**1. Write a WebDriver script to navigate to a website and click on a specific link.**

package com.Assignment;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

public class specificlink\_Assignment1 {

public static void main(String[] args) {

WebDriver driver= new ChromeDriver();

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

//to get a URL from a website

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

// to select a specific link from the google page

WebElement gmail=driver.findElement(By.partialLinkText("Gmail"));

// To click on the specific link text

gmail.click();

driver.close();

}

**2. Implement a Page Object Model for a login page using WebDriver.**

1.login page

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.support.FindBy;

import org.openqa.selenium.support.PageFactory;

public class LoginPage {

private WebDriver driver;

@FindBy(name = "Username");

private WebElement usernameInput;

@FindBy(name = "Password");

private WebElement passwordInput;

@FindBy(xpath = " //\*[@id="app"]/div[1]/div/div[1]/div/div[2]/div[2]/form/div[3]/button");

private WebElement loginButton;

public LoginPage(WebDriver driver) {

this.driver = driver;

PageFactory.initElements(driver, this);

}

public void setUsername(String username) {

usernameInput.sendKeys(“Admin”);

}

public void setPassword(String password) {

passwordInput.sendKeys(“Admin123”);

}

public void clickLogin() {

loginButton.click();

}

}

2.Dashboard Page

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.support.PageFactory;

public class DashboardPage {

private WebDriver driver;

public DashboardPage(WebDriver driver) {

this.driver = driver;

PageFactory.initElements(driver, this);

}

}

**3.Validation**

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

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

**import org.testng.Assert;**

**import org.testng.annotations.AfterMethod;**

**import org.testng.annotations.BeforeMethod;**

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

**public class LoginTest {**

**private WebDriver driver;**

**@BeforeMethod**

**public void setUp() {**

**// Set up WebDriver**

**System.setProperty("webdriver.Chrome.driver", "** **path\_to\_Chrome\_driver");**

**driver = new ChromeDriver();**

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

**}**

**@Test**

**public void testLogin() {**

**// Open the ORHM login page**

**driver.get(""** **https://opensource-demo.orangehrmlive.com/web/index.php/auth/login ");**

**// Initialize LoginPage**

**LoginPage loginPage = new LoginPage(driver);**

**// Enter credentials**

**loginPage.setUsername("Admin");**

**loginPage.setPassword("Admin123");**

**// Click login button**

**loginPage.clickLogin();**

**// Assuming successful login redirects to Dashboard**

**Assert.assertEquals(driver.getCurrentUrl(), "expected\_dashboard\_url");**

**}**

**@AfterMethod**

**public void tearDown() {**

**// Close the WebDriver instance**

**if (driver != null) {**

**driver.quit();**

**}**

**}**

**}**

**3. Write a WebDriver script to handle a dropdown and select an option based on specific criteria.**

package com.Assignment;

import java.time.Duration;

import java.util.List;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.support.ui.Select;

public class DrpDown\_Assignement3 {

public static void main(String[] args) {

WebDriver driver = new ChromeDriver();

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

driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));

//To get a url and xpath of dropdown menus by using the select class.

driver.get("https://www.ironspider.ca/forms/dropdowns.htm");

WebElement Drplist=driver.findElement(By.xpath("//\*[@id=\"Content\"]/div[1]/center[1]/div/form/select"));

Select select= new Select(Drplist);

System.out.println("Selected select:"+select.getFirstSelectedOption().getText());

//To find the no of elements in the dropdown menu

List<WebElement>Cofffee=select.getOptions();

System.out.println("Total no.of coffee: "+Cofffee.size());

//To print the no of menus in the drop down

int i=0;

for (WebElement c: Cofffee )

{

System.out.println(i + ". "+ c.getText());

}

//It is a method in a select class

select.selectByVisibleText("Black");

System.out.println("Selected select by visible text:"+select.getFirstSelectedOption().getText());

//It is a method in a select class

select.selectByIndex(2);

System.out.println("Selected select by index:"+select.getFirstSelectedOption().getText());

//It is a method in a select class

select.selectByValue("cream");

System.out.println("Selected select by value:"+select.getFirstSelectedOption().getText());

driver.close();

}

}

**4. Implement a test case using WebDriver to validate the functionality of a registration form.**

package com.Assignment;

import java.awt.AWTException;

import java.awt.Robot;

import java.time.Duration;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.chrome.ChromeOptions;

import org.openqa.selenium.support.ui.ExpectedConditions;

import org.openqa.selenium.support.ui.Select;

import org.openqa.selenium.support.ui.Wait;

import org.openqa.selenium.support.ui.WebDriverWait;

public class A04Registrationform {

public static void main(String[] args) throws InterruptedException, AWTException {

WebDriver driver = new ChromeDriver();

ChromeOptions op = new ChromeOptions();

WebDriverWait wait = new WebDriverWait(driver, Duration.ofSeconds(10));

op.addArguments("--disable-notifications");

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

driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(2));

driver.get("https://demoqa.com/automation-practice-form");

WebElement fname = driver.findElement(By.id("firstName"));

fname.sendKeys("Aparna");

WebElement lname = driver.findElement(By.id("lastName"));

lname.sendKeys("Kadam");

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

email.sendKeys("aparna.jdhv@gmail.com");

WebElement mob = driver.findElement(By.id("userNumber"));

mob.sendKeys("7709432979");

WebElement dob = driver.findElement(By.id("dateOfBirthInput"));

dob.click();

dob.sendKeys("22 Nov 1989");

Select month = new Select(driver.findElement(

By.xpath("//\*[@id=\"dateOfBirth\"]/div[2]/div[2]/div/div/div[2]/div[1]/div[2]/div[1]/select")));

month.selectByValue("10");

Select yr = new Select(driver.findElement(

By.xpath("//\*[@id=\"dateOfBirth\"]/div[2]/div[2]/div/div/div[2]/div[1]/div[2]/div[2]/select")));

yr.selectByValue("1989");

WebElement dobClick = driver

.findElement(By.xpath("//\*[@id=\"dateOfBirth\"]/div[2]/div[2]/div/div/div[2]/div[2]/div[4]/div[4]"));

dobClick.click();

WebElement sub = driver.findElement(By.id("subjectsInput"));

sub.sendKeys("Test");

WebElement hobbies = driver.findElement(By.xpath("//\*[@id=\"hobbiesWrapper\"]/div[2]/div[1]/label"));

hobbies.click();

WebElement hobbies2 = driver.findElement(By.xpath("//\*[@id=\"hobbiesWrapper\"]/div[2]/div[3]/label"));

hobbies2.click();

WebElement fileInput = driver.findElement(By.id("uploadPicture"));

fileInput.click();

fileInput.sendKeys("C:\\Users\\INDIA\\OneDrive\\Pictures\\Saved Pictures\\1.jpeg");

Robot robot = new Robot();

robot.keyPress(1);

WebElement state = driver.findElement(By.xpath("//\*[@id=\"state\"]/div"));

state.click();

}

}

**5. Write a WebDriver script to capture a screenshot of a webpage and save it to a specific location**

package com.Assignment;

import java.io.File;

import java.io.IOException;

import java.time.Duration;

import org.openqa.selenium.OutputType;

import org.openqa.selenium.TakesScreenshot;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.io.FileHandler;

public class Screenshot\_Assignment5 {

public static void main(String[] args) throws IOException {

WebDriver driver = new ChromeDriver();

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

driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));

driver.get("https://staragile.melimu.com/mod/assign/view.php?id=9352");

File screenShot = ((TakesScreenshot)driver).getScreenshotAs(OutputType.FILE);

//FileUtils.copyFile(screenShot, new File("D:\\StarAgileScreenShot.jpeg");)

FileHandler.copy(screenShot, new File("D:\\StarAgileScreenShot.jpeg"));

System.out.println("Screenshot is taken");

driver.close();

}

}