HW9

Update TestAmazonSearch.java test case to TestAmazonSearchDataDriven.java
Replace all Thread.sleep() by at least one Implicit waits and Explicit waits;
Using data driven either from Excel sheet or BDD feature file
Capture screenshot(s), the image names append with Date time.

- **MyStepdefsAmazon.java**

```
package StepDefinition;

import cucumber.api.java.en.And;
import cucumber.api.java.en.Given;
import cucumber.api.java.en.Then;
import cucumber.api.java.en.When;
import org.apache.commons.io.FileUtils;
import org.openqa.selenium.*;
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;

import java.io.File;
import java.io.IOException;
import java.sql.Timestamp;
import java.time.Duration;
import java.util.Date;

public class MyStepdefsAmazon {

    // add global definition here
    WebDriver driver;
    //Define file path for string
    String screenshotPath = "c:/CS522Screenshots";

    // Launch browser and go to amazon
    @Given("Open the Chrome and launch the amazon application")
    public void launchBrowserGoToAmazon() {
        System.setProperty("webdriver.chrome.driver", "chromedriver");
        driver = new ChromeDriver();
        driver.get("http://www.amazon.com/");
    }
    String timeStampReturm (){
        Date date = new Date();
        Timestamp ts=new Timestamp(date.getTime());
        return ts.toString();
    }
    // Maximize window size
    @When("Maximize window")
    public void maximizeWindowSize() {
        driver.manage().window().maximize();
    }
```

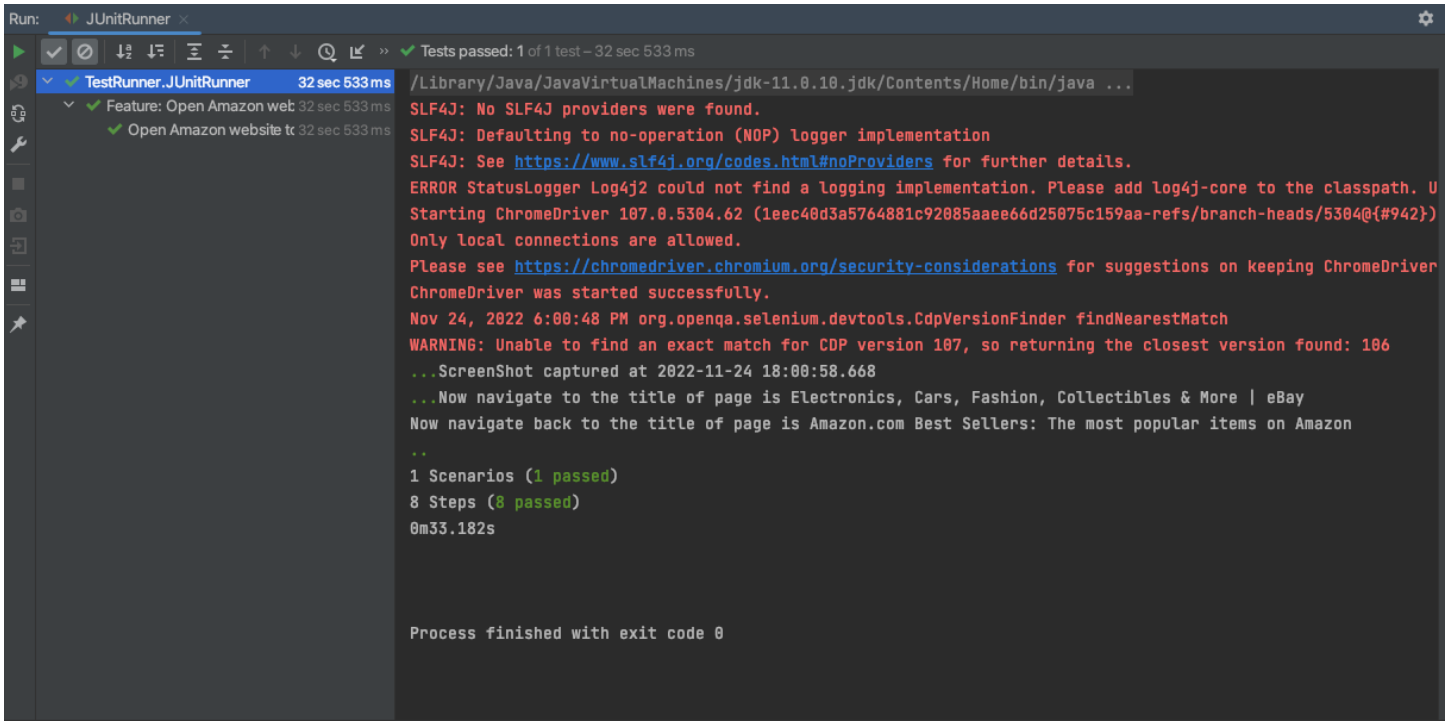
```
    // Input a product item and click Search
    @And("Product Search")
    public void searchProduct() throws IOException {
        // implicit wait
        driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));
        // Explicit wait
        WebElement res = new WebDriverWait(driver,
Duration.ofSeconds(15)).until(ExpectedConditions
                .elementToBeClickable(By.id("twotabsearchtextbox")));

        driver.findElement(By.id("twotabsearchtextbox")).sendKeys("JBL
Speakers");

        // Screenshot capture
        //takeSnapShot(driver, screenshotPath + "//" + timeStampReturm()
+"_product1.png") ;
        System.out.println("ScreenShot captured at "+ timeStampReturm());
        // Explicit wait
        WebElement res1 = new WebDriverWait(driver,
Duration.ofSeconds(15)).until(ExpectedConditions
                .elementToBeClickable(By.id("nav-search-submit-button")));
        driver.findElement(By.id("nav-search-submit-button")).click();
        // implicit wait of 10 sec
        driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));
    }
    // Click the link Best Sellers
    @And("Open link BestSellers")
    public void openLinkBestSellers() {
        // implicit wait of 10 sec
        driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));
        // explicit wait
        WebElement res2 = new WebDriverWait(driver,
Duration.ofSeconds(15)).until(ExpectedConditions
                .elementToBeClickable(By.linkText("Best Sellers")));
        driver.findElement(By.linkText("Best Sellers")).click();
    }
    // Navigate to ebay.com then go back
    @And("Navigate to ebay and back to amazon")
    public void navigateToEbayGoBack() {
        driver.navigate().to("http://www.ebay.com/");
        // implicit wait of 10 sec
        driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));
        System.out.println("Now navigate to the title of page is " +
                driver.getTitle());
        driver.navigate().back();
        // implicit wait of 10 sec
        driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));
        System.out.println("Now navigate back to the title of page is " +
                driver.getTitle());

    }
    // Select a search category
    @And("Select Category")
    public void selectCategory() {
```

```
        Select category = new
Select(driver.findElement(By.id("searchDropdownBox")));
        category.selectByVisibleText("Electronics");

    }
    // Close browser and exit
    @Then("Close and exit")
    public void closeExit(){
        driver.quit();
    }

    @And("Take Snapshot")
    public void takeSnapShot() throws IOException {
        //Convert web driver object to TakeScreenshot
        TakesScreenshot scrShot =((TakesScreenshot)driver);

        //Call getScreenshotAs method to create image file
        File SrcFile=scrShot.getScreenshotAs(OutputType.FILE);

        //Move image file to new destination
        File DestFile=new File(screenshotPath + "//" + timeStampReturm()
+"_product1.png");

        //Copy file at destination
        FileUtils.copyFile(SrcFile, DestFile);


    }

}
```

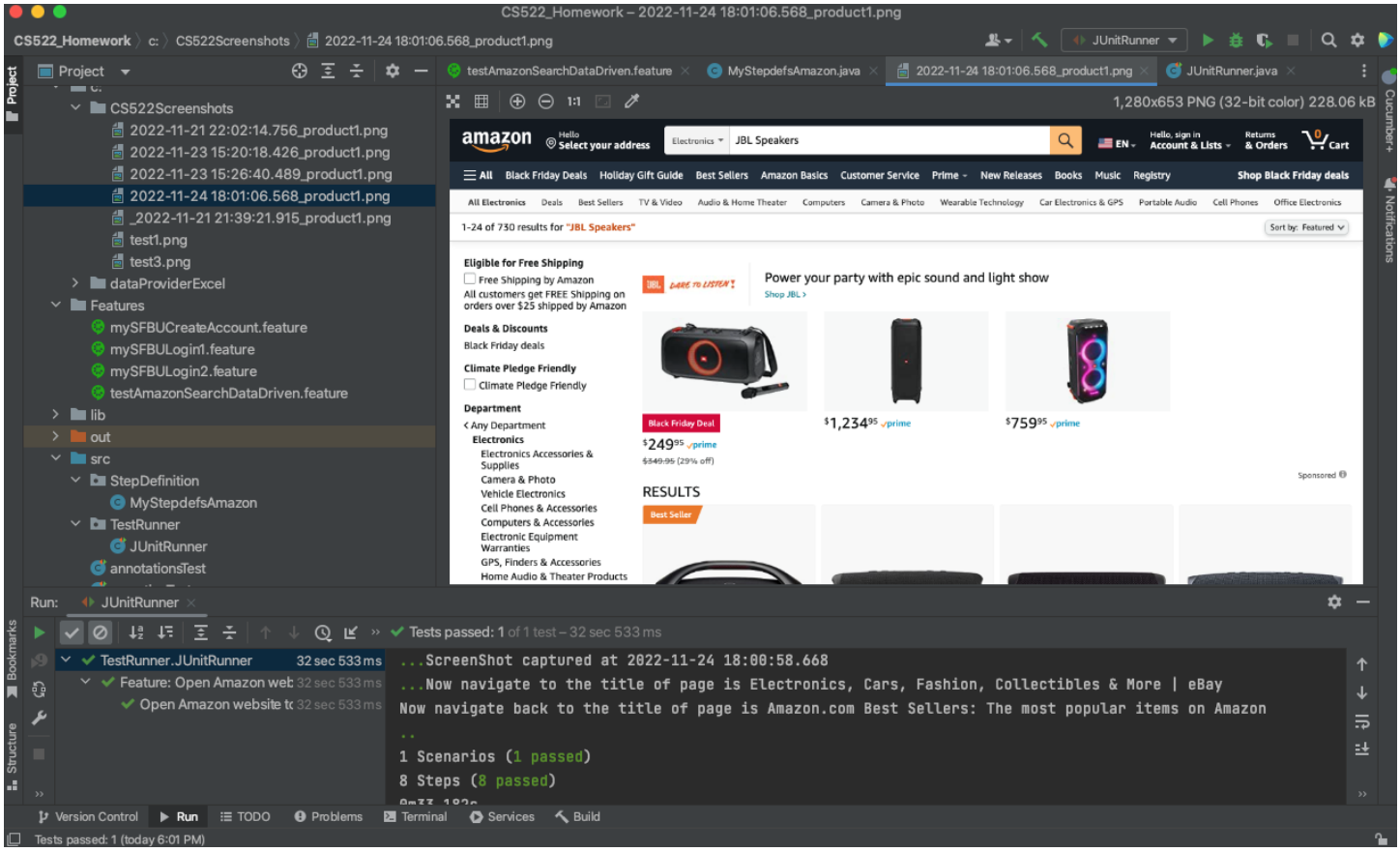
- **testAmazonSearchDataDriven.feature**

```
Feature: Open Amazon website to explore the products

  Scenario: Verification of searched product and take a screenshot

    Given Open the Chrome and launch the amazon application

    When Maximize window
    And Select Category
    And Product Search
    And Take Snapshot
    And Open link BestSellers
    And Navigate to ebay and back to amazon
    Then Close and exit
```

- **Attached Log**



- **Screenshot image names append with Date time**


CS522_Homework – 2022-11-24 18:01:06.568_product1.png
CS522_Homework
CS522Screenshots
2022-11-24 18:01:06.568_product1.png
JUnitRunner
Project
testAmazonSearchDataDriven.feature
MyStepdefsAmazon.java
JUnitRunner.java
1,280x653 PNG (32-bit color) 228.06 kB
CS522Screenshots
2022-11-21 22:02:14.756_product1.png
2022-11-23 15:20:18.426_product1.png
2022-11-23 15:26:40.489_product1.png
2022-11-24 18:01:06.568_product1.png
_2022-11-21 21:39:21.915_product1.png
test1.png
test3.png
dataProviderExcel
Features
mySFBUCreateAccount.feature
mySFBULogin1.feature
mySFBULogin2.feature
testAmazonSearchDataDriven.feature
lib
out
src
StepDefinition
MyStepdefsAmazon
TestRunner
JUnitRunner
annotationsTest
amazon
JBL Speakers
1-24 of 730 results for "JBL Speakers"
Power your party with epic sound and light show
RESULTS
Run:
JUnitRunner
Tests passed: 1 of 1 test – 32 sec 533 ms
TestRunner.JUnitRunner 32 sec 533 ms
Feature: Open Amazon web 32 sec 533 ms
Open Amazon website tc 32 sec 533 ms
...ScreenShot captured at 2022-11-24 18:00:58.668
...Now navigate to the title of page is Electronics, Cars, Fashion, Collectibles & More | eBay
Now navigate back to the title of page is Amazon.com Best Sellers: The most popular items on Amazon
..
1 Scenarios (1 passed)
8 Steps (8 passed)
Version Control
Run
TODO
Problems
Terminal
Services
Build
Tests passed: 1 (today 6:01 PM)