Phase – 5 Practice Project: Assisted Practice

- 4. Handling Various Web Elements.
- Code
- ✓ AdvancedLocatingElements.java

```
package com.ecommerce.test;
import java.time.Duration;
import java.util.List;
import java.util.concurrent.TimeUnit;
import org.openqa.selenium.Alert;
import org.openga.selenium.By;
import org.openqa.selenium.JavascriptExecutor;
import org.openga.selenium.WebDriver;
import org.openga.selenium.WebElement;
import org.openga.selenium.WindowType;
import org.openga.selenium.chrome.ChromeDriver;
import org.openga.selenium.support.ui.ExpectedConditions;
import org.openqa.selenium.support.ui.Select;
import org.openga.selenium.support.ui.WebDriverWait;
public class AdvancedLocatingElements {
     public static void main(String[] args) throws InterruptedException
          // Basic configuration
          WebDriver driver = new ChromeDriver();
          demoTableDetails(driver);
          // Demo Alerts, IFrames
          demoExternalElements(driver);
          demoExternalElementsNewTab(driver);
          demoExternalElementsIFrame(driver);
     }
     private static void demoExternalElementsIFrame(WebDriver driver)
throws InterruptedException {
          String baseUrl = "File:///D:\\Eclipse Projects\\hello-
selenium\\src\\main\\resources\\test.html";
          driver.get(baseUrl);
          // driver.manage().timeouts().implicitlyWait(10,
TimeUnit.SECONDS);
          Thread. sleep (10000);
          driver.switchTo().frame("myframe");
          driver.findElement(By.cssSelector("#docsearch > button >
span.DocSearch-Button-Container > span")).click();
```

```
driver.findElement(By.cssSelector("#docsearch-
input")).sendKeys("hello");
     }
     private static void demoExternalElementsNewTab(WebDriver driver)
throws InterruptedException {
          String baseUrl = "File:///D:\\Eclipse Projects\\hello-
selenium\\src\\main\\resources\\test.html";
          driver.get(baseUrl);
          // driver.manage().timeouts().implicitlyWait(10,
TimeUnit.SECONDS);
          Thread. sleep (10000);
          driver.switchTo().newWindow(WindowType.TAB);
          driver.navigate().to("https://www.google.com?q=flowers");
     }
     static void demoExternalElements (WebDriver driver) throws
InterruptedException {
          String baseUrl = "File:///D:\\Eclipse Projects\\hello-
selenium\\src\\main\\resources\\test.html";
          driver.get(baseUrl);
          // driver.manage().timeouts().implicitlyWait(10,
TimeUnit.SECONDS);
          Thread. sleep (10000);
          driver.findElement(By.linkText("See an example
alert")).click();
          // alert will appear now, may be in 10 secs
          WebDriverWait wait = new WebDriverWait (driver,
Duration.ofSeconds(10));
          // Wait for the alert to be displayed
          wait.until(ExpectedConditions.alertIsPresent());
          // Store the alert in a variable
          Alert alert = driver.switchTo().alert();
          System.out.printf("\n alert text is %s \n", alert.getText());
          Thread. sleep (10000);
          alert.accept();
     }
     // Locate and Process Table (no of rows, no of columns, particular
cell data,
     // etc)
     static void demoTableDetails(WebDriver driver) {
          String baseUrl = "https://www.nyse.com/ipo-center/recent-ipo";
```

```
driver.get (baseUrl);
          driver.manage().timeouts().implicitlyWait(10,
TimeUnit. SECONDS);
          String tableXPath =
"/html/body/div[1]/div[4]/div[2]/div[3]/div[1]/div[4]/table";
          String tableXPathRow =
"/html/body/div[1]/div[4]/div[2]/div[3]/div[1]/div[4]/table/tbody/tr";
          List<WebElement> rowList =
driver.findElements(By.xpath(tableXPathRow));
          System.out.printf("\n No of rows in IPO table = %s",
rowList.size());
          // Column count
          String tableHeadingXPath =
"/html/body/div[1]/div[4]/div[2]/div[3]/div[1]/div[4]/table/thead/tr/th"
;
          List<WebElement> colList =
driver.findElements(By.xpath(tableHeadingXPath));
          System.out.printf("\n No of columns in IPO table = %s",
colList.size());
          // 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);
          // Change the cell contents using JS
          // JS Executor
          JavascriptExecutor js = (JavascriptExecutor) driver;
          String cssSelectScriptForCell3 3 = "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(cssSelectScriptForCell3 3);
     }
}
✓ test.html
<html>
<head>
<title>Hello</title>
<script>
     function myDblClickFunction() {
          document.getElementById("demo-messages").textContent = "You
double clicked me!";
          document.getElementById("demo-messages").style.color = "red";
```

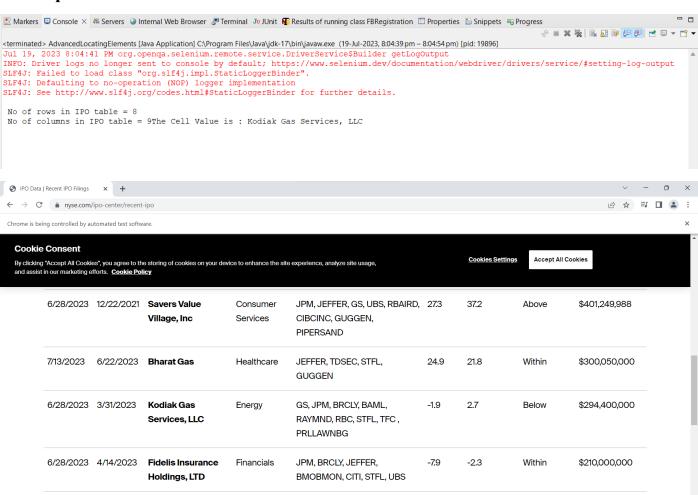
```
}
     function mySqlClickFunction() {
          document.getElementById("demo-messages").textContent = "You
single clicked me!";
          document.getElementById("demo-messages").style.color = "blue";
</script>
</head>
<body bgcolor="#ffeeee">
     DEMO-MESSAGES:
     <span id="demo-messages">GETTING STARTED</span>
     <span id="xyz">Hello world!</span> Alerts The simplest of these is
     referred to as an alert, which shows a custom message, and a single
     button which dismisses the alert, labelled in most browsers as OK.
Ιt
     can also be dismissed in most browsers by pressing the close
button,
     but this will always do the same thing as the OK button.
     <a href="javascript:alert('hello alerts!')">See an example
alert</a>
     <br>
     <hr>
     <div id="modal">
          <iframe id="myframe" name="myframe"</pre>
src="https://seleniumhq.github.io"
               width=1200 height=400> </iframe>
     </div>
     <br>
     <br>
     <button id="dblButton" ondblclick="myDblClickFunction()"</pre>
          onclick="mySqlClickFunction()">Double-click me or Single
          click me</button>
     < h3 > 0 Some h3 text< /h3 >
     <form>
          <input type="text" id="admin"> <br> <input type="text"</pre>
               id="admin123"> <br > <input type="text" id="adminxyz">
          <br> <input type="text" id="adm"> <br>
     </form>
     <h3>1 Some h3 text</h3>
     < h3 > 2 Some h3 text< /h3 >
     <h3>3 Some h3 text</h3>
     <div id='eCommerce'>
          < h4 > h4 first < /h4 >
          < h4 > h4 second < /h4 >
     </div>
     <select multiple aria-label="Month" name="birthday month"</pre>
id="month"
```

```
title="Month" class=" 9407 5dba 9hk6 8esg" size="12">
          <option value="1">Jan</option>
          <option value="2">Feb</option>
          <option value="3">Mar</option>
          <option value="4">Apr</option>
          <option value="5">May</option>
          <option value="6">Jun</option>
          <option value="7" selected="1">Jul</option>
          <option value="8">Aug</option>
          <option value="9">Sep</option>
          <option value="10">Oct</option>
          <option value="11">Nov</option>
          <option value="12">Dec</option>
     </select>
     <input type="text" id="WWWWxyz">
</body>
</html>
```

Output

7/13/2023 6/23/2023 **Sagimet**

Biosciences Inc.



GS, TDSEC, PIPERSAND

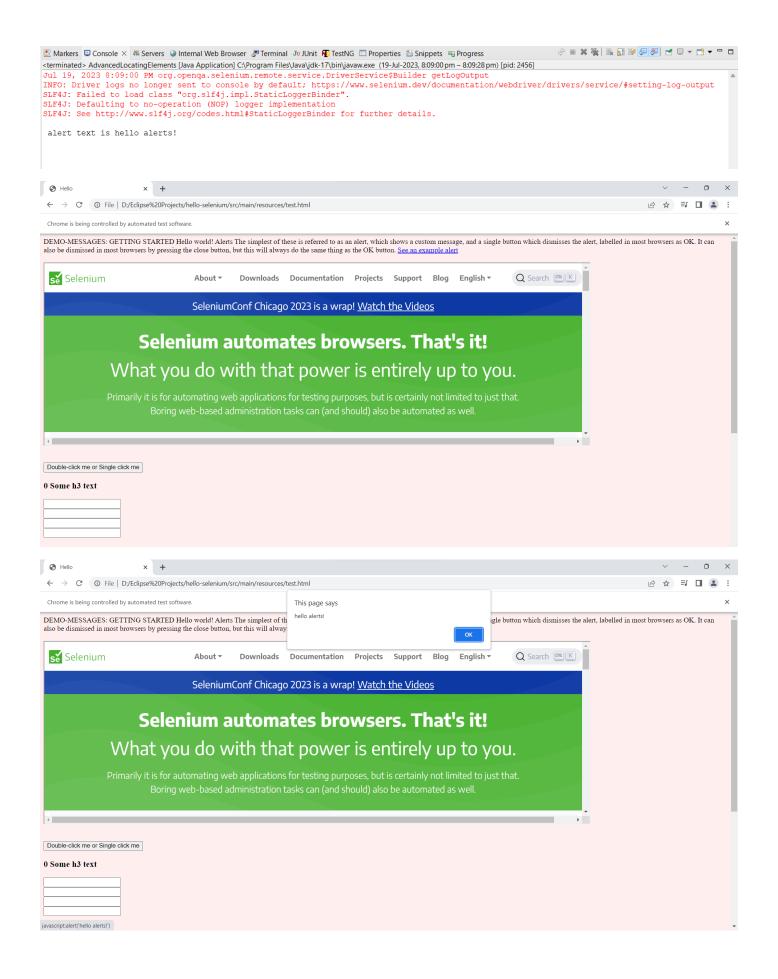
-0.3

-0.1

Healthcare

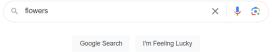
Within

\$85,000,000









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