**SQE Project**

**Phase - 02**

**21L-5838\_**

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**Section: BSE-5A**

**Login Page Test Cases**

| **Test Case** | **Input** | **Expected Output** | **Actual Output** | **Purpose** |
| --- | --- | --- | --- | --- |
| 1 | Enter valid credentials (username, password) | Successful login | Successful login | Verify user authentication mechanism |
| 2 | Enter invalid username | Display invalid username message | Invalid username message displayed | Verify username validation rules |
| 3 | Enter invalid password | Display invalid password message | Invalid password message displayed | Verify password validation rules |
| 4 | Leave username field empty | Display missing username message | Missing username message displayed | Verify mandatory fields handling |
| 5 | Leave password field empty | Display missing password message | Missing password message displayed | Verify mandatory fields handling |
| 6 | Enter username with special characters | Display invalid username message | Invalid username message displayed | Verify username format validation |
| 7 | Enter password with special characters | Display invalid password message | Invalid password message displayed | Verify password format validation |
| 8 | Enter username with multiple spaces | Display invalid username message | Invalid username message displayed | Verify whitespace handling |
| 9 | Enter password with multiple spaces | Display invalid password message | Invalid password message displayed | Verify whitespace handling |

**Home Page Test Cases**

| **Test Case** | **Input** | **Expected Output** | **Actual Output** | **Purpose** |
| --- | --- | --- | --- | --- |
| 1 | Navigate to the home page | Display homepage with relevant content | Homepage displayed with banner images, product carousel, and search bar | Verify homepage accessibility |
| 2 | Verify banner images | Banner images should be displayed correctly | Banner images displayed correctly with links to respective product pages | Verify banner image functionality |
| 3 | Verify product carousel | Product carousel should display featured products | Product carousel displayed with featured products and navigation options | Verify product carousel functionality |
| 4 | Verify search functionality | Search for a product using the search bar | Relevant search results displayed with matching product names and descriptions | Verify product search functionality |
| 5 | Verify navigation menu | Links in the navigation menu should redirect to the correct pages | Links redirected to respective pages (categories, products, contact, etc.) | Verify navigation menu functionality |
| 6 | Add an item to the cart | Users should be able to add items to their cart from the home page | Item added to cart with updated cart icon and quantity indicator | Verify add to cart functionality |
| 7 | View cart | Users should be able to view their cart from the home page | Cart overlay displayed with added items, quantities, and checkout option | Verify cart visibility and accessibility |
| 8 | Logout of the account | Users should be able to log out of their account from the home page | Successful logout and redirection to the login page | Verify logout functionality |

**Admin Page Test Cases**

| **Test Case** | **Input** | **Expected Output** | **Actual Output** | **Purpose** |
| --- | --- | --- | --- | --- |
| 1 | Navigate to the admin page | Display admin dashboard with access to various management tools | Admin dashboard displayed with user management, product management, order management, and system configuration options | Verify admin access and dashboard functionality |
| 2 | Verify user management | Admins should be able to view, edit, and delete user accounts | User list displayed with options to view, edit, and delete individual user accounts | Verify user management functionalities |
| 3 | Verify product management | Admins should be able to add, edit, and delete products | Product list displayed with options to add, edit, and delete individual products | Verify product management functionalities |
| 4 | Verify order management | Admins should be able to view, process, and refund orders | Order list displayed with options to view, process, and refund individual orders | Verify order management functionalities |
| 5 | Verify system configuration | Admins should be able to manage system settings and configurations | System configuration page displayed with various settings for website appearance, email notifications, and other configurations | Verify system configuration management |
| 6 | Navigate to the homepage from the admin page | Admins should be able to navigate to the homepage from the admin page | Homepage displayed upon clicking the "Home" link in the admin dashboard | Verify seamless navigation between admin and user interfaces |
| 7 | Logout of the admin account | Admins should be able to log out of their admin account | Successful logout and redirection to the login page | Verify secure logout from the admin interface |
| 8 | Navigate to the category page from the admin page | Admins should be able to access the category management page | Category management page displayed with options to add, edit, and delete categories | Verify category management accessibility |

**Home Page Test Cases**

1. Incomplete Input Validation: The test cases primarily focus on basic functionality but lack thorough input validation for fields like search bar and navigation menu links. This could lead to unexpected behavior or security vulnerabilities.
2. Limited Error Handling: While some test cases address error messages, they don't comprehensively cover various error scenarios, such as invalid input formats, server errors, or network issues.
3. Lack of Performance Testing: The test cases don't address performance aspects, such as page load times, responsiveness under heavy traffic, or handling multiple concurrent users.
4. Missing Accessibility Testing: Accessibility considerations are not addressed in the test cases, ensuring the homepage is usable for individuals with disabilities using assistive technologies.

**Login Page Test Cases**

1. Insufficient Password Strength Validation: The test cases only mention invalid password messages but don't specify password strength requirements, such as minimum length, character diversity, or password history checks.
2. Lack of Account Recovery Mechanism: The test cases don't cover scenarios like forgotten password recovery, account lockouts due to multiple failed login attempts, or two-factor authentication implementation.
3. No Mention of Session Management: The test cases don't address session management aspects, such as session timeout, session hijacking prevention, or secure logout procedures.
4. No Cross-Site Scripting (XSS) Protection Testing: The test cases don't specifically test for XSS vulnerabilities, which could allow malicious users to inject scripts into the login page and steal user credentials.

**Admin Page Test Cases**

1. Incomplete User Management Coverage: The test cases primarily focus on basic user management actions but lack coverage for user role-based access control, permission management, or user activity logs.
2. Insufficient Product Management Validation: The test cases only mention adding, editing, and deleting products but don't cover product data validation, image upload handling, or product inventory management.
3. Order Management Limitations: The test cases focus on viewing, processing, and refunding orders but don't address order status updates, order cancellations, or order fulfillment processes.
4. Missing System Configuration Testing: The test cases don't specify the scope of system configuration options, such as email server settings, payment gateways integration, or website customization options.
5. Limited Error Handling and Security: The test cases lack comprehensive error handling and security testing for administrative actions, ensuring data integrity and preventing unauthorized access or manipulation.

These recommendations aim to enhance the clarity, completeness, and security coverage of the existing test cases. Adjustments made in accordance with these suggestions will contribute to a more robust testing process for the login page, home page, and admin page functionalities.