

Test Cases

Functional Test Cases

1. Login with valid credentials
 - a. **Given** the login screen is displayed
 - b. **When** the user enters a valid username and password
 - c. **When** the user clicks the login button
 - d. **Then** the user is redirected to the dashboard page
2. Login with invalid credentials
 - a. **Given** the login screen is displayed
 - b. **When** the user leaves the username and password fields blank
 - c. **When** the user clicks the login button
 - d. **Then** the user is redirected to the 404 page
3. Login with invalid password
 - a. **Given** the login screen is displayed
 - b. **When** the user enters valid username and invalid password
 - c. **When** the user clicks the login button
 - d. **Then** the user is redirected to the 404 page
4. Login with invalid username
 - a. **Given** the login screen is displayed
 - b. **When** the user enters invalid username and valid password
 - c. **When** the user clicks the login button
 - d. **Then** the user is redirected to the 404 page
5. Login with empty password
 - a. **Given** the login screen is displayed
 - b. **When** the user enters username and empty password

- c. **When** the user clicks the login button
 - d. **Then** the user should see a popup with text **Please fill out this field**
- 6. Login with empty username
 - a. **Given** the login screen is displayed
 - b. **When** the user enters empty username and valid password
 - c. **When** the user clicks the login button
 - d. **Then** the user should see a popup with text **Please fill out this field**
- 7. Login with empty credentials
 - a. **Given** the login screen is displayed
 - b. **When** the user enters empty username and password
 - c. **When** the user clicks the login button
 - d. **Then** the user should see a popup with text **Please fill out this field**
- 8. Case sensitivity for username and password fields
 - a. **Given** the login screen is displayed
 - b. **When** the user enters random case username and password
 - c. **When** the user clicks the login button
 - d. **Then** the user is redirected to the 404 page
- 9. Password masking
 - a. **Given** the login screen is displayed
 - b. **When** the user enters random case username and password
 - c. **Then** validate the password field is masked
- 10. Username and Password field validation
 - a. **Given** the login screen is displayed
 - b. **When** the user see the username and password

- c. **Then** do field validation for username and password field
- d. (Field validation includes long username and password, special chars etc)

Security Test Cases

1. Error Message Consistency
 - a. **Given** the login screen is displayed
 - b. **When** the user enters incorrect credentials
 - c. **Then** the error message does not reveal whether the username or password was incorrect
2. Session Hijacking
 - a. **Given** the user is logged in successfully
 - b. **When** the session token is reused in another browser
 - c. **Then** the system invalidates the token and requires reauthentication

Usability Test Cases

1. Field Placeholder Text
 - a. **Given** the login screen is displayed
 - b. **When** the user views the username and password fields
 - c. **Then** the placeholder text provides guidance (e.g., "Username")
2. Responsive Design
 - a. **Given** the login screen is shown on various devices (desktop, tablet, mobile)
 - b. **When** the user interacts with the fields and button
 - c. **Then** the layout adjusts properly

3. Accessibility

- a. **Given** the login screen is displayed
- b. **When** a screen reader or tab navigation is used
- c. **Then** all fields and buttons are accessible

Performance Test Cases

1. Page Load Time

- a. **Given** the login screen is requested
- b. **When** the page loads
- c. **Then** it loads within 2 seconds

2. Concurrent Login Requests

- a. **Given** multiple users try to log in simultaneously
- b. **When** 1000 login requests are sent concurrently
- c. **Then** the system handles the load without crashing

3. System Behavior During High Load

- a. **Given** the system is under peak load
- b. **When** a user tries to log in
- c. **Then** the system responds within acceptable time limits

Edge Case Test Scenarios

1. Browser Back Button

- a. **Given** the user is logged in
- b. **When** the user clicks the browser back button
- c. **Then** the system does not display the login screen without logging out

2. Cross-Browser Compatibility

- a. **Given** the login screen is displayed
- b. **When** the user accesses it using various browsers (Chrome, Firefox, Safari, Edge)
- c. **Then** the login functionality works seamlessly