

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

Writeups:-

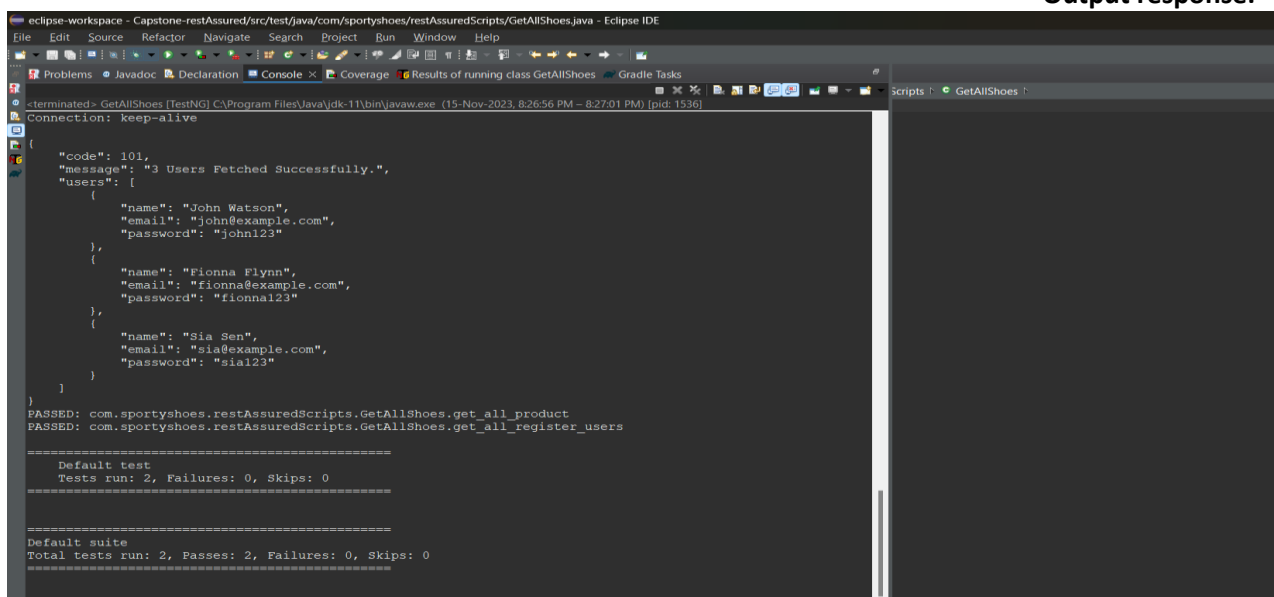
1. Automate the below API endpoints using Rest-Assured

- Here below we are retrieving the list of products in the store using Rest-Assured:

```
package com.sportyshoes.restAssuredScripts;
import org.testng.annotations.Test;
import io.restassured.RestAssured;

public class GetAllShoes {
    @Test(priority = '1')
    public void get_all_product()
    {
        RestAssured.given()
            .baseUrl ("http://localhost:9010")
            .basePath("/get-shoes")
            .when()
            .get()
            .then()
            .statusCode(200)
            .log()
            .all();
    }
}
```

Output response:



```
eclipse-workspace - Capstone-restAssured/src/test/java/com/sportyshoes/restAssuredScripts/GetAllShoes.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Problems Javadoc Declaration Console Coverage Results of running class GetAllShoes Gradle Tasks
-terminated> GetAllShoes [TestNG] C:\Program Files\Java\jdk-11\bin\javaw.exe (15-Nov-2023, 8:26:56 PM - 8:27:01 PM) [pid: 1536]
Connection: keep-alive
{
  "code": 101,
  "message": "3 Users Fetched Successfully.",
  "users": [
    {
      "name": "John Watson",
      "email": "john@example.com",
      "password": "john123"
    },
    {
      "name": "Fionna Flynn",
      "email": "fionna@example.com",
      "password": "fionna123"
    },
    {
      "name": "Sia Sen",
      "email": "sia@example.com",
      "password": "sia123"
    }
  ]
}
PASSED: com.sportyshoes.restAssuredScripts.GetAllShoes.get_all_product
PASSED: com.sportyshoes.restAssuredScripts.GetAllShoes.get_all_register_users

=====
Default test
Tests run: 2, Failures: 0, Skips: 0
=====

Default suite
Total tests run: 2, Passes: 2, Failures: 0, Skips: 0
=====
```

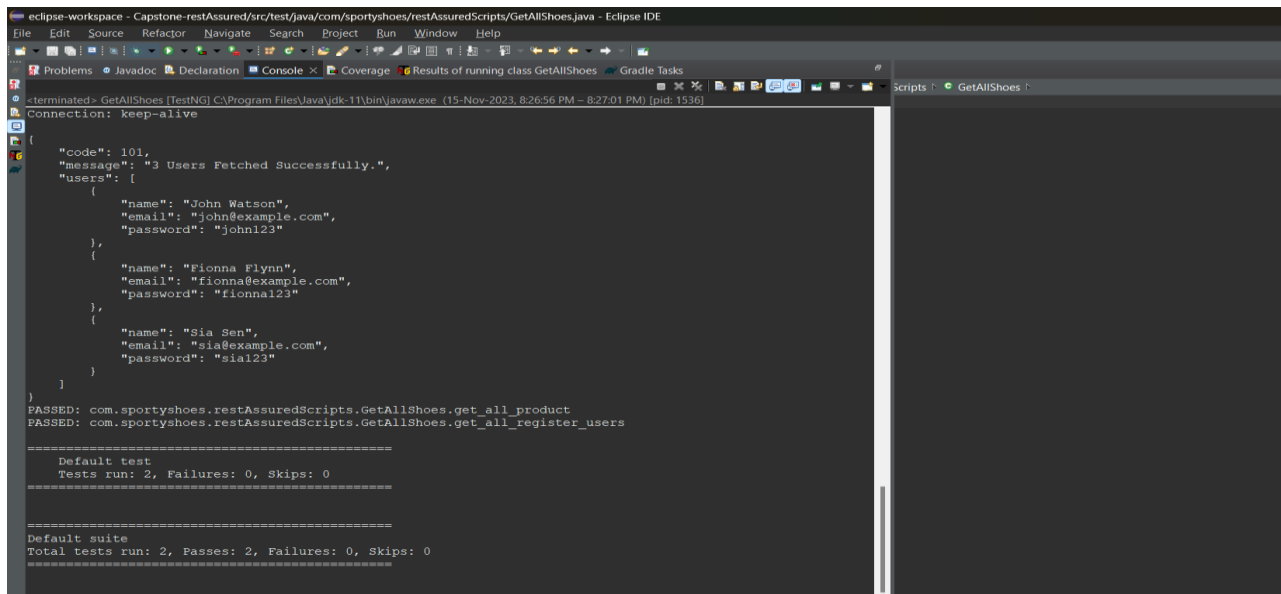
=====

- **Retrieving the list of all registered users:**

=====

```
@Test(priority = '2')
public void get_all_register_users()
{
    RestAssured.given()
        .baseUrl("http://localhost:9010")
        .basePath("/get-users")
        .when()
        .get()
        .then()
        .statusCode(200)
        .log()
        .all();
} }
```

Output response:



```
eclipse-workspace - Capstone-restAssured/src/test/java/com/sportyshoes/restAssuredScripts/GetAllShoes.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Problems Javadoc Declaration Console X Coverage Results of running class GetAllShoes Gradle Tasks
Connection: Keep-alive
{
  "code": 101,
  "message": "3 Users Fetched Successfully.",
  "users": [
    {
      "name": "John Watson",
      "email": "john@example.com",
      "password": "john123"
    },
    {
      "name": "Fionna Flynn",
      "email": "fionna@example.com",
      "password": "fionna123"
    },
    {
      "name": "Sia Sen",
      "email": "sia@example.com",
      "password": "sia123"
    }
  ]
}
PASSED: com.sportyshoes.restAssuredScripts.GetAllShoes.get_all_product
PASSED: com.sportyshoes.restAssuredScripts.GetAllShoes.get_all_register_users
=====
Default test
Tests run: 2, Failures: 0, Skips: 0
=====
Default suite
Total tests run: 2, Passes: 2, Failures: 0, Skips: 0
=====
```

=====

- **Add the Products:**

=====

```
package com.sportyshoes.restAssuredScripts;
```

```
import org.testng.annotations.Test;
```

```

import io.restassured.RestAssured;

public class Add_thenewProduct {

@Test
public void add_product()
{
RestAssured.given()
.baseUri("http://localhost:9010")
.basePath("/add-shoe")
.queryParam("id", "441")
.queryParam("image", "www.Pumashoes12.com")
.queryParam("name", "Puma")
.queryParam("category", "Sneakers")
.queryParam("sizes", "8,9")
.queryParam("price", "3500")
.when()
.post()
.then()
.log().all();
}}

```

Output response:

The screenshot displays the Eclipse IDE interface with two panes. The left pane shows the console output of a REST client test execution. The right pane shows the Java code for the test.

Console Output:

```

<terminated> Add_thenewProduct [TestNG] C:\Program Files\Java\jdk-11\bin\javaw.exe (15-Nov-2023, 8:29:52 PM)
[RemoteTestNG] detected TestNG version 7.7.1
SLF4J: Failed to load class "org.slf4j.impl.StaticLoggerBinder".
SLF4J: Defaulting to no-operation (NOP) logger implementation
SLF4J: See http://www.slf4j.org/codes.html#StaticLoggerBinder for further details.
HTTP/1.1 200
Set-Cookie: JSESSIONID=AA20A3666B291BEDBE760F9D48E405FD; Path=/; HttpOnly
Content-Type: application/json
Transfer-Encoding: chunked
Date: Wed, 15 Nov 2023 14:59:54 GMT
Keep-Alive: timeout=60
Connection: keep-alive

{
  "code": 101,
  "message": "Puma Added Successfully.",
  "shoe": {
    "id": 441,
    "image": "www.Pumashoes12.com",
    "name": "Puma",
    "category": "Sneakers",
    "sizes": "8,9",
    "price": 3500
  }
}
PASSED: com.sportyshoes.restAssuredScripts.Add_thenewProduct.add_product

=====
Default test
Tests run: 1, Failures: 0, Skips: 0
=====

=====
Default suite
Total tests run: 1, Passes: 1, Failures: 0, Skips: 0
=====

```

Java Code:

```

tng.annotations.Test;

Add_thenewProduct {

    @Test
    public void add_product()

    {
        RestAssured.given()
            .baseUri("http://localhost:9010")
            .basePath("/add-shoe")
            .queryParam("id", "441")
            .queryParam("image", "www.Pumashoes12.com")
            .queryParam("name", "Puma")
            .queryParam("category", "Sneakers")
            .queryParam("sizes", "8,9")
            .queryParam("price", "3500")
            .when()
            .post()
            .then()
            .log().all();
    }
}

```

=====

- **Update the products:**

=====

```
package com.sportyshoes.restAssuredScripts;

import org.testng.annotations.Test;

import io.restassured.RestAssured;

public class Update_product {

    @Test
    public void update_the_product()
    {

        RestAssured.given()
            .baseUrl("http://localhost:9010")
            .basePath("/update-shoe")
            .queryParams("id", "441")
            .queryParams("image", "www.image08.com")
            .queryParams("name", "Red Chief")
            .queryParams("category", "Formal")
            .queryParams("sizes", "7,9,10")
            .queryParams("price", "3200")
            .when()
            .put()
            .then()
            .log().all();
    }
}
```

The screenshot shows the Eclipse IDE interface with the following details:

- Top Bar:** eclipse-workspace - Capstone-restAssured/src/test/java/com/sportyshoes/restAssuredScripts/UpdateProduct.java - Eclipse IDE
- Menu Bar:** File, Edit, Source, Refactor, Navigate, Search, Project, Run, Window, Help
- Toolbar:** Standard Eclipse development tools.
- Project Explorer:** src/test/java, com.sportyshoes.restAssuredScripts, UpdateProduct.java
- Console:**

```

[RemoteTestNG] detected TestNG version 7.7.1
SLF4J: Failed to load class "org.slf4j.impl.StaticLoggerBinder".
SLF4J: Defaulting to no-operation (NOP) logger implementation
SLF4J: See http://www.slf4j.org/codes.html#StaticLoggerBinder for further
HTTP/1.1 200
Set-Cookie: JSESSIONID=5DC349E5446C49E26DFB9B2C314543A8; Path=/; HttpOnly
Content-Type: application/json
Transfer-Encoding: chunked
Date: Wed, 15 Nov 2023 15:00:49 GMT
Keep-Alive: timeout=60
Connection: keep-alive

{
  "code": 101,
  "message": "Red Chief Updated Successfully.",
  "shoe": {
    "id": 441,
    "image": "www.image08.com",
    "name": "Red Chief",
    "category": "Formal",
    "sizes": "7,9,10",
    "price": 3200
  }
}
PASSED: com.sportyshoes.restAssuredScripts.UpdateProduct.update_the_product

=====
Default test
Tests run: 1, Failures: 0, Skips: 0
=====

=====
Default suite
Total tests run: 1, Passes: 1, Failures: 0, Skips: 0
=====

```
- Editor:** UpdateProduct.java

```

tng.annotations.Test;

update_product {

    @Test
    void update_the_product() {

        assured.given()
            .uri("http://localhost:9010")
            .path("/update-shoe")
            .param("id", "441")
            .param("image", "www.image08.com")
            .param("name", "Red Chief")
            .param("category", "Formal")
            .param("sizes", "7,9,10")
            .param("price", "3200")
        )
        .when()
        .all();
    }
}

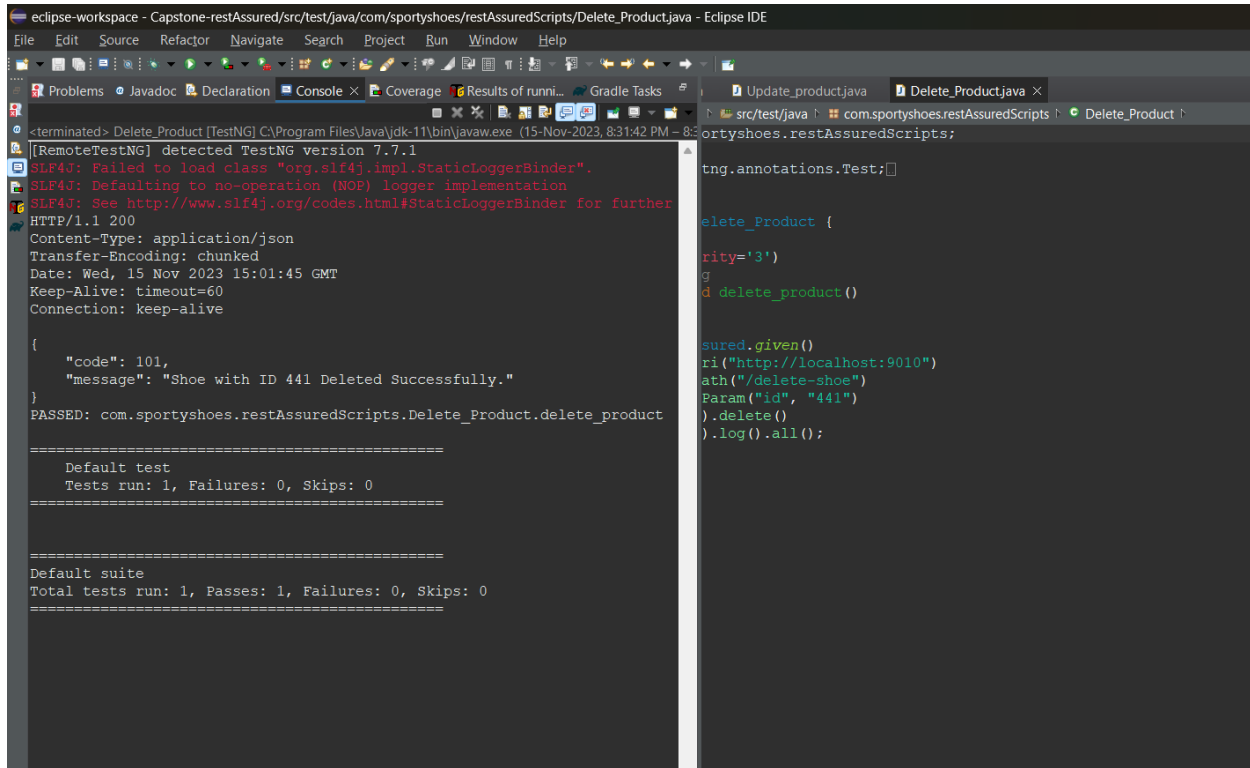
```

=====

```
@Test(priority='3')
public void delete_product()
{
    RestAssured.given()
        .baseUrl("http://localhost:9010")
        .basePath("/delete-shoe")
        .queryParams("id", "441")
        .when().delete()
        .then().log().all();
}
```

}}

Output response:



The screenshot shows the Eclipse IDE interface. The top toolbar includes icons for File, Edit, Source, Refactor, Navigate, Search, Project, Run, Window, and Help. Below the toolbar, there are tabs for Problems, Javadoc, Declaration, Console, Coverage, Results of running, and Gradle Tasks. The Console tab is active, displaying the output of a REST client test. The output shows a successful HTTP 200 response with a JSON body: {"code": 101, "message": "Shoe with ID 441 Deleted Successfully."}. The test is labeled "PASSED: com.sportyshoes.restAssuredScripts.Delete_Product.delete_product". The output also includes summary information: "Default test Tests run: 1, Failures: 0, Skips: 0" and "Default suite Total tests run: 1, Passes: 1, Failures: 0, Skips: 0". The right side of the IDE shows the source code for the test, which is a REST client script using the Rest Assured library to delete a shoe with ID 441.

```
<terminated> Delete_Product [TestNG] C:\Program Files\Java\jdk-11\bin\javaw.exe (15-Nov-2023, 8:31:42 PM - 8:31:42 PM)
[RemoteTestNG] detected TestNG version 7.7.1
SLF4J: Failed to load class "org.slf4j.impl.StaticLoggerBinder".
SLF4J: Defaulting to no-operation (NOP) logger implementation
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 15:01:45 GMT
Keep-Alive: timeout=60
Connection: keep-alive

{
  "code": 101,
  "message": "Shoe with ID 441 Deleted Successfully."
}
PASSED: com.sportyshoes.restAssuredScripts.Delete_Product.delete_product

=====
Default test
Tests run: 1, Failures: 0, Skips: 0
=====

=====
Default suite
Total tests run: 1, Passes: 1, Failures: 0, Skips: 0
=====

Delete_Product {
    @BeforeTest
    public void setUp() {
        tng.annotations.Test();
    }

    @Test
    public void delete_product() {
        given()
            .uri("http://localhost:9010")
            .path("/delete-shoe")
            .param("id", "441")
            .delete()
            .log().all();
    }
}
```

2. Selenium Scripts using TestNG to test all the pages with URL:

<http://localhost:9010/>

TestBase.java class:

```
package com.sportyshoes.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();

}
}
=====

```

▪ Selenium script for login page:

Loginpage.java class:

```

=====
package com.sportyshoes.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 Loginpagetest {

    @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 Loginpagetest(WebDriver driver) {
        PageFactory.initElements(driver, this);
    }
}

```

```

    }

    public void user_login()
    {
        loginEmail.sendKeys("dikshansh067@gmail.com");
        loginpassword.sendKeys("dikshansh@123");
        loginbtn.click();
    }
    public void click_cart()
    {
        clickCart.click();
    }
}

```

=====

Loginpagetest.java

=====

```
package com.sportyshoes.Test;
```

```

import org.testng.Assert;
import org.testng.annotations.BeforeTest;
import org.testng.annotations.Test;
import com.sportyshoes.SeleniumCucumberScripts.Homepagetest;
import com.sportyshoes.SeleniumCucumberScripts.Loginpagetest;
import com.sportyshoes.SeleniumCucumberScripts.Registerpagetest;
import com.sportyshoes.SeleniumCucumberScripts.TestBase;

```

```

public class Loginpagetest2 extends TestBase {
    Homepagetest hp;
    Registerpagetest rp;
    Loginpagetest lp;

    @BeforeTest
    public void start_browser()
    {
        OpenBrowser("Chrome");
        hp = new Homepagetest(driver);
        rp = new Registerpagetest(driver);
        lp = new Loginpagetest(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 Dikshansh !";
    String actualText = rp.validate_registration_Text();
    Assert.assertEquals(actualText, expected);
}

@Test(priority='4')
public void test_click_cart()
{
    lp.click_cart();
}
}

```

Output Response:

The screenshot shows the Eclipse IDE interface. The left pane displays the test results for 'Loginpagetest2'. The right pane shows the source code for 'Loginpagetest2.java'.

Test Results (Left Pane):

```

[RemoteTestNG] detected TestNG version 7.7.1
SLF4J: Failed to load class "org.slf4j.impl.StaticLoggerBinder".
SLF4J: Defaulting to no-operation (NOP) logger implementation
SLF4J: See http://www.slf4j.org/codes.html#StaticLoggerBinder for further details.
Nov 15, 2023 8:33:13 PM org.openqa.selenium.devtools.CdpVersionFinder find
WARNING: Unable to find an exact match for CDP version 119, so returning 118
PASSED: com.sportyshoes.Test.Loginpagetest2.test_getTitle_page
PASSED: com.sportyshoes.Test.Loginpagetest2.test_click_cart
PASSED: com.sportyshoes.Test.Loginpagetest2.Test_validate_registration_Text
PASSED: com.sportyshoes.Test.Loginpagetest2.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 (Right Pane):

```

tng.Assert;

loginpagetest2 extends TestBase {

    hp;
    rp;
    lp;

    t
    d start_browser()

    owser("Chrome");
    ew Homepagetest(driver);
    ew Registerpagetest(driver);
    ew Loginpagetest(driver);

    rity='1')
    g
    d test_login()
    r_login();

    rity='2')
    g
    d test_getTitle_page()

    expected = "http://localhost:9010/login";
    Actual = hp.getURL_page();
    .assertEquals(Actual, expected);

    = '3')

```

=====

Registrationpage.java class:

=====

```
package com.sportyshoes.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 Registerpagetest 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 Registerpagetest(WebDriver driver) {
        PageFactory.initElements(driver, this);
    }

    public void register_user()
    {
        registername.sendKeys("Dikshansh");
        registeremail.sendKeys("dikshansh067@gmail.com");
        registerpassword.sendKeys("dikshansh@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;
}}

```

=====

Registrationpagetest.java class:

=====

```

package com.sportyshoes.Test;

```

```

import static org.testng.Assert.assertEquals;

```

```

import org.testng.Assert;
import org.testng.annotations.BeforeTest;
import org.testng.annotations.Test;

```

```

import com.sportyshoes.SeleniumCucumberScripts.Homepagetest;
import com.sportyshoes.SeleniumCucumberScripts.Registerpagetest;
import com.sportyshoes.SeleniumCucumberScripts.TestBase;

```

```

public class Registerpagetest2 extends TestBase{

```

```

    Homepagetest hp;
    Registerpagetest rp;

```

```

    @BeforeTest
    public void start_browser()
    {
        OpenBrowser("Chrome");
        hp = new Homepagetest(driver);
        rp = new Registerpagetest(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);

}

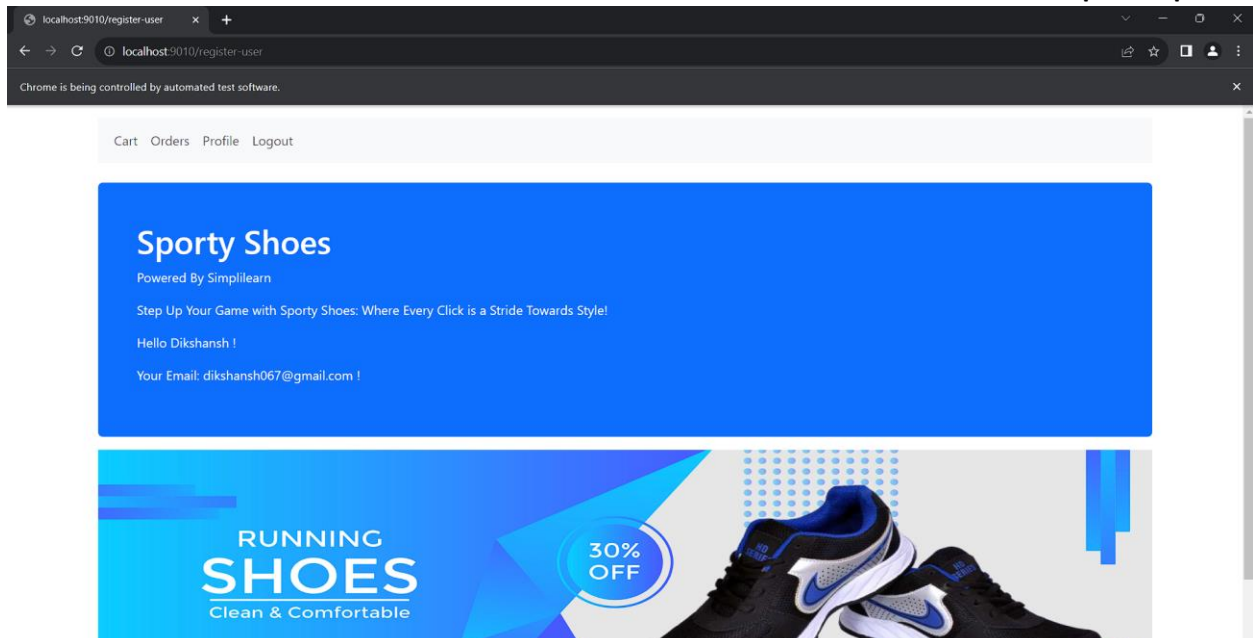
@Test(priority='3')
public void Test_register_user()
{
rp.register_user();
}

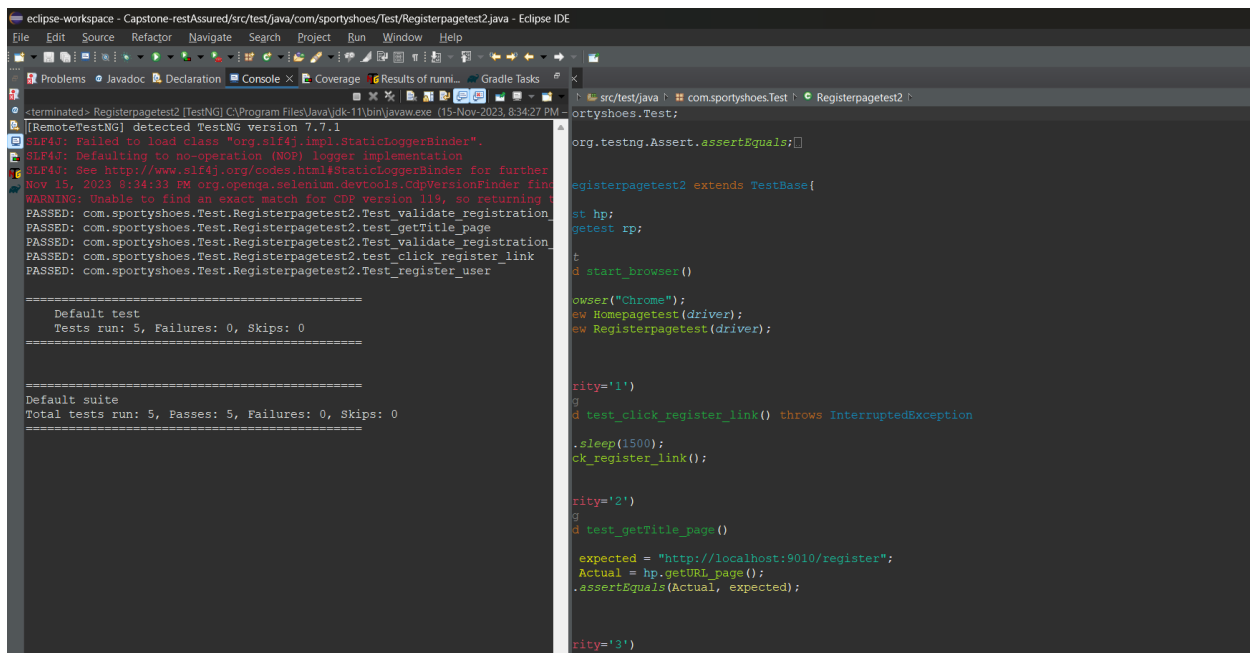
@Test(priority='4')
public void Test_validate_registration_URL()
{
String expected = "http://localhost:9010/register-user";
String Actual = rp.validate_registration_URL();
assertEquals(Actual, expected);
}

@Test(priority='5')
public void Test_validate_registration_Text()
{
String expected = "Hello Dikshansh !";
String actualText = rp.validate_registration_Text();
Assert.assertEquals(actualText, expected);
}}

```

Output Response:





=====

Addproducttocart.java class:

=====

```
package com.sportyshoes.SeleniumCucumberScripts;
```

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

```
public class Addtocarttest {
```

```
    @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 Addtocarttest(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;
    } }

```

=====

Addproducttocarttest.java class:

=====

```

package com.sportyshoes.Test;

import org.testng.Assert;
import org.testng.annotations.BeforeTest;
import org.testng.annotations.Test;

import com.sportyshoes.SeleniumCucumberScripts.Addtocarttest;
import com.sportyshoes.SeleniumCucumberScripts.Homepagetest;
import com.sportyshoes.SeleniumCucumberScripts.Loginpagetest;
import com.sportyshoes.SeleniumCucumberScripts.Registerpagetest;
import com.sportyshoes.SeleniumCucumberScripts.TestBase;

public class Addtocarttest2 extends TestBase {

    Homepagetest hp;
    Registerpagetest rp;
    Loginpagetest lp;
    Addtocarttest ac;

    @BeforeTest
    public void start_browser()
    {
        OpenBrowser("Chrome");
        hp = new Homepagetest(driver);
    }

```

```

rp = new Registerpagetest(driver);
lp = new Loginpagetest(driver);
ac = new Addtocarttest(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);
}

@Test (priority='4')
public void closeBrowser()
{
driver.close();
}
}

```

Output Response:

```

eclipse-workspace - Capstone-restAssured/src/test/java/com/sportyshoes/Test/Addtocarttest2.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Problems Javadoc Declaration Console X Coverage Results of running class Addtocarttest2 Gradle Tasks
<terminated> Addtocarttest2 [TestNG] C:\Program Files\Java\jdk-11\bin\javaw.exe (15-Nov-2023, 8:38:18 PM - 8:38:36 PM) [pid: 9748]
[RemoteTestNG] detected TestNG version 7.7.1
SLF4J: Failed to load class "org.slf4j.impl.StaticLoggerBinder".
SLF4J: Defaulting to no-operation (NOP) logger implementation
SLF4J: See http://www.slf4j.org/codes.html#StaticLoggerBinder for further details.
Nov 15, 2023 8:38:25 PM org.openqa.selenium.devtools.CdpVersionFinder.findNearestMatch
WARNING: Unable to find an exact match for CDP version 119, so returning the closest version
PASSED: com.sportyshoes.Test.Addtocarttest2.test_login
PASSED: com.sportyshoes.Test.Addtocarttest2.test_validate_success_message
PASSED: com.sportyshoes.Test.Addtocarttest2.test_add_product_to_cart
PASSED: com.sportyshoes.Test.Addtocarttest2.closeBrowser

=====
Default test
Tests run: 4, Failures: 0, Skips: 0
=====

Default suite
Total tests run: 4, Passes: 4, Failures: 0, Skips: 0
=====

```

=====

Orderpage.java class:

=====

```
package com.sportyshoes.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 Orderpagetest {

    @FindBy(linkText="Orders")
    WebElement orderlink;

    public Orderpagetest(WebDriver driver) {
        PageFactory.initElements(driver, this);
    }

    public void click_orderPage()
    {
        orderlink.click();
    }
}
```

=====

Orderpagetest.java class:

=====

```
package com.sportyshoes.Test;
```

```
import org.testng.Assert;
import org.testng.annotations.BeforeTest;
import org.testng.annotations.Test;
```

```
import com.sportyshoes.SeleniumCucumberScripts.Homepagetest;
import com.sportyshoes.SeleniumCucumberScripts.Loginpagetest;
import com.sportyshoes.SeleniumCucumberScripts.Orderpagetest;
import com.sportyshoes.SeleniumCucumberScripts.Registerpagetest;
```



```
import com.sportyshoes.SeleniumCucumberScripts.TestBase;
```

```
public class Orderpagetest2 extends TestBase{
```

```
    Homepagetest hp;  
    Registerpagetest rp;  
    Loginpagetest lp;  
    Orderpagetest op;
```

```
    @BeforeTest
```

```
    public void start_browser()
```

```
    {  
        OpenBrowser("Chrome");  
        hp = new Homepagetest(driver);  
        rp = new Registerpagetest(driver);  
        lp = new Loginpagetest(driver);  
        op = new Orderpagetest(driver);  
    }
```

```
    @Test(priority='1')
```

```
    public void test_login()
```

```
    {  
        lp.user_login();  
    }
```

```
    @Test(priority='2')
```

```
    public void test_click_orders()
```

```
    {  
        op.click_orderPage();  
    }
```

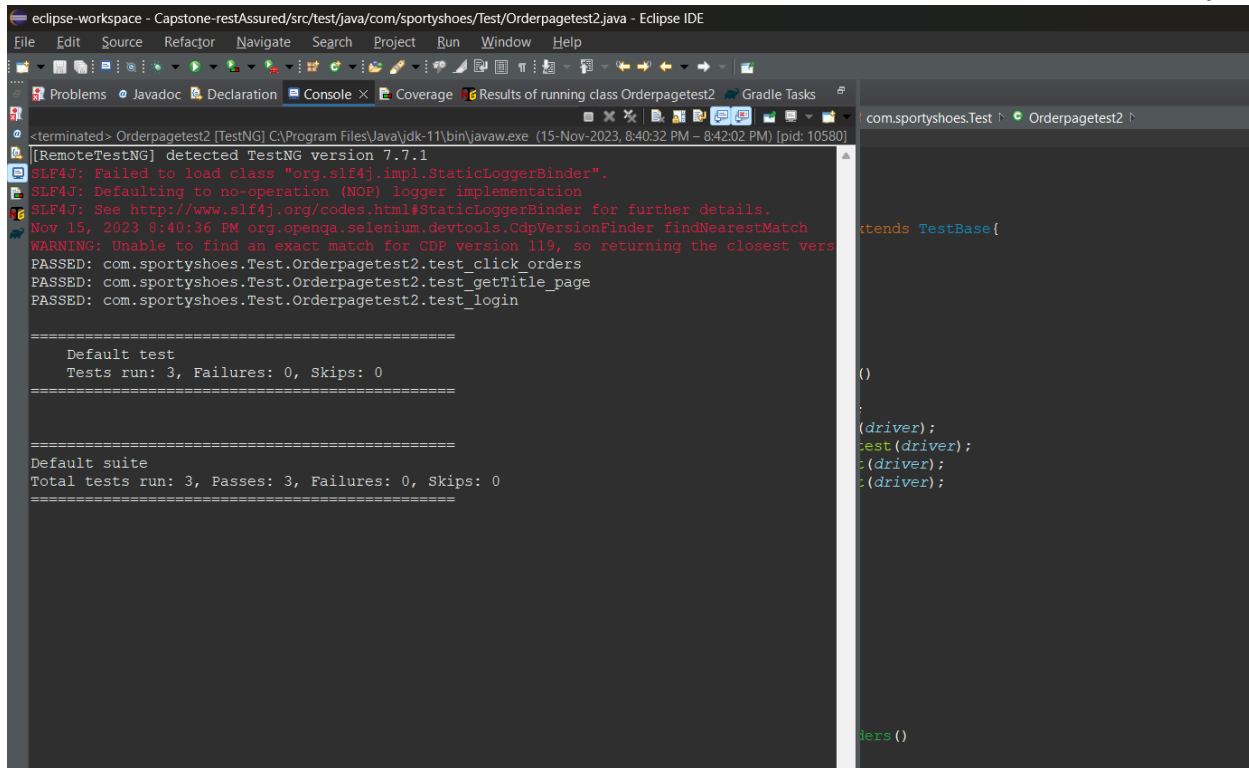
```
    @Test(priority='3')
```

```
    public void test_getTitle_page()
```

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

```
}
```

Output:



The screenshot shows the Eclipse IDE interface. The top menu bar includes File, Edit, Source, Refactor, Navigate, Search, Project, Run, Window, and Help. Below the menu bar is a toolbar with various icons. The main workspace is divided into two panes. The left pane, titled 'Console', displays the output of running the 'Orderpagetest2' class. The output shows that the tests passed, with a summary indicating 3 tests run, 0 failures, and 0 skips. The right pane, titled 'com.sportyshoes.Test > Orderpagetest2', shows the source code of the test class, which extends 'TestBase' and contains several test methods.

```
<terminated> Orderpagetest2 [TestNG] C:\Program Files\Java\jdk-11\bin\javaw.exe (15-Nov-2023, 8:40:32 PM - 8:42:02 PM) [pid: 10580]
[RemoteTestNG] detected TestNG version 7.7.1
SLF4J: Failed to load class "org.slf4j.impl.StaticLoggerBinder".
SLF4J: Defaulting to no-operation (NOP) logger implementation
SLF4J: See http://www.slf4j.org/codes.html#StaticLoggerBinder for further details.
Nov 15, 2023 8:40:36 PM org.openqa.selenium.devtools.CdpVersionFinder findNearestMatch
WARNING: Unable to find an exact match for CDP version 119, so returning the closest version
PASSED: com.sportyshoes.Test.Orderpagetest2.test_click_orders
PASSED: com.sportyshoes.Test.Orderpagetest2.test_getTitle_page
PASSED: com.sportyshoes.Test.Orderpagetest2.test_login

=====
Default test
Tests run: 3, Failures: 0, Skips: 0
=====

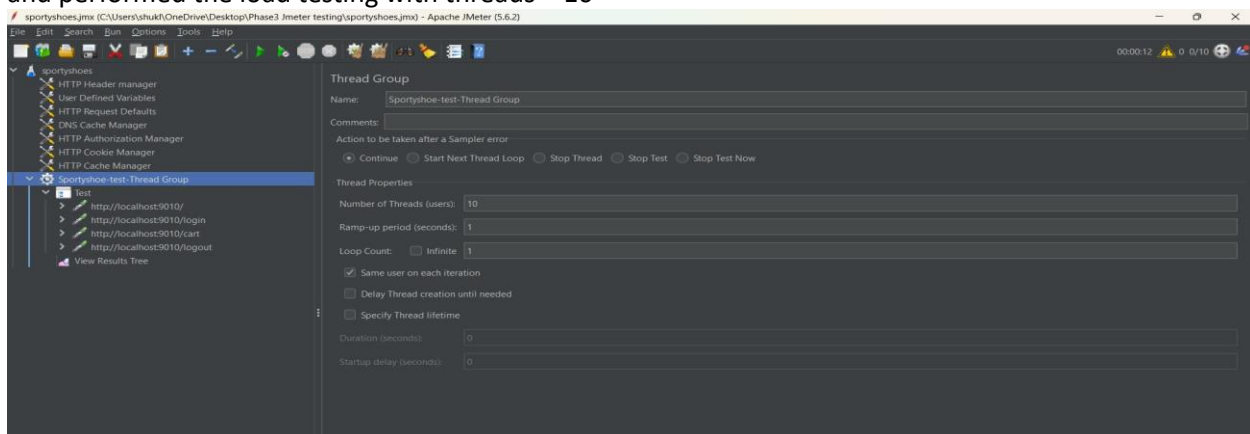
Default suite
Total tests run: 3, Passes: 3, Failures: 0, Skips: 0
=====

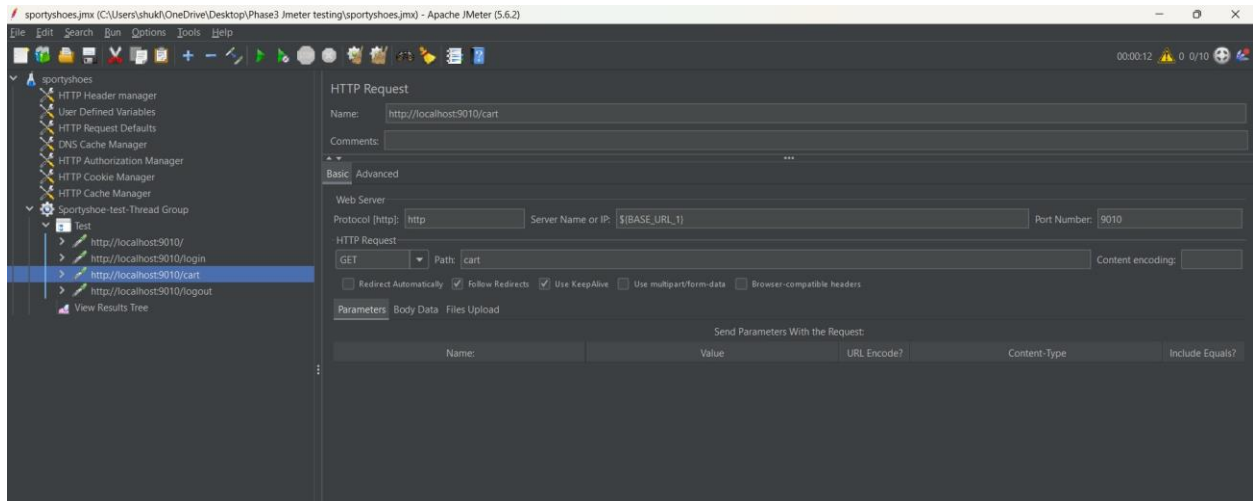
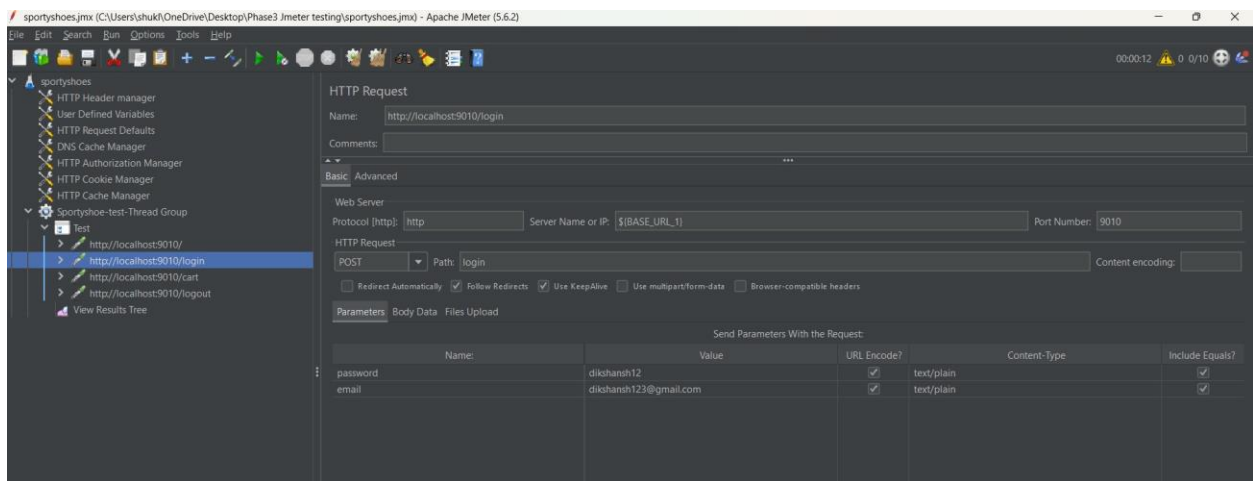
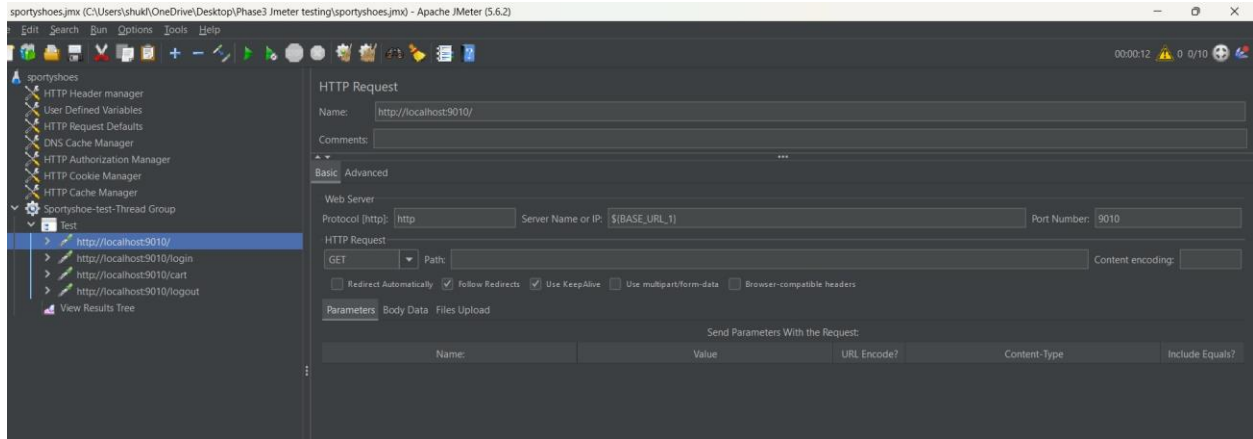
com.sportyshoes.Test > Orderpagetest2
Orderpagetest2 extends TestBase{
    public Orderpagetest2() {
        super();
    }
    public void test_click_orders() {
        driver.get("http://localhost:9010/");
        test(driver);
    }
    public void test_getTitle_page() {
        driver.get("http://localhost:9010/");
        test(driver);
    }
    public void test_login() {
        driver.get("http://localhost:9010/login");
        test(driver);
    }
}
```

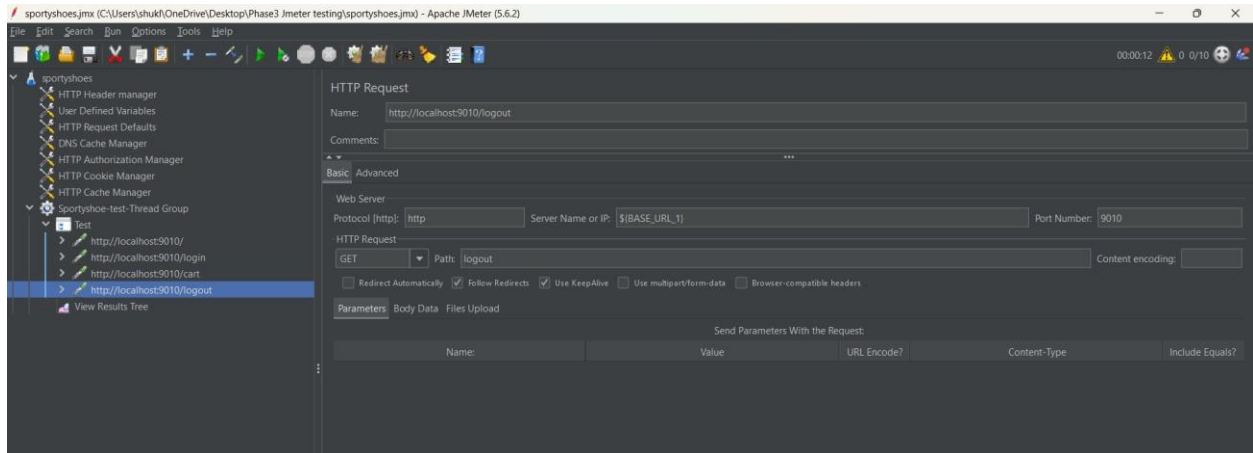


3. Create JMeter scripts to do load testing of the homepage and the product detail page.

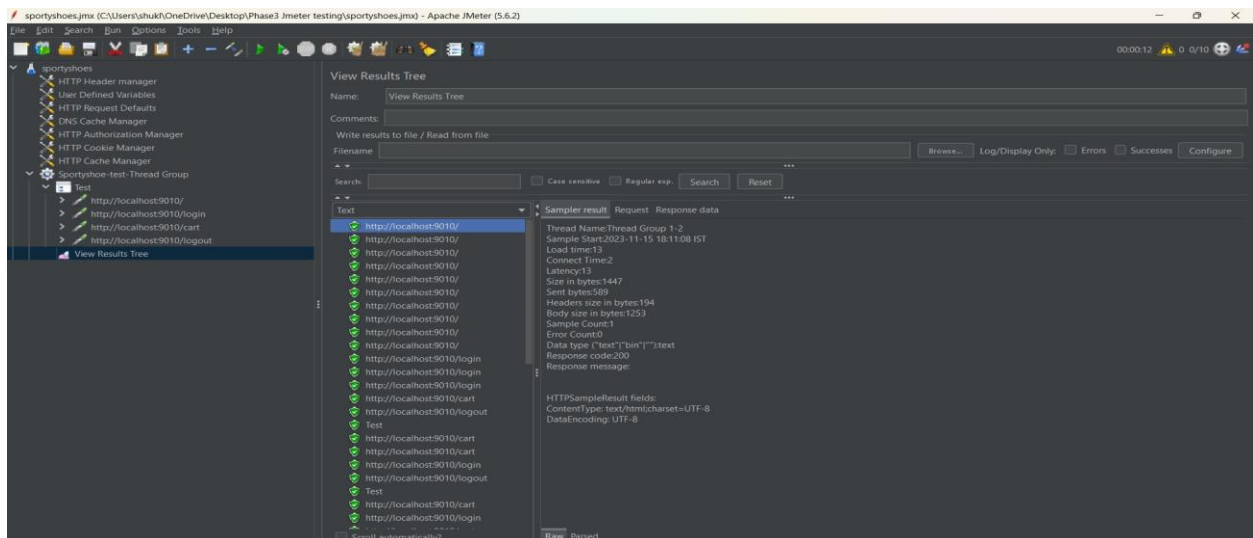
The below are the scripts which had been recorded on <http://localhost:9010/> -> login -> cart -> logout and performed the load testing with threads = 10







Output Response:



4. Setup Cucumber in Java Project and write Feature Files using Gherkin to test the API endpoints mentioned in point 1 above.

Sportyshoe.feature file:

=====

Feature: Implement The Capstone Project

Scenario: Rest API testing on localhost:9010

- Given User send a Get request to display product list and validates status
- Given User sends a Get request to get list of registered users and validates status
- Given User send Post request to Add product and validates status
- Given User sends a Put request to update product and validates status
- Given User sends a Del request to delete product from list and validates status

Steps file:

(sportyshoes_validate.java)

=====

```
package steps;
```

```
import io.cucumber.java.en.Given;  
import io.restassured.RestAssured;
```

```
public class sportyshoes_validation {
```

```
    @Given("User send a Get request to display product list and validates status")  
    public void user_send_a_get_request_to_display_product_list_and_validates_status() {
```

```
        RestAssured.given()  
            .baseUrl("http://localhost:9010")  
            .basePath("/get-shoes")  
            .when()  
            .get()  
            .then()  
            .statusCode(200)  
            .log()  
            .all();
```

```
    }
```

```
    @Given("User sends a Get request to get list of registered users and validates status")  
    public void user_sends_a_get_request_to_get_list_of_registered_users_and_validates_status() {
```

```
        RestAssured.given()  
            .baseUrl("http://localhost:9010")  
            .basePath("/get-users")  
            .when()  
            .get()  
            .then()  
            .statusCode(200)  
            .log()  
            .all();
```

```
    }
```

```
    @Given("User send Post request to Add product and validates status")  
    public void user_send_post_request_to_add_product_and_validates_status() {
```

```
        RestAssured.given()  
            .baseUrl("http://localhost:9010")  
            .basePath("/add-shoe")
```

```

        .queryParams("id", "441")
        .queryParams("image", "www.Pumashoes12.com")
        .queryParams("name", "Puma")
        .queryParams("category", "Sneakers")
        .queryParams("sizes", "8,9")
        .queryParams("price", "3500")
        .when()
        .post()
        .then()
        .log().all();
    }

```

```

@Given("User sends a Put request to update product and validates status")
public void user_sends_a_put_request_to_update_product_and_validates_status() {

```

```

    RestAssured.given()
        .baseUrl("http://localhost:9010")
        .basePath("/update-shoe")
        .queryParams("id", "441")
        .queryParams("image", "www.image08.com")
        .queryParams("name", "Red Chief")
        .queryParams("category", "Formal")
        .queryParams("sizes", "7,9,10")
        .queryParams("price", "3200")
        .when()
        .put()
        .then()
        .log().all();
}

```

```

@Given("User sends a Del request to delete product from list and validates status")
public void user_sends_a_del_request_to_delete_product_from_list_and_validates_status() {

```

```

    RestAssured.given()
        .baseUrl("http://localhost:9010")
        .basePath("/delete-shoe")
        .queryParams("id", "441")
        .when().delete()
        .then().log().all();
}
}

```

=====

Cucumber Output response:

```
eclipse-workspace - Capstone-restAssured/src/test/java/features/sportyshoes.feature - Eclipse IDE
File Edit Navigate Search Project Run Window Help
Problems Javadoc Declaration Console Coverage Results of running class Addtocarttest2 Gradle Tasks
@-terminated> sportyshoes.feature [Cucumber Feature] C:\Program Files\Java\jdk-11\bin\javaw.exe (15-Nov-2023, 5:45:01 PM - 5:45:05 PM) [pid: 37668]
    *price": 3200
  }
}
Given User sends a Put request to update product and validates status # steps.sportyshoes_val
HTTP/1.1 200
Content-Type: application/json
Transfer-Encoding: chunked
Date: Wed, 15 Nov 2023 12:15:04 GMT
Keep-Alive: timeout=60
Connection: keep-alive

{
  "code": 101,
  "message": "Shoe with ID 441 Deleted Successfully."
}
Given User sends a Del request to delete product from list and validates status # steps.sportyshoes_val

1 Scenarios (1 passed)
5 Steps (5 passed)
0m2.862s

Share your Cucumber Report with your team at https://reports.cucumber.io
Activate publishing with one of the following:

src/test/resources/cucumber.properties:  cucumber.publish.enabled=true
src/test/resources/junit-platform.properties:  cucumber.publish.enabled=true
Environment variable:  CUCUMBER_PUBLISH_ENABLED=true
JUnit:  @CucumberOptions(publish = true)

More information at https://cucumber.io/docs/cucumber/environment-variables/

Disable this message with one of the following:

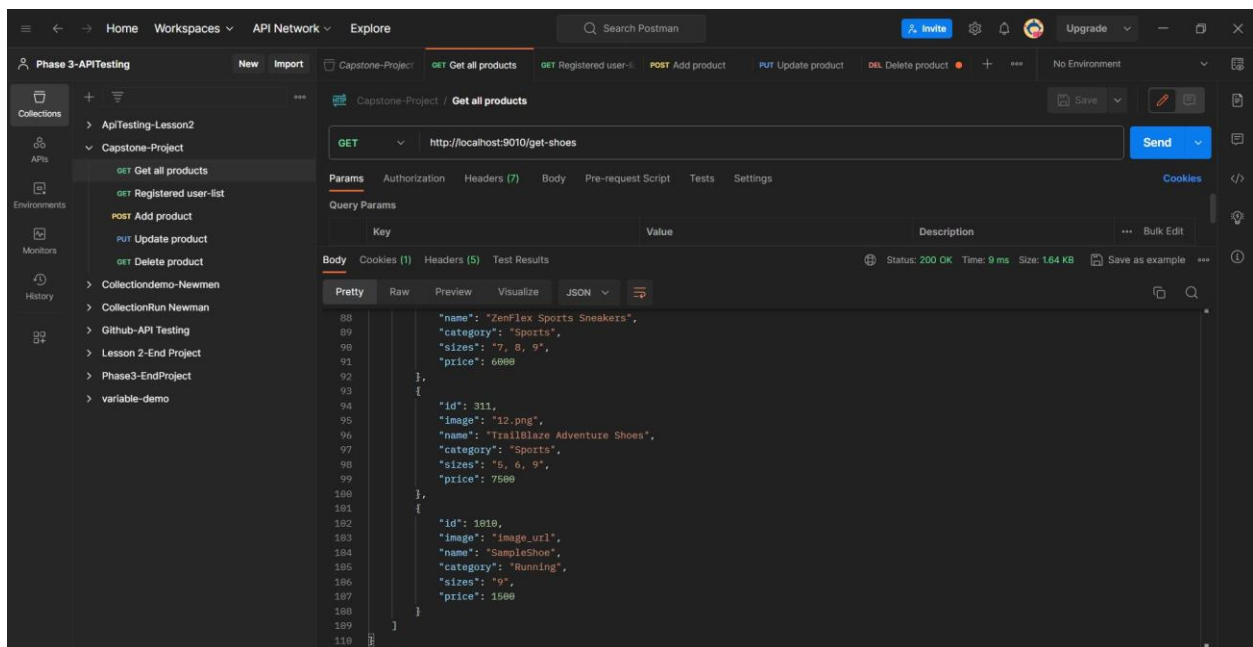
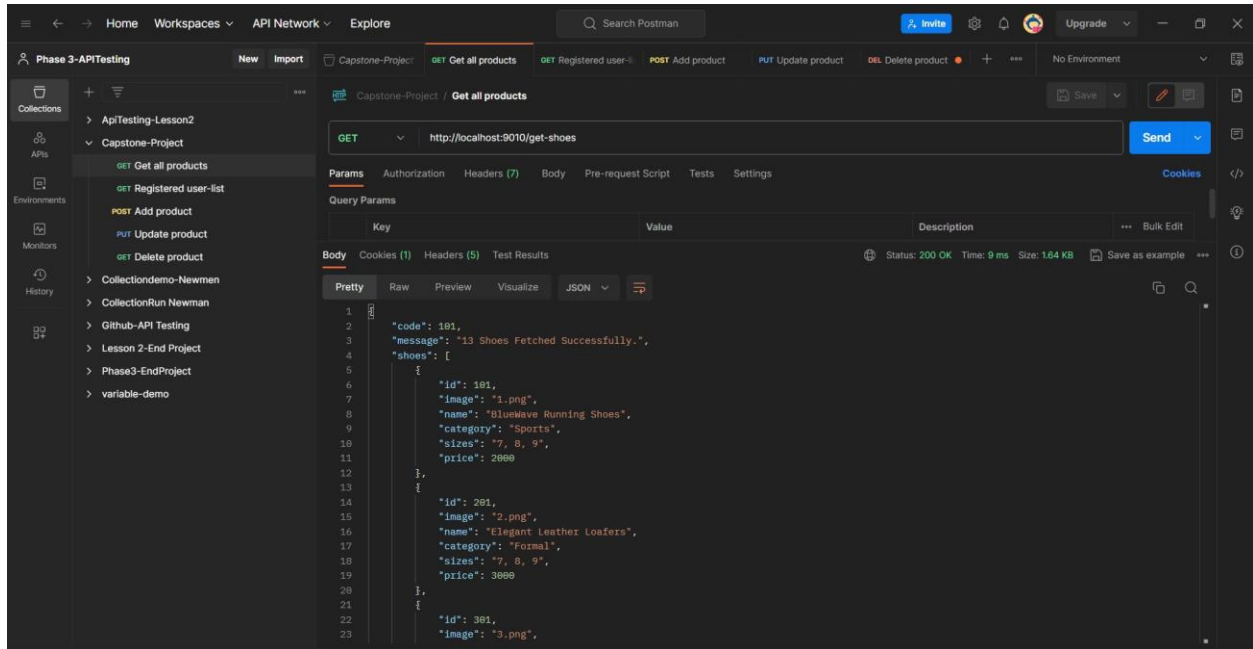
src/test/resources/cucumber.properties:  cucumber.publish.quiet=true
src/test/resources/junit-platform.properties:  cucumber.publish.quiet=true

    act list and validates status
    registered users and validates status
    nd validates status
    act and validates status
    act from list and validates status
```

5. Create Postman scripts to test the following API endpoints:

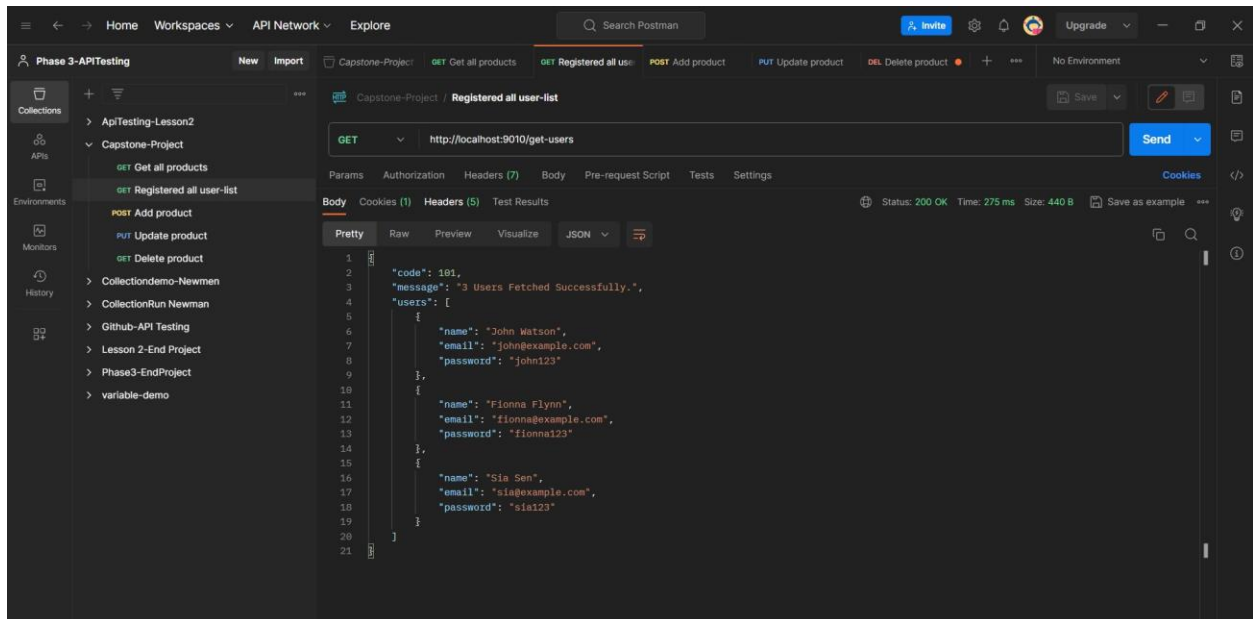
Display all products in the store:

Here below we have created a new collection from top left (+) symbol with name Capstone-Project after that we have Added a Get request to retrieve all the products with url <http://localhost:9010/get-shoes> and then we have save the request and click on send to get the below response



Display list of all registered users:

we have Added a Get request to retrieve all the registered users with url <http://localhost:9010/get-users> and then we have save the request and click on send to get the below response



Add the Products:

we have Added a POST request to Add the product on the list of product with url

[http://localhost:9010/add-](http://localhost:9010/add-shoe?id=1010&image=www.image.com_url&name=SampleShoe&category=Running&sizes=9&price=1000)

[shoe?id=1010&image=www.image.com_url&name=SampleShoe&category=Running&sizes=9&price=1000](http://localhost:9010/add-shoe?id=1010&image=www.image.com_url&name=SampleShoe&category=Running&sizes=9&price=1000) and then we have save the request and click on send to get the below response.

The screenshot displays the Postman interface with a POST request configured for the endpoint `http://localhost:9010/add-shoe?id=1010&image=www.imge.com&name=Sneakers&category=Running&sizes=9&price=1000`. The request parameters are as follows:

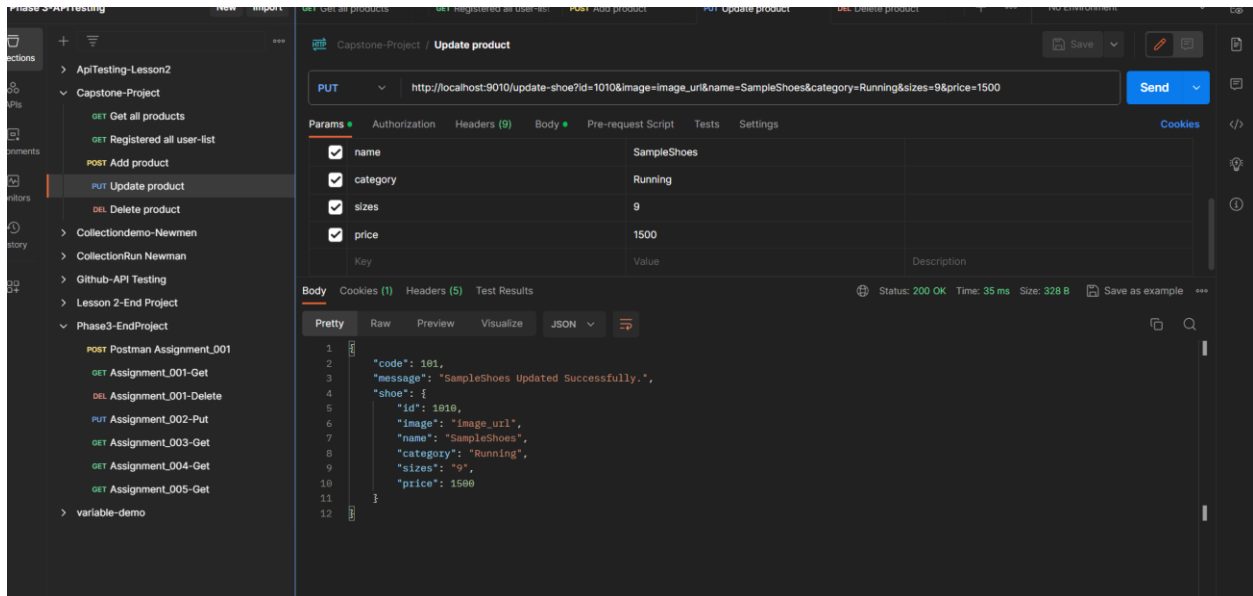
Key	Value	Description
name	Sneakers	
category	Running	
sizes	9	
price	1000	

The response is shown in the 'Body' tab, indicating a successful status of 200 OK. The response body is a JSON object:

```
1 {
2   "code": 101,
3   "message": "Sneakers Added Successfully.",
4   "shoe": {
5     "id": 1010,
6     "image": "www.image.com",
7     "name": "Sneakers",
8     "category": "Running",
9     "sizes": "9",
10    "price": 1000
11  }
12 }
```

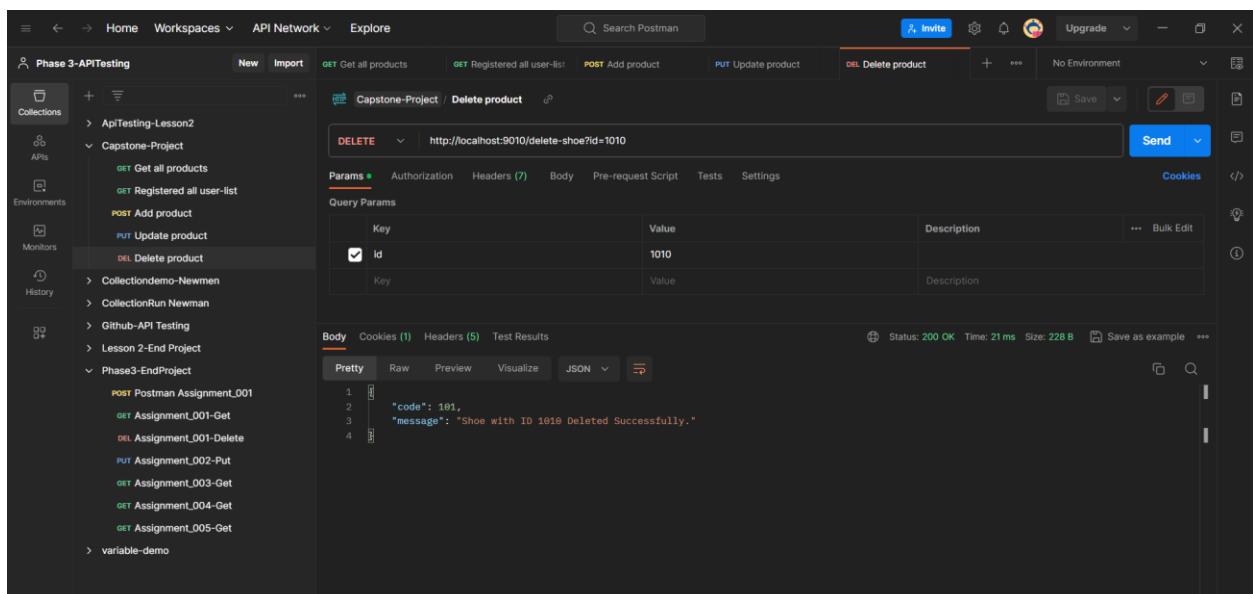
Update Products:

Here we have Added a PUT request to update the request which had been already created in the above Add product , however with URL http://localhost:9010/update-shoe?id=1010&image=www.image.com_url&name=SampleShoe&category=Running&sizes=9&price=1000



Delete Product

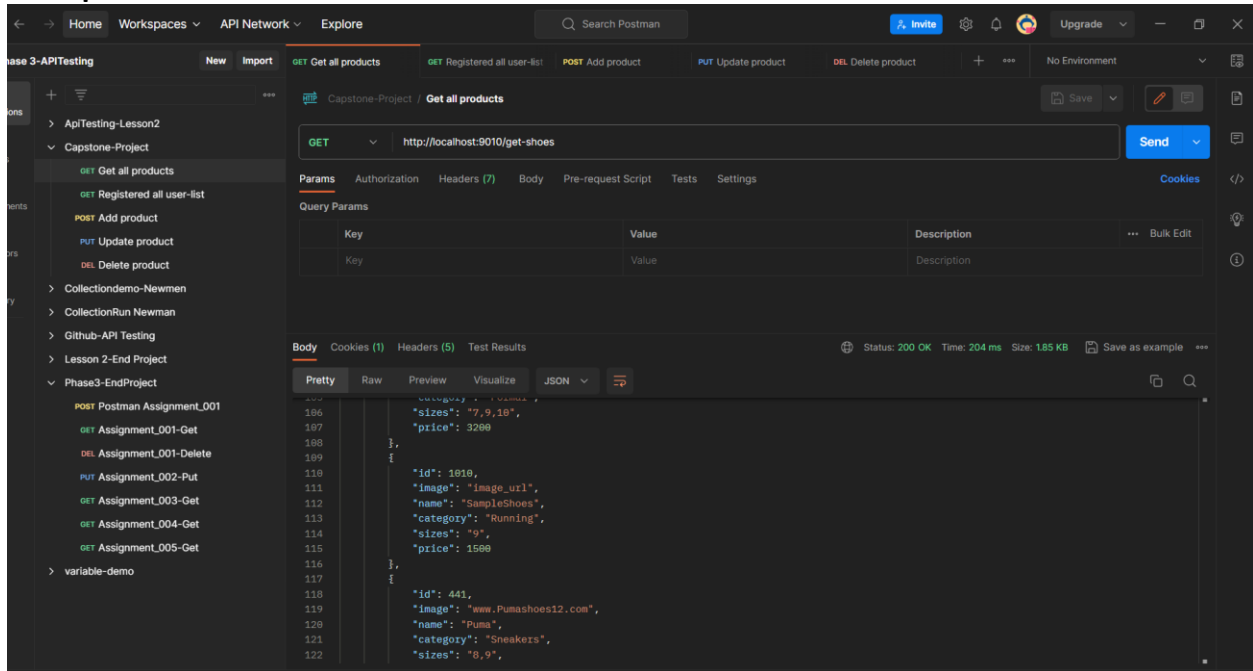
Here we are deleting the product which we have create on GET request with url <http://localhost:9010/delete-shoe?id=1010>



Therefore, for the Above Delete scenario I have found an issue which is stated below:

Bug : Upon executing deletion request for the ID ="1010" as shown above the product is not deleting from the all product list, However that needs to be fixed by the developer.

Eventually after successful deletion of product with ID 1010 , the product is yet vnot deleted in All product list:



Github URL:

<https://github.com/DikshanshSh/Java-fsd/tree/main/Capstone-Project%2001>