

Software Testing

Q.No. 1) Write Test Cases for a Login Page :

1. Email/Phone Number/Username Textbox
2. Password Textbox
3. Login Button
4. Remember Me Checkbox
5. Keep Me Signed In Checkbox
6. Forgot Password Link
7. Sign up/Create an account Link

Q.No. 2) Write the Test Scenarios of Gmail Inbox Functionality.

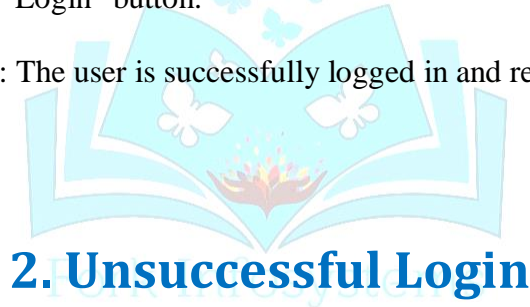
1> Test Cases for a Login Page

When creating test cases for a login page, it's important to cover a variety of scenarios to ensure the page functions correctly and securely. Here are some common test cases for a login page:

1. Successful Login

Test Case 1.1: Valid Credentials

- **Description** : Verify that a user can log in with valid credentials.
- **Steps** :
 1. Enter a valid username.
 2. Enter the correct password for that username.
 3. Click the "Login" button.
- **Expected Result** : The user is successfully logged in and redirected to the homepage or dashboard.



2. Unsuccessful Login

Test Case 2.1: Invalid Username

- **Description** : Verify that an error message is displayed when an invalid username is entered.
- **Steps** :
 1. Enter an invalid username.
 2. Enter a valid password.
 3. Click the "Login" button.
- **Expected Result** : An error message is displayed indicating invalid username.

Test Case 2.2: Invalid Password

- **Description:** Verify that an error message is displayed when an invalid password is entered.

- **Steps :**

1. Enter a valid username.
2. Enter an incorrect password.
3. Click the "Login" button.

- **Expected Result :** An error message is displayed indicating invalid password.

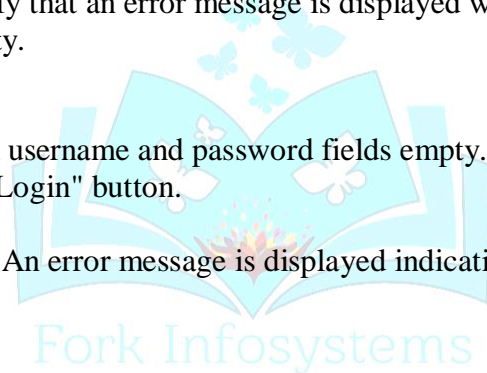
Test Case 2.3: Both Fields Empty

- **Description :** Verify that an error message is displayed when both username and password fields are left empty.

- **Steps :**

1. Leave both username and password fields empty.
2. Click the "Login" button.

- **Expected Result :** An error message is displayed indicating that both fields are required.



3. Field Validation

Test Case 3.1: Username Field Validation

- **Description :** Verify that the username field accepts only valid characters.

- **Steps :**

1. Enter special characters or invalid input in the username field.
2. Click the "Login" button.


- **Expected Result :** An error message is displayed or input is rejected.

Test Case 3.2: Password Field Validation

- **Description** : Verify that the password field accepts the correct format (e.g., minimum length, required characters).
- **Steps** :
 1. Enter a password that does not meet the security criteria.
 2. Click the "Login" button.
- **Expected Result** : An error message is displayed indicating that the password does not meet the requirements.

4. UI Elements

Test Case 4.1: Presence of Login Button

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- **Description** : Verify that the login button is present on the page.
 - **Steps** :
 1. Load the login page.
 - **Expected Result** : The "Login" button is visible and clickable.

Test Case 4.2: Presence of Forgot Password Link

- **Description**: Verify that the "Forgot Password" link is present and functional.
- **Steps**:
 1. Load the login page.
 2. Click the "Forgot Password" link.
- **Expected Result** : The user is redirected to the password recovery page.

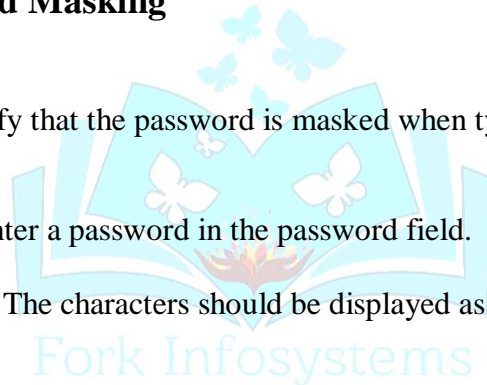
5. Security

Test Case 5.1: SQL Injection

- **Description:** Verify that the login form is protected against SQL injection attacks.
- **Steps:**
 1. Enter SQL injection code in the username or password fields.
 2. Click the "Login" button.
- **Expected Result:** The system should reject the input and not execute any harmful commands.

Test Case 5.2: Password Masking

- **Description :** Verify that the password is masked when typed.
- **Steps :**
 1. Enter a password in the password field.
- **Expected Result :** The characters should be displayed as dots or asterisks.



6. Usability

Test Case 6.1: Error Message Clarity

- **Description :** Verify that error messages are clear and helpful.
- **Steps :**
 1. Enter invalid credentials.
 2. Click the "Login" button.
- **Expected Result :** The error message should clearly indicate the problem (e.g., "Invalid username or password").

Test Case 6.2: Successful Login Redirect

- **Description:** Verify that a successful login redirects the user to the correct page.
- **Steps :**
 1. Enter valid credentials.
 2. Click the "Login" button.
- **Expected Result :** The user is redirected to the homepage, dashboard, or the page they were trying to access.

7. Compatibility

Test Case 7.1: Cross-Browser Compatibility

- **Description :** Verify that the login page functions correctly across different web browsers.
- **Steps :**
 1. Open the login page in various browsers (e.g., Chrome, Firefox, Safari, Edge).
 2. Perform login actions in each browser.
- **Expected Result :** The login page behaves consistently across all tested browsers.

Test Case 7.2: Mobile Responsiveness

- **Description :** Verify that the login page is responsive and usable on mobile devices.
- **Steps :**
 1. Open the login page on various mobile devices.
 2. Perform login actions on each device.
- **Expected Result :** The login page should display correctly and be functional on all tested devices.

These test cases help ensure the login page is robust, user-friendly, and secure. Adjust and expand them based on your specific application and requirements.