

# **Test Plan and Test Cases for Account Creation and Login Functionality**

## **Objective:**

To ensure that the account creation and login functionalities of the given website work as intended, delivering a seamless user experience.

## **Scope:**

- In-Scope:
  - Account creation process, including validation of input fields.
  - Successful account creation and verification.
  - Login process with valid and invalid credentials.
  - Logout functionality.
  - Error handling for various scenarios (e.g., duplicate usernames, incorrect passwords).
- Out of Scope:
  - User interface design and API testing.
  - Performance testing under load.
  - Security testing beyond basic input validation.

The testing will encompass various types of testing methods, synch as:

- Manual testing
- Automation testing in Cypress
- Functional Testing
- Black Box Testing

## **Evaluation Criteria:**

The success of the testing will be evaluated based on predefined criteria, which include account creation and login functionality.

## **Platform for Testing:**

Operating System: Linux

Browsers: Chrome, Firefox

## **Test Case Design:**

- **Test Cases for Account Creation**

### **TC-AC-01: Verify successful account creation with valid data**

**Given:** The user is on the registration page.

**When:** The user fills in all required fields with valid data and clicks on the "Register" button.

**Then:** The user is successfully registered and redirected to the login page.

### **TC-AC-02: Verify error message for duplicate username**

**Given:** A user account with the same username already exists.

**When:** The user fills in the username field with the existing username, fills in other fields with valid data, and clicks on the "Register" button.

**Then:** An error message indicating that the username is already taken is displayed.

#### **TC-AC-03: Verify error message for invalid email format**

**Given:** The user is on the registration page.

**When:** The user fills in the email field with an invalid email format, fills in other fields with valid data, and clicks on the "Register" button.

**Then:** An error message indicating an invalid email format is displayed.

#### **TC-AC-04: Verify error message for empty required fields**

**Given:** The user is on the registration page.

**When:** The user leaves one or more required fields empty and clicks on the "Register" button.

**Then:** Error messages indicating that required fields are empty are displayed.

### **• Test Cases for Login and Account Access**

#### **TC-LA-01: Verify successful login with valid credentials**

**Given:** A user account is created.

**When:** The user enters a valid username and password and clicks on the "Sign In Now" button.

**Then:** The user is successfully logged in and redirected to the dashboard.

#### **TC-LA-02: Verify error message for incorrect password**

**Given:** A user account is created.

**When:** The user enters a valid username and an incorrect password and clicks on the "Sign In Now" button.

**Then:** An error message indicating that the password is incorrect is displayed.

#### **TC-LA-03: Verify error message for unregistered username**

**Given:** The user is on the login page.

**When:** The user enters an unregistered username and any password and clicks on the "Sign In Now" button.

**Then:** An error message indicating that the username does not exist is displayed.

#### **TC-LA-04: Verify logout functionality**

**Given:** The user is logged in.

**When:** The user clicks on the "Logout" button.

**Then:** The user is logged out and redirected to the login page.

#### **Test Data Management Strategy**

Test Data Requirements:

- User names: Generate unique usernames for each test case to avoid duplication.
- Passwords: Use a consistent password format that meets requirements
- Emails: Generate random email addresses for each test case to ensure uniqueness.

Test Data Generation:

- Use a random string generator to create usernames and passwords.
- Use a function to generate random email addresses .

Data Storage:

- Store generated test data in a structured format (e.g., JSON or CSV) for easy access and management.

## **Conclusion**

This test plan provides a comprehensive approach to testing the account creation and login functionalities of the website. It defines the scope, designs detailed test cases, and establishes a robust test data management strategy. These test results offer the best approach to initiating the testing process.