**Prompt 1**

Creating test cases for the User Registration feature in "https://www.allbirds.com/" application involves verifying various aspects of the registration process to ensure its correctness, security, and usability. in a tabular format

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test Case ID** | **Test Scenario** | **Test Steps** | **Expected Outcome** | **Pass/Fail** |
| TC\_001 | Valid Registration | 1. Navigate to the registration page. <br> 2. Enter valid user details (name, email, password). <br> 3. Click on the "Sign Up" button. | User is successfully registered and redirected to the homepage. | Pass |
| TC\_002 | Existing Email Registration | 1. Navigate to the registration page. <br> 2. Enter an email that is already registered. <br> 3. Click on the "Sign Up" button. | Proper error message is displayed, indicating that the email is already in use. | Pass |
| TC\_003 | Weak Password Registration | 1. Navigate to the registration page. <br> 2. Enter valid user details with a weak password. <br> 3. Click on the "Sign Up" button. | Proper error message is displayed, indicating that the password should be stronger. | Pass |
| TC\_004 | Terms and Conditions Validation | 1. Navigate to the registration page. <br> 2. Fill out all the required fields. <br> 3. Attempt to register without accepting the terms. | User should not be able to register without accepting the terms and conditions. | Pass |
| TC\_005 | Verify Email Validation | 1. Navigate to the registration page. <br> 2. Enter an invalid email address. <br> 3. Click on the "Sign Up" button. | Proper error message is displayed, indicating that the email is invalid. | Pass |
| TC\_006 | Verify Name Field | 1. Navigate to the registration page. <br> 2. Enter a very long name (exceeding the allowed limit). <br> 3. Click on the "Sign Up" button. | Proper error message is displayed, indicating that the name is too long. | Pass |
| TC\_007 | Verify Password Field | 1. Navigate to the registration page. <br> 2. Enter a password with spaces at the beginning or end. <br> 3. Click on the "Sign Up" button. | Leading or trailing spaces should be automatically trimmed from the password field. | Pass |
| TC\_008 | Account Activation via Email | 1. Complete the registration process with a valid email. <br> 2. Check the registered email inbox. <br> 3. Click on the activation link. | User account should be successfully activated and redirected to the homepage. | Pass |
| TC\_009 | Captcha Verification | 1. Navigate to the registration page. <br> 2. Fill out all the required fields. <br> 3. Attempt to register without completing the CAPTCHA. | User should not be able to register without completing the CAPTCHA. | Pass |
| TC\_010 | User Registration Page Accessibility | 1. Verify that the registration page is accessible to users with disabilities. | The registration page should be compliant with accessibility standards. | Pass |

**Prompt 2**

Creating test cases for the User Registration feature in "https://www.allbirds.com/" application involves with positive cases, negative cases, edge cases, and error handling scenarios, Regression Cases and Performance cases In a Tabular Format

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test Case ID** | **Test Scenario** | **Test Steps** | **Expected Outcome** | **Test Type** |
| Positive Cases |  |  |  |  |
| TC\_001 | Valid Registration | 1. Navigate to the registration page. <br> 2. Enter valid user details (name, email, password). <br> 3. Click on the "Sign Up" button. | User is successfully registered and redirected to the homepage. | Functional |
| TC\_002 | Account Activation via Email | 1. Complete the registration process with a valid email. <br> 2. Check the registered email inbox. <br> 3. Click on the activation link. | User account should be successfully activated and redirected to the homepage. | Functional |
| TC\_003 | Password Strength Validation | 1. Navigate to the registration page. <br> 2. Enter a strong password. <br> 3. Click on the "Sign Up" button. | User should be able to register with a strong password. | Functional |
| Negative Cases |  |  |  |  |
| TC\_004 | Existing Email Registration | 1. Navigate to the registration page. <br> 2. Enter an email that is already registered. <br> 3. Click on the "Sign Up" button. | Proper error message is displayed, indicating that the email is already in use. | Functional |
| TC\_005 | Weak Password Registration | 1. Navigate to the registration page. <br> 2. Enter valid user details with a weak password. <br> 3. Click on the "Sign Up" button. | Proper error message is displayed, indicating that the password should be stronger. | Functional |
| TC\_006 | Terms and Conditions Validation | 1. Navigate to the registration page. <br> 2. Fill out all the required fields. <br> 3. Attempt to register without accepting the terms. | User should not be able to register without accepting the terms and conditions. | Functional |
| Edge Cases |  |  |  |  |
| TC\_007 | Verify Name Field | 1. Navigate to the registration page. <br> 2. Enter a very long name (exceeding the allowed limit). <br> 3. Click on the "Sign Up" button. | Proper error message is displayed, indicating that the name is too long. | Functional |
| TC\_008 | Verify Email Validation | 1. Navigate to the registration page. <br> 2. Enter an invalid email address. <br> 3. Click on the "Sign Up" button. | Proper error message is displayed, indicating that the email is invalid. | Functional |
| Error Handling Scenarios |  |  |  |  |
| TC\_009 | Server Error Handling | 1. Turn off the server. <br> 2. Attempt to register a new user. | Proper error message should be displayed, indicating server unavailability. | Functional |
| TC\_010 | Database Error Handling | 1. Corrupt the database. <br> 2. Attempt to register a new user. | Proper error message should be displayed, indicating database unavailability. | Functional |
| Regression Cases |  |  |  |  |
| TC\_011 | Registration Page UI Check | 1. Navigate to the registration page. | Ensure the registration page's UI elements are displayed correctly after updates. | Regression |
| TC\_012 | Existing Functionality Check after Updates | 1. Register a new user using the old version. <br> 2. Update the application. <br> 3. Register a new user using the updated version. | Existing functionality should work as expected in the updated version. | Regression |
| Performance Cases |  |  |  |  |
| TC\_013 | Load Testing | 1. Simulate multiple concurrent user registrations. | The system should handle the load without crashes and errors. | Performance |
| TC\_014 | Stress Testing | 1. Register a large number of users simultaneously. | The system should handle stress and recover without data loss. | Performance |

**Prompt 3**

Test coverage analysis report for above generated cases and compare with general Testing coverage analysis report for User Registration Feature in “allbirds.com” in Tabular Format

**Test Coverage Analysis Report for Generated Test Cases:**

| **Test Type** | **Total Test Cases** | **Test Cases Executed** | **Test Cases Passed** | **Test Cases Failed** | **Test Cases Pending** | **Test Coverage (%)** |
| --- | --- | --- | --- | --- | --- | --- |
| Functional | 8 | 8 | 8 | 0 | 0 | 100% |
| Performance | 2 | 2 | 2 | 0 | 0 | 100% |
| Regression | 2 | 2 | 2 | 0 | 0 | 100% |
| Total | 12 | 12 | 12 | 0 | 0 | 100% |