**Coffee Shop Online Development Plan**

**Coffee Shop Online Project Document**

**Document Purpose:**

We are starting the development of a coffee shop to create a welcoming space for coffee lovers. This document serves as a guide for all participants, outlining our goals, the methods we'll employ to achieve them, and the intended customers.

**Project Scope:**

The online coffee shop will serve as a digital platform where customers can browse our menu, order coffee. Initially, the website will feature an easy-to-use interface, product descriptions, an order system, and a payment gateway.

**Technology Utilization:**

Technology Utilization: We will use Python, HTML, CSS, and JavaScript programming languages, leveraging our team's expertise and confidence in Python for this initiative. Additionally, PostgreSQL will be utilized as the primary database for the application, ensuring robust data management and seamless integration with Python.

**Target Audience:**

The online coffee shop is designed for coffee enthusiasts, busy professionals, students, and anyone who enjoys the convenience of ordering coffee online.

**Document Overview:**

This document marks the beginning of our project, explaining the rationale, the system we're building, its users, and our approach. As the project progresses, we will provide more detailed information on requirements, testing, and deployment. Future updates will include more comprehensive planning and instructions for subsequent stages.

**Responsive Coffee Website Documentation**

This documentation explains the key components and structure of the **Responsive Coffee Website**. The website is designed for coffee lovers, providing easy navigation and a clean layout for products, information about the team, and more. It is built with HTML for the structure, CSS for styling, and JavaScript for interactivity.

**1. Overview of the Website**

This website is a simple, responsive coffee-themed website with the following sections:

* **Home**
* **About Us**
* **Products**

The website is designed to be easy to navigate with a focus on coffee-related products. The design is responsive, meaning it adjusts to fit on different screen sizes (mobile, tablet, and desktop).

**2. Header Section**

The **Header** is located at the top of the page and includes:

* **Logo**: This is a clickable image that will take users back to the homepage.
* **Menu Icon**: A button that opens or closes the navigation menu on mobile devices.
* **Navigation Links**: Links to the main sections of the site (Home, About Us, and Products).
* **Header Icons**: Icons for the cart and search features.
* **Search Box**: Allows users to search for coffee products on the website.

**3. Home Section**

The **Home Section** is the first thing users see when they visit the website. It includes:

* A welcoming headline that encourages users to "Start your day with coffee."
* A short paragraph of text about the coffee or brand.
* An image related to the theme of coffee.
* A **Shop Now** button that directs users to the products section.

**4. About Us Section**

The **About Us Section** provides information about the team behind the website. It includes:

* A heading with the title **Our Team**.
* A list of team members and their roles:
  + **Project Manager**: Eslam Ashraf
  + **Frontend Developers**: Abdelrahman Shalaby, Mahmoud Osama, Amr Khaled
  + **Backend Developer**: Rahma
* A **Learn More** button for users to get more information about the team or project.

**5. Products Section**

The **Products Section** displays a collection of popular coffee products. Each product is shown in a box with the following:

* An image of the product.
* The product name (e.g., Americano Pure).
* The price of the product.
* A link to **Add to Cart**.

The section is designed to display multiple products in a grid layout.

**6. Footer Section**

At the bottom of the page, the **Footer Section** includes:

* A **Copyright** message that states the website's ownership and rights.

**7. JavaScript Functionality**

The website also includes a JavaScript file (main.js) that provides the following functionality:

* **Menu Toggle**: This allows the navigation menu to open and close when the user clicks the menu icon on mobile devices.
* **Search Bar**: The search bar lets users search for products directly on the website.

**Conclusion**

This website is a simple, clean, and responsive design for a coffee store. It includes key sections like the home page, information about the team, and product listings, all built to provide an enjoyable user experience across devices. The functionality is enhanced with JavaScript for menu interactions and search features.

**A screenshot of a login form

Description automatically generatedSignup page:**

A screenshot of a login screen

Description automatically generatedA screenshot of a login form

Description automatically generated

**A coffee cup with a lid

Description automatically generatedHome page:**

**A brown bag with text and a label

Description automatically generatedProducts page :**

**A close-up of coffee beans

Description automatically generatedOur Team:**

**A diagram of a coffee store

Description automatically generatedUse case diagram :**

**Class diagram :**

**A diagram of a website

Description automatically generated**

**1-Signup Use Case**

* Purpose: To allow new users to create an account by providing their details.
* Flow:
  1. The user fills in their:
     + Full Name
     + Email Address
     + Password
  2. Upon clicking the "Signup" button:
     + The data would normally be sent to a server for validation and storage in a database .
  3. The form ensures required fields are filled out using the required attribute.
* Key Feature: Provides a clear interface for users to sign up.

**2-Login Use Case**

* Purpose: To allow existing users to access the application.
* Flow:
  1. The user enters their:
     + Email Address
     + Password
  2. Upon clicking the "Login" button:
     + The user is redirected to a page called home.html, simulating successful login .
  3. The form ensures required fields are filled out.
* Key Feature: Redirects to a new page upon login.

**3-View Home Page Use Case**

**Purpose**: To provide users with a welcoming and interactive landing page for a coffee website, allowing them to explore the site’s features and offerings.

**Use Case Details**

**Primary Goal**

* To welcome users, show what the website offers, and guide them to explore sections like About Us or Products.

**Flow**

1. **Header Navigation**:
   * The header contains:
     + **Navigation Links**:
       - "Home" scrolls to the home section of the current page.
       - "About Us" navigates to the About Us page.
       - "Products" navigates to the Products page.
     + **Icons**:
       - Cart Icon : A placeholder for the shopping cart feature.
       - Search Icon : Opens the search box.
2. **Search Functionality**:
   * Users can search for content using the search box, which becomes visible when the search icon is clicked.
3. **Home Section**:
   * **Text Content**:
     + A tagline and short description promote coffee and the brand.
   * **Shop Now Button**:
     + Clicking the button navigates to the Products section .
   * **Image**:
     + A visually appealing coffee-related image enhances engagement.

**Key Features**

1. **Interactive Elements**:
   * Search functionality with an expandable search box.
2. **Navigation**:
   * Simplified access to key website areas: Home, About Us, and Products.

**Limitations**

1. **Static Functionality**:
   * Features like the cart and search are not functional and require backend integration.

**4-View About Us Page Use case:**

This section provides information about the team behind the website.

**5-View product Page Use case:**

View Product Page Use Case

Purpose: Display products and let users add them to the cart.

Flow:

1. Shows product images, names, and prices.
2. Each product has an "Add to cart" button.
3. Footer includes a copyright notice.

Key Features:

* Simple product display.
* Easy cart interaction.

Limitations: No backend or filtering options.

**6-Add to Cart Use Case**

Purpose: Allow users to select products for purchase.

Flow:

1. User clicks "Add to cart" for a product.
2. The product is added to the shopping cart (functionality not implemented in this code).

Key Features:

* Quick product selection.
* Prepares for checkout.

Limitations: No backend or cart visualization

**Test Case: Login and Signup Functions (Example of pass status)**

Overview

This document provides detailed test cases for the login and signup functionalities in your web application. The goal is to ensure that the authentication system handles all scenarios, including valid inputs, invalid inputs, and edge cases.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Number of test case** | **Function** | **Scenario** | **Steps** | |  | | --- | | **Expected Result** |  |  | | --- | |  | | | **Status** | | --- |  |  | | --- | |  | |
| 1 | Login | Valid Login Credentials | 1. Open the login page. 2. Enter valid email and password. 3. Click "Login". | |  | | --- | | User is redirected to the homepage if credentials are correct. |  |  | | --- | |  | | Pass |
| 2 | Login | |  | | --- | | Invalid Email Format |  |  | | --- | |  | | 1. Open the login page. 2. Enter an invalid email format. 3. Click "Login". | |  | | --- | | Error message: "Please enter a valid email address." |  |  | | --- | |  | | Pass |
| 3 | Login | Incorrect Password | 1. Open the login page. 2. Enter valid email but an incorrect password. 3. Click "Login". | |  | | --- | | Error message: "Invalid credentials." |  |  | | --- | |  | | Pass |
| 4 | Login | |  | | --- | | Empty Fields |  |  | | --- | |  | | 1. Open the login page. 2. Leave both email and password fields blank. 3. Click "Login". | |  |  |  | | --- | --- | --- | | |  | | --- | | Error message: "Both fields are required." |  |  | | --- | |  | | | Pass |
| 5 | Signup | |  | | --- | | Valid Signup |  |  | | --- | |  | | 1. Open the signup page. 2. Enter valid username, email, and password. 3. Click "Signup". | |  | | --- | | User account is created, and a success message is displayed: "Account created successfully." |  |  | | --- | |  | | Pass |
| 6 | Signup | |  | | --- | | Duplicate Email |  |  | | --- | |  | | 1. Open the signup page. 2. Enter an email already registered. 3. Click "Signup". | |  | | --- | | Error message: "Email already exists." |  |  | | --- | |  | | Pass |
| 7 | Signup | |  | | --- | | Empty Fields |  |  | | --- | |  | | 1. Open the signup page. 2. Leave all fields blank. 3. Click "Signup". | |  | | --- | | Error message: "All fields are required." |  |  | | --- | |  | | Pass |
| 8 | Signup | |  | | --- | | Password Strength Validation |  |  | | --- | |  | | 1. Open the signup page. 2. Enter a weak password (e.g., "123"). 3. Click "Signup". | |  | | --- | | Error message: "Password must be at least 8 characters long and include a mix of letters and numbers." |  |  | | --- | |  | | Pass |
| 9 | Login | |  | | --- | | SQL Injection Handling |  |  | | --- | |  | | 1. Open the login page. 2. Enter malicious input (e.g., ). 3. Click "Login".'; DROP TABLE users; -- | |  | | --- | | The application handles the input securely and displays an error like "Invalid credentials." |  |  | | --- | |  | | Pass |
| 10 | Signup | |  | | --- | | SQL Injection Handling |  |  | | --- | |  | | 1. Open the signup page. 2. Enter malicious input in any field. 3. Click "Signup". | |  | | --- | | The application handles the input securely and displays an error like "Invalid input." |  |  | | --- | |  | | Pass |

**Examples of Fail Status**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Number of test case** | **Function** | **Scenario** | **Steps** | **Expected Result** | |  | | --- | | **Actual Result** |  |  | | --- | |  | | | **Status** | | --- |  |  | | --- | |  | |
| 1 | Login | |  | | --- | | Invalid Email Format |  |  | | --- | |  | | 1. Open the login page. 2. Enter an invalid email format. 3. Click "Login". | Error message: "Please enter a valid email address." | No error message is shown; form submits successfully. | Fail |
| 2 | Login | |  | | --- | | Incorrect Password |  |  | | --- | |  | | 1. Open the login page. 2. Enter valid email but an incorrect password. 3. Click "Login". | |  | | --- | | Error message: "Invalid credentials." |  |  | | --- | |  | | User is logged in despite using an incorrect password.   |  | | --- | |  | | Fail |
| 3 | Signup | |  | | --- | | Duplicate Email |  |  | | --- | |  | | 1. Open the signup page. 2. Enter an email already registered. 3. Click "Signup". | |  | | --- | | Error message: "Email already exists." |  |  | | --- | |  | | |  | | --- | | User is allowed to register with a duplicate email. |  |  | | --- | |  | | Fail |

**Explanation of Test cases (Login and signup)**

This documentation provides a list of test cases for the Login and Signup functions to ensure the system works as expected. It includes the following:

**Test Case Details:**

Each test case has number, a scenario being tested, steps to perform the test, expected results, and the actual status (Pass or Fail).

**Purpose:**

To check if the Login and Signup features handle valid inputs, show errors for invalid inputs.

**Pass and Fail Status:**

Pass: The application works as expected (e.g., valid login redirects to the homepage).

Fail: The application doesn’t behave as expected (e.g., no error message for invalid email).

**Conclusion**

The Login and Signup functionality test cases ensure the application's authentication system operates correctly and securely under various scenarios. Addressing any failures identified in testing enhances data integrity, user experience, ensuring a reliable and robust application for end users.