2.15 Automate the Web Application

DESCRIPTION

Project objective:

Use the website link given to you and automate different functionalities for the same. Create a new project and include all the dependencies in the class path. Create a Java class that will contain your automation and test scripts. Run the project using TestNG.

Code Snippets

Program1.java

```java
package mytest;

import java.time.Duration;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

import org.testng.Assert;

import org.testng.annotations.AfterGroups;

import org.testng.annotations.AfterMethod;

import org.testng.annotations.AfterSuite;

import org.testng.annotations.AfterTest;

import org.testng.annotations.BeforeMethod;

import org.testng.annotations.Test;


public class Program1 {

        WebDriver driver;

        @BeforeMethod

        public void setUp() {

                System.setProperty("webdriver.chrome.driver",
"C:\\Users\\vmb44\\Desktop\\chromedriver.exe");

                driver = new ChromeDriver();

                driver.get("https://amazon.in");

                driver.manage().window().maximize();
```

```java
                    driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(5));
//                  driver.close();
        }


        @Test
        public void verifyTitle() {
                String actualTitle = driver.getTitle();
                String expectedTitle = "Online Shopping site in India: Shop Online for Mobiles,
Books, Watches, Shoes and More - Amazon.in";
                Assert.assertEquals(actualTitle, expectedTitle);
                if(actualTitle == expectedTitle) {
                        System.out.println("Both the titles match");
                }
                else {
                        System.out.println("The titles does not match with each other");
                }
                driver.quit();
        }


        @Test
        public void verifyLogo() {
                boolean     flag     =     driver.findElement(By.xpath("//a[@id='nav-logo-
sprites']")).isDisplayed();
                Assert.assertTrue(flag);
                System.out.print("If the Logo matches, prints as true else false: " +flag);
                driver.quit();
        }
//      Amazon Registration process using @Test annotation


        @Test
        public void verifyRegistration() throws InterruptedException {
```

```java
driver.get("https://www.amazon.in/ap/register?openid.identity=http%3A%2F%2Fspe
cs.openid.net%2Fauth%2F2.0%2Fidentifier_select&openid.assoc_handle=inflex&openid.mo
de=checkid_setup&openid.claimed_id=http%3A%2F%2Fspecs.openid.net%2Fauth%2F2.0%
2Fidentifier_select&openid.ns=http%3A%2F%2Fspecs.openid.net%2Fauth%2F2.0");

driver.manage().window().maximize();


Thread.sleep(2000);

driver.findElement(By.id("ap_customer_name")).sendKeys("Vishwanath
Bagali");

Thread.sleep(2000);

driver.findElement(By.id("ap_phone_number")).sendKeys("8765432123");

Thread.sleep(2000);

driver.findElement(By.id("ap_email")).sendKeys("vmb44011@gmail.com");

Thread.sleep(2000);

driver.findElement(By.id("ap_password")).sendKeys("Vishu@12345");

Thread.sleep(2000);

driver.findElement(By.xpath("//input[@id='continue']")).click();

Thread.sleep(2000);

String at = driver.getTitle();

System.out.println("Driver title: "+ at);

String st= "Authentication required";


if(at.equalsIgnoreCase(st))

{
//              If the credentials entered are correct the right output is detected and
printed as success else failed

System.out.println("Registration successfully");

}
else

{

System.out.println("Could not register the user, kindly enter the valid
data");
```

```java
        }
        driver.quit();
    }
```

// Amazon Login process using @Test annotation, to validate the user

```java
    @Test
    public void verifyYLogin() throws InterruptedException {
        driver.navigate().to("https://www.amazon.in/ap/signin?openid.pape.max_auth_age=0&openid.return_to=https%3A%2F%2Fwww.amazon.in%2F%3F_encoding%3DUTF8%26adgrpid%3D58507629306%26ext_vrnc%3Dhi%26gclid%3DCj0KCQjw166aBhDEARIsAMEyZh49BAHZr2MkQN6X1lta2wC9Vkrnp8lVGy1CHaA6zRQaAfgmKUzTmeUaAib9EALw_wcB%26hvadid%3D486388034337%26hvdev%3Dc%26hvdvcmdl%3D%26hvlocint%3D%26hvlocphy%3D9062011%26hvnetw%3Dg%26hvpone%3D%26hvpos%3D%26hvptwo%3D%26hvqmt%3De%26hvrand%3D17084038091954731564%26hvtargid%3Dkwd-28878962%26hydadcr%3D14456_2154379%26ref%3Dpd_sl_1cfjttkdmt_e%26tag%3Dgooghydrabk1-21%26ref_%3Dnav_newcust&prevRID=D0F2ABJZC2NSZKCWSC4V&openid.identity=http%3A%2F%2Fspecs.openid.net%2Fauth%2F2.0%2Fidentifier_select&openid.assoc_handle=inflex&openid.mode=checkid_setup&openid.claimed_id=http%3A%2F%2Fspecs.openid.net%2Fauth%2F2.0%2Fidentifier_select&pageId=inflex&openid.ns=http%3A%2F%2Fspecs.openid.net%2Fauth%2F2.0");

        driver.findElement(By.id("ap_email")).sendKeys("vmb4401@gmail.com");
        Thread.sleep(2000);
        driver.findElement(By.xpath("//input[@id='continue']")).click();
        Thread.sleep(2000);
        Thread.sleep(2000);
        driver.findElement(By.id("ap_password")).sendKeys("Vishu@00000");
        driver.findElement(By.xpath("//input[@id='signInSubmit']")).click();
        String lat = driver.getTitle();
        System.out.println("Driver title: "+ lat);
        String lst= "Amazon Sign In";
        if(lat.equalsIgnoreCase(lst))
        {
                System.out.println("Login successfully");
        }
```

```
        else
        {
                System.out.println("Could not login as the user entered invalid
credentials");
        }
        driver.quit();
    }


    @Test
    public void verifyZCart() throws InterruptedException {
        driver.get("https://www.amazon.in/");
        Thread.sleep(2000);


        driver.findElement(By.id("twotabsearchtextbox")).sendKeys("samsung galaxy
s");
        Thread.sleep(2000);
        driver.findElement(By.id("nav-search-submit-button")).click();
        Thread.sleep(3000);
        driver.findElement(By.id("p_89/Samsung")).click();
        Thread.sleep(3000);
        driver.findElement(By.partialLinkText("Samsung Galaxy S21 5G (Phantom
Violet, 8GB, 128GB Storage)")).click();
        Thread.sleep(5000);
        driver.quit();
        System.out.println("Driver is exited, process execution is successful");
    }


    @AfterGroups
    public void tearDown() {
        driver.quit();
    }
```

```
}
```

pom.xml

```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>Automation_Web_App</groupId>
  <artifactId>Automation_Web_App</artifactId>
  <version>0.0.1-SNAPSHOT</version>

  <dependencies>

  <!-- https://mvnrepository.com/artifact/org.seleniumhq.selenium/selenium-
java -->
<dependency>
    <groupId>org.seleniumhq.selenium</groupId>
    <artifactId>selenium-java</artifactId>
    <version>4.5.0</version>
</dependency>


  </dependencies>

  <build>
    <sourceDirectory>src</sourceDirectory>
    <plugins>
      <plugin>
        <artifactId>maven-compiler-plugin</artifactId>
        <version>3.8.1</version>
        <configuration>
          <source>1.8</source>
          <target>1.8</target>
        </configuration>
      </plugin>
    </plugins>
  </build>
</project>
```

testing.xml

```xml
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">
<suite name="Suite">
  <test thread-count="5" name="Test">
    <classes>
      <class name="mytest.Program1"/>
    </classes>
  </test> <!-- Test -->
</suite> <!-- Suite -->
```