images.

Example:

button:hover {

background-color: gold;

transition: background-color 0.3s ease;

}

**CSS Variables**

CSS allows custom properties or variables to define reusable values:

:root {

--main-color: #ff4c68;

}

h1 {

color: var(--main-color);

}

This makes managing colors, sizes, and spacing easier across the Modiwear website.

**CSS Frameworks**

For professional and scalable design, developers often use CSS frameworks:

* **Bootstrap**: Pre-built components and responsive grid system.
* **Tailwind CSS**: Utility-first CSS framework.
* **Materialize**: Google’s Material Design for web.

Using these can save time and ensure a consistent, modern look.

**Dynamic Behavior with JavaScript**

Modiwear also integrates JavaScript to add interactivity like:

* Image sliders on the homepage.
* Cart updates without reloading the page.
* User login status detection and greeting:  
  *"Welcome, [Username]"* once logged in.

This interaction begins with HTML structure and is enriched by JavaScript.

**The Importance of Clean Code and Best Practices**

For Modiwear to be scalable and maintainable:

* Consistent indentation and formatting are vital.
* Use of comments (<!-- -->) improves collaboration.
* Avoiding inline styles allows separation of concerns.
* Using descriptive class and ID names enhances readability.

Example:

<div class="product-card">

<img src="shirt.jpg" alt="Men's Casual Shirt">

<h2>Men's Casual Shirt</h2>

</div>

**SEO and Accessibility**

Modiwear aims for excellent search visibility and inclusive design.

* Headings (<h1>, <h2>) must follow a logical hierarchy.
* Images should always use the alt attribute.
* Forms should have associated <label> tags.
* Use of ARIA roles (role="navigation", role="form") boosts accessibility for screen readers.

**SEO Best Practices in Modiwear**

SEO (Search Engine Optimization) is the process of improving the visibility of your website on search engines like Google. Modiwear’s HTML must follow these guidelines:

* Use descriptive <title> and <meta> tags.
* Use semantic HTML for all page elements.
* Properly structured headings from <h1> to <h6>.
* Image alt attributes for search indexing.
* Clean URLs (e.g., www.modiwear.com/product/shirt001).

**Authentication Flow: Admin vs. User**

For a professional e-commerce website, user management is crucial.

1. **Registration Page**
   * Allows users and admins to register.
   * Uses <form> and <input> elements.
2. **Login Page**
   * Validates user credentials.
   * Redirects to respective dashboards.
3. **Session Management**
   * Ensures secure and personalized user experience.
   * Shows “Welcome, [Username]” upon login.

This flow is created by combining HTML forms with server-side scripts (PHP or JavaScript).

**Contact and Feedback System**

Every website should offer a way for users to reach out. Modiwear’s contact page:

* Uses <form>, <input>, and <textarea> for message submission.
* Uses <label> for accessibility.
* May embed a map using <iframe> for physical store locations.

Example:

<iframe src="https://maps.google.com" width="300" height="200"></iframe>

**Admin and User Registration/Login System**

For Modiwear’s secure environment, separate forms for Admin and User registration are created. This setup ensures:

* Secure login for customers.
* Role-based redirection to Admin Dashboard or User Homepage.
* Prevention of unauthorized access using password fields (<input type="password">) and server-side validation.

**Real-world Relevance of Modiwear Project**

Working on Modiwear is not just an academic task — it mimics real business websites. You learn:

* Structuring an online store.
* Presenting products professionally.
* Handling customer data securely.
* Providing seamless navigation and fast loading.

**Role of JavaScript in Modiwear**

JavaScript enhances Modiwear in multiple ways:

1. **Form Validation**
   * Prevents invalid data submission.
   * Provides real-time feedback to users.

function validateForm() {

let username = document.forms["loginForm"]["username"].value;

if (username === "") {

alert("Username must be filled out");

return false;

}

}

1. **Dynamic Content Update**

* Changes prices, images, or descriptions based on user selection.
* Example: Showing different images when the customer selects different shirt colors.

1. **Personalized Welcome Message**

* After successful login, JavaScript can display:

document.getElementById("welcome").innerText = `Welcome, ${username}!`;

1. **Shopping Cart Operations**

* Add, remove, and update cart items.
* Calculate total prices in real-time.

**JavaScript Enhancing User Experience**

With JavaScript, Modiwear can offer features like:

* **Live Search**: Instantly filter products as users type.
* **Image Sliders**: Showcase different collections automatically.
* **Theme Switching**: Allow users to switch between dark and light modes.
* **Product Preview Tools**: Let users see how colors, patterns, and styles change with just a click.

**JavaScript and Security**

While JavaScript enhances interactivity, it also plays a role in:

* **Input Sanitization**: Avoid malicious code entries before sending data to the server.
* **Session Handling**: Store login states with cookies or localStorage.

localStorage.setItem("loggedInUser", username);

* **Data Encryption**: Although sensitive encryption should be server-side, JavaScript can hash passwords before sending them.

**JavaScript and AJAX**

AJAX (Asynchronous JavaScript and XML) allows web pages to be updated asynchronously by exchanging data with a web server behind the scenes.

For Modiwear:

* Product filters and sorting can happen without refreshing the page.
* Real-time stock availability checks.
* Submitting contact forms or feedback without reloading the page.

**Event Handling in JavaScript**

JavaScript uses **event-driven programming** to respond to user actions like:

* Clicking the “Add to Cart” button.
* Submitting a form.
* Changing a dropdown for size or color.

Example:

document.getElementById("addToCartBtn").addEventListener("click", function() {

alert("Item added to your cart!");

});

**JavaScript and JSON**

For modern web development, data is often exchanged in JSON (JavaScript Object Notation) format. It allows seamless communication between the front-end and the back-end.

Example:

let product = {

"name": "Customized Shirt",

"price": 799,

"color": "Blue" };

This makes JavaScript an essential part of both front-end and back-end workflows.

**JavaScript for Real-time Updates**

Using JavaScript, Modiwear can show:

* Stock status like "Only 2 left!" in real-time.
* User-specific recommendations based on previous behavior.
* Order status updates after purchase.

**JavaScript and Local Storage**

For small projects like Modiwear, localStorage and sessionStorage help maintain data without a database.

Example:

localStorage.setItem("cartItemCount", 2);

When the user refreshes, the cart count remains intact until manually cleared.

**JavaScript Frameworks and Libraries**

In professional-grade projects, developers extend JavaScript with frameworks and libraries:

* **React**: For building user interfaces.
* **Vue.js**: For single-page applications.
* **jQuery**: Simplifies HTML document traversing and Ajax interactions.
* **Bootstrap (JS part)**: Provides ready-made components like carousels and modals.

While the current Modiwear project uses basic JavaScript, knowing these tools helps prepare for larger, scalable web development.

**From Static to Dynamic: Beyond HTML**

While HTML is the first step, the real power of web development comes when you combine it with:

* **CSS** for styling.
* **JavaScript** for interactivity.
* **PHP or Node.js** for server-side operations.
* **MySQL** or **MongoDB** for database management.

In real-world projects, HTML forms send data to back-end scripts which process it, save it to a database, and return a response to the user.

**Website Performance and Speed**

Fast websites offer better user experiences and higher search engine rankings. Modiwear should:

* Optimize images.
* Minify CSS and JavaScript.
* Use caching.
* Choose reliable hosting.

This ensures smooth loading even during high-traffic sales or new collection launches.

**Website Security**

Security is essential, especially when dealing with:

* User login details.
* Payment gateways.
* Personal contact information.

Modiwear must implement secure password storage, HTTPS encryption, and input validation to ensure the safety of its users.

**Importance of Responsive Web Design**

A **responsive website** adjusts its layout depending on the screen size — whether it’s a desktop, tablet, or mobile.

For fashion customization, customers often browse from their phones. Responsive design ensures that the site looks professional and works perfectly on all devices.

**Purpose of a Website**

A website serves as the digital face of a business or individual. For **Modiwear**, the website will:

* Allow users to browse and customize fashion products.
* Provide important information about the company, policies, and offers.
* Build customer trust through reviews, contact forms, and testimonials.
* Enable smooth online shopping and checkout experiences.
* Act as a marketing platform for sales, offers, and brand awareness.

**Conclusion**

Website development is more than just writing code — it's about crafting a digital experience that represents the brand. For a fashion brand like Modiwear, a modern, responsive, and secure website helps to attract, engage, and retain customers while building trust and increasing sales.

HTML is the backbone of the Modiwear Fashion Customization Website. Alongside CSS and JavaScript, it allows you to create elegant, functional, and user-centric web solutions. The project not only sharpens your web development skills but also simulates real-world e-commerce challenges such as:

* User authentication.
* Product customization.
* Cart management.
* Responsive design.
* SEO-friendly structure.

This makes the Modiwear project a perfect beginner-to-intermediate level exercise for anyone studying web development, design, or entrepreneurship.

## **Code:**

Home Page:

HTML:

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Modiwear - Home</title>

<link rel="stylesheet" href="styles.css">

</head>

<body>

<div class="div1">

<a class="para1"><strong>Modiwear</strong></a>

</div>

<div class="div2">

<div class="display-inline">

<ul>

<li><a href="home.html" class="nav-button">Home</a></li>

<li><a href="wp practice.html" class="nav-button">About Us</a></li>

<li><a href="service.html" class="nav-button">Services</a></li>

<li><a href="ContactM.html" class="nav-button">Contact</a></li>

<li><a href="Product.html" class="nav-button">Product</a></li>

</ul>

</div>

<div class="div2 display-inline float-right">

<span id="Welcome"></span>

<a id="login" href="loginpage.html" class="nav-button">Login</a>

<a id="register" href="Register.html" class="nav-button">Register</a>

<a href="cart.html" class="nav-button">Cart <span id="cart-count">(0)</span></a>

</div>

</div>

<div class="container">

<h1>Revamp Your Style Today</h1>

<p>Explore trendy outfits, customize your wardrobe, and make sustainable choices.</p>

<br>

<button class="nav-button">

<a href="product.html" class="button-link">Explore Products</a>

</button>

<button class="nav-button">

<a href="customize.html" class="button-link">Customize your Products</a>

</button>

</div>

<div class="image-gallery">

<img src="https://img.perniaspopupshop.com/catalog/product/s/h/SHRE012331\_1.jpg?impolicy=listingimagenew" alt="Fashion Image 1">

<img src="https://www.stateofescape.com/cdn/shop/files/meganav\_styles\_0008\_crop\_in.jpg?v=1729143543" alt="Fashion Image 2">

<img src="https://www.shutterstock.com/image-photo/full-length-curly-african-american-600nw-2261513983.jpg" alt="Fashion Image 3">

<img src="https://assets.myntassets.com/dpr\_1.5,q\_60,w\_400,c\_limit,fl\_progressive/assets/images/2025/FEBRUARY/10/owGK7Som\_a403a360605e4a7a9b659d11231d3e2e.jpg" alt="Fashion Image 4">

</div>

<div class="footer">

<p class="text-center text-muted">&copy; 2024 Modiwear. All rights reserved.</p>

<p>Follow us on social media:</p>

<ul>

<li><a href="https://facebook.com">Facebook</a></li>

<li><a href="https://instagram.com">Instagram</a></li>

<li><a href="https://twitter.com">Twitter</a></li>

</ul>

</div>

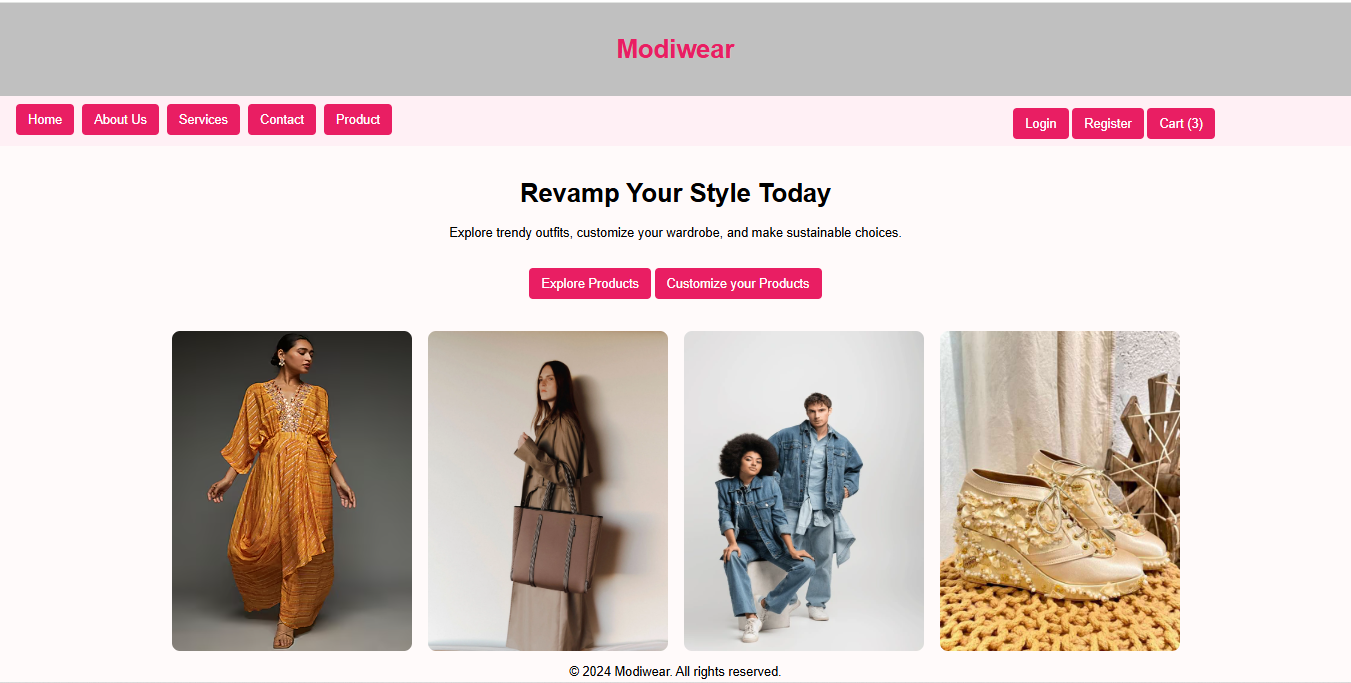
<script src="script.js"></script>

</body>

</html>

## **Output:**

A. Index/Home page output:



## **Code:**

B. menu/product page:

Html code:

<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

</head>

<body>

<div class="div1">

<a class="para1"><strong>Modiwear</strong></a>

</div>

<!-- Products Section -->

<section id="shop">

<div class="container">

<h2 class="section-title">Trending Products:</h2>

<div class="products">

<!-- Product Cards -->

<div class="product">

<img src="https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcRYcF29W99MwKPPO5Qo-MSWaK1qS\_ht3XakOQ&s" alt="Floral Summer Dress">

<h3>Floral Summer Dress</h3>

<p>Rs. 600</p>

<button onclick="addToCart('Floral Summer Dress', 600)">Add to Cart</button>

</div>

<div class="product">

<img src="https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcSXkKSVdFVb\_REt306ZXdiJTSgPyPSXjjX9nA&s" alt="Vintage Denim Jacket">

<h3>Vintage Denim Jacket</h3>

<p>Rs. 850</p>

<button onclick="addToCart('Vintage Denim Jacket', 850)">Add to Cart</button>

</div>

<div class="product">

<img src="https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcSbRmPFISEsYS3QLGcxARwyfSr2ilujk\_WZiQ&s" alt="Custom Leather Boots">

<h3>Custom Leather Boots</h3>

<p>Rs. 1000</p>

<button onclick="addToCart('Custom Leather Boots', 1000)">Add to Cart</button>

</div>

<div class="product">

<img src="https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcRf7HU8FNm\_EBjGj1-b\_0DntNnM\_7SsZYF9eA&s" alt="Casual Hoodie">

<h3>Casual Hoodie</h3>

<p>Rs. 450</p>

<button onclick="addToCart('Casual Hoodie', 450)">Add to Cart</button>

</div>

<div class="product">

<img src="https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcQC3oN7mAfVbzvzj\_M3G3qQ2NIbJqZefQhMpw&s" alt="Stylish Pants">

<h3>Stylish Pants</h3>

<p>Rs. 500</p>

<button onclick="addToCart('Stylish Pants', 500)">Add to Cart</button>

</div>

<div class="product">

<img src="https://png.pngtree.com/png-vector/20240814/ourmid/pngtree-stylish-men-s-elegant-shirt-png-image\_13480775.png" alt="Elegant Shirt">

<h3>Elegant Shirt</h3>

<p>Rs. 400</p>

<button onclick="addToCart('Elegant Shirt', 400)">Add to Cart</button>

</div>

<div class="product">

<img src="https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcQF\_EwACz6lh\_K7rLzvZEzbC8x2ZgZbP\_3eEA&s" alt="Summer Hat">

<h3>Summer Hat</h3>

<p>Rs.300</p>

<button onclick="addToCart('Summer Hat', 300)">Add to Cart</button>

</div>

<div class="product">

<img src="https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcQ2ERZOoTjq0G4AQ4MSYy4XVxE7PoL\_KS9HCA&s" alt="Sport Jacket">

<h3>Sport Jacket</h3>

<p>Rs. 600</p>

<button onclick="addToCart('Sport Jacket', 600)">Add to Cart</button>

</div>

<div class="product">

<img src="https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcTMIslFr9EC5ciAruWgT-J6xg9me0dz0dPtJw&s" alt="Classic Sneakers">

<h3>Classic Sneakers</h3>

<p>Rs. 750</p>

<button onclick="addToCart('Classic Sneakers', 750)">Add to Cart</button>

</div>

<div class="product">

<img src="https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcRFS-Rdi-zw8qU-wAuqi\_gyHQbBN0T92ixn6Q&s" alt="Designer Bag">

<h3>Designer Bag</h3>

<p>Rs. 350</p>

<button onclick="addToCart('Designer Bag', 350)">Add to Cart</button>

</div>

</div>

</div>

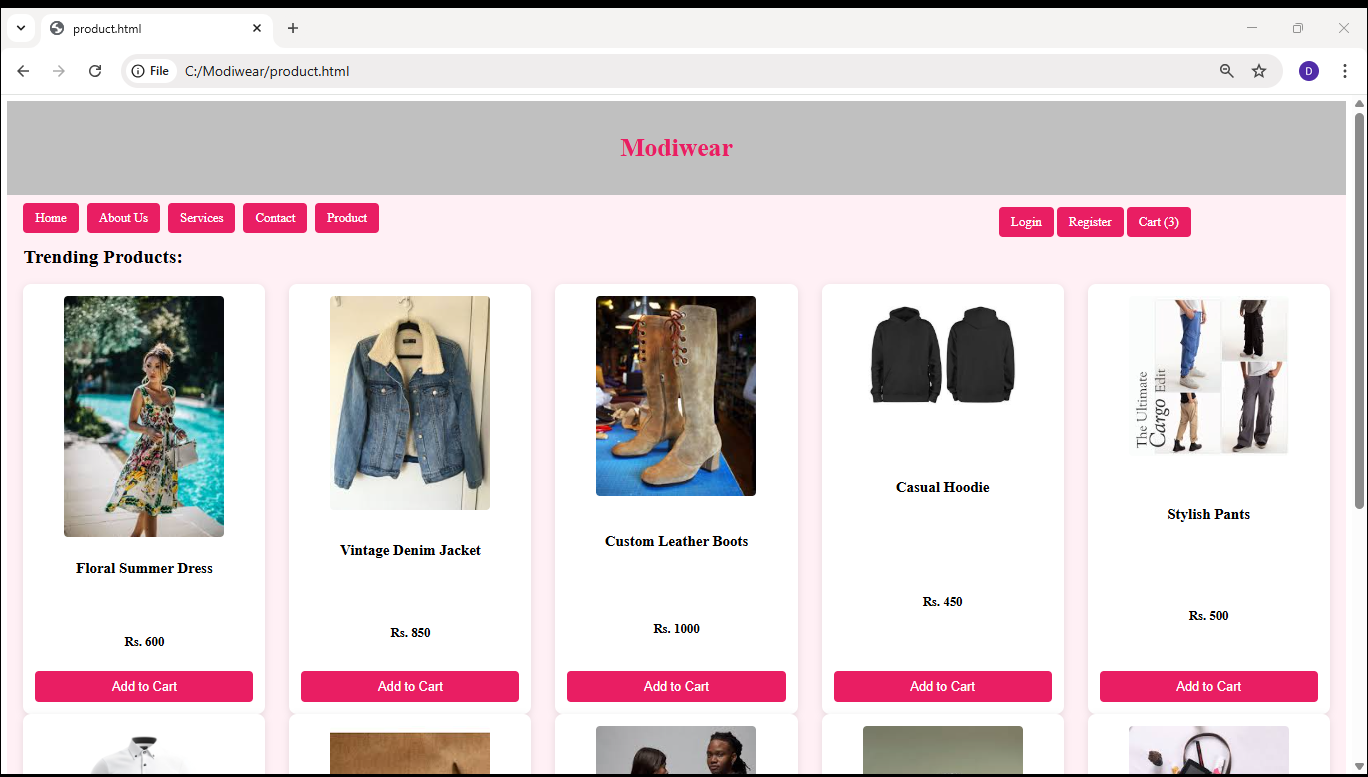
</section>

</body>

</html>

## **Output:**

B. menu/product page output:



## **Code:**

C. cart page:

code:

<!DOCTYPE html>

<html>

<head>

</head>

<body>

<div class="div1">

<a class="para1"><strong>Modiwear</strong></a>

</div>

<div class="cart-container">

<h2>Shopping Cart</h2>

<table class="cart-table">

<thead>

<tr>

<th>Product</th>

<th>Price (Rs.)</th>

<th>Quantity</th>

<th>Total</th>

<th>Action</th>

</tr>

</thead>

<tbody id="cart-items"></tbody>

</table>

<div class="total-container">

Total Amount: Rs. <span id="total-price">0</span>

</div>

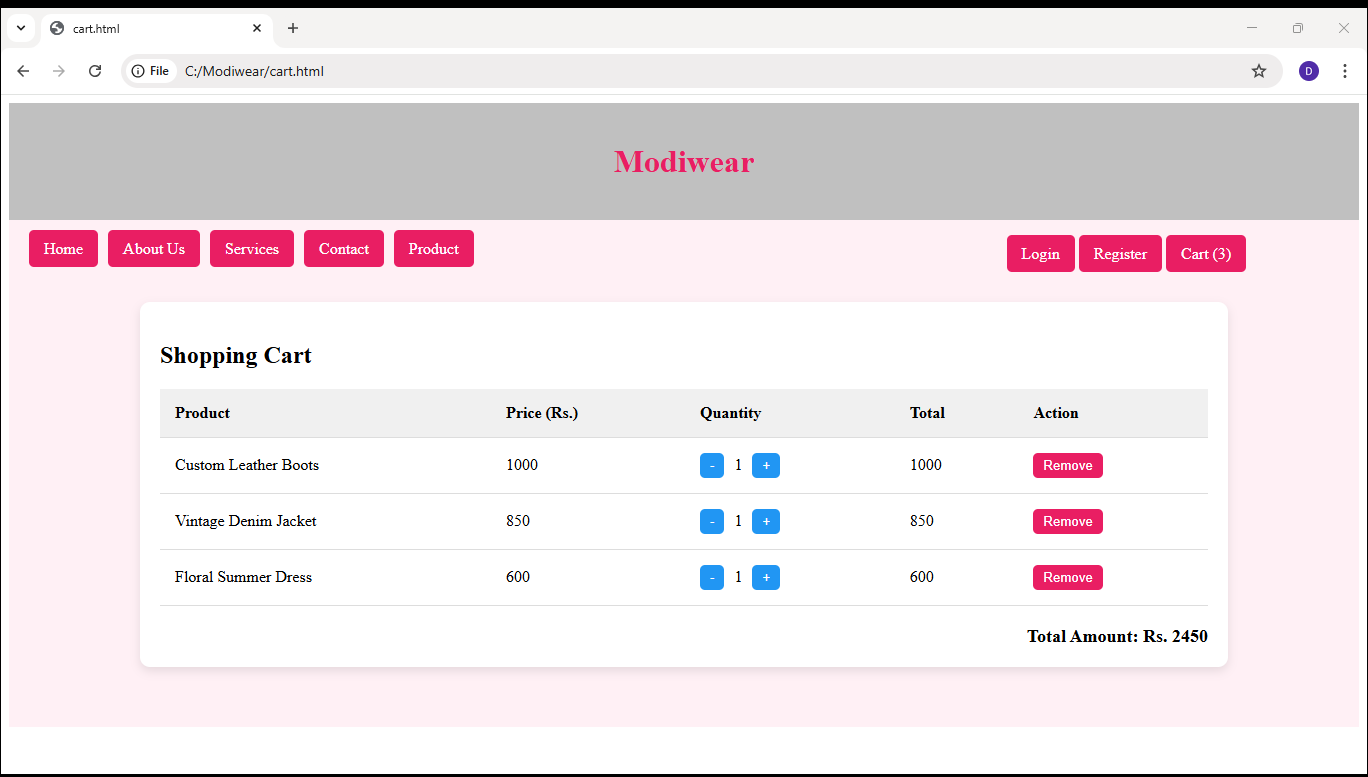
</div>

</body>

</html>

## **Output:**

C. cart page output:



## 

## **Code:**

D. about us page:

code:

<!DOCTYPE html>

<html>

<head>

</head>

<body>

<div class="container">

<div class="about-section">

<h2>About Us</h2>

<p>Welcome to Modiwear! We are an innovative fashion platform where creativity meets style. Whether you are looking to purchase, resell, or customize clothes, we are here to bring your fashion dreams to life. Our mission is to empower individuals with the freedom to express themselves through high-quality, customizable clothing options.</p>

<p>At Modiwear, we understand that clothing is more than just fabric – it's an expression of who you are. That's why we provide a wide range of options for you to create, buy, or sell clothing that suits your style. Our platform is built to support creators, designers, and customers alike, bringing everyone together to celebrate fashion in all its forms.</p>

<div class="mission-values">

<div>

<h3>Our Mission</h3>

<p>To redefine fashion by providing a platform for unique, customizable clothing that empowers personal style and creativity. Our goal is to make high-quality fashion accessible to everyone, offering a seamless shopping experience and unparalleled customer service.</p>

</div>

<div>

<h3>Our Values</h3>

<p>We believe in inclusivity, sustainability, and creativity. Every garment we offer is crafted with care, and we strive to maintain an eco-friendly approach to production. We value diversity, and we are committed to fostering an environment where every customer can find clothing that fits their personality and needs.</p>

</div>

</div>

<h2>What We Offer</h2>

<p>At Modiwear, we offer a variety of services, including:</p>

<ul>

<li><strong>Custom Clothing:</strong> Personalize your outfits with our design tools, and create clothing that speaks to you.</li>

<li><strong>Resell Opportunities:</strong> Join our community of resellers and promote Modiwear's fashionable items to your audience.</li>

<li><strong>Ready-to-Wear:</strong> Browse our curated collection of trendy, pre-designed clothing pieces, perfect for any occasion.</li>

</ul>

<br>

<br>

<br>

<h2>Contact </h2>

<p>Email Id: Modiwear123@gmail.com<br> Telephone number: +1 (555) 123-4567 <br>Contact number: 8849292011<br> Address: Blossom house,2nd floor,

<br> Shivaji Nagar, Pune-412208.

<br> Maharashtra, India.</p>

</div>

</div>

<br>

<div class="footer">

<p class="text-center text-muted"> &copy; 2024 Modiwear. All rights reserved.</p>

<p>Follow us on social media:</p>

<ul>

<li><a href="https://facebook.com">Facebook</a></li>

<li><a href="https://instagram.com">Instagram</a></li>

<li><a href="https://twitter.com">Twitter</a></li>

</ul>

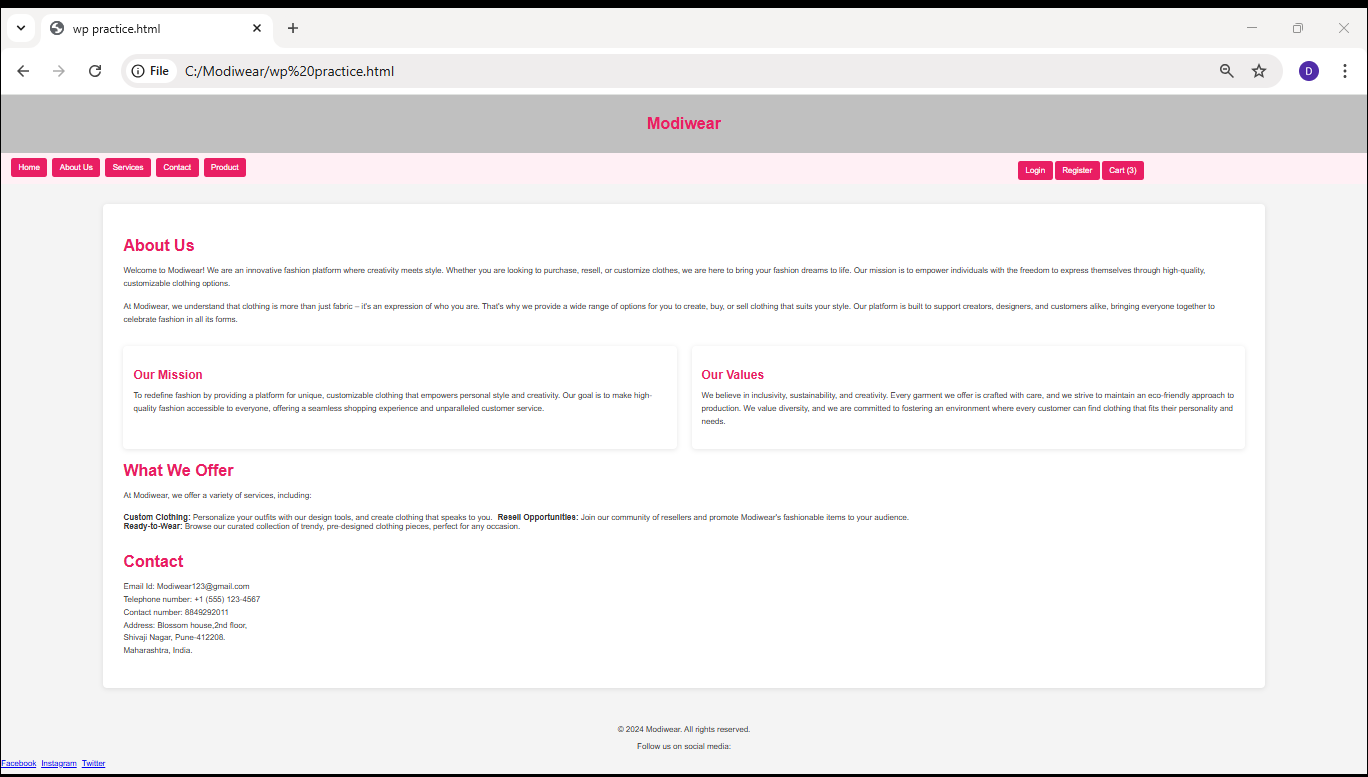
</div>

</body>

</html>

## **Output:**

D. about us page output:



## **Code:**

E. contact us page:

code:

<!DOCTYPE html>

<html>

<head>

</head>

<body>

<div class="container">

<div class="contact-section">

<h2>Contact Us</h2>

<form>

<input type="text" placeholder="Your Name" required>

<input type="email" placeholder="Your Email" required>

<textarea placeholder="Your Message" required></textarea>

<button type="submit">Send Message</button>

</form>

</div>

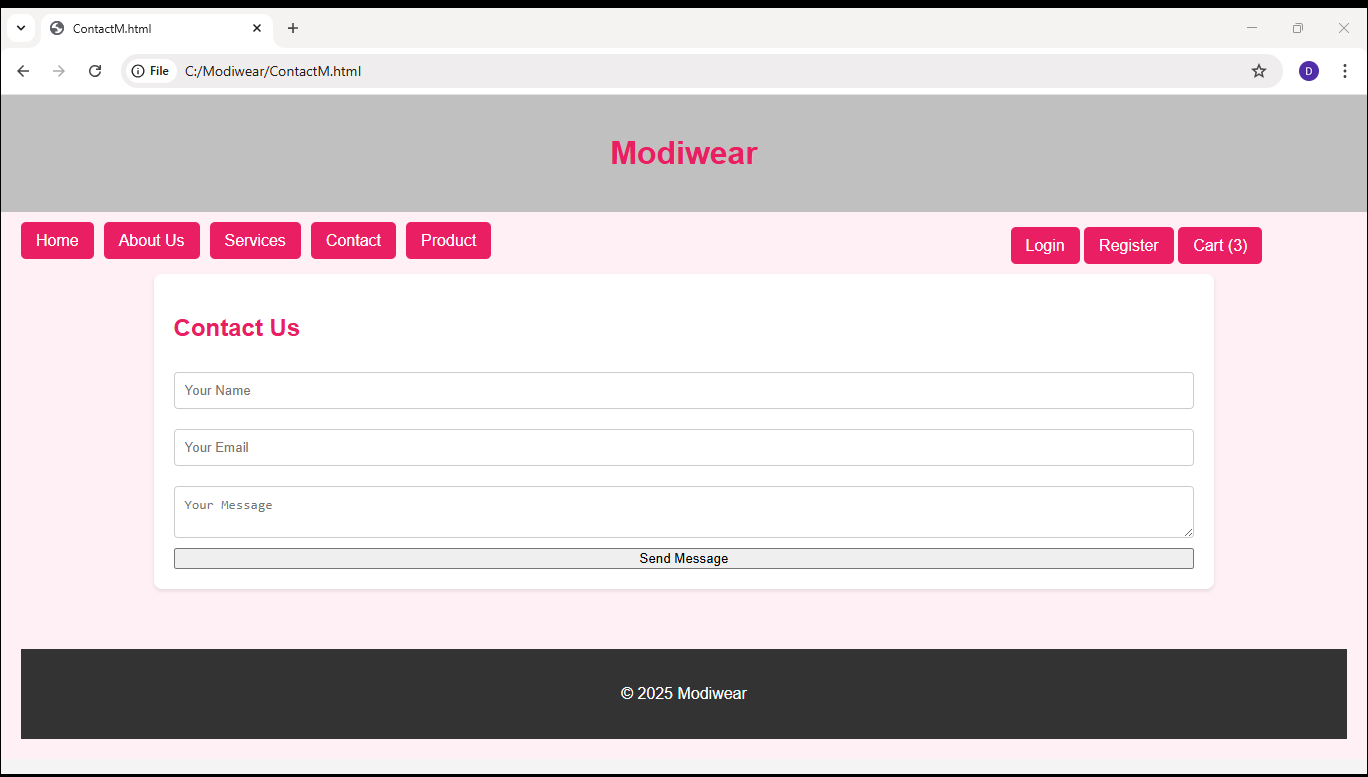
</div>

</body>

</html>

## **Output:**

E. contact us page output:



## **Code:**

F. registration page:

code:

<!DOCTYPE html>

<html>

<head>

</head>

<body>

<div class="register-container">

<form id="registerForm" action="/register" method="post">

<h2>Registration Form</h2>

<label for="firstname">First Name</label>

<input type="text" id="firstname" name="firstname" placeholder="Enter First Name" required>

<label for="lastname">Last Name</label>

<input type="text" id="lastname" name="lastname" placeholder="Enter Last Name" required>

<label for="username">User Name</label>

<input type="text" id="username" name="username" placeholder="Enter User Name" required>

<label for="email">Email-Id</label>

<input type="text" id="email" name="email" placeholder="Enter Email-Id" required>

<label for="pass">Password</label>

<input type="password" id="pass" name="pass" placeholder="Enter Password" required>

<button type="button" id="show-pass">Show Password</button>

<label for="userType">Register as:</label>

<select id="userType" name="userType" required>

<option value="customer">Customer</option>

<option value="seller">Seller</option>

</select>

<input type="submit" id="submit-btn" value="Register" disabled>

<div class="msg"></div>

</form>

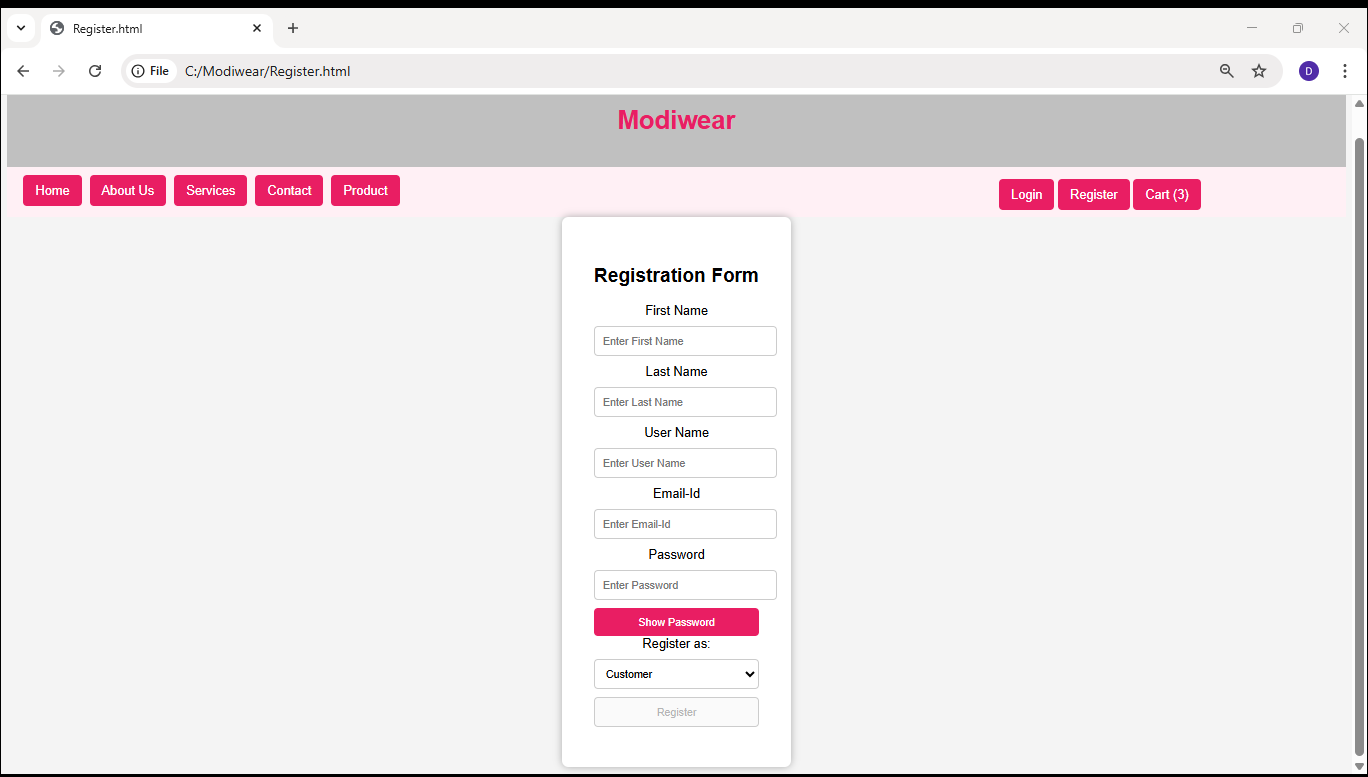
</div>

</body>

</html>

## **Output:**

F. registration page output:



## **Code:**

G. login page:

code:

<!DOCTYPE html>

<html>

<head>

</head>

<body>

<div class="login-container">

<h2>Login</h2>

<form id="loginForm">

<label for="userType">Login as:</label>

<select id="userType">

<option value="customer">Customer</option>

<option value="seller">Seller</option>

</select>

<label for="email">Email:</label>

<input type="email" class="box" placeholder="Enter Email" id="email" required>

<label for="password">Password:</label>

<input type="password" class="box" placeholder="Enter Password" id="password" required>

<button type="button" id="show-pass">Show Password</button>

<input type="submit" id="submit-btn" value="Login" disabled>

<div class="msg"></div>

</form>

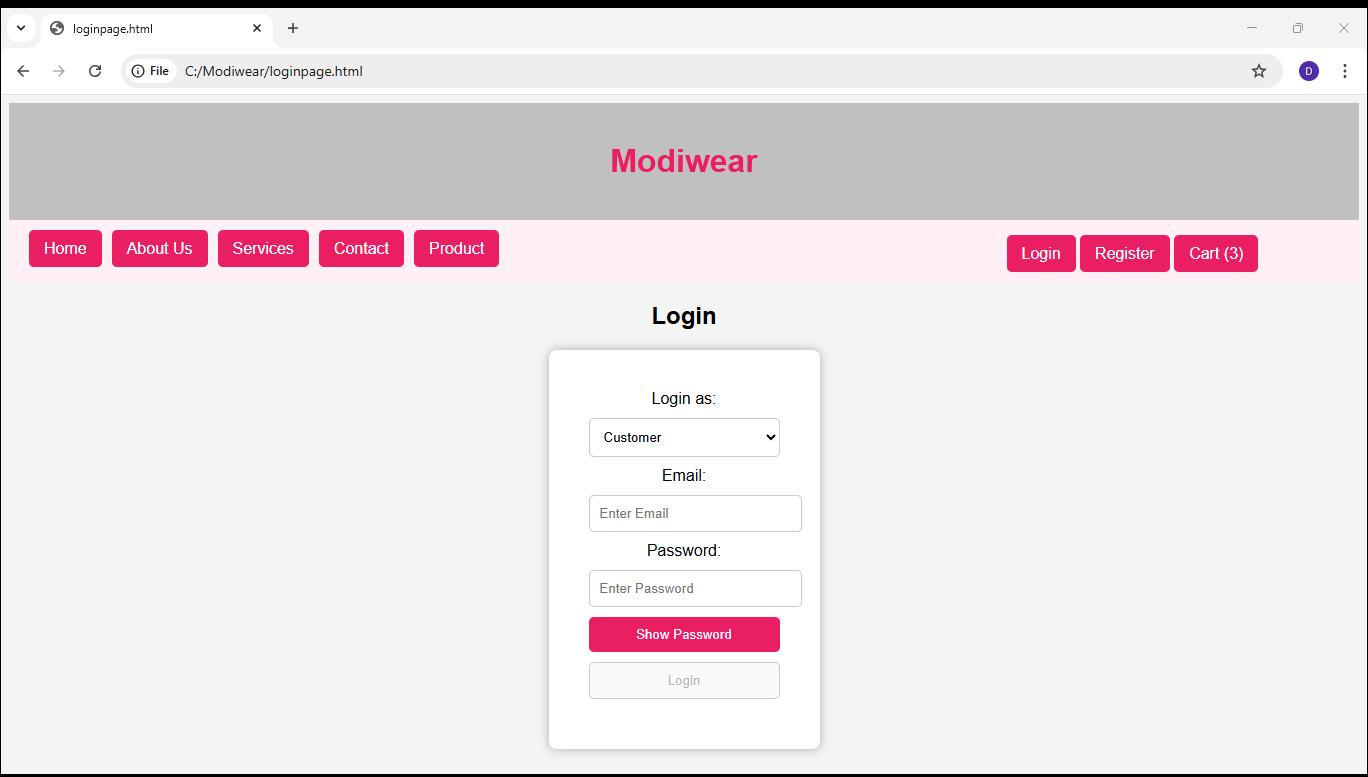
</div>

</body>

</html>

## **Output:**

G. login page output:



## 

## **Conclusion:**

This experiment helped in understanding how to structure and design the basic skeleton of a website using HTML. It included the creation of essential web pages like Home, Menu, Cart, About Us, Contact, Registration, and Login. The practical task enhanced knowledge of semantic elements, form design, and webpage layout. This is the foundation step in developing a fully functional coffee shop website.

## **Experiment No.3**

**Problem Statement:**

Enhance the layout of the MODIWEAR website using CSS Grid for the home page.

Use CSS Grid to layout the menu/product items in a structured and style the menu categories with appropriate headings, spacing, separators, images, descriptions, and prices.

**Objective:**To enhance the home page layout of the MODIWEAR website using CSS Grid, ensuring a visually appealing, structured, and user-friendly presentation of the menu/product items. This includes organizing products into grid-based sections with clearly styled categories, headings, separators, product images, descriptions, and prices, providing users with a seamless and modern browsing experience.

**Theory:**

Introduction to CSS Grid

CSS Grid Layout is a powerful two-dimensional layout system that allows developers to create web pages with complex, responsive designs. Unlike Flexbox, which handles layouts in a single direction (row or column), CSS Grid manages layouts across both rows and columns, making it ideal for modern web applications like Modiwear, which features product galleries, shopping carts, and categorized clothing listings.

With Modiwear's focus on customizable fashion, structured presentation is crucial. CSS Grid enables a well-organized layout where users can comfortably explore clothing collections, view recommendations, and interact with the platform seamlessly on any device.

Why CSS Grid for Modiwear?

The fashion industry thrives on visual appeal, and Modiwear’s website must reflect this through aesthetic, responsive, and user-friendly interfaces. CSS Grid is particularly useful in:

* Arranging clothing and accessory items in neat grids (e.g., 2x2, 3x3, 4x4).
* Structuring different sections like:
  + “Seasonal Trends”
  + “Recommended for You”
  + “Custom Outfit Builder”
* Ensuring uniform alignment for images, descriptions, pricing, and action buttons.
* Adapting gracefully to mobile, tablet, and desktop viewports.

Modiwear Home Page Layout with CSS Grid

The Modiwear homepage is divided into meaningful sections using CSS Grid:

* A full-width navigation bar with links to Home, Products, Customize, About, Contact.
* A hero banner featuring the latest fashion trend or offer.
* A three-column featured categories section (e.g., Men, Women, Accessories).
* A testimonial section aligned in a horizontal row.
* A footer containing contact info and social media icons.

Advantages of CSS Grid on the Homepage:

* Simplifies defining large sections of the layout.
* Makes positioning of elements like banners and buttons more precise.
* Ensures scalable responsiveness without excessive use of media queries.

Modiwear Product Page Layout Using CSS Grid

This page is the heart of Modiwear, showcasing customizable and ready-to-wear products. Items are categorized such as:

* Men’s Wear
* Women’s Wear
* Kids
* Custom Collection
* Accessories

Each product is displayed inside a grid-based product card with:

* Product Image
* Product Name
* Short Description
* Price
* “Customize” or “Add to Cart” Button

Key Styling Elements in Product Cards

Each .product-card could include:

* A stylish image container
* Bold product title
* Fashionable price tag
* A minimalistic "Customize" or "Add to Cart" button
* Hover and click animations

Additional Styling Concepts Applied in Modiwear:

* Category Headers with stylized fonts and background overlays
* Section Separators using borders or subtle box-shadows
* Hover Effects for interactive shopping experience

Mobile Responsiveness with CSS Grid:

A key benefit of CSS Grid in the Modiwear project is how naturally it adapts to small screens:

* On mobile, the grid collapses to 1-column or 2-column layouts, ensuring content remains readable and user-friendly.
* Touch-friendly spacing is maintained between buttons and cards.
* Makes the platform accessible and smooth across devices.

**Code:**

HTML:

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Modiwear - Home</title>

<link rel="stylesheet" href="styles.css">

</head>

<body>

<div class="div1">

<a class="para1"><strong>Modiwear</strong></a>

</div>

<div class="div2">

<div class="display-inline">

<ul>

<li><a href="home.html" class="nav-button">Home</a></li>

<li><a href="wp practice.html" class="nav-button">About Us</a></li>

<li><a href="service.html" class="nav-button">Services</a></li>

<li><a href="ContactM.html" class="nav-button">Contact</a></li>

<li><a href="Product.html" class="nav-button">Product</a></li>

</ul>

</div>

<div class="div2 display-inline float-right">

<span id="Welcome"></span>

<a id="login" href="loginpage.html" class="nav-button">Login</a>

<a id="register" href="Register.html" class="nav-button">Register</a>

<a href="cart.html" class="nav-button">Cart <span id="cart-count">(0)</span></a>

</div>

</div>

<div class="container">

<h1>Revamp Your Style Today</h1>

<p>Explore trendy outfits, customize your wardrobe, and make sustainable choices.</p>

<br>

<button class="nav-button">

<a href="product.html" class="button-link">Explore Products</a>

</button>

<button class="nav-button">

<a href="customize.html" class="button-link">Customize your Products</a>

</button>

</div>

<div class="image-gallery">

<img src="https://img.perniaspopupshop.com/catalog/product/s/h/SHRE012331\_1.jpg?impolicy=listingimagenew" alt="Fashion Image 1">

<img src="https://www.stateofescape.com/cdn/shop/files/meganav\_styles\_0008\_crop\_in.jpg?v=1729143543" alt="Fashion Image 2">

<img src="https://www.shutterstock.com/image-photo/full-length-curly-african-american-600nw-2261513983.jpg" alt="Fashion Image 3">

<img src="https://assets.myntassets.com/dpr\_1.5,q\_60,w\_400,c\_limit,fl\_progressive/assets/images/2025/FEBRUARY/10/owGK7Som\_a403a360605e4a7a9b659d11231d3e2e.jpg" alt="Fashion Image 4">

</div>

<div class="footer">

<p class="text-center text-muted">&copy; 2024 Modiwear. All rights reserved.</p>

<p>Follow us on social media:</p>

<ul>

<li><a href="https://facebook.com">Facebook</a></li>

<li><a href="https://instagram.com">Instagram</a></li>

<li><a href="https://twitter.com">Twitter</a></li>

</ul>

</div>

<script src="script.js"></script>

</body>

</html>

CSS:

body {

background: #fffafa;

margin: 0;

font-family: Arial, sans-serif;

}

.div1 {

background-color: #c0c0c0;

color: white;

padding: 40px 60px;

font-size: 30px;

text-align: center;

}

.para1 {

color: #e91e63;

font-size: 2rem;

margin-bottom: 30px;

}

.div2 {

background-color: #fff0f5;

padding: 20px;

text-align: left;

}

.display-inline {

display: inline-block;

width: 40%;

}

.float-right {

float: right;

width: 25%;

padding: 5px;

}

ul {

list-style-type: none;

margin: 0;

padding: 0;

}

li {

float: left;

margin-right: 10px;

}

.nav-button {

background-color: #e91e63;

color: white;

border: none;

padding: 10px 15px;

border-radius: 5px;

cursor: pointer;

text-decoration: none;

font-size: 16px;

transition: background-color 0.3s;

}

.nav-button:hover {

background-color: #c2185b;

}

.button-link {

color: white;

text-decoration: none;

}

.container {

text-align: center;

padding: 20px;

}

.image-gallery {

display: flex;

justify-content: center;

flex-wrap: wrap;

gap: 20px;

margin-top: 20px;

}

.image-gallery img {

width: 300px;

height: 400px;

border-radius: 10px;

transition: transform 0.3s ease;

}

.image-gallery img:hover {

transform: scale(1.05);

}

.footer {

background-color: #333;

color: white;

text-align: center;

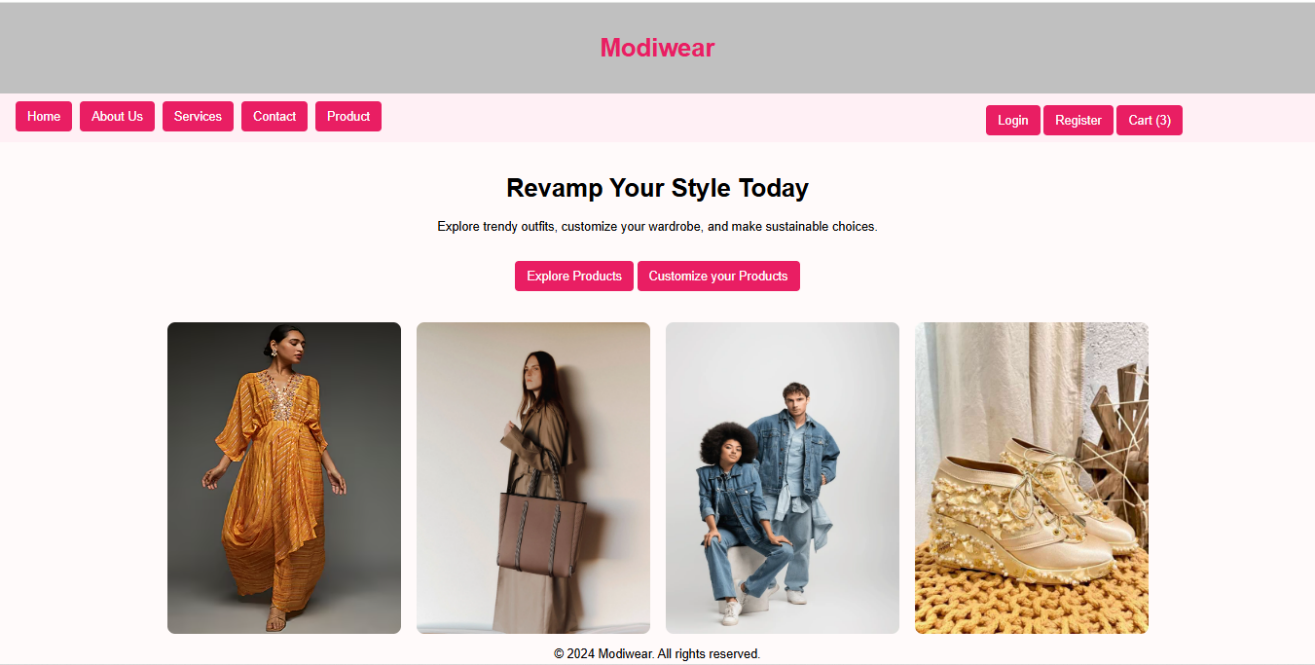
padding: 20px 0;

margin-top: 40px;

}

## **Output:**

A. Index/Home page output:



**Conclusion**

For a modern fashion customization platform like Modiwear, **CSS Grid empowers developers** to build visually attractive, user-centric layouts that scale effortlessly across devices. With proper implementation:

* Layouts remain consistent
* Navigation is intuitive
* Content presentation supports user interaction
* The overall site feels modern, elegant, and brand-aligned

CSS Grid is **an essential part** of the Modiwear development strategy, improving user engagement through intelligent and adaptive web design.

**Experiment No.4**

**Problem Statement:**

CSS

1. Enhance the layout of the ModiWear website using CSS Grid for the home page.
2. Use CSS Grid to layout the menu/product items in a structured and style the menu categories with appropriate headings, spacing, separators, images, descriptions, and prices.

**Objective:**  
To **redesign and enhance** the **home page layout** of the MODIWEAR website by utilizing **CSS Grid**, aiming to:

* Create a well-structured grid layout for showcasing menu/product items.
* Visually organize products into clearly defined categories with proper headings and spacing.
* Integrate images, product descriptions, and prices in an aesthetically pleasing and responsive format.
* Improve user experience by offering a clean, modern, and intuitive interface.

**Theory:**

**1. Why CSS Styling Matters in Fashion E-commerce Websites**

When users visit your fashion platform, the first impression is driven by visual appeal. A clean, well-structured, and aesthetically pleasing interface builds trust, improves navigation, and increases user engagement.

For fashion and lifestyle platforms like ModiWear, visual styling plays a key role in enhancing the browsing and buying experience. Whether it’s the cart, contact page, or user registration form, thoughtful CSS styling with appropriate margins, padding, typography, and color palette:

* Makes content visually digestible
* Provides a strong sense of brand and design flow
* Enhances usability and accessibility
* Encourages key actions such as product purchase, account registration, and form submission

**1. Cart Page**

The cart page is where users review selected clothing or fashion accessories. It should be clear, organized, and action-oriented.

**Key Styling Techniques:**

* Add padding around each cart item (product image, title, price, quantity) for visual clarity
* Use margins to create breathing space between item name, quantity input, price tag, and “Remove” button
* Style quantity inputs and buttons with rounded borders and consistent size
* Highlight total price in a bolder font and background color
* Ensure consistent font size and spacing for subtotal, tax, and total

**Result:** A structured and modern cart interface that minimizes confusion and maximizes purchase decisions.

**2. About Us Page**

This page introduces the ModiWear brand, its fashion values, story, and team. A strong design helps users feel emotionally connected.

**Key Styling Techniques:**

* Use ample line height and paragraph spacing for text readability
* Add padding and white space between “Our Journey”, “What We Believe”, and “Meet the Team” sections
* Use soft background colors or dividers to separate content visually
* Style team or brand images with rounded edges and spacing
* Highlight core fashion principles or sustainability goals using boxes or quote sections

**Result:** A polished, elegant brand page that builds credibility and resonates with fashion-conscious users.

**3. Contact Page**

The contact page enables users to reach out for queries, feedback, or collaborations.

**Key Styling Techniques:**

* Style form inputs (Name, Email, Message) with equal width, padding, and subtle borders
* Use margin spacing between input fields for visual separation
* On input focus, add a border color transition for interactivity
* Style the “Submit” button with hover effects and brand-aligned colors
* Layout the form in a centered container with balanced horizontal and vertical padding

**Result:** A user-friendly and professional contact form that promotes communication.

**4. Admin/User Registration Form**

User onboarding is a critical step in fashion e-commerce. The form should feel secure, simple, and stylish.

**Key Styling Techniques:**

* Group fields like name, email, and password logically
* Use clear labels and placeholders for better understanding
* Ensure consistent input field widths, padding, and alignment
* Apply card-like layout with shadows, rounded corners, and light background color
* Include interactive button styles and error messages for real-time feedback

**Result:** A streamlined and visually attractive registration form that users are comfortable filling out.

**5. Admin/User Login Form**

Login forms must provide a quick, clean, and efficient login experience.

**Key Styling Techniques:**

* Center the login box with defined width and padding
* Style form inputs for Email and Password with enough spacing and border highlight on focus
* Use contrasting button colors and hover states for “Login”
* Display error messages in red and confirmation in green
* Apply a subtle background design (e.g., fashion-themed image or overlay)

**Result:** A reliable and visually appealing login page that improves user confidence and experience.

By following these CSS styling strategies, **ModiWear** ensures that every user interaction—from browsing to checkout—is polished, accessible, and aligned with the brand’s fashionable identity.

Code:

. cart page:

code:

<!DOCTYPE html>

<html>

<head>

</head>

<body>

<div class="div1">

<a class="para1"><strong>Modiwear</strong></a>

</div>

<div class="cart-container">

<h2>Shopping Cart</h2>

<table class="cart-table">

<thead>

<tr>

<th>Product</th>

<th>Price (Rs.)</th>

<th>Quantity</th>

<th>Total</th>

<th>Action</th>

</tr>

</thead>

<tbody id="cart-items"></tbody>

</table>

<div class="total-container">

Total Amount: Rs. <span id="total-price">0</span>

</div>

</div>

</body>

</html>

CSS:

<style>

.cart-container {

width: 80%;

margin: 40px auto;

background: white;

padding: 20px;

border-radius: 10px;

box-shadow: 0px 4px 10px rgba(0, 0, 0, 0.1);

}

.cart-table {

width: 100%;

border-collapse: collapse;

}

.cart-table th, .cart-table td {

padding: 15px;

text-align: left;

border-bottom: 1px solid #ddd;

}

.cart-table th {

background: #f0f0f0;

}

.quantity-btn {

padding: 5px 10px;

border: none;

cursor: pointer;

border-radius: 5px;

background-color: #2196F3;

color: white;

}

.remove-btn {

background-color: #e91e63;

color: white;

padding: 5px 10px;

border: none;

cursor: pointer;

border-radius: 5px;

}

.total-container {

margin-top: 20px;

text-align: right;

font-size: 18px;

font-weight: bold;

}

</style>

About us page:

code:

<!DOCTYPE html>

<html>

<head>

</head>

<body>

<div class="container">

<div class="about-section">

<h2>About Us</h2>

<p>Welcome to Modiwear! We are an innovative fashion platform where creativity meets style. Whether you are looking to purchase, resell, or customize clothes, we are here to bring your fashion dreams to life. Our mission is to empower individuals with the freedom to express themselves through high-quality, customizable clothing options.</p>

<p>At Modiwear, we understand that clothing is more than just fabric – it's an expression of who you are. That's why we provide a wide range of options for you to create, buy, or sell clothing that suits your style. Our platform is built to support creators, designers, and customers alike, bringing everyone together to celebrate fashion in all its forms.</p>

<div class="mission-values">

<div>

<h3>Our Mission</h3>

<p>To redefine fashion by providing a platform for unique, customizable clothing that empowers personal style and creativity. Our goal is to make high-quality fashion accessible to everyone, offering a seamless shopping experience and unparalleled customer service.</p>

</div>

<div>

<h3>Our Values</h3>

<p>We believe in inclusivity, sustainability, and creativity. Every garment we offer is crafted with care, and we strive to maintain an eco-friendly approach to production. We value diversity, and we are committed to fostering an environment where every customer can find clothing that fits their personality and needs.</p>

</div>

</div>

<h2>What We Offer</h2>

<p>At Modiwear, we offer a variety of services, including:</p>

<ul>

<li><strong>Custom Clothing:</strong> Personalize your outfits with our design tools, and create clothing that speaks to you.</li>

<li><strong>Resell Opportunities:</strong> Join our community of resellers and promote Modiwear's fashionable items to your audience.</li>

<li><strong>Ready-to-Wear:</strong> Browse our curated collection of trendy, pre-designed clothing pieces, perfect for any occasion.</li>

</ul>

<br>

<br>

<br>

<h2>Contact </h2>

<p>Email Id: Modiwear123@gmail.com<br> Telephone number: +1 (555) 123-4567 <br>Contact number: 8849292011<br> Address: Blossom house,2nd floor,

<br> Shivaji Nagar, Pune-412208.

<br> Maharashtra, India.</p>

</div>

</div>

<br>

<div class="footer">

<p class="text-center text-muted"> &copy; 2024 Modiwear. All rights reserved.</p>

<p>Follow us on social media:</p>

<ul>

<li><a href="https://facebook.com">Facebook</a></li>

<li><a href="https://instagram.com">Instagram</a></li>

<li><a href="https://twitter.com">Twitter</a></li>

</ul>

</div>

</body>

</html>

CSS:

<style>

body {

font-family: Arial, sans-serif;

margin: 0;

padding: 0;

background-color: #f4f4f4;

color: #333;

}

header {

background-color: #e91e63; /\* Pink color \*/

color: white;

text-align: center;

padding: 1rem 0;

}

header h1 {

margin: 0;

}

.container {

width: 85%;

margin: 0 auto;

padding: 40px 0;

}

.about-section {

background-color: white;

padding: 40px;

border-radius: 8px;

box-shadow: 0 2px 10px rgba(0, 0, 0, 0.1);

}

.about-section h2 {

color: #e91e63;

font-size: 2rem;

margin-bottom: 20px;

}

.about-section p {

font-size: 1rem;

line-height: 1.6;

margin-bottom: 20px;

}

.mission-values {

display: flex;

gap: 30px;

margin-top: 40px;

}

.mission-values div {

flex: 1;

padding: 20px;

background-color: #fff;

border-radius: 8px;

box-shadow: 0 2px 10px rgba(0, 0, 0, 0.1);

}

.mission-values div h3 {

color: #e91e63;

font-size: 1.5rem;

margin-bottom: 10px;

}

</style>

Registration page:

code:

<!DOCTYPE html>

<html>

<head>

</head>

<body>

<div class="register-container">

<form id="registerForm" action="/register" method="post">

<h2>Registration Form</h2>

<label for="firstname">First Name</label>

<input type="text" id="firstname" name="firstname" placeholder="Enter First Name" required>

<label for="lastname">Last Name</label>

<input type="text" id="lastname" name="lastname" placeholder="Enter Last Name" required>

<label for="username">User Name</label>

<input type="text" id="username" name="username" placeholder="Enter User Name" required>

<label for="email">Email-Id</label>

<input type="text" id="email" name="email" placeholder="Enter Email-Id" required>

<label for="pass">Password</label>

<input type="password" id="pass" name="pass" placeholder="Enter Password" required>

<button type="button" id="show-pass">Show Password</button>

<label for="userType">Register as:</label>

<select id="userType" name="userType" required>

<option value="customer">Customer</option>

<option value="seller">Seller</option>

</select>

<input type="submit" id="submit-btn" value="Register" disabled>

<div class="msg"></div>

</form>

</div>

</body>

</html>

CSS:

<style>

body { font-family: Arial, sans-serif; background-color: #f4f4f4; text-align: center; }

form {

background: white;

padding: 40px;

border-radius: 8px;

box-shadow: 0px 0px 10px 0px #aaa;

display: inline-block;

}

input, select {

display: block;

width: 100%;

padding: 10px;

margin: 10px 0;

border: 1px solid #ccc;

border-radius: 5px;

}

button {

background-color: #e91e63;

color: white;

border: none;

padding: 10px;

border-radius: 5px;

cursor: pointer;

width: 100%;

}

button:hover {

background-color: #c2185b;

}

</style>

Login page:

code:

<!DOCTYPE html>

<html>

<head>

</head>

<body>

<div class="login-container">

<h2>Login</h2>

<form id="loginForm">

<label for="userType">Login as:</label>

<select id="userType">

<option value="customer">Customer</option>

<option value="seller">Seller</option>

</select>

<label for="email">Email:</label>

<input type="email" class="box" placeholder="Enter Email" id="email" required>

<label for="password">Password:</label>

<input type="password" class="box" placeholder="Enter Password" id="password" required>

<button type="button" id="show-pass">Show Password</button>

<input type="submit" id="submit-btn" value="Login" disabled>

<div class="msg"></div>

</form>

</div>

</body>

</html>

CSS:

<style>

body { font-family: Arial, sans-serif;

background-color: #f4f4f4; text-align: center; }

form {

background: white;

padding: 40px;

border-radius: 8px;

box-shadow: 0px 0px 10px 0px #aaa;

display: inline-block;

}

input, select {

display: block;

width: 100%;

padding: 10px;

margin: 10px 0;

border: 1px solid #ccc;

border-radius: 5px;

}

button {

background-color: #e91e63;

color: white;

border: none;

padding: 10px;

border-radius: 5px;

cursor: pointer;

width: 100%;

}

button:hover {

background-color: #c2185b;

}

</style>

**Conclusion**

Effective use of CSS in a fashion e-commerce platform like ModiWear is not just about making the site look good—it's about enhancing usability, guiding user actions, and reinforcing brand identity. Each key page—whether it's the Cart, About Us, Contact, or Login/Registration—plays a crucial role in the user journey.

By using thoughtful CSS styling techniques such as Grid layout systems, spacing control, responsive design, and interactive elements, ModiWear creates a visually appealing and user-friendly environment. This improves the overall user experience (UX), increases user retention, and ultimately supports higher conversions.

**Experiment No.5**

**Problem Statement:**

JavaScript

1. Implement user registration and login forms for the modiwear website. These forms will allow users to create an account, log in, and access personalized features, such as saving favorite items or viewing order history.

User Registration Form will allow new customers to sign up and create an account on the website. The form will capture basic user details, including the name, email address, and password (not limited to these fields).

User Login Form will allow registered users to log into their accounts. The form will require an email address and a password to authenticate the user.

1. Provide validations for user registration and login forms to validate the input to ensure that all required fields are filled and that the email format is valid. (**Contents beyond Syllabus)**

Develop cart functionality to allow users to add items, update quantities, and remove items.

**Objective:**

To implement user registration and login with input validation, enabling personalized features like saved items and order history. Also, develop a shopping cart system allowing users to add, update, and remove items for a seamless shopping experience.

**Theory:**

In fashion-based e-commerce platforms like **ModiWear**, delivering a seamless and personalized experience is essential to build user trust and increase conversions. JavaScript plays a vital role in enhancing interactivity, validating input, and managing user-specific actions such as account creation, login, and cart management. These functionalities are key for improving user engagement and streamlining the shopping process.

**1. User Registration and Login Forms**

ModiWear offers account creation and login features to help users securely access personalized content, track orders, and manage their wishlist or cart.

**Registration Form**

The registration form on ModiWear collects user details like name, email, password, and optionally address or phone number to create an account.

**JavaScript responsibilities in registration:**

* Preventing form submission if required fields are empty
* Validating email format using regular expressions (e.g., user@example.com)
* Enforcing strong password rules (minimum length, uppercase, special characters)
* Ensuring password and confirm password fields match
* Providing **real-time** inline feedback (e.g., green checkmarks or red alerts) for user guidance

**Login Form**

The login form verifies user identity using their email and password, allowing access to their dashboard or order history.

**JavaScript responsibilities in login:**

* Ensuring fields are not left blank
* Validating email format
* Comparing login credentials with data stored locally (or on a backend)
* Displaying error messages if authentication fails
* Redirecting successfully logged-in users to the **ModiWear homepage** or **user panel**

**2. JavaScript Form Validations**

Proper validation improves the user experience by catching mistakes early and preventing incomplete or invalid data from reaching the backend.

**Common JavaScript validation tasks used in ModiWear:**

* Required field checks (e.g., name, email, password)
* Email format validation using RegEx
* Password strength validation with length, numbers, and symbols
* Confirm password match check
* Showing inline or tooltip-based error messages to guide users instantly

This **client-side validation** is faster and user-friendly. It complements any backend validation for better security

**3. Cart Functionality**

The shopping cart on **ModiWear** allows users to manage their selected outfits, accessories, and bundles in real time.

**Key JavaScript cart features implemented:**

* Dynamically adding products to the cart upon clicking “Add to Cart”
* Managing cart data as an **array of objects** to store product name, price, quantity, etc.
* Updating quantity fields with instant total recalculation
* Removing individual items from the cart
* Calculating and displaying total price, taxes, and discounts
* Saving cart data using **localStorage** so the cart persists even after page reload
* Updating the cart display dynamically with **DOM manipulation**

These cart interactions make shopping on **ModiWear** smooth, real-time, and reliable.

**Code:**

Registration page:

Html:

<!DOCTYPE html>

<html>

<head>

</head>

<body>

<div class="register-container">

<form id="registerForm" action="/register" method="post">

<h2>Registration Form</h2>

<label for="firstname">First Name</label>

<input type="text" id="firstname" name="firstname" placeholder="Enter First Name" required>

<label for="lastname">Last Name</label>

<input type="text" id="lastname" name="lastname" placeholder="Enter Last Name" required>

<label for="username">User Name</label>

<input type="text" id="username" name="username" placeholder="Enter User Name" required>

<label for="email">Email-Id</label>

<input type="text" id="email" name="email" placeholder="Enter Email-Id" required>

<label for="pass">Password</label>

<input type="password" id="pass" name="pass" placeholder="Enter Password" required>

<button type="button" id="show-pass">Show Password</button>

<label for="userType">Register as:</label>

<select id="userType" name="userType" required>

<option value="customer">Customer</option>

<option value="seller">Seller</option>

</select>

<input type="submit" id="submit-btn" value="Register" disabled>

<div class="msg"></div>

</form>

</div>

</body>

</html>

CSS:

<style>

body { font-family: Arial, sans-serif; background-color: #f4f4f4; text-align: center; }

form {

background: white;

padding: 40px;

border-radius: 8px;

box-shadow: 0px 0px 10px 0px #aaa;

display: inline-block;

}

input, select {

display: block;

width: 100%;

padding: 10px;

margin: 10px 0;

border: 1px solid #ccc;

border-radius: 5px;

}

button {

background-color: #e91e63;

color: white;

border: none;

padding: 10px;

border-radius: 5px;

cursor: pointer;

width: 100%;

}

button:hover {

background-color: #c2185b;

}

</style>

JAVASCRIPT:

<script>

var username = document.getElementById('username');

var pass = document.getElementById('pass');

var submit = document.getElementById('submit-btn');

var showPass = document.getElementById('show-pass');

var userType = document.getElementById('userType');

var validUsername = false;

var validPass = false;

document.getElementById("registerForm").addEventListener("submit", function (e) {

e.preventDefault();

const userDetails = {

Firstname: document.getElementById("fname").value,

Lastname: document.getElementById("lname").value,

Email: document.getElementById("email").value,

Password: document.getElementById("password").value,

};

</script>

login page:

code:

<!DOCTYPE html>

<html>

<head>

</head>

<body>

<div class="login-container">

<h2>Login</h2>

<form id="loginForm">

<label for="userType">Login as:</label>

<select id="userType">

<option value="customer">Customer</option>

<option value="seller">Seller</option>

</select>

<label for="email">Email:</label>

<input type="email" class="box" placeholder="Enter Email" id="email" required>

<label for="password">Password:</label>

<input type="password" class="box" placeholder="Enter Password" id="password" required>

<button type="button" id="show-pass">Show Password</button>

<input type="submit" id="submit-btn" value="Login" disabled>

<div class="msg"></div>

</form>

</div>

</body>

</html>

CSS:

<style>

body { font-family: Arial, sans-serif;

background-color: #f4f4f4; text-align: center; }

form {

background: white;

padding: 40px;

border-radius: 8px;

box-shadow: 0px 0px 10px 0px #aaa;

display: inline-block;

}

input, select {

display: block;

width: 100%;

padding: 10px;

margin: 10px 0;

border: 1px solid #ccc;

border-radius: 5px;

}

button {

background-color: #e91e63;

color: white;

border: none;

padding: 10px;

border-radius: 5px;

cursor: pointer;

width: 100%;

}

button:hover {

background-color: #c2185b;

}

</style>

JAVASCRIPT:  
<script>

var email = document.getElementById('email');

var pass = document.getElementById('password');

var submit = document.getElementById('submit-btn');

var showPass = document.getElementById('show-pass');

var msgElement = document.querySelector('.msg');

var validEmail = false;

var validPass = false;

document.getElementById("loginForm").addEventListener("submit", function (e) {

e.preventDefault();

const enteredEmail = document.getElementById("loginEmail").value;

const enteredPassword = document.getElementById("loginPassword").value;

const userDetails = JSON.parse(localStorage.getItem("userDetails"));

</script>

**Conclusion**

For a fashion e-commerce website like **ModiWear**, JavaScript is a core technology that brings functionality to life. From real-time form validation and interactive login to dynamic cart updates, JavaScript ensures a modern, responsive, and intuitive user journey.  
Its use in validating inputs, managing user data locally, and handling cart operations not only enhances user satisfaction but also boosts performance by reducing server dependency.  
By implementing well-structured JavaScript logic, **ModiWear** provides a fast, seamless, and stylish shopping experience aligned with users’ expectations.

**Experiment No.6**

**Problem Statement:**

JavaScript

1. The user login form will allow registered users to log into their accounts. The form will require an email address and a password to authenticate the user.
2. If the login is successful, the user should be redirected to the homepage or their user dashboard. (**Contents beyond Syllabus)**
3. Use localStorage or sessionStorage to store authentication data, such as the user’s email and login status. This ensures that once a user is logged in, they remain authenticated even after the page reloads or when they visit the site again. (**Contents beyond Syllabus)**
4. Save the cart data to local storage when items are added, updated, or removed. Retrieve and load the cart data from local storage when the page loads. (**Contents beyond Syllabus)**

**Objective:**

To implement a **login system** using **localStorage/sessionStorage** for authentication and session management, enabling users to stay logged in. Additionally, ensure **cart data is saved and retrieved** from localStorage for a persistent shopping experience.

**Theory:**

Persistent Login and Cart Functionality using Web Storage API

Introduction

In modern web applications, offering a seamless user experience requires maintaining user session states and data across different pages or after a page refresh. JavaScript’s Web Storage API—comprising localStorage and sessionStorage—is a lightweight solution to store data on the client side. For a cosmetic website, using these features can significantly improve usability by allowing persistent login sessions and retaining cart data even after page reloads or temporary site exits.

1. Persistent Login using localStorage/sessionStorage

The login system allows users to securely enter their credentials (email and password) to gain access to their accounts. Once validated, their login status and user identifier (like email or user ID) are stored in the browser using either:

* localStorage: Stores data with no expiration time, persisting even after the browser is closed and reopened.
* sessionStorage: Stores data only for the duration of the page session (i.e., until the tab or browser is closed).

Implementation Features:

* After successful login, JavaScript stores:
  + userEmail: to identify the current user
  + isLoggedIn: a boolean flag to indicate the login status
* On subsequent visits or page reloads:
  + JavaScript checks for these flags and either redirects to the dashboard or shows the login screen
* Logout functionality clears the stored values, ending the session

Benefits:

* Eliminates the need to re-login on every visit
* Enhances user convenience and session continuity
* Reduces server load for small-scale or prototype apps

2. Cart Data Management using localStorage

Shopping carts are central to any e-commerce website. Users expect that the items they add remain intact even if they leave or refresh the page. localStorage enables this by preserving the state of the cart.

Implementation Features:

* Every time a user adds, removes, or updates a product in the cart:
  + JavaScript serializes the cart array/object into JSON
  + This data is saved to localStorage
* On page load:
  + JavaScript checks if cart data exists in localStorage
  + If it does, it parses and loads it into the cart view
* The cart remains persistent until explicitly cleared

Benefits:

* Prevents loss of user data on reload or accidental tab closure
* Creates a more seamless and intuitive shopping experience
* Ensures continuity across visits without requiring account creation

Use Cases Beyond the Syllabus (Advanced Learning):

These implementations represent concepts often covered beyond standard academic curricula:

* Managing state with client-side storage
* Working with JSON and JavaScript objects dynamically
* Handling user sessions in single-page or multi-page applications without a backend
* Creating realistic e-commerce simulations or prototypes for portfolio projects

### ****Code:****

login page:

code:

<!DOCTYPE html>

<html>

<head>

</head>

<body>

<div class="login-container">

<h2>Login</h2>

<form id="loginForm">

<label for="userType">Login as:</label>

<select id="userType">

<option value="customer">Customer</option>

<option value="seller">Seller</option>

</select>

<label for="email">Email:</label>

<input type="email" class="box" placeholder="Enter Email" id="email" required>

<label for="password">Password:</label>

<input type="password" class="box" placeholder="Enter Password" id="password" required>

<button type="button" id="show-pass">Show Password</button>

<input type="submit" id="submit-btn" value="Login" disabled>

<div class="msg"></div>

</form>

</div>

</body>

</html>

CSS:

<style>

body { font-family: Arial, sans-serif;

background-color: #f4f4f4; text-align: center; }

form {

background: white;

padding: 40px;

border-radius: 8px;

box-shadow: 0px 0px 10px 0px #aaa;

display: inline-block;

}

input, select {

display: block;

width: 100%;

padding: 10px;

margin: 10px 0;

border: 1px solid #ccc;

border-radius: 5px;

}

button {

background-color: #e91e63;

color: white;

border: none;

padding: 10px;

border-radius: 5px;

cursor: pointer;

width: 100%;

}

button:hover {

background-color: #c2185b;

}

</style>

JAVASCRIPT:  
<script>

var email = document.getElementById('email');

var pass = document.getElementById('password');

var submit = document.getElementById('submit-btn');

var showPass = document.getElementById('show-pass');

var msgElement = document.querySelector('.msg');

var validEmail = false;

var validPass = false;

document.getElementById("loginForm").addEventListener("submit", function (e) {

e.preventDefault();

const enteredEmail = document.getElementById("loginEmail").value;

const enteredPassword = document.getElementById("loginPassword").value;

const userDetails = JSON.parse(localStorage.getItem("userDetails"));

if (userDetails && userDetails.Email === enteredEmail && userDetails.Password === enteredPassword) {

alert("Login successful!");

localStorage.setItem("isLoggedIn", "true");

window.location.href = "home.html";

} else {

alert("Invalid email or password!");

}

});

email.addEventListener('input', function() {

validEmail = email.value.length >= 6;

email.style.borderColor = validEmail ? 'green' : 'red';

toggleSubmit();

});

pass.addEventListener('input', function() {

validPass = pass.value.length >= 6;

pass.style.borderColor = validPass ? 'green' : 'red';

toggleSubmit();

});

showPass.addEventListener('click', function() {

if (pass.type === 'password') {

pass.type = 'text';

showPass.textContent = 'Hide Password';

} else {

pass.type = 'password';

showPass.textContent = 'Show Password';

}

});

function toggleSubmit() {

submit.disabled = !(validEmail && validPass);

}

// Form Submission Handling

document.getElementById("loginForm").addEventListener("submit", function(event) {

event.preventDefault(); // Prevent default form submission

msgElement.textContent = "Login Successful!"; // Temporary success message

msgElement.style.color = "green";

// Simulate login or send data to backend here

console.log("Email:", email.value);

console.log("Password:", pass.value);

});

let cart = JSON.parse(localStorage.getItem('cart')) || [];

const cartCount = document.getElementById('cart-count');

function updateCartCount() {

cartCount.textContent = `(${cart.length})`;

}

function addToCart(name, price) {

let product = { name, price };

if (!cart.find(item => item.name === name)) {

cart.push(product);

localStorage.setItem('cart', JSON.stringify(cart));

updateCartCount();

}

}

window.onload = function() {

updateCartCount();

document.querySelectorAll("button").forEach(button => {

button.addEventListener("click", function() {

updateCartCount();

});

});

};

document.getElementById("loginForm").addEventListener("submit", function(event) {

event.preventDefault();

let userType = document.getElementById("userType").value;

if (userType === "seller") {

window.location.href = "seller.html";

} else {

window.location.href = "home.html";

}

});

</script>

### ****Conclusion****

For a fashion-based website like **ModiWear**, persistent login and cart functionalities powered by JavaScript’s Web Storage API provide a **responsive, user-friendly experience** without requiring complex backend systems.  
Storing session and cart data in localStorage or sessionStorage ensures users can pick up where they left off, enhancing convenience and reducing drop-offs.  
These features are not just technically smart—they help **bridge the gap between prototypes and professional-grade user experience**, making **ModiWear** more reliable and engaging.

**Experiment no.7**

**Problem statement:**

PHP

1. Develop a PHP script to handle user registration for the Modiwear website. The script should accept input from users for their name, email address, password, etc. (all required fields for registration).
2. Implement error handling to notify users of any issues during registration, such as validation errors.
3. Provide feedback to the user upon successful registration, either through a confirmation message or a redirect to a login page.

**Objective:**To develop a **PHP-based user registration system** that securely collects user details (name, email, password, etc.), includes **validation and error handling**, and provides **feedback or redirection** upon successful registration to ensure a smooth onboarding experience.

**Theory:**

User registration is a fundamental component of web applications, particularly in e-commerce platforms like your cosmetic website. PHP is widely used on the server side to handle form submissions, validate user inputs, interact with databases (like MySQL), and ensure secure data processing.

In this system, the registration form captures user details (name, email, password, etc.). Once submitted, the PHP script validates the inputs and then stores them securely into a database. To maintain security, user passwords are hashed before storage.

Core Elements of the PHP Registration Script:

1. Form Handling: Grabs data using $\_POST.
2. Validation: Ensures fields are not empty and email is valid.
3. Password Hashing: Uses password\_hash() to securely hash passwords.
4. Database Interaction: Uses MySQLi or PDO to store user data.
5. Error Handling: Displays messages for missing fields or registration failures.
6. User Feedback: Provides confirmation or redirection upon success.

Features Covered:

 User Input Handling: Name, Email, and Password.

 Error Handling:

o Checks for empty fields.

o Validates correct email format.

o Enforces minimum password length.

 Password Hashing: Uses password\_hash() for secure storage.

 Database Interaction: Safely inserts user data using Prepared Statements to avoid SQL

Injection.

 Feedback:

o Success message with a link to login.

o Clear error messages if any field fails validation.

**Code:**

This script handles the backend logic for storing user data and validating input.

<;?php

// Database connection (adjust according to your DB setup)

$host = &quot;localhost&quot;;

$user = &quot;root&quot;;

$password = &quot;&quot;;

$db = &quot;modiwear\_db&quot;;

$conn = new mysqli($host, $user, $password, $db);

// Check connection

if ($conn-&gt;connect\_error) {

die(&quot;Connection failed: &quot; . $conn-&gt;connect\_error);

}

// Form submission check

if (isset($\_POST[&#39;register&#39;])) {

// Collect input values

$name = trim($\_POST[&#39;name&#39;]);

$email = trim($\_POST[&#39;email&#39;]);

$password = trim($\_POST[&#39;password&#39;]);

// Basic Validation

if (empty($name) || empty($email) || empty($password)) {

echo &quot;All fields are required!&quot;;

} elseif (!filter\_var($email, FILTER\_VALIDATE\_EMAIL)) {

echo &quot;Invalid email format!&quot;;

} elseif (strlen($password) &lt; 6) {

echo &quot;Password must be at least 6 characters.&quot;;

} else {

// Hash password for security

$hashedPassword = password\_hash($password, PASSWORD\_BCRYPT);

// Insert query

$sql = &quot;INSERT INTO users (name, email, password) VALUES (?, ?, ?)&quot;;

$stmt = $conn-&gt;prepare($sql);

$stmt-&gt;bind\_param(&quot;sss&quot;, $name, $email, $hashedPassword);

// Execute and give feedback

if ($stmt-&gt;execute()) {

echo &quot;Registration successful! &lt;a href=&#39;login.php&#39;&gt;Click here to Login&lt;/a&gt;&quot;;

} else {

echo &quot;Error: &quot; . $stmt-&gt;error;

}

$stmt-&gt;close();

}

}

$conn-&gt;close();

?>

**Conclusion**

Implementing user registration with PHP provides the backbone of user management in your website. By securely collecting, validating, and storing user data, you enable personalized experiences and functionalities such as login, saving favorites, or viewing past orders.

This system:

* Promotes user trust by securing sensitive data like passwords.
* Ensures data integrity through server-side validation.
* Enhances the user experience with real-time feedback and clear error handling.

**Experiment 8**

**Problem Statement:**

PHP

1. Develop a PHP script to handle user login for the Modiwear website. The script should accept input from users for their login credentials. (all required fields for login).
2. Provide feedback to the user upon successful login, either through a confirmation message or a redirect to a welcome page.
3. Implement error handling to notify users of login failures due to incorrect credentials or other errors.

Provide feedback to the user upon successful login, either through a welcome user name message or a redirect to a home page.

**Objective:**

Develop a PHP script to handle secure user login by verifying credentials and providing clear

feedback for both successful and failed login attempts.

**Theory: PHP Login System**

A user login system is a fundamental component of most websites, especially e-commerce platforms. It enables secure access to personalized features like managing carts, tracking orders, or viewing saved products. In PHP, login functionality typically involves:

* Capturing login credentials via a form (email and password).
* Validating inputs.
* Comparing credentials against stored data in a database.
* Starting a session upon successful login.
* Redirecting or displaying a welcome message.
* Showing errors for invalid credentials.

**Security Aspects:**

* **Password Hashing & Verification**: Passwords are stored as hashes using password\_hash() during registration. PHP’s password\_verify() is used to compare hashes during login.
* **Session Handling**: PHP sessions are used to maintain the user’s login state across pages.

**Features Covered:**

 Secure Login Input Handling: Checks both email and password.

 Error Handling:

o Alerts if fields are empty.

o Alerts for wrong email or wrong password.

 Password Verification: Uses password\_verify() for secure authentication.

 Feedback:

o On success, displays a welcome message with the username.

o Redirects to home.php after 2 seconds.

o On failure, provides clear error messages.

 Session Start: Stores the logged-in user&#39;s name for later use on other pages.

**PHP Login Script (login.php)**

This PHP file will handle the back-end logic for verifying user credentials.

<;?php

session\_start();

// Database connection

$host = &quot;localhost&quot;;

$user = &quot;root&quot;;

$password = &quot;&quot;;

$db = &quot;modiwear\_db&quot;;

$conn = new mysqli($host, $user, $password, $db);

// Check connection

if ($conn-&gt;connect\_error) {

die(&quot;Connection failed: &quot; . $conn-&gt;connect\_error);

}

// Form submission check

if (isset($\_POST[&#39;login&#39;])) {

$email = trim($\_POST[&#39;email&#39;]);

$password = trim($\_POST[&#39;password&#39;]);

// Validate input

if (empty($email) || empty($password)) {

echo &quot;Both email and password are required!&quot;;

} else {

// Prepare SQL

$sql = &quot;SELECT id, name, password FROM users WHERE email = ?&quot;;

$stmt = $conn-&gt;prepare($sql);

$stmt-&gt;bind\_param(&quot;s&quot;, $email);

$stmt-&gt;execute();

$result = $stmt-&gt;get\_result();

// Check if user exists

if ($result-&gt;num\_rows === 1) {

$row = $result-&gt;fetch\_assoc();

// Verify password

if (password\_verify($password, $row[&#39;password&#39;])) {

$\_SESSION[&#39;user\_name&#39;] = $row[&#39;name&#39;];

echo &quot;Welcome, &quot; . $\_SESSION[&#39;user\_name&#39;] . &quot;! Login successful.&quot;;

header(&quot;refresh:2; url=home.php&quot;);

} else {

echo &quot;Incorrect password! Please try again.&quot;;

}

} else {

echo &quot;No user found with this email!&quot;;

}

$stmt-&gt;close();

}

}

$conn-&gt;close();

?>

**Conclusion:**

Implementing a login system with PHP ensures a secure and user-friendly experience for your ModiWear website. By validating input, securely verifying credentials, and using PHP sessions:

* You allow users to access personalized features.
* You prevent unauthorized access.
* You improve user engagement and trust.

This PHP login script ensures that the ModiWear site:

 Validates login data securely.

 Displays personalized welcome messages.

 Uses session management.

 Properly handles user errors like wrong credentials or empty fields.

**Experiment 9**

**Problem Statement:**

PHP

1. Develop a PHP script to handle user login for the Coffee Shop website. The script should accept input from users for their login credentials. (all required fields for login).
2. Provide feedback to the user upon successful login, either through a confirmation message or a redirect to a welcome page.
3. Implement error handling to notify users of login failures due to incorrect credentials or other errors.

Provide feedback to the user upon successful login, either through a welcome user name message or a redirect to a home page.

**Objective:**

To create a **secure PHP login system** that accepts user credentials, validates them, and provides **appropriate feedback** through error messages for failures or a **welcome message/redirect** on successful login, enhancing user access and experience.

**Theory: PHP Shopping Cart System**

A shopping cart is a core component of any e-commerce platform. It serves as a temporary storage space where users can collect and manage the items they wish to purchase. In the case of a cosmetics website, where products can be unique and availability may be limited to single units, the shopping cart system plays an even more critical role.

**Two Types of Cart Management Systems in PHP:**

**A. Session-Based Shopping Cart (Without MySQL)**

This approach uses PHP sessions to temporarily store cart data in memory while the user is browsing. It is useful for fast prototyping and requires no database interaction.

**Key Characteristics:**

* Cart data is stored in $\_SESSION.
* Data persists during the browsing session.
* No need to log in to use the cart.
* Items are lost if the session expires or the browser is closed.

**Operations Supported:**

* **Add to Cart**: Add items by storing product ID, name, quantity, and price in session.
* **View Cart**: Display the contents stored in session.
* **Remove from Cart**: Unset item by ID or index from the session.

**Advantages:**

* Simple to implement.
* No database overhead.

**Limitations:**

* Not persistent after session end.
* Not scalable for logged-in user experiences.

**B. Database-Based Shopping Cart (With MySQL)**

This is the professional and scalable approach where cart data is stored in a **MySQL database**. It allows cart contents to persist across user sessions, products, and logins.

**Key Characteristics:**

* Each user has a unique cart identified by user ID.
* Cart contents are stored in a cart table, and optionally a cart\_items table for item details.
* Requires user login or session management.

**Operations Supported:**

* **Add to Cart**: Insert or update records in the cart\_items table.
* **View Cart**: Query database for all cart items belonging to a specific user.
* **Remove from Cart**: Delete an item from the database by item ID or cart ID.

**Advantages:**

* Cart is persistent and user-specific.
* Works across sessions and products.
* Enables cart analytics and user behavior tracking.

**Limitations:**

* Requires more setup and error handling.
* Needs secure login system to link cart with user.

**Code Explanation**PHP script for adding items:

<?php

session\_start();

include 'config.php';

if (isset($\_POST['add\_to\_cart'])) {

    $item\_id = $\_POST['item\_id'];

    $item\_name = $\_POST['item\_name'];

    $quantity = $\_POST['quantity'];

    $price = $\_POST['price'];

    $user\_id = $\_SESSION['user\_id'];

    $query = "INSERT INTO cart (user\_id, item\_id, item\_name, quantity, price) VALUES (?, ?, ?, ?, ?)";

    $stmt = $conn->prepare($query);

    $stmt->bind\_param("iisid", $user\_id, $item\_id, $item\_name, $quantity, $price);

    $stmt->execute();

    echo "Item added to cart!";

}

?>

PHP script for viewing cart:

<?php

$user\_id = $\_SESSION['user\_id'];

$query = "SELECT \* FROM cart WHERE user\_id = ?";

$stmt = $conn->prepare($query);

$stmt->bind\_param("i", $user\_id);

$stmt->execute();

$result = $stmt->get\_result();

while ($row = $result->fetch\_assoc()) {

    echo $row['item\_name'] . " - " . $row['quantity'] . "<br>";

}

?>

PHP script for removing items:

<?php

if (isset($\_GET['remove'])) {

    $item\_id = $\_GET['remove'];

    $user\_id = $\_SESSION['user\_id'];

    $query = "DELETE FROM cart WHERE item\_id = ? AND user\_id = ?";

    $stmt = $conn->prepare($query);

    $stmt->bind\_param("ii", $item\_id, $user\_id);

    $stmt->execute();

    echo "Item removed from cart.";

}

?>

**Conclusion:** The implementation of a dynamic cart system using PHP and MySQL significantly enhances the usability and professionalism of the Modiwear fashion customization website. It provides customers with an interactive and seamless shopping experience. By integrating a robust backend with a user-friendly frontend, the website not only meets the standards of modern e-commerce but also empowers users to customize and purchase fashion products effortlessly. This module also lays the groundwork for future enhancements like promotions, real-time inventory, and analytics.

**Experiment 10**

**Problem Statement:**

A. Develop a PHP script to handle the checkout process for users who are ready to complete their purchase. The script should process the cart data and provide feedback to the user upon successful or failed checkout.

B. Develop a PHP script that processes the checkout process for users who are ready to complete their purchase, integrating the MySQL database for handling user and order information. The script should validate user input, process the cart data, and provide feedback upon successful or failed checkout.

**Objective:**

To implement a secure and user-friendly checkout system for the Modiwear fashion customization website using PHP and MySQL. The checkout system should:

1. Retrieve cart items stored in session or database.
2. Validate user input (e.g., shipping address, payment details).
3. Save order information into the MySQL database.
4. Display a confirmation message upon successful purchase.
5. Handle and report any errors (e.g., empty cart, incomplete form).

**Theory:**

**1. Introduction to PHP in Web Development:** PHP is a server-side scripting language designed for web development. It interacts with databases (like MySQL) and handles server-side logic such as form processing, session management, and data validation.

**2. Role of MySQL in Web Applications:** MySQL is a relational database management system (RDBMS) that is widely used for storing and retrieving structured data. In e-commerce websites, MySQL stores user accounts, product listings, shopping carts, and order information.

**3. Checkout Process in E-commerce:** The checkout process is the final step where a customer confirms the purchase. It involves:

* Displaying cart items
* Entering shipping/payment information
* Order confirmation
* Order record storage

**4. PHP Sessions and Form Handling:** Sessions in PHP are used to retain user-specific information across pages. Checkout forms typically use the POST method for securely transferring user data like address and phone number.

**5. Database Design for Checkout Process:**

* users: Stores customer details
* products: Stores product details
* cart: Temporarily stores selected items
* orders: Logs order details (order\_id, user\_id, total\_price, status)
* order\_items: Links ordered products to the order ID

**6. Input Validation and Security:** Proper validation (e.g., required fields, proper email format) and SQL injection protection using prepared statements are critical in PHP.

**7. Feedback Mechanism:** Feedback via alerts or redirect messages enhances user experience by confirming successful orders or guiding users on failed attempts.

**8. Benefits of Server-Side Checkout Handling:**

* Better security
* Database record creation
* Order processing logic integration (e.g., sending order emails, reducing inventory)

**9. Typical Workflow:**

1. User clicks checkout
2. PHP collects form data
3. Validates input
4. Inserts data into orders and order\_items
5. Clears cart
6. Displays success/failure message

**10. Real-World Usage and Examples:** E-commerce sites like Amazon and Flipkart use similar logic. The design may vary, but backend principles remain largely the same.

**Code:**

<?php

// File: checkout.php

session\_start();

include('db\_config.php'); // file where database connection is set up

if ($\_SERVER["REQUEST\_METHOD"] === "POST") {

if (!isset($\_SESSION['user\_id'])) {

echo "User not logged in.";

exit;

}

$userId = $\_SESSION['user\_id'];

$cart = $\_SESSION['cart'] ?? [];

if (empty($cart)) {

echo "Cart is empty.";

exit;

}

// Validate user input

$fullname = trim($\_POST['fullname']);

$address = trim($\_POST['address']);

$phone = trim($\_POST['phone']);

if (empty($fullname) || empty($address) || empty($phone)) {

echo "Please fill all required fields.";

exit;

}

// Begin MySQL Transaction

mysqli\_begin\_transaction($conn);

try {

$orderQuery = "INSERT INTO orders (user\_id, fullname, address, phone, created\_at) VALUES (?, ?, ?, ?, NOW())";

$stmt = mysqli\_prepare($conn, $orderQuery);

mysqli\_stmt\_bind\_param($stmt, "isss", $userId, $fullname, $address, $phone);

mysqli\_stmt\_execute($stmt);

$orderId = mysqli\_insert\_id($conn);

$itemQuery = "INSERT INTO order\_items (order\_id, product\_id, quantity, price) VALUES (?, ?, ?, ?)";

$stmtItem = mysqli\_prepare($conn, $itemQuery);

foreach ($cart as $item) {

$productId = $item['product\_id'];

$quantity = $item['quantity'];

$price = $item['price'];

mysqli\_stmt\_bind\_param($stmtItem, "iiid", $orderId, $productId, $quantity, $price);

mysqli\_stmt\_execute($stmtItem);

}

// Commit transaction

mysqli\_commit($conn);

// Clear cart after successful order

unset($\_SESSION['cart']);

echo "Checkout successful. Your order ID is: $orderId";

} catch (Exception $e) {

mysqli\_rollback($conn);

echo "Checkout failed. Please try again.";

}

} else {

echo "Invalid request method.";

}

?>

**Conclusion:**

The checkout module is a vital part of any e-commerce platform. By integrating PHP with MySQL, the Modiwear fashion customization project ensures a seamless and secure purchasing experience. This assignment enabled the creation of a robust backend flow to manage order placement, data validation, and database transactions, forming the core of a functional online shopping system. With these scripts in place, Modiwear is better equipped to serve its users effectively and securely.