**Automate the Web Application**

**LoginTest.java**

**package** com;

**import** org.openqa.selenium.By;

**import** org.openqa.selenium.WebDriver;

**import** org.openqa.selenium.WebElement;

**import** org.openqa.selenium.chrome.ChromeDriver;

**import** org.testng.annotations.AfterClass;

**import** org.testng.annotations.BeforeClass;

**import** org.testng.annotations.Test;

**import** io.github.bonigarcia.wdm.WebDriverManager;

**public** **class** LoginTest {

**private** WebDriver driver;

@BeforeClass

**public** **void** setUp() {

WebDriverManager.*chromedriver*().setup();

driver = **new** ChromeDriver();

String path = LoginTest.**class**.getClassLoader().getResource("login.html").getPath();

driver.get("file://" + path);

}

@Test

**public** **void** testLogin() **throws** InterruptedException {

loginEmployee(driver, "anju@gmail.com", "123");

// Optionally, add assertions to verify login success or check for error messages

}

@AfterClass

**public** **void** tearDown() {

driver.quit();

}

**private** **void** loginEmployee(WebDriver driver, String email, String password) **throws** InterruptedException {

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

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

WebElement submitButton = driver.findElement(By.*xpath*("//button[text()='Submit']"));

// Fill out the login form

emailInput.sendKeys(email);

passwordInput.sendKeys(password);

Thread.*sleep*(2000);

// Click the "Submit" button

submitButton.click();

// Optionally, add code to handle login success or failure scenarios

}

}

**RegistrationTest.java**

package com;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

import org.testng.annotations.AfterClass;

import org.testng.annotations.BeforeClass;

import org.testng.annotations.Test;

import io.github.bonigarcia.wdm.WebDriverManager;

public class RegistrationTest {

private WebDriver driver;

@BeforeClass

public void setup() {

WebDriverManager.chromedriver().setup();

driver = new ChromeDriver();

driver.manage().timeouts().implicitlyWait(10, java.util.concurrent.TimeUnit.SECONDS);

}

@Test(priority = 1)

public void testWelcomePage() {

// Test displaying the welcome page

displayWelcomePage();

// Pause for 5 seconds (5000 milliseconds) to manually interact with the page (for demonstration purposes)

sleep(5000);

// Print the "Welcome Page Test Successful" message

System.out.println("Welcome Page Test Successful");

}

@Test(priority = 2)

public void testRegistrationProcess() throws InterruptedException {

// Test the registration process

displayRegistrationPage();

// Fill out the registration form

registerNewEmployee("anju", "anju@gmail.com", "123");

// Pause for 5 seconds (5000 milliseconds) before checking for the "Register Success" message

sleep(5000);

// Check for the "Register Success" message

boolean successMessageDisplayed = isElementDisplayed(By.xpath("//h1[contains(text(), 'Register Success')]"));

if (successMessageDisplayed) {

System.out.println("Register Success");

}

}

@AfterClass

public void teardown() {

// Close the browser after the test is executed

if (driver != null) {

driver.quit();

}

}

private void displayWelcomePage() {

String welcomePath = RegistrationTest.class.getResource("/welcome.html").toString();

driver.get(welcomePath);

}

private void displayRegistrationPage() {

String registrationPath = RegistrationTest.class.getResource("/registration.html").toString();

driver.get(registrationPath);

}

private void registerNewEmployee(String name, String email, String password) throws InterruptedException {

WebElement nameInput = driver.findElement(By.id("name"));

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

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

WebElement registerButton = driver.findElement(By.id("register-button"));

nameInput.sendKeys(name);

emailInput.sendKeys(email);

passwordInput.sendKeys(password);

Thread.sleep(2000);

// Click the registration button

registerButton.click();

}

private boolean isElementDisplayed(By locator) {

try {

return driver.findElement(locator).isDisplayed();

} catch (org.openqa.selenium.NoSuchElementException e) {

return false;

}

}

private void sleep(long milliseconds) {

try {

Thread.sleep(milliseconds);

} catch (InterruptedException e) {

e.printStackTrace();

}

}

}

**Login.html**

<!DOCTYPE html>

<html lang=*"en"*>

<head>

<meta charset=*"UTF-8"*>

<meta name=*"viewport"* content=*"width=device-width, initial-scale=1.0"*>

<title>Login Page</title>

</head>

<body>

<h1>Login Page</h1>

<form id=*"login-form"*>

<label for=*"login-email"*>Email:</label>

<input type=*"email"* id=*"login-email"* name=*"email"* required><br>

<label for=*"login-password"*>Password:</label>

<input type=*"password"* id=*"login-password"* name=*"password"* required><br>

<button type=*"submit"*>Submit</button>

</form>

</body>

</html>

**Registration.html**

<!DOCTYPE html>

<html>

<head>

<title>Registration Page</title>

</head>

<body>

<h1>Registration</h1>

<form id=*"registration-form"* action=*"/register"* method=*"post"*>

<label for=*"name"*>Name:</label>

<input type=*"text"* id=*"name"* name=*"name"* required>

<br>

<label for=*"email"*>Email:</label>

<input type=*"email"* id=*"email"* name=*"email"* required>

<br>

<label for=*"password"*>Password:</label>

<input type=*"password"* id=*"password"* name=*"password"* required>

<br>

<input type=*"submit"* value=*"Register"* id=*"register-button"*>

</form>

</body>

</html>

**Welcome.html**

<!DOCTYPE html>

<html lang=*"en"*>

<head>

<meta charset=*"UTF-8"*>

<meta name=*"viewport"* content=*"width=device-width, initial-scale=1.0"*>

<title>Welcome Page</title>

</head>

<body>

<h1>Welcome to Our Website!</h1>

<p>Click the button below to proceed to the registration page:</p>

<a href=*"registration.html"*>Registration Page</a>

</body>

</html>

**Pom.xml**

<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 https://maven.apache.org/xsd/maven-4.0.0.xsd">

<modelVersion>4.0.0</modelVersion>

<groupId>login</groupId>

<artifactId>login</artifactId>

<version>0.0.1-SNAPSHOT</version>

<dependencies>

<dependency>

<groupId>org.seleniumhq.selenium</groupId>

<artifactId>selenium-java</artifactId>

<version>4.10.0</version>

</dependency>

<!-- https://mvnrepository.com/artifact/org.seleniumhq.selenium/selenium-support -->

<dependency>

<groupId>org.seleniumhq.selenium</groupId>

<artifactId>selenium-support</artifactId>

<version>4.10.0</version>

</dependency>

<!-- https://mvnrepository.com/artifact/org.seleniumhq.selenium/selenium-chrome-driver -->

<dependency>

<groupId>org.seleniumhq.selenium</groupId>

<artifactId>selenium-chrome-driver</artifactId>

<version>4.10.0</version>

</dependency>

<dependency>

<groupId>io.github.bonigarcia</groupId>

<artifactId>webdrivermanager</artifactId>

<version>5.2.2</version> <!-- Use the latest version available -->

</dependency>

<dependency>

<groupId>org.slf4j</groupId>

<artifactId>slf4j-simple</artifactId>

<version>1.7.32</version>

</dependency>

</dependencies>

</project>