**Source Code: Automated Web Interaction and File Uploading**

package handleWebElement;

import java.io.File;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.PreparedStatement;

import java.sql.SQLException;

import java.time.Duration;

import org.apache.commons.io.FileUtils;

import org.openqa.selenium.By;

import org.openqa.selenium.JavascriptExecutor;

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.NoSuchElementException;

import org.openqa.selenium.OutputType;

import org.openqa.selenium.TakesScreenshot;

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

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

public class WebElementLocator {

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

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

WebDriver driver = new ChromeDriver();

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

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

Thread.sleep(5000);

// Use of WebDriverWait to ensure the close button is clickable before attempting to click it

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

wait.until(ExpectedConditions.frameToBeAvailableAndSwitchToIt(By.cssSelector("iframe[title^='notification-frame']")));

wait.until(ExpectedConditions.elementToBeClickable(By.cssSelector("i.we\_close"))).click();

WebElement closeButton;

Thread.sleep(5000);

driver.switchTo().defaultContent();

System.out.println("----Driver on Main Frame---");

Thread.sleep(2000);

// Login closed

driver.findElement(By.xpath("//\*[@id=\"SW\"]/div[1]/div[2]/div[2]/div/section/span")).click();

WebElement fromInput = wait.until(ExpectedConditions.elementToBeClickable(By.cssSelector("input[id='fromCity']")));

fromInput.click();

// Wait for the dropdown options to appear and then select 'Pune, India'

WebElement puneOption = wait.until(ExpectedConditions.elementToBeClickable(By.xpath("//p[contains(text(),'Pune, India')]")));

puneOption.click();

Thread.sleep(5000);

WebElement toInput = wait.until(ExpectedConditions.elementToBeClickable(By.cssSelector("input[id='toCity']")));

toInput.click();

// Wait for the dropdown options to appear and then select 'Bangkok, Thailand'

WebElement bangkokOption = wait.until(ExpectedConditions.elementToBeClickable(By.xpath("//p[contains(text(),'Bangkok, Thailand')]")));

bangkokOption.click();

Thread.sleep(5000);

FileUploader.uploadFile();

DBConnection dbConnection = new DBConnection();

ScreenshotCapture screenshotCapture = new ScreenshotCapture(driver);

// Create a DB Connection Class

try {

Connection connection = dbConnection.getConnection();

// Step 12: Perform Database Operations

PreparedStatement preparedStatement = connection.prepareStatement("INSERT INTO products (product\_name, price, description) VALUES (?, ?, ?)");

preparedStatement.setString(1, "Sample Product");

preparedStatement.setDouble(2, 99.99);

preparedStatement.setString(3, "Description for Sample Product");

preparedStatement.executeUpdate();

connection.close();

} catch (SQLException e) {

e.printStackTrace();

}

// Step 13: Create a Class for Screenshots

screenshotCapture.captureScreenshot("screenshot.png");

// Step 14: Close the WebDriver

driver.quit();

}

}

class FileUploader {

public static void uploadFile() throws InterruptedException {

WebDriver driver = new ChromeDriver();

try {

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

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

driver.get("https://www.remove.bg/");

WebElement uploadButton = driver.findElement(By.xpath("//\*[@id=\"page-content\"]/div[2]/div[1]/div/div/div/div[2]/div[2]/button"));

uploadButton.click();

// Execute the AutoIT script to handle file upload

ProcessBuilder pb = new ProcessBuilder("C:\\Users\\Lenovo\\javaProject\\handleWebElement\\Screenshots\\AutoITScript.exe");

pb.start();

} catch (Exception e) {

e.printStackTrace();

} finally {

driver.quit();

}

}

}

class DBConnection {

public Connection getConnection() throws SQLException {

String url = "jdbc:mysql://localhost:3306/webapp";

String username = "root";

String password = "Rahul@123";

return DriverManager.getConnection(url, username, password);

}

}

class ScreenshotCapture {

private WebDriver driver;

public ScreenshotCapture(WebDriver driver) {

this.driver = driver;

}

public void captureScreenshot(String fileName) {

try {

TakesScreenshot screenshot = (TakesScreenshot) driver;

File srcFile = screenshot.getScreenshotAs(OutputType.FILE);

String screenshotPath = "Screenshots/" + fileName;

File destFile = new File(screenshotPath);

FileUtils.copyFile(srcFile, destFile); // Corrected line

} catch (Exception e) {

e.printStackTrace();

}

}

}