## Capstone Project: Create a Testing Framework for Sporty Shoes Website

Repository: https://github.com/Joshnitha/Phase2 Practice-Projects/

## **Project objective:**

The objective is to develop a comprehensive QA and test suite for the Sporty Shoes website. The QA effort will require the following:

- 1. Browser-based end-user testing using Selenium WebDriver with TestNG Framework.
- 2. Load Testing using JMeter.
- 3. API Testing with Cucumber.
- 4. API Testing with Postman and Rest Assured.

The end deliverables will be executable scripts and modules that can be run on demand for testing the Sporty Shoes web app.

## **Background of the problem statement:**

Sporty Shoes has an e-commerce website that has the following existing features in place:

- Users can view products.
- If users want to purchase something, they can first sign up and then log in.
- Users can add multiple items to their cart and do a checkout.
- Users have a dashboard that lets them edit their profile, view past purchases, and view their cart.
- Once users do a checkout, the items are cleared from their cart and an order is generated which is stored in their order history.

The above application is already functional. What is needed now is to add a testing layer that will ensure that everything is passed through QA.

#### **Implementation Requirements**

The following deliverables are expected:

- 1. Automate the below API endpoints using Rest-Assured
  - Retrieve the list of all products in the store.
  - Retrieve the list of all registered users.
  - Add the product.
  - Delete the product.
  - Update the product.

- 2. Create Selenium scripts using TestNG to test all the pages in the web app that will automate:
  - Login page
  - Registration Page
  - Add Product to cart page.
  - Place Order Page
- 3. Create JMeter scripts to do load testing of the homepage and the product detail page.
- 4. Setup Cucumber in Java Project and write Feature Files using Gherkin to test the API endpoints mentioned in point 1 above.
- 5. Create Postman scripts to test the following API endpoints:
  - Retrieve the list of all products in the store.
  - Retrieve the list of all registered users.
  - Add the product.
  - Delete the product.
  - Update the product.

## **API Endpoints:**

	Method	
Action		Endpoint
	GET	. ,,
Retrieve the list of all products in the store		http://localhost:9010/get-shoes
	GET	
Retrieve the list of all registered users		http://localhost:9010/get-users
	POST	http://localhost:9010/add-
		shoe?id=101ℑ=image_url&name=Sa
		mpleShoe&category=Running&sizes=9≺
Add the product		<u>ice=1000</u>
Delete the product	DELETE	http://localhost:9010/delete-shoe?id=101
Update the product	PUT	http://localhost:9010/update-shoe

## Add Product URL Sample with POST Method:

http://localhost:9010/add-

shoe?id=101&image=image\_url&name=SampleShoe&category=Running&sizes=9&price=10
00

## **Update Product URL Sample with PUT Method:**

```
Request body (http://localhost:9010/update-shoe) {
    "id": 101,
    "name": "Updated Shoe Name",
    "category": "Updated Category",
    "sizes": "8,9,10",
    "price": 1500
    "image": "updated_image_url",
}
```

## **Delete Product URL Sample with DELETE Method:**

http://localhost:9010/delete-shoe?id=101

## You must use the following:

- 1. Source code editing and modification: Eclipse IDE
- 2. End-User Black Box Testing: Selenium WebDriver (A Browser testing framework where only the Java version is used.) with TestNG Framework.
- 3. Load Testing: JMeter (A load testing application for Java applications.)
- 4. API Testing: Cucumber (The Gherkin syntax used in Cucumber allows you to define test scenarios in a natural language format)
- 5. API Testing: Postman (A standalone application that allows testing of API-based services.) and Rest-Assured.
- 6. Git: To connect and push files from the local system to GitHub
- 7. GitHub: To store the application code and track its versions.
- 8. Specification document: Any open-source document or Google Docs

### The following requirements should be met:

- 1. All testing scripts and code should be pushed to your GitHub repository. You need to document the steps and write the algorithms in it.
- 2. The submission of your GitHub repository link is mandatory. In order to track your task, you need to share the link to the repository. You can add a section in your document.
- 3. Document the step-by-step process starting from creating test cases and then executing them and recording the results.
- 4. You need to submit the final specification document which should include:
  - Project and tester details
  - Concepts used in the project.
  - Links to the GitHub repository to verify the project completion.
  - Your conclusion on enhancing the application and defining the USPs (Unique Selling Points)

#### Project to be tested:

Download the project from <a href="https://github.com/Simplilearn-Edu/SportyShoes">https://github.com/Simplilearn-Edu/SportyShoes</a>
Then execute:

java -jar project\_name.jar

# Steps to complete the Capstone project

Launch the Application under test

- Go to github URL https://github.com/Simplilearn-Edu/SportyShoes.git
- Click on Green button which has Code written on it. Click on Download Zip
- The download zip file will be in your download folder
- Extract all the files in downloads folder

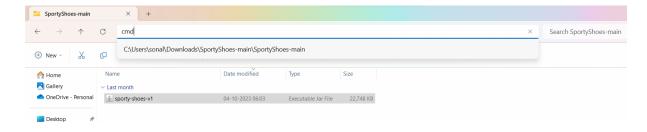


Go inside the folder SportyShoes-main and then again go in the folder SportyShoes-main

Go inside the folder where you see the sporty-shoes-v1 jar file



Start cmd prompt in the same folder



Execute the java command to run the jar file and deploy the application

java -jar sporty-shoes-v1.jar OR java -jar -Dserver.port=8100 sporty-shoes-v1.jar



## **Rest Assured:**

Create a maven project

Add the dependencies in pom file

```
<dependencies>
 <dependency>
  <groupId>org.apache.logging.log4j/groupId>
  <artifactId>log4j-api</artifactId>
  <version>2.14.1</version>
</dependency>
<!-- https://mvnrepository.com/artifact/org.apache.logging.log4j/log4j-core -->
<dependency>
  <groupId>org.apache.logging.log4j/groupId>
  <artifactId>log4j-core</artifactId>
  <version>2.14.1</version>
</dependency>
         <dependency>
  <groupId>junit
  <artifactId>junit</artifactId>
  <version>4.11</version>
   <scope>test</scope>
  </dependency>
 <!-- https://mvnrepository.com/artifact/io.cucumber/cucumber-java -->
<dependency>
 <groupId>io.cucumber
  <artifactId>cucumber-java</artifactId>
  <version>7.10.1</version>
</dependency>
```

```
<!-- https://mvnrepository.com/artifact/io.cucumber/cucumber-java -->
<dependency>
  <groupId>io.cucumber
 <artifactId>cucumber-junit</artifactId>
 <version>7.10.1</version>
 <scope>test</scope>
</dependency>
 <!-- https://mvnrepository.com/artifact/io.cucumber/cucumber-java -->
<dependency>
 <groupId>io.cucumber
 <artifactId>cucumber-core</artifactId>
  <version>7.10.1</version>
</dependency>
<!-- https://mvnrepository.com/artifact/io.rest-assured/rest-assured -->
<dependency>
 <groupId>io.rest-assured
 <artifactId>rest-assured</artifactId>
 <version>5.3.0</version>
  <scope>test</scope>
</dependency>
<!-- https://mvnrepository.com/artifact/io.rest-assured/rest-assured-common -->
<dependency>
 <groupId>io.rest-assured
 <artifactId>rest-assured-common</artifactId>
 <version>5.3.0</version>
</dependency>
<!-- https://mvnrepository.com/artifact/io.rest-assured/rest-assured-all -->
<dependency>
 <groupId>io.rest-assured
  <artifactId>rest-assured-all</artifactId>
 <version>5.3.0</version>
  <scope>test</scope>
</dependency>
<!-- https://mvnrepository.com/artifact/io.rest-assured/json-path -->
<dependency>
  <groupId>io.rest-assured
  <artifactId>ison-path</artifactId>
 <version>5.3.0</version>
  <scope>test</scope>
</dependency>
```

```
<!-- https://mvnrepository.com/artifact/org.json/json -->
<dependency>
 <groupId>org.json</groupId>
 <artifactId>json</artifactId>
  <version>20180813</version>
</dependency>
<!-- https://mvnrepository.com/artifact/org.hamcrest/hamcrest -->
<dependency>
 <groupId>org.hamcrest
 <artifactId>hamcrest</artifactId>
 <version>2.2</version>
 <scope>test</scope>
</dependency>
<!-- https://mvnrepository.com/artifact/org.testng/testng -->
<dependency>
  <groupId>org.testng/groupId>
 <artifactId>testng</artifactId>
 <version>7.7.1</version>
 <scope>test</scope>
</dependency>
<!-- https://mvnrepository.com/artifact/com.fasterxml.jackson.core/jackson-databind -->
<dependency>
 <groupId>com.fasterxml.jackson.core
 <artifactId>jackson-databind</artifactId>
 <version>2.15.2</version>
</dependency>
 <dependency>
 <groupId>org.seleniumhq.selenium
 <artifactId>selenium-java</artifactId>
  <version>4.11.0</version>
</dependency>
<!-- https://mvnrepository.com/artifact/io.github.bonigarcia/webdrivermanager -->
<dependency>
 <groupId>io.github.bonigarcia
 <artifactId>webdrivermanager</artifactId>
  <version>5.4.1</version>
</dependency>
 </dependencies>
```

```
Source Code:
package com.sporty.shoe.restAssuredScripts;
import static org.hamcrest.Matchers.equalTo;
import java.util.HashMap;
import org.testng.annotations.Test;
import io.restassured.RestAssured;
public class GetAllShoes {
@Test
public void get_all_shoes()
{
RestAssured.given()
.baseUri("http://localhost:9010")
.basePath("/get-shoe?id=801")
.when()
.get()
.then()
.statusCode(200)
//.log().all();
.body("id", equalTo("801"),
"image", equalTo("8.png"),
"name", equalTo("LightStride Performance Shoes"),
```

```
"category", equalTo("Sports"),
"sizes", equalTo("7, 8"),
"price", equalTo("1200"));
}
@Test(priority='2')
public void get_all_users()
{
RestAssured.given()
.baseUri("http://localhost:9010")
//.basePath("/get-users")
.basePath("/get-user/John Watson")
.when()
.get()
.then()
.statusCode(200)
//.log().all();
.body("name", equalTo("John Watson"),
"email", equalTo(",john@example.com"),
"password", equalTo("john123"));
}
}
ScreenShots:
```

```
"name": "John Watson",
"email": "john@example.com",
                                                                         All Tests Failed Tests Summary
            "password": "john123"
                                                                  Failure Exception
        },
                                                                    "name": "Fionna Flynn",
           "email": "fionna@example.com",
"password": "fionnal23"
                                                                       get_all_users (0.107 s)
        },
                  Ι
           "name": "Sia Sen",
"email": "sia@example.com",
           "password": "sia123"
   1
PASSED: com.sportyshoe.restAssuredScripts.GetAllshoes.get_all_users
PASSED: com.sportyshoe.restAssuredScripts.GetAllshoes.get_all_shoes
_____
   Default test
   Tests run: 2, Failures: 0, Skips: 0
Default suite
Total tests run: 2, Passes: 2, Failures: 0, Skips: 0
```

#### Source code:

```
package com.sporty.shoe.restAssuredScripts;
import org.testng.annotations.Test;
import io.restassured.RestAssured;
public class postandputnewShoe {
       @Test(priority='1')
       public void add_new_product()
       {
              RestAssured.given()
              .baseUri("http://localhost:9010")
              .basePath("/add-shoe")
              .queryParam("id","1020")
              .queryParam("image", "www.imge.com")
              .queryParam("name","Nike")
              .queryParam("category", "Running")
              .queryParam("sizes","5,6,7")
              .queryParam("price", "2000")
              .when()
              .post()
              .then()
              .log().all();
}
       @Test(priority='2')
       public void update a product()
              RestAssured.given()
              .baseUri("http://localhost:9010")
              .basePath("/update-shoe")
              .queryParam("id","1020")
              .queryParam("image", "www.imge123.com")
              .queryParam("name","Reebok")
              .queryParam("category", "Running")
              .queryParam("sizes","5,6,7")
              .queryParam("price", "2500")
              .when()
              .put()
```

```
.then()
.log().all();

@Test(priority='3')
public void delete_product()
{
          RestAssured.given()
          .baseUri("http://localhost:9010")
          .basePath("/update-shoe")
          .queryParam("id","1020")
          .when()
          .delete()
          .then()
          .log().all();
}
```

```
☑ TestBase.java ☑ HomePage.java ☑ HomePageTes... ☑ ItestListen... ☑ TestProduct... ☑ RegisterPag... ☑ RegisterPag... ☑
  1 package com.sporty.shoe.restAssuredScripts;
  3⊕ import org.testng.annotations.Test;
  7 public class postandputnewShoe {
 8
 9⊜
         @Test(priority='1')
         Run | Debug
10
         public void add_new_product()
11
12
13
              RestAssured.given()
              .baseUri("http://localhost:9010")
              .basePath("/add-shoe")
15
             .queryParam("id","1020")
.queryParam("image", "www.imge.com")
.queryParam("name","Nike")
16
17
18
             .queryParam("category", "Running")
.queryParam("sizes", "5,6,7")
.queryParam("price", "2000")
19
20
21
22
              .when()
23
             .post()
24
              .then()
25
              .log().all();
26
27 }
28
29
30⊝
         @Test(priority='2')
         Run | Debug
31
         public void update_a_product()
```

```
public void update_a_product()
        RestAssured.given()
        kestAssured.given()
.baseUri("http://localhost:9010")
.basePath("/update-shoe")
.queryParam("id","1020")
.queryParam("image", "www.imge123.com")
.queryParam("name", "Reebok")
.queryParam("category", "Running")
.queryParam("sizes","5,6,7")
.queryParam("price", "2500")
.when()
         .when()
         .put()
         .then()
        .log().all();
@Test(priority='3')
Run | Debug
public void delete_product()
        RestAssured.given()
.baseUri("http://localhost:9010")
.basePath("/update-shoe")
         .queryParam("id","1020")
         .when()
         .delete()
         .then()
       .log().all();
```

```
Date: Tue, 14 Nov 2023 04:57:17 GMT
                                                                                                                                                                                                                                                                                                                                                                            Search:
 Keep-Alive: timeout=60
                                                                                                                                                                                                                                                                                                                                      Failed Tests Summary
 Connection: keep-alive
                                                                                                                                                                                                                                                                                                                                         ∨ 🛅 Default suite ( 2/0/0/0 ) (4.084 s) Failure Exception
                                                                                                                                                                                                                                                                                                                                              "code": 101,
"message": "Reebok Updated Successfully.",
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100 Property of the contract o
                                                                                                                                                                                                                                                                                                                                                                   add new product (3,955 s)
                                                                                                                                                                                                                                                                                                                                                                  update_a_product (0.129 s)
                     "shoe": {
    "id": 1020,
                                       "image": "www.imge123.com",
                                       "name": "Reebok",
                                      "category": "Running",
"sizes": "5,6,7",
                                        "price": 2500
PASSED: com.sportyshoe.restAssuredScripts.PostandPutnewShoe.add_new_product PASSED: com.sportyshoe.restAssuredScripts.PostandPutnewShoe.update_a_product
                   Default test
                   Tests run: 2, Failures: 0, Skips: 0
 Default suite
Total tests run: 2, Passes: 2, Failures: 0, Skips: 0
```

# **Selenium scripts using TestNG:**

**Source Code:** 

TestBase class:

```
package com.sportyshoe.SeleniumCucumberScripts;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.firefox.FirefoxDriver;
public class TestBase {
public static WebDriver driver;
public static void OpenBrowser(String browser)
{
if(browser == "Chrome")
{
driver = new ChromeDriver();
}
if(browser == "FireFox")
{
driver = new FirefoxDriver();
}
driver.manage().window().maximize();
driver.manage().deleteAllCookies();
driver.get("http://localhost:9010/");
}
public static void closebrowser()
{
driver.close();
}
```

```
}
```

```
HomePage class:
package com.sportyshoe.SeleniumCucumberScripts;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.support.FindBy;
import org.openqa.selenium.support.PageFactory;
public class HomePage extends TestBase {
@FindBy(xpath="//div[@class='container mt-3']/descendant::p[1]")
WebElement text;
@FindBy(linkText="New User? Register Here")
WebElement registerLink;
public HomePage(WebDriver driver) {
PageFactory.initElements(driver, this);
}
public String getURL_page()
{
String URLnew = driver.getCurrentUrl();
return URLnew;
}
public String Validate_Text_On_Page()
{
String pageText = text.getText();
```

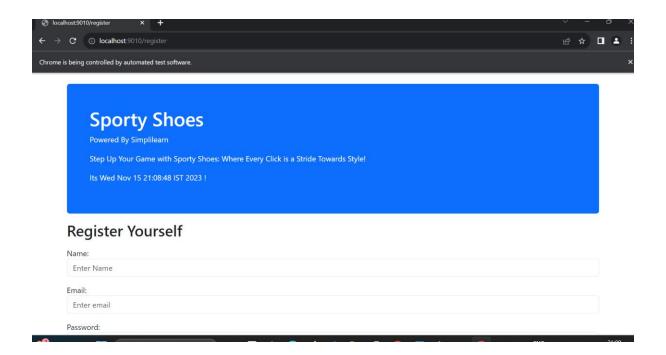
```
System.out.println(pageText);
return pageText;
}
public void click_register_link()
{
registerLink.click();
}
}
HomePageTest Class:
package com.sportyshoe.Test;
import org.testng.annotations.AfterTest;
import org.testng.annotations.BeforeTest;
import org.testng.annotations.Test;
import com.sportyshoe.SeleniumCucumberScripts.HomePage;
import com.sportyshoe.SeleniumCucumberScripts.TestBase;
import static org.testng.Assert.assertEquals;
import org.testng.Assert;
import org.testng.Assert.*;
public class HomePageTest extends TestBase {
HomePage hp;
@BeforeTest
public void start_browser()
{
```

```
OpenBrowser("Chrome");
hp = new HomePage(driver);
}
@Test(priority='1')
public void test_getTitle_page()
{
String expected = "http://localhost:9010/";
String Actual = hp.getURL_page();
Assert.assertEquals(Actual, expected);
}
@Test(priority='2')
public void Test_Validate_Text_On_Page()
{
String expected = "Powered By Simplilearn";
String actualText = hp.Validate Text On Page();
Assert.assertEquals(actualText, expected);
}
@Test(priority='3')
public void test_click_register_link() throws InterruptedException
{
Thread.sleep(1500);
hp.click_register_link();
}
}
```

```
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.firefox.FirefoxDriver;
public class TestBase {
    public static WebDriver driver;
    public static void OpenBrowser(String browser)
        if(browser == "Chrome")
            driver = new ChromeDriver();
         if(browser == "FireFox")
             driver = new FirefoxDriver();
         driver.manage().window().maximize();
         driver.manage().deleteAllCookies();
         driver.get("http://localhost:9010/");
    }
    public static void closebrowser()
         driver.close();
```

```
🖆 🗗 *TestBase.java 👂 *HomePage.java × 🚇 *HomePageTes... 👂 ItestListen... 👂 TestProduct... 👂 RegisterPag... 👂 RegisterPag... 👂 RegisterPag...
    3@import org.openqa.selenium.WebDriver;
   5 import org.openqa.selenium.WebElement;
   6 import org.openqa.selenium.support.FindBy;
7 import org.openqa.selenium.support.PageFactory;
   9 public class HomePage extends TestBase {
  11⊜
           @FindBy (xpath="//div[@class='container mt-3']/descendant::p[1]") \\
  12
          WebElement text;
          @FindBy(linkText="New User? Register Here")
WebElement registerLink;
  14⊕
  16
         public HomePage(WebDriver driver) {
  18
               PageFactory.initElements(driver, this);
  19
  21
  220
          public String getURL_page()
  23
24
               String URLnew = driver.getCurrentUrl();
  25
26
27
               return URLnew;
 289
29
30
31
32
33
          public String Validate_Text_On_Page()
               String pageText = text.getText();
System.out.println(pageText);
               return pageText;
  35⊜
36
          public void click_register_link()
               registerLink.click();
                                                                                                        29:6:673
                                                                  Writable
                                                                                     Smart Insert
```

```
16 public class HomePageTest extends TestBase {
  18 HomePage hp;
          public void start_browser()
              OpenBrowser("Chrome");
              hp = new HomePage(driver);
          @Test(priority='1')
          public void test_getTitle_page()
              String expected = "http://localhost:9010/";
String Actual = hp.getURL_page();
Assert.assertEquals(Actual, expected);
  32
33
34
35
36
  37⊜
38
          @Test(priority='2')
  39
40
          public void Test_Validate_Text_On_Page()
              String expected = "Powered By Simplilearn";
String actualText = hp.Validate_Text_On_Page();
Assert.assertEquals(actualText, expected);
  41
42
43
44
          @Test(priority='3')
 4 6⊖
```



■ Console ×								
<pre><terminated> HomePageTest [TestNG] C:\Users\DELL\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.</terminated></pre>								
[RemoteTestNG] detected TestNG version 7.7.1								
SLF4J: Failed to load class "org.slf4j.impl.StaticLoggerBinder".								
3LF4J: Defaulting to no-operation (NOP) logger implementation								
<pre>SLF4J: See http://www.slf4j.org/codes.html#StaticLoggerBinder for furth</pre>								
Nov 15, 2023 9:08:45 PM org.openqa.selenium.devtools.CdpVersionFinder 1 VARNING: Unable to find an exact match for CDP version 119, so returning								
								Powered By Simplilearn
PASSED: com.sportyshoe.Test.HomePageTest.Test_Validate_Text_On_Page								
PASSED: com.sportyshoe.Test.HomePageTest.test_getTitle_page								
PASSED: com.sportyshoe.Test.HomePageTest.test_click_register_link								
Default test								
Tests run: 3, Failures: 0, Skips: 0								
=======================================								
Default suite								
Total tests run: 3, Passes: 3, Failures: 0, Skips: 0								

## **Source Code:**

## RegisterPage Class:

package com.sportyshoe.SeleniumCucumberScripts;

import org.openqa.selenium.WebDriver; import org.openqa.selenium.WebElement; import org.openqa.selenium.support.FindBy;

```
import org.openqa.selenium.support.PageFactory;
public class RegisterPage extends TestBase {
       @FindBy(xpath="//input[@id='name']")
       WebElement registername;
       @FindBy(xpath="//input[@id='email']")
       WebElement registeremail;
       @FindBy(xpath="//input[@id='password']")
       WebElement registerpassword;
       @FindBy(xpath="//button[@type='submit']")
       WebElement registerBtn;
       @FindBy(xpath="//div[@class='mt-4 p-5 bg-primary text-white
rounded']/descendant::p[3]")
       WebElement userText;
       public RegisterPage(WebDriver driver) {
              PageFactory.initElements(driver, this);
      }
       public void register_user()
              registername.sendKeys("josh");
              registeremail.sendKeys("josh@gmail.com");
              registerpassword.sendKeys("josh@123");
              registerBtn.click();
       }
       public String validate_registration_URL()
       {
              String register url = driver.getCurrentUrl();
              return register_url;
       }
       public String validate registration Text()
       {
              String user name = userText.getText();
              return user_name;
       }
```

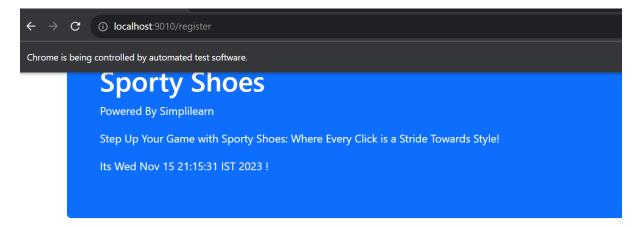
```
}
RegisterPageTest Class:
package com.sportyshoe.Test;
import static org.testng.Assert.assertEquals;
import org.testng.Assert;
import org.testng.annotations.BeforeTest;
import org.testng.annotations.Test;
import com.sportyshoe.SeleniumCucumberScripts.HomePage;
import com.sportyshoe.SeleniumCucumberScripts.RegisterPage;
import com.sportyshoe.SeleniumCucumberScripts.TestBase;
public class RegisterPageTest extends TestBase{
HomePage hp;
RegisterPage rp;
@BeforeTest
public void start_browser()
{
OpenBrowser("Chrome");
hp = new HomePage(driver);
rp = new RegisterPage(driver);
}
@Test(priority='1')
public void test_click_register_link() throws InterruptedException
```

{

```
Thread.sleep(1500);
hp.click_register_link();
}
@Test(priority='2')
public void test_getTitle_page()
{
String expected = "http://localhost:9010/register";
String Actual = hp.getURL_page();
Assert.assertEquals(Actual, expected);
}
@Test(priority='3')
public void Test_register_user()
{
rp.register_user();
}
@Test(priority='4')
public void Test_validate_registration_URL()
{
String expected = "http://localhost:9010/register-user";
String Actual = rp.validate_registration_URL();
assertEquals(Actual, expected);
}
@Test(priority='5')
public void Test_validate_registration_Text()
```

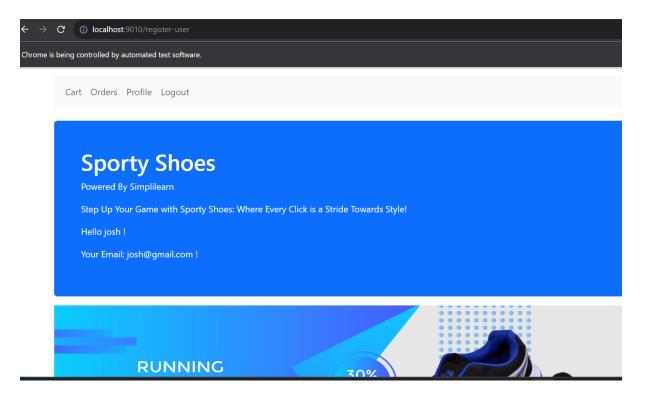
```
{
String expected = "Hello josh !";
String actualText = rp.validate_registration_Text();
Assert.assertEquals(actualText, expected);
}
```

#### OutPut:



# **Register Yourself**

Name:		
josh		
Email:		
josh@gmail.com		
Password:		
•••••		
Register		



#### **Source Code:**

#### Program:

## LoginPage Class:

package com.sportyshoe.SeleniumCucumberScripts;

import org.openqa.selenium.WebDriver; import org.openqa.selenium.WebElement; import org.openqa.selenium.support.FindBy; import org.openqa.selenium.support.PageFactory;

public class LoginPage {

@FindBy(xpath="//input[@id='email']")
WebElement loginEmail;

@FindBy(xpath="//input[@id='password']")
WebElement loginpassword;

@FindBy(xpath="//button[@type='submit']")
WebElement loginbtn;

@FindBy(linkText="Cart")
WebElement clickCart;

```
public LoginPage(WebDriver driver) {
              PageFactory.initElements(driver, this);
       }
       public void user_login()
              loginEmail.sendKeys("josh@gmail.com");
              loginpassword.sendKeys("josh@123");
              loginbtn.click();
       }
       public void click_cart()
              clickCart.click();
       }
}
LoginPageTest Class:
package com.sportyshoe.Test;
import org.testng.Assert;
import org.testng.annotations.BeforeTest;
import org.testng.annotations.Test;
import com.sportyshoe.SeleniumCucumberScripts.HomePage;
import com.sportyshoe.SeleniumCucumberScripts.LoginPage;
import com.sportyshoe.SeleniumCucumberScripts.RegisterPage;
import com.sportyshoe.SeleniumCucumberScripts.TestBase;
public class LoginPageTest extends TestBase {
HomePage hp;
RegisterPage rp;
```

```
LoginPage lp;
@BeforeTest
public void start_browser()
{
OpenBrowser("Chrome");
hp = new HomePage(driver);
rp = new RegisterPage(driver);
lp = new LoginPage(driver);
}
@Test(priority='1')
public void test_login()
{
lp.user_login();
}
@Test(priority='2')
public void test_getTitle_page()
{
String expected = "http://localhost:9010/login";
String Actual = hp.getURL_page();
Assert.assertEquals(Actual, expected);
}
@Test(priority='3')
public void Test_validate_registration_Text()
{
```

```
String expected = "Hello josh !";
String actualText = rp.validate_registration_Text();
Assert.assertEquals(actualText, expected);
}
@Test(priority='4')
public void test_click_cart()
{
lp.click_cart();
}
```

```
package com.sportyshoe.SeleniumCucumberScripts;
mport org.openqa.selenium.WebDriver;
public class LoginPage {
     @FindBy(xpath="//input[@id='email']")
     WebElement loginEmail;
     @FindBy(xpath="//input[@id='password']")
     WebElement loginpassword;
    @FindBy(xpath="//button[@type='submit']")
     WebElement loginbtn;
     @FindBy(linkText="Cart")
    WebElement clickCart;
    public LoginPage(WebDriver driver) {
         PageFactory.initElements(driver, this);
     }
    public void user_login()
         loginEmail.sendKeys("josh@gmail.com");
         loginpassword.sendKeys("josh@123");
         loginbtn.click();
    public void click_cart()
         clickCart.click();
```

```
② Tr 12 Save (Ctrl+S) □ HomePage.java □ HomePageTes... □ RegisterPag... □ RegisterPag... □ RegisterPag... □ *LoginPageT... × □ LoginPage.java □ postandputn... □ C
13
14 public class LoginPageTest extends TestBase {
16
17
        HomePage hp;
18
        RegisterPage rp;
19
20
21
        LoginPage lp;
        @BeforeTest
22
23
24
25
26
27
28
29
        public void start_browser()
             OpenBrowser("Chrome");
             hp = new HomePage(driver);
             rp = new RegisterPage(driver);
             lp = new LoginPage(driver);
30
        @Test(priority='1')
31⊖
32
33
34
35
        public void test_login()
             lp.user_login();
36
37
38⊜
        @Test(priority='2')
               Debug
39
40
41
42
43
44
        public void test_getTitle_page()
             String expected = "http://localhost:9010/login";
             String Actual = hp.getURL_page();
             Assert.assertEquals(Actual, expected);
```



# **Sporty Shoes**

Powered By Simplilearn

Step Up Your Game with Sporty Shoes: Where Every Click is a Stride Towards Style!

## **Login Yourself**

Email:		
josh@gmail.com		
Password:		
•••••		
Login		

```
Console ×
cterminateds LoginPageTest [TestNG] C\Users\DELL\p2\poo\polyplugins\org.edipse.justj.openjdk.hotspot.jre.full.win32x86_64_17.0.6.v20230204-1729\jre\bin\javaw.exe
[RemoteTestNG] detected TestNG version 7.7.1

SLF4J: Failed to load class "org.slf4j.impl.StaticLoggerBinder".

SLF4J: Befaulting to no-operation (NOP) logger implementation

SLF4J: See http://www.slf4j.org/codes.htmlf5taticLoggerBinder for further details.

Nov 15, 2023 9:21:13 PM org.openga.selenium.devtools.CdpVersionFinder findNearestMatch
WARNING: Unable to find an exact match for CDP version 119, so returning the closest version found: 115

PASSED: com.sportyshoe.Test.LoginPageTest.test_click_cart

PASSED: com.sportyshoe.Test.LoginPageTest.test_login

PASSED: com.sportyshoe.Test.LoginPageTest.test_login

Default test

Tests run: 4, Failures: 0, Skips: 0

Default suite

Total tests run: 4, Passes: 4, Failures: 0, Skips: 0
```

#### **Source Code:**

## AddToCardPage Class:

```
package com.sportyshoe.SeleniumCucumberScripts;
import org.openqa.selenium.JavascriptExecutor;
import org.openga.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.support.FindBy;
import org.openqa.selenium.support.PageFactory;
public class AddtoCartPage {
@FindBy(xpath="//a[@id=\"shoe101\"]")
WebElement viewShoeBTN;
@FindBy(xpath = "//a[@id='cart101']")
WebElement addtocartBTN;
@FindBy(xpath="//div[@class='alert alert-success']/descendant::p[1]")
WebElement successText;
JavascriptExecutor executor;
public AddtoCartPage(WebDriver driver) {
PageFactory.initElements(driver, this);
executor = (JavascriptExecutor) driver;
}
public void add_product_to_cart() throws InterruptedException
{
executor.executeScript("arguments[0].click();", addtocartBTN);
}
public String validate_success_message()
{
```

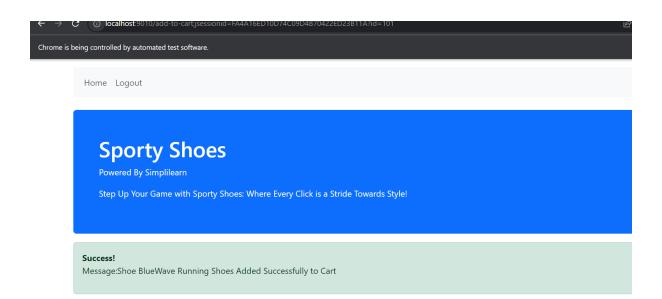
```
String successtext = successText.getText();
return successtext;
}
}
AddToCardPageTest Class:
package com.sportyshoe.Test;
import org.testng.Assert;
import org.testng.annotations.BeforeTest;
import org.testng.annotations.Test;
import com.sportyshoe.SeleniumCucumberScripts.AddtoCartPage;
import com.sportyshoe.SeleniumCucumberScripts.HomePage;
import com.sportyshoe.SeleniumCucumberScripts.LoginPage;
import com.sportyshoe.SeleniumCucumberScripts.RegisterPage;
import com.sportyshoe.SeleniumCucumberScripts.TestBase;
public class AddtoCartPageTest extends TestBase{
HomePage hp;
RegisterPage rp;
LoginPage lp;
AddtoCartPage ac;
@BeforeTest
public void start_browser()
{
```

```
OpenBrowser("Chrome");
hp = new HomePage(driver);
rp = new RegisterPage(driver);
lp = new LoginPage(driver);
ac = new AddtoCartPage(driver);
}
@Test(priority='1')
public void test_login()
{
lp.user_login();
}
@Test(priority='2')
public void test_add_product_to_cart() throws InterruptedException
{
ac.add_product_to_cart();
}
@Test(priority='3')
public void test_validate_success_message()
{
String expected = "Message:Shoe BlueWave Running Shoes Added Successfully to Cart";
String actualText= ac.validate_success_message();
Assert.assertEquals(actualText, expected);
}
}
```

## Program:

```
TestBase,java 🛮 HomePage,java 🚨 HomePageTes... 🚨 RegisterPag... 🔻 RegisterPag... 🔻 LoginPageTes... 🚇 LoginPageJava 🚨 AddtoCartPag... 💆 *AddtoCartP... 🚇 postandputn...
  import org.openga.selenium.JavascriptExecutor;
 import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebZlement;
import org.openqa.selenium.support.FindBy;
import org.openqa.selenium.support.PageFactory;
9 public class AddtoCartPage {
      @FindBy(xpath="//a[@id=\"shoe101\"]")
WebElement viewShoeBTN;
119
12
13
149
15
16
179
20
21
229
23
24
25
26
27
289
29
31
32
33
34
35
36
      @FindBy(xpath = "//a[@id='cart101']")
WebElement addtocartBTN;
      @FindBy(xpath="//div[@class='alert alert-success']/descendant::p[1]")
WebElement successText;
      JavascriptExecutor executor;
      public AddtoCartPage(WebDriver driver) {
   PageFactory.initElements(driver, this);
   executor = (JavascriptExecutor) driver;
      public void add_product_to_cart() throws InterruptedException
          executor.executeScript("arguments[0].click();", addtocartBTN);
370 public String validate success message()
     Lair Jource Netacrot Havigare Jearch Hoject Nutt Williams Help
13
       Run All
   14 public class AddtoCartPageTest extends TestBase{
            HomePage hp;
   16
            RegisterPage rp;
            LoginPage lp;
   19
           AddtoCartPage ac;
            @BeforeTest
   21⊖
            public void start_browser()
   23
   24
                 OpenBrowser("Chrome");
                 hp = new HomePage(driver);
    26
                 rp = new RegisterPage(driver);
                 lp = new LoginPage(driver);
ac = new AddtoCartPage(driver);
   27
   28
   29
            }
    30
   31⊜
            @Test(priority='1')
            public void test_login()
    33
    34
                 lp.user_login();
   37
            @Test(priority='2')
   38⊜
    39
            public void test_add_product_to_cart() throws InterruptedException
   40
                 ac.add_product_to_cart();
   41
    42
   43
```

#### **Output:**



```
Console ×

cterminated> AddtoCartPageTest [TestNG] C\Users\DELL\p2\poo\polyplugins\org.edipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.6.v20230204-1729\jre\bin\javaw.exe (15-Nov-2) [Temother TestNG] detected TestNG version 7.7.1

SLF4J: F <terminated> AddtoCartPageTest [TestNG] C\Users\DELL\p2\poo\polyplugins\org.edipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.6.v20230204-1729\jre\bin\javaw.exe (15-Nov-2) [Temother TestNG] c\Users\DELL\p2\poo\polyplugins\org.edipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.6.v20230204-1729\jre\bin\javaw.exe (15-Nov-2) [Temother Test] contains the following property of the follow
```

# **Source Code:**

# **OrderPage Class:**

package com.sportyshoe.SeleniumCucumberScripts;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.support.FindBy;

import org.openga.selenium.support.PageFactory;

```
public class Orderpage {
@FindBy(linkText="Orders")
WebElement orderlink;
public Orderpage(WebDriver driver) {
PageFactory.initElements(driver, this);
}
public void click_orderPage()
{
orderlink.click();
}
}
OrderPageTest Class:
package com.sportyshoe.Test;
import org.testng.Assert;
import org.testng.annotations.BeforeTest;
import org.testng.annotations.Test;
import com.sportyshoe.SeleniumCucumberScripts.HomePage;
import com.sportyshoe.SeleniumCucumberScripts.LoginPage;
import com.sportyshoe.SeleniumCucumberScripts.Orderpage;
import com.sportyshoe.SeleniumCucumberScripts.RegisterPage;
import com.sportyshoe.SeleniumCucumberScripts.TestBase;
public class OrderPageTest extends TestBase{
HomePage hp;
```

```
RegisterPage rp;
LoginPage lp;
Orderpage op;
@BeforeTest
public void start_browser()
OpenBrowser("Chrome");
hp = new HomePage(driver);
rp = new RegisterPage(driver);
lp = new LoginPage(driver);
op = new Orderpage(driver);
}
@Test(priority='1')
public void test_login()
{
lp.user_login();
}
@Test(priority='2')
public void test_click_orders()
{
op.click_orderPage();
}
@Test(priority='3')
public void test_getTitle_page()
```

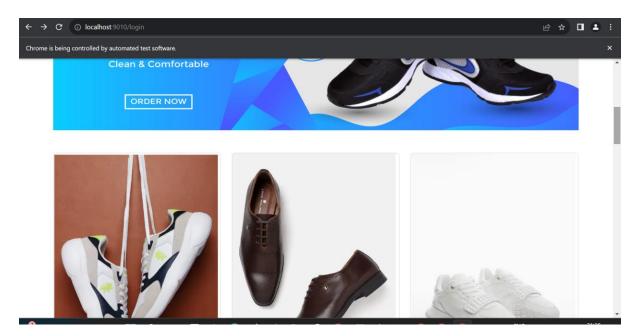
```
String expected = "http://localhost:9010/orders";
String Actual = hp.getURL_page();
Assert.assertEquals(Actual, expected);
}
```

## ScreenShots:

## Program:

```
📱 🛮 HomePage.java 🔎 HomePageTes... 🗈 RegisterPag... 🖟 RegisterPag... 🗥 LoginPageTes... 🖟 LoginPage.java 🗥 AddtoCartPa
  1 package com.sportyshoe.SeleniumCucumberScripts;
  30 import org.openqa.selenium.WebDriver;
  5 import org.openqa.selenium.WebElement;
  6 import org.openqa.selenium.support.FindBy;
  7 import org.openqa.selenium.support.PageFactory;
 9 public class Orderpage {
 11⊝
        @FindBy(linkText="Orders")
 12
        WebElement orderlink;
  13
 14
15⊝
       public Orderpage(WebDriver driver) {
 16
17
18
            PageFactory.initElements(driver, this);
       public void click_orderPage()
  20
            orderlink.click();
 24 }
 25
```

# **Output:**



# JMeter:

# **Steps:**

Record the scripts using blaze meter.

Login to blaze mater.

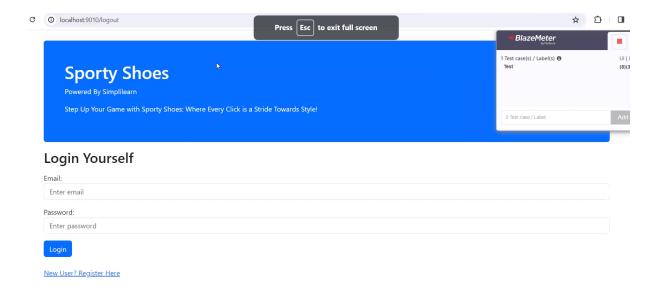
	<b>≡BlazeMet</b>	er rforce
	Sign In Register	
	G Sign In with Google	
	OR	
Ema	all	
Pass	ssword	
■ Re	temember me	Forgot Password?
	Sign In	
	Using SAML? Enter your work email and click (no need for password)	Sign In
	Using legacy SSO? Click here	
I will need extra 10 min since to finish u	up the scenarios. He's be with m	e. Let me quic

# Start recoding .

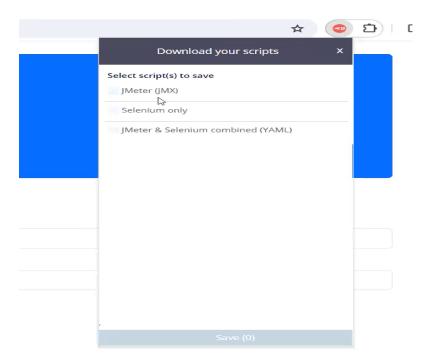


Enter email and password .

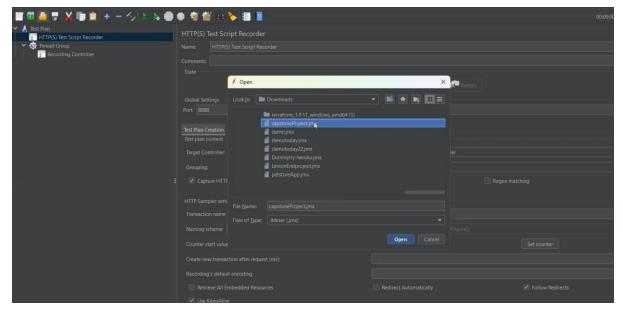
Click on login.

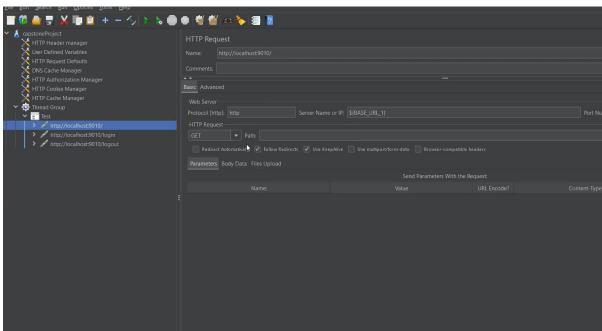


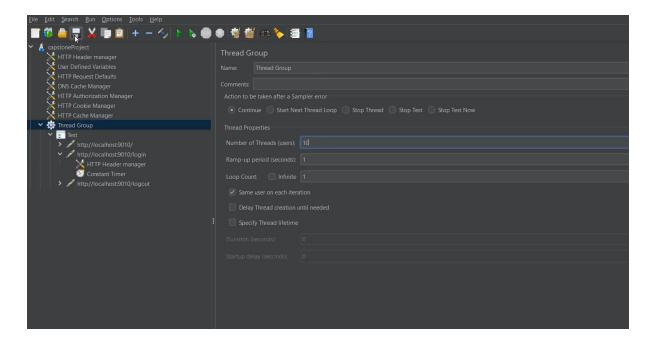
Stop the recording and save .



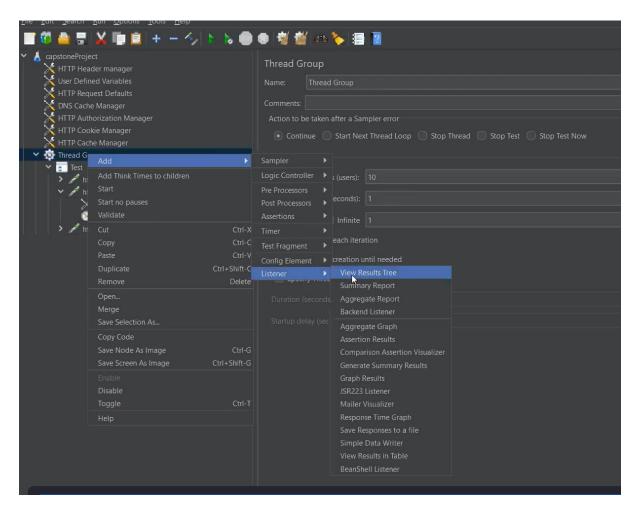
Import the recoded script from downloads .



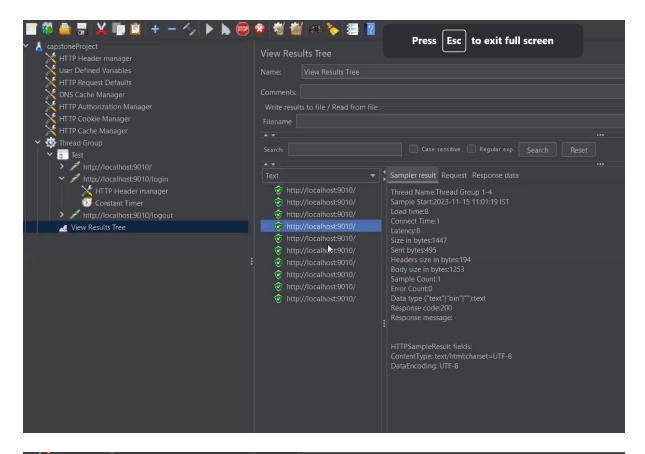


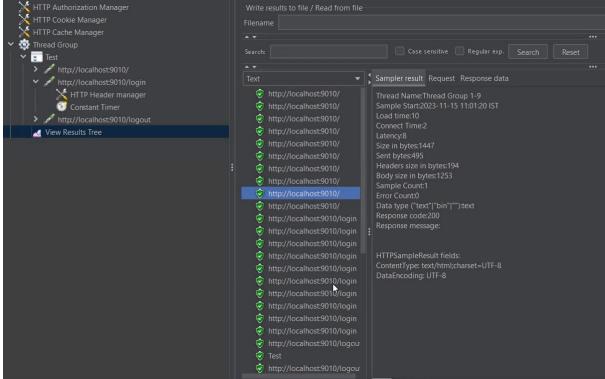


In the thread group add the Listener



Click on run.





# **Cucumber:**

## Feature file:

Feature: Implement The Capstone Project

Scenario: Rest API testing on localhost:9010

Given User send a get request to get all the shoes

Given User sends a Get request to get all the users

Given User sends a post request to add a new product

Given User sends a put request to update a product

Given User sends a delete request to add a new product

#### ScreenShot:

```
AddtoCartPag...  
AddtoCartPag...  
Orderpage.java  
OrderPageTes...  
sportyshoe.f... ×  
AddtoCartPag...  
Sportyshoe.f... ×  
AddtoCartPag...  
Orderpage.java  
OrderPageTes...  
Sportyshoe.f... ×  
AddtoCartPag...  
Sportyshoe.f... ×  
AddtoCartPag...  
Orderpage.java  
OrderPageTes...  
Sportyshoe.f... ×  
AddtoCartPag...  
Orderpage.java  
OrderpageTes...  
Orderp
```

```
Source Code:

package steps;

import io.cucumber.java.en.Given;

import io.restassured.RestAssured;

public class SportyShoe_steps {

@Given("User send a get request to get all the shoes")

public void user_send_a_get_request_to_get_all_the_shoes() {
```

```
RestAssured.given()
.baseUri("http://localhost:9010")
.basePath("/get-shoes")
.when()
.get()
.then()
.statusCode(200)
.log().all();
}
@Given("User sends a Get request to get all the users")
public void user_sends_a_get_request_to_get_all_the_users() {
RestAssured.given()
.baseUri("http://localhost:9010")
.basePath("/get-users")
//.basePath("/get-user/John Watson")
.when()
.get()
.then()
.statusCode(200)
.log().all();
}
@Given("User sends a post request to add a new product")
public void user_sends_a_post_request_to_add_a_new_product() {
RestAssured.given()
```

```
.baseUri("http://localhost:9010")
.basePath("/add-shoe")
.queryParam("id","1020")
.queryParam("image", "www.imge.com")
.queryParam("name","Nike")
.queryParam("category", "Running")
.queryParam("sizes","5,6,7")
.queryParam("price", "2000")
.when()
.post()
.then()
.log().all();
}
@Given("User sends a put request to update a product")
public void user_sends_a_put_request_to_update_a_product() {
RestAssured.given()
.baseUri("http://localhost:9010")
.basePath("/update-shoe")
.queryParam("id","1020")
.queryParam("image", "www.imge123.com")
.queryParam("name","Reebok")
.queryParam("category", "Running")
.queryParam("sizes","5,6,7")
.queryParam("price", "2500")
```

```
.when()
.put()
.then()
.log().all();
}
@Given("User sends a delete request to add a new product")
public void user_sends_a_delete_request_to_add_a_new_product() {
RestAssured.given()
.baseUri("http://localhost:9010")
.basePath("/update-shoe")
.queryParam("id","1020")
.when()
.delete()
.then()
.log().all();
}
}
```

ScreenShots:

Program:

```
2 HomePage.java 2 RegisterPag... 2 LoginPageTes... 2 LoginPagejava 2 AddtoCartPag... 2 AddtoCartPag... 2 Orderpagejava 3 OrderpageJava 3 OrderpageTes... 4 State CartPag... 3 OrderpageTes... 4 AddtoCartPag... 5 OrderpageTes... 5 OrderpageTes... 5 OrderpageTes... 5 OrderpageTes... 5 OrderpageTes... 5 OrderpageTes... 6 OrderpageTes... 6 OrderpageTes... 6 OrderpageTes... 7 OrderpageTes... 7 OrderpageTes... 7 OrderpageTes... 7 OrderpageTes... 7 OrderpageTes... 7 OrderpageTes... 8 OrderpageTes... 8 OrderpageTes... 8 OrderpageTes... 8 OrderpageTes... 8 OrderpageTes... 9 
       1 package steps;
      3 import io.cucumber.java.en.Given;
      5 import io.restassured.RestAssured;
      7 public class SportyShoe steps {
    10°@Given("User send a get request to get all the shoes")
11 public void user_send_a_get_request_to_get_all_the_shoes() {
                   RestAssured.given()
                   .baseUri("http://localhost:9010")
.basePath("/get-shoes")
                    .when()
                   .get()
                    .then()
                    .statusCode(200)
                    .log().all();
    20 }
    220@Given("User sends a Get request to get all the users")
    23 public void user_sends_a_get_request_to_get_all_the_users() {
                   RestAssured.given()
                   .basePath("/get-users")
//.basePath("/get-users")
//.basePath("/get-user/John Watson")
                    .when()
                    .get()
                    .then()
                    .statusCode (200)
                    .log().all();
    33 }
    35@@Given("User sends a post request to add a new product")
 36 public void user_sends_a_post_request_to_add_a_new_product() {
ြ HomePage.java ြ RegisterPag... ြ LoginPageTes... ြ LoginPage.java ြ AddtoCartPag... ြ AddtoCartPag... ြ Orderpage.java ြ OrderPage.java
      36 public void user_sends_a_post_request_to_add_a_new_product() {
                       RestAssured.given()
                      baseUri("http://localhost:9010")
basePath("/add-shoe")
.queryParam("id","1020")
.queryParam("image", "www.imge.com")
.queryParam("name", "Nike")
     40
                       .queryParam("category", "Running")
.queryParam("sizes", "5,6,7")
.queryParam("price", "2000")
                       .when()
                       .post()
                       .then()
                       .log().all();
     50
     51 }
     53@@Given("User sends a put request to update a product")
     54 public void user_sends_a_put_request_to_update_a_product() {
     55
                       RestAssured.given()
                       baseUri("http://localhost:9010")
basePath("/update-shoe")
.queryParam("id","1020")
     56
                       .queryParam("image", "www.imge123.com")
.queryParam("name", "Reebok")
                       queryParam("category", "Running")
.queryParam("sizes", "5,6,7")
.queryParam("price", "2500")
     64
                       .when()
      65
                       .put()
                       .then()
                       .log().all();
     68 }
      70@@Given("User sends a delete request to add a new product")
                                                                                                                                                         Writable
                                                                                                                                                                                                                                                    21:1:400
                                                                                                                                                                                                        Smart Insert
```

#### **Output:**

```
⊕ Console ×
<terminated> sportyshoe.feature [Cucumber Feature] C:\Users\DELL\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.6.v20230204-
   SLF4J: See http://www.slf4j.org/codes.html#StaticLoggerBinder for further details.
  HTTP/1.1 200
  Content-Type: application/json
  Transfer-Encoding: chunked
   Date: Wed, 15 Nov 2023 16:21:44 GMT
  Keep-Alive: timeout=60
  Connection: keep-alive
        "code": 101,
"message": "12 Shoes Fetched Successfully.",
         "shoes": [
               {
                    "id": 101,
"image": "1.png",
"name": "BlueWave Running Shoes",
"category": "Sports",
"sizes": "7, 8, 9",
"price": 2000
               },
                    "id": 201,
"image": "2.png",
"name": "Elegant Leather Loafers",
"category": "Formal",
"sizes": "7, 8, 9",
"price": 3000
               },
                     "id": 301,
"image": "3.png",
"name": "NeoFlex Athletic Shoes",
                     "category": "Sports",
"sizes": "7, 8, 9, 10",
"price": 4500
```

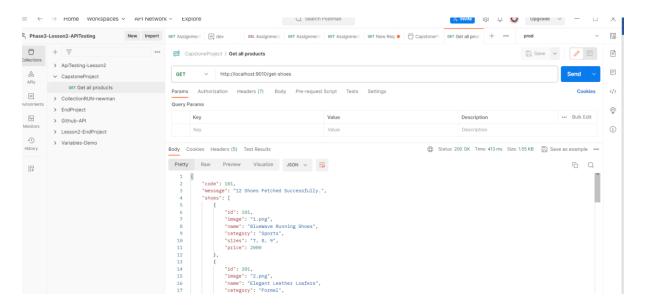
# **Postman:**

# Steps:

Add a collection and add a Get request.

Enter url.

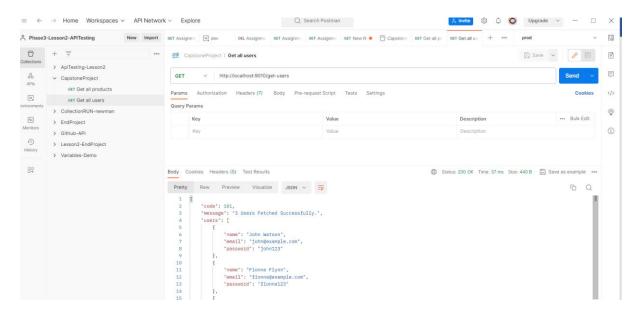
Click on save and send.



#### Add a get request for users

Enter url

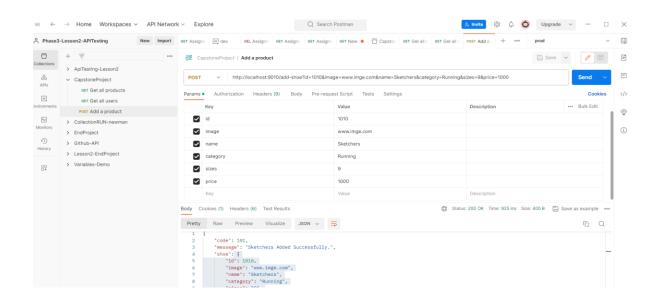
Click on save and send



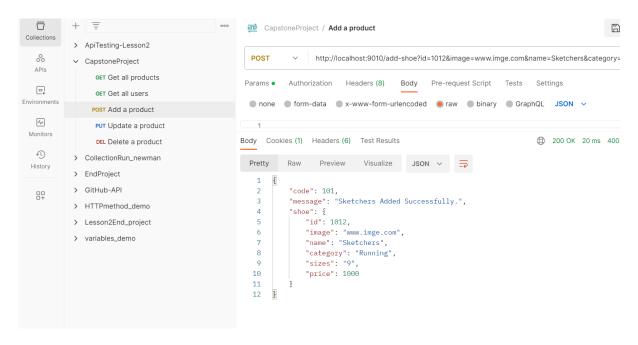
Add post request.

#### Enter url

Click on save and send.

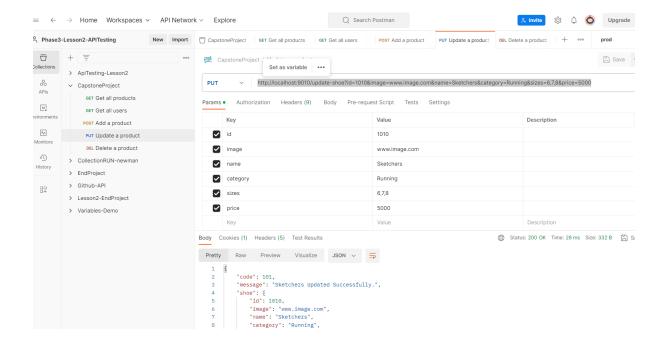


#### Click on save and send.

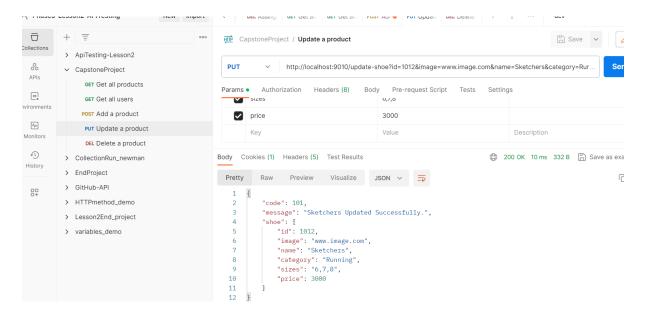


Add put request

Add params.



#### Save and send



#### Add delete request

Enter url

Save and send.

