/ AdvancedLocateElementsDemo.java

package com.test;

import java.time.Duration;

import java.util.List;

import java.util.concurrent.TimeUnit;

import org.openqa.selenium.Alert;

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.support.ui.ExpectedConditions;

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

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

public class AdvancedLocateElementsDemo {

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

WebDriver driver = new ChromeDriver(); // new FirefoxDriver();

// demoXPathCSSSelector(driver);

//demoElementActionForSelect(driver);

//demoElementActionForTable(driver);

//demoAlert(driver);

demoIFrameActions(driver);

// close the browser and quit.

// driver.close();

}

/\* IFrame actions demo \*/

static void demoIFrameActions(WebDriver driver) throws InterruptedException {

String baseUrl = "<File:///C:\\\\\\\\Users\\\\\\\\Admin\\\\\\\\Desktop\\\\\\\\testing\\\\\\\\hello-selenium1\\\\\\\\src\\\\\\\\main\\\\\\\\resources\\\\\\\\test.html>";

driver.get(baseUrl);

driver.switchTo().frame("myframe");

// Now we can click the button

driver.findElement(By.cssSelector(".DocSearch-Button-Placeholder")).click();

driver.findElement(By.cssSelector("#docsearch-input")).sendKeys("hello");

}

/\* Alert actions demo \*/

static void demoAlert(WebDriver driver) throws InterruptedException {

String baseUrl = "<File:///C:\\\\\\\\Users\\\\\\\\Admin\\\\\\\\Desktop\\\\\\\\testing\\\\\\\\hello-selenium1\\\\\\\\src\\\\\\\\main\\\\\\\\resources\\\\\\\\test.html>";

driver.get(baseUrl);

// driver.manage().timeouts().implicitlyWait(15, TimeUnit.SECONDS);

Thread.sleep(10000);

// Click the link to activate the alert

driver.findElement(By.linkText("See an example alert")).click();

Thread.sleep(10000);

// alert will appear now, may be in 10 secs

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

// Wait for the alert to be displayed and store it in a variable

wait.until(ExpectedConditions.alertIsPresent());

// Store the alert in a variable

Alert alert = driver.switchTo().alert();

// Store the alert in a variable for reuse

String text = alert.getText();

System.out.println(text);

// Press the Cancel button

alert.accept();

}

/\* Table demo \*/

static void demoElementActionForTable(WebDriver driver) throws InterruptedException {

String baseUrl = "<https://www.nyse.com/ipo-center/recent-ipo>";

driver.get(baseUrl);

driver.manage().timeouts().implicitlyWait(5, TimeUnit.SECONDS);

String tableXPath = "/html/body/div[1]/div[4]/div[2]/div[3]/div[1]/div[4]/table";

String tableRowXPath = "/html/body/div[1]/div[4]/div[2]/div[3]/div[1]/div[4]/table/tbody/tr";

// Row count

List<WebElement> selectIPOTableRows = driver.findElements(By.xpath(tableRowXPath));

System.out.println("No of rows : " + selectIPOTableRows.size());

String tableHeadColsXPath = "/html/body/div[1]/div[4]/div[2]/div[3]/div[1]/div[4]/table/thead/tr/th";

// Finding number of Columns

List<WebElement> columnsNumber = driver.findElements(By.xpath(tableHeadColsXPath));

int columnCount = columnsNumber.size();

System.out.println("No of columns in this table : " + columnCount);

// Finding cell value at 4th row and 3rd column

WebElement cellAddress = driver.findElement(By.xpath(tableXPath + "/tbody/tr[4]/td[3]"));

String value = cellAddress.getText();

System.out.println("The Cell Value is : " + value);

// JS Executor

JavascriptExecutor js = (JavascriptExecutor) driver;

String elementTextChangeScript = "var e = document.querySelector(\"body > div:nth-child(1) > div:nth-child(4) > div:nth-child(2) > div:nth-child(3) > div:nth-child(1) > div:nth-child(9) > table > tbody > tr:nth-child(3) > td:nth-child(3) > strong\"); e.textContent=\"Bharat Gas\";";

js.executeScript(elementTextChangeScript);

}

/\* Select/Multi-select actions demo \*/

static void demoElementActionForSelect(WebDriver driver) {

String baseUrl = "<File:///F:\\Users\\HomeWk\\git\\sl\\PHASE5\\morning\\hello-selenium\\src\\main\\resources\\test.html>";

driver.get(baseUrl);

WebElement selectMonthElement = driver.findElement(By.id("month"));

Select selectMonth = new Select(selectMonthElement);

System.out.println("selectMonth is muti select " + selectMonth.isMultiple());

selectMonth.selectByIndex(0);

selectMonth.selectByIndex(6);

List<WebElement> optionsList = selectMonth.getAllSelectedOptions();

for (WebElement option : optionsList)

System.out.println("selectMonth selected options are " + option.getText());

}

static void demoXPathCSSSelector(WebDriver driver) {

String baseUrl = "<File:///F:\\Users\\HomeWk\\git\\sl\\PHASE5\\morning\\hello-selenium\\src\\main\\resources\\test.html>";

driver.get(baseUrl);

List<WebElement> inputAdminElements = driver.findElements(By.xpath("//input[contains(@id, 'admin')]"));

System.out.println("inputAdminElements has " + inputAdminElements.size());

// same as above but by using CSS selectors

List<WebElement> inputAdminElementsUsingCSSSelector = driver.findElements(By.cssSelector("input[id\*='admin']"));

System.out.println("inputAdminElementsUsingCSSSelector has " + inputAdminElementsUsingCSSSelector.size());

WebElement secondH3SiblingOfForm = driver.findElement(By.cssSelector("h3:nth-child(2)"));

System.out.println("secondH3SiblingOfForm text is " + secondH3SiblingOfForm);

}

}

Output:

  
