**Github link for test cases:**

[**https://github.com/priyankjain7777/asians-group-login-and-signup-test-cases**](https://github.com/priyankjain7777/asians-group-login-and-signup-test-cases)

**Below are some possible test cases for the login and register feature of a website:**

1. Positive test case: Successfully register with valid username and password
2. Positive test case: Successfully log in with valid username and password
3. Negative test case: Register with invalid username and/or password (e.g. empty username or password, username or password less than required length, username or password containing invalid characters, etc.)
4. Negative test case: Log in with invalid username and/or password (e.g. wrong username or password, empty username or password, username or password less than required length, username or password containing invalid characters, etc.)
5. Negative test case: Register with an existing username
6. Negative test case: Log in with a non-existent username
7. Positive test case: Register with additional information (e.g. email, full name, etc.)
8. Positive test case: Log in with additional information (e.g. email, full name, etc.)
9. Negative test case: Register with invalid email address
10. Negative test case: Register with invalid full name
11. Negative test case: Register with mismatched password and confirm password fields
12. Negative test case: Register without agreeing to terms and conditions (if applicable)
13. Positive test case: Log out after successful login
14. Negative test case: Attempt to log out without being logged in
15. Negative test case: Attempt to register or log in during a scheduled maintenance downtime
16. Positive test case: Register with a strong password (e.g. containing uppercase and lowercase letters, numbers, and special characters)
17. Negative test case: Register with a weak password (e.g. containing only lowercase letters and/or numbers)
18. Negative test case: Attempt to log in with expired credentials
19. Negative test case: Attempt to log in with locked account (due to multiple failed attempts or other reasons)
20. Positive test case: Successfully reset password using password reset feature (if available)

**Automated test cases for the login and register Feature of a website:**

//These test cases cover a range of scenarios, including positive and negative test cases,

as well as edge cases such as using special characters in the username and registering with an email that is already in use. The code uses the Selenium WebDriver API to automate the interactions with the website and perform the tests.

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

public class LoginAndRegisterTest {

public static void main(String[] args) {

// Set ChromeDriver path

System.setProperty("webdriver.chrome.driver", "/path/to/chromedriver");

// Launch ChromeDriver

WebDriver driver = new ChromeDriver();

// Navigate to website

driver.get("https://www.example.com");

**// Test Case 1: Successfully register with valid username and password**

driver.findElement(By.linkText("Register")).click();

WebElement usernameInput = driver.findElement(By.id("username"));

WebElement passwordInput = driver.findElement(By.id("password"));

usernameInput.sendKeys("testuser");

passwordInput.sendKeys("testpassword");

passwordInput.submit();

System.out.println("Test Case 1: Pass");

**// Test Case 2: Successfully log in with valid username and password**

driver.findElement(By.linkText("Login")).click();

usernameInput = driver.findElement(By.id("username"));

passwordInput = driver.findElement(By.id("password"));

usernameInput.sendKeys("testuser");

passwordInput.sendKeys("testpassword");

passwordInput.submit();

System.out.println("Test Case 2: Pass");

**// Test Case 3: Register with invalid username and/or password**

driver.findElement(By.linkText("Register")).click();

usernameInput = driver.findElement(By.id("username"));

passwordInput = driver.findElement(By.id("password"));

usernameInput.sendKeys("");

passwordInput.sendKeys("");

passwordInput.submit();

if (driver.getCurrentUrl().contains("register")) {

System.out.println("Test Case 3: Pass");

} else {

System.out.println("Test Case 3: Fail");

}

**// Test Case 4: Log in with invalid username and/or password**

driver.findElement(By.linkText("Login")).click();

usernameInput = driver.findElement(By.id("username"));

passwordInput = driver.findElement(By.id("password"));

usernameInput.sendKeys("wronguser");

passwordInput.sendKeys("wrongpassword");

passwordInput.submit();

if (driver.getCurrentUrl().contains("login")) {

System.out.println("Test Case 4: Pass");

} else {

System.out.println("Test Case 4: Fail");

}

**// Test Case 5: Register with an existing username**

driver.findElement(By.linkText("Register")).click();

usernameInput = driver.findElement(By.id("username"));

passwordInput = driver.findElement(By.id("password"));

usernameInput.sendKeys("testuser");

passwordInput.sendKeys("testpassword");

passwordInput.submit();

if (driver.getCurrentUrl().contains("register")) {

System.out.println("Test Case 5: Pass");

} else {

System.out.println("Test Case 5: Fail");

}

**// Test Case 6: Log in with a non-existent username**

driver.findElement(By.linkText("Login")).click();

usernameInput = driver.findElement(By.id("username"));

passwordInput = driver.findElement(By.id("password"));

usernameInput.sendKeys("nonexistentuser");

passwordInput.sendKeys("testpassword");

passwordInput.submit();

if (driver.getCurrentUrl().contains("login")) {

System.out.println("Test Case 6: Pass");

} else {

System.out.println("Test Case 6: Fail");

}

**// Test Case 7: Register with additional information**

driver.findElement(By.linkText("Register")).click();

usernameInput = driver.findElement(By.id("username"));

passwordInput = driver.findElement(By.id("password"));

WebElement emailInput = driver.findElement(By.id("email"));

WebElement ageInput = driver.findElement(By.id("age"));

usernameInput.sendKeys("testuser2");

passwordInput.sendKeys("testpassword");

emailInput.sendKeys("testuser2@example.com");

ageInput.sendKeys("30");

passwordInput.submit();

if (driver.getCurrentUrl().contains("login")) {

System.out.println("Test Case 7: Pass");

} else {

System.out.println("Test Case 7: Fail");

}

This code navigates to the registration page, fills in the "username", "password", "email", and "age"

fields with valid data, and submits the form.Then it checks

if the page has redirected to the login page, indicating a successful registration.If the page URL contains "login", the test

case is considered to have passed, otherwise it has failed.

**// Test Case 8: Log in with additional information**

driver.findElement(By.linkText("Login")).click();

usernameInput = driver.findElement(By.id("username"));

passwordInput = driver.findElement(By.id("password"));

usernameInput.sendKeys("testuser");

passwordInput.sendKeys("testpassword");

passwordInput.submit();

if (driver.getCurrentUrl().contains("dashboard")) {

System.out.println("Test Case 8: Pass");

} else {

System.out.println("Test Case 8: Fail");

}

**// Test Case 9: Log in with an email instead of a username**

driver.findElement(By.linkText("Login")).click();

usernameInput = driver.findElement(By.id("username"));

passwordInput = driver.findElement(By.id("password"));

usernameInput.sendKeys("testuser@example.com");

passwordInput.sendKeys("testpassword");

passwordInput.submit();

if (driver.getCurrentUrl().contains("login")) {

System.out.println("Test Case 9: Pass");

} else {

System.out.println("Test Case 9: Fail");

}

**// Test Case 10: Register with a weak password**

driver.findElement(By.linkText("Register")).click();

usernameInput = driver.findElement(By.id("username"));

passwordInput = driver.findElement(By.id("password"));

usernameInput.sendKeys("testuser3");

passwordInput.sendKeys("weak");

passwordInput.submit();

if (driver.getCurrentUrl().contains("register")) {

System.out.println("Test Case 10: Pass");

} else {

System.out.println("Test Case 10: Fail");

}

**// Test Case 11: Log in with a weak password**

driver.findElement(By.linkText("Login")).click();

usernameInput = driver.findElement(By.id("username"));

passwordInput = driver.findElement(By.id("password"));

usernameInput.sendKeys("testuser");

passwordInput.sendKeys("weak");

passwordInput.submit();

if (driver.getCurrentUrl().contains("login")) {

System.out.println("Test Case 11: Pass");

} else {

System.out.println("Test Case 11: Fail"); }

**// Test Case 12: Log in with an empty password field**

driver.findElement(By.linkText("Login")).click();

usernameInput = driver.findElement(By.id("username"));

passwordInput = driver.findElement(By.id("password"));

usernameInput.sendKeys("testuser");

passwordInput.sendKeys("");

passwordInput.submit();

if (driver.getCurrentUrl().contains("login")) {

System.out.println("Test Case 12: Pass");

} else {

System.out.println("Test Case 12: Fail");

}

**// Test Case 13: Register with an empty username field**

driver.findElement(By.linkText("Register")).click();

usernameInput = driver.findElement(By.id("username"));

passwordInput = driver.findElement(By.id("password"));

usernameInput.sendKeys("");

passwordInput.sendKeys("testpassword");

passwordInput.submit();

if (driver.getCurrentUrl().contains("register")) {

System.out.println("Test Case 13: Pass");

} else {

System.out.println("Test Case 13: Fail"); }

**// Test Case 14: Log in with an empty username field**

driver.findElement(By.linkText("Login")).click();

usernameInput = driver.findElement(By.id("username"));

passwordInput = driver.findElement(By.id("password"));

usernameInput.sendKeys("");

passwordInput.sendKeys("testpassword");

passwordInput.submit();

if (driver.getCurrentUrl().contains("login")) {

System.out.println("Test Case 14: Pass");

} else {

System.out.println("Test Case 14: Fail");

}

**// Test Case 15: Register with a username that contains special characters**

driver.findElement(By.linkText("Register")).click(); usernameInput = driver.findElement(By.id("username")); passwordInput = driver.findElement(By.id("password")); usernameInput.sendKeys("test#$%user"); passwordInput.sendKeys("testpassword"); passwordInput.submit();

if (driver.getCurrentUrl().contains("register")) {

System.out.println("Test Case 15: Pass");

} else {

System.out.println("Test Case 15: Fail");

}

**// Test Case 16: Log in with a username that contains special characters**

driver.findElement(By.linkText("Login")).click(); usernameInput = driver.findElement(By.id("username")); passwordInput = driver.findElement(By.id("password")); usernameInput.sendKeys("test#$%user"); passwordInput.sendKeys("testpassword"); passwordInput.submit();

if (driver.getCurrentUrl().contains("login")) {

System.out.println("Test Case 16: Pass");

} else {

System.out.println("Test Case 16: Fail");

}

**// Test Case 17: Register with an email that is already in use**

driver.findElement(By.linkText("Register")).click(); usernameInput = driver.findElement(By.id("username")); passwordInput = driver.findElement(By.id("password")); WebElement emailInput = driver.findElement(By.id("email")); usernameInput.sendKeys("testuser4"); passwordInput.sendKeys("testpassword"); emailInput.sendKeys("testuser@example.com"); passwordInput.submit();

if (driver.getCurrentUrl().contains("register")) {

System.out.println("Test Case 17: Pass");

} else {

System.out.println("Test Case 17: Fail");

}

**// Test Case 18: Log in with an incorrect password**

driver.findElement(By.linkText("Login")).click(); usernameInput = driver.findElement(By.id("username")); passwordInput = driver.findElement(By.id("password")); usernameInput.sendKeys("testuser"); passwordInput.sendKeys("wrongpassword"); passwordInput.submit();

if (driver.getCurrentUrl().contains("login")) {

System.out.println("Test Case 18: Pass");

} else {

System.out.println("Test Case 18: Fail");

}

**// Test Case 19: Log in with a username that does not exist**

driver.findElement(By.linkText("Login")).click(); usernameInput = driver.findElement(By.id("username")); passwordInput = driver.findElement(By.id("password")); usernameInput.sendKeys("nonexistentuser"); passwordInput.sendKeys("testpassword"); passwordInput.submit();

if (driver.getCurrentUrl().contains("login")) {

System.out.println("Test Case 19: Pass");

} else {

System.out.println("Test Case 19: Fail");

}