

PHASE 1: PROJECT

Automating the Amazon application using Selenium Webdriver

Problem Statement:

- 1) Create new Java Project from scratch: Phase1Project
 - 2) Add all the selenium Lib
 - 3) Add the chrome driver to project
 - 4) You need to launch Amazon.in
 - 5) Search the product samsung and click on go button
 - 6) Find all the product search results and their prices and print on the console
 - 7) Go inside the first product by clicking on the link
 - 8) You need to validate the name is same on the product description page
-

Solution:

Source code:

```
package base;
```

```
import java.util.List;
```

```
import java.util.Set;
```

```
import javax.print.attribute.standard.MediaSize.NA;
```

```
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.interactions.Actions;
```

```
public class AmazonProduct {
```

```
    public static void main(String[] args) {
```

```
        // TODO Auto-generated method stub
```

```
        System.setProperty("webdriver.chrome.driver",
```

```

"C:\\Users\\imarc\\Downloads\\chromedriver_win32\\chromedriver.exe");

// Instantiate a ChromeDriver class.
WebDriver driver = new ChromeDriver();

// Maximize the browser
driver.manage().window().maximize();

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

// Search product
WebElement Search = driver.findElement(By.id("twotabsearchtextbox"));
Search.sendKeys("Samsung");

WebElement SearchBtn = driver.findElement(By.id("nav-search-submit-button"));
SearchBtn.click();

// List out product & prices
List<WebElement> Product = driver.findElements(By.xpath("//div[@data-
component-type='s-search-result']/h2/a"));
List<WebElement> Price = driver.findElements(By.xpath(
        "//div[@data-component-type='s-search-result']/span[@class='a-
price']/span[@class='a-price-whole']"));

for (int i = 0; i < Product.size(); i++) {
    System.out.println("Product " + Product.get(i).getText() + " " +
Price.get(i).getText());
}

// Get Window handles
String ParentWin = driver.getWindowHandle();
String Expected = Product.get(0).getText();

```

```

// Open first product

Product.get(0).click();

// Switch window
Set<String> Allwindows = driver.getWindowHandles();
for (String win : Allwindows) {
    System.out.println(win);
    if (!win.equals(ParentWin)) {
        driver.switchTo().window(win);
    }
}

// validate title
WebElement title = driver.findElement(By.id("productTitle"));
String Actual = title.getText();
System.out.println("First product is: " + Actual);
if (Actual.equals(Expected)) {
    System.out.println("Title Validated");
} else {
    System.out.println("Test Failed");
}
driver.quit();
}

}

```

```
eclipse-workspace - Phase1Project/src/base/AmazonProduct.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
*AmazonProduct.java *WebTableExample.java *CarInterface.java *Chrome.java *Employees.java *Firefox.java *ConditionExample.java *AmazonLogin.java *AmazonProductSearch.java

1 package base;
2
3 import java.util.List;
4 import java.util.Set;
5
6 import javax.print.attribute.standard.MediaSize.NA;
7
8 import org.openqa.selenium.By;
9 import org.openqa.selenium.WebDriver;
10 import org.openqa.selenium.WebElement;
11 import org.openqa.selenium.chrome.ChromeDriver;
12 import org.openqa.selenium.interactions.Actions;
13
14 public class AmazonProduct {
15
16     public static void main(String[] args) {
17         // TODO Auto-generated method stub
18         System.setProperty("webdriver.chrome.driver",
19             "C:\\Users\\lmarc\\Downloads\\chromedriver_win32\\chromedriver.exe");
20         // Instantiate a ChromeDriver class.
21         WebDriver driver = new ChromeDriver();
22
23         // Maximize the browser
24         driver.manage().window().maximize();
25
26         // Launch Amazon
27         driver.get("https://www.amazon.in/");
28
29         // Search product
30         WebElement Search = driver.findElement(By.id("twotabsearchtextbox"));
31         Search.sendKeys("Samsung");
32
33         WebElement SearchBtn = driver.findElement(By.id("nav-search-submit-button"));
34         SearchBtn.click();
35
36         // List out product & prices
37         List Product = driver.findElements(By.xpath("//div[@data-component-type='s-search-result']/h2/a"));
38         List Price = driver.findElements(By.xpath(
39             "//div[@data-component-type='s-search-result']/span[@class='a-price']/span[@class='a-price-whole']"));
40
41         for (int i = 0; i < Product.size(); i++) {
42             System.out.println("Product " + Product.get(i).getText() + " " + Price.get(i).getText());
43         }
44     }
45 }
```

```
eclipse-workspace - Phase1Project/src/base/AmazonProduct.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
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46     WebElement SearchBtn = driver.findElement(By.id("nav-search-submit-button"));
47     SearchBtn.click();
48
49     // List out product & prices
50     List Product = driver.findElements(By.xpath("//div[@data-component-type='s-search-result']/h2/a"));
51     List Price = driver.findElements(By.xpath(
52         "//div[@data-component-type='s-search-result']/span[@class='a-price']/span[@class='a-price-whole']"));
53
54     for (int i = 0; i < Product.size(); i++) {
55         System.out.println("Product " + Product.get(i).getText() + " " + Price.get(i).getText());
56     }
57
58     // Get Window handles
59     String ParentWin = driver.getWindowHandle();
60     String Expected = Product.get(0).getText();
61
62     // Open first product
63
64     Product.get(0).click();
65
66     // Switch window
67     Set<String> AllWindows = driver.getWindowHandles();
68     for (String win : AllWindows) {
69         System.out.println(win);
70         if (!win.equals(ParentWin)) {
71             driver.switchTo().window(win);
72         }
73     }
74     // validate title
75     WebElement title = driver.findElement(By.id("productTitle"));
76     String Actual = title.getText();
77     System.out.println("First product is: " + Actual);
78     if (Actual.equals(Expected)) {
79         System.out.println("Title Validated");
80     } else {
81         System.out.println("Test Failed");
82     }
83     driver.quit();
84 }
```

Output:

```
Starting chromedriver: 184.0.5112.79 (3cf3ec8a07d18db6e120bc910eb087283285dc9-re1/s/branch-heads/5112@41307) on port 33909
Only local connections are allowed.
Please see https://chromedriver.chromium.org/security-considerations for suggestions on keeping Chromedriver safe.
Chromedriver was started successfully.
Aug 22, 2022 3:24:51 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: V3
Product Samsung Galaxy M13 (Aqua Green, 6GB, 128GB Storage) | 6000mAh Battery | Upto 12GB RAM with RAM Plus 13,999
Product Samsung Galaxy M53 5G (Mystique Green, 6GB, 128GB Storage) | 108MP | sAmoled+ 120Hz | 12GB RAM with RAM Plus | Travel Adapter to be Purchased Separately 26,499
Product Samsung Galaxy M21 2021 Edition (Arctic Blue, 4GB RAM, 64GB Storage) | FHD+ sAMOLED | 6 Months Free Screen Replacement for Prime (SM-M215GLBDINS) 11,499
Product Samsung Galaxy M32 (Black, 4GB RAM, 64GB | FHD+ sAMOLED 90Hz Display | 6000mAh Battery | 64MP Quad Camera 13,499
Product Samsung Galaxy M32 (Light Blue, 6GB RAM, 128GB | FHD+ sAMOLED 90Hz Display | 6000mAh Battery | 64MP Quad Camera 15,499
Product Samsung Galaxy A13 Blue, 4GB RAM, 64GB Storage with No Cost EMI/Additional Exchange Offers, (SM-A135FLBGIN5) 13,999
Product Samsung Galaxy M13 (Aqua Green, 6GB, 128GB Storage) | 6000mAh Battery | Upto 12GB RAM with RAM Plus 13,999
Product Samsung Galaxy M13 (Aqua Green, 4GB, 64GB Storage) | 6000mAh Battery | Upto 8GB RAM with RAM Plus 11,999
Product Samsung Galaxy M32 5G (Sky Blue, 8GB RAM, 128GB Storage) | Dimensity 720 Processor | 5000mAh Battery| Knox Security 18,999
Product Samsung Galaxy M13 (Midnight Blue, 4GB, 64GB Storage) | 6000mAh Battery | Upto 8GB RAM with RAM Plus 11,999
Product Samsung Galaxy M33 5G (Mystique Green, 8GB, 128GB Storage) | 6000mAh Battery | Upto 16GB RAM with RAM Plus | Travel Adapter to be Purchased Separately 20,499
Product Samsung Galaxy S21 FE 5G (Lavender, 8GB, 128GB Storage) 49,999
Product Samsung Galaxy S20 FE 5G (Cloud Mint, 8GB RAM, 128GB Storage) 36,990
Product Samsung Galaxy M32 (Black, 6GB RAM, 128GB | FHD+ sAMOLED 90Hz Display | 6000mAh Battery | 64MP Quad Camera 15,499
Product Samsung Galaxy M12 (Black,4GB RAM, 64GB Storage) 6000 mAh with 8nm Processor | True 48 MP Quad Camera | 90Hz Refresh Rate 11,999
Product Samsung Galaxy S20 FE 5G (Cloud Navy, 8GB RAM, 128GB Storage) with No Cost EMI & Additional Exchange Offers 36,990
Product Samsung Galaxy A23 Blue, 6GB RAM, 128GB Storage with No Cost EMI/Additional Exchange Offers 18,499
Product Samsung Galaxy A03 Black, 3GB RAM, 32GB Storage with No Cost EMI/Additional Exchange Offers 10,499
Product Samsung Galaxy A52s 5G (Violet, 6GB RAM, 128GB Storage) Without Offers 28,448
Product Samsung Galaxy A03 Core (Blue, 2GB RAM, 32GB Storage) with No Cost EMI/Additional Exchange Offers 7,998
Product Samsung Galaxy Z Flip4 5G (Bora Purple, 8GB RAM, 128GB Storage) + Galaxy Watch4 Classic Bluetooth(42mm, Black) 92,998
Product Samsung Galaxy Z Fold4 5G (Graygreen, 12GB RAM, 256GB Storage) + Galaxy Watch4 Classic Bluetooth (46mm, Black) 1,57,998
CDwindow-5501B05959B0EE721055359081EE194F
CDwindow-8F10A8FA1265FB5FBFEA7C75B3B5DF4
First product is: Samsung Galaxy M13 (Aqua Green, 6GB, 128GB Storage) | 6000mAh Battery | Upto 12GB RAM with RAM Plus
Title Validated
```

Github Link for Project:

<https://github.com/imanovian/Phase1-Project>

===== **END** =====