HARSHITHA NA

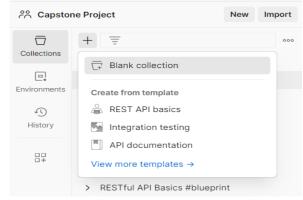
<u>Capstone Project: Create a Testing Framework for Sporty Shoes</u> Website

Source code for capstone Project:

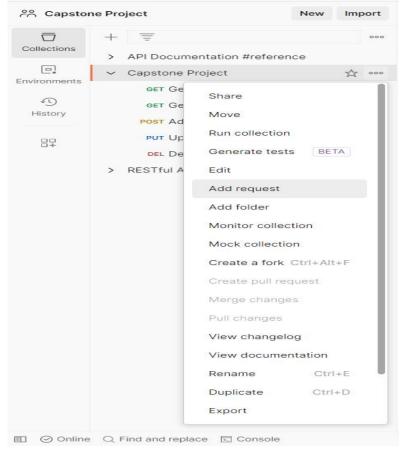
Creating a Testing Framework for sporty shoes website:

- 1. Create Postman scripts to test the following API endpoints:
 - Retrieve thelist of all products in the store.
 - Retrieve the list of all registered users.
 - Add the product.
 - Delete the product.
 - Update the product.

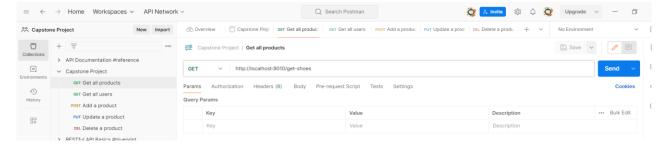
First go to postman application



Click on + symbol here show 2 options select blank collection and put name as Capstone Project.

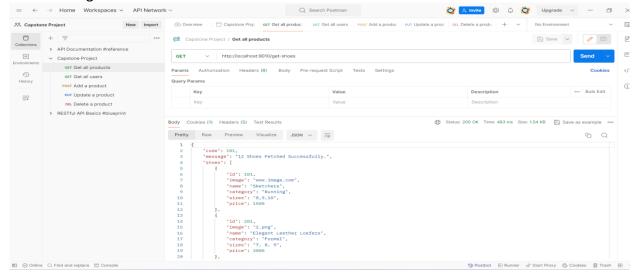


Next step capstone project have 3 dots click on 3 dots have option Add request Put name as Get all Products



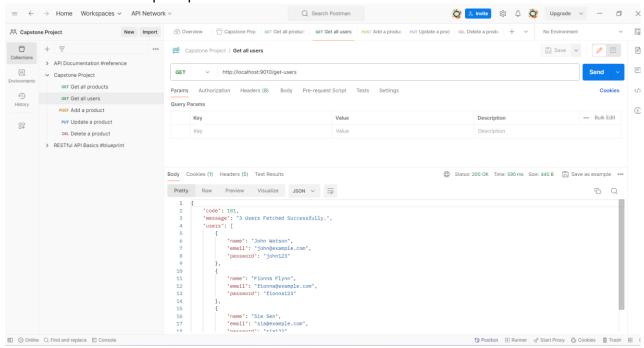
Enter URL in GET method http://localhost:9010/get-shoes

After adding URL click on save button and run this URL



This above picture is the GET all products output

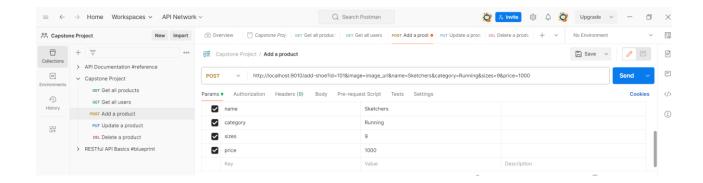
Next select another request put name as GET all users



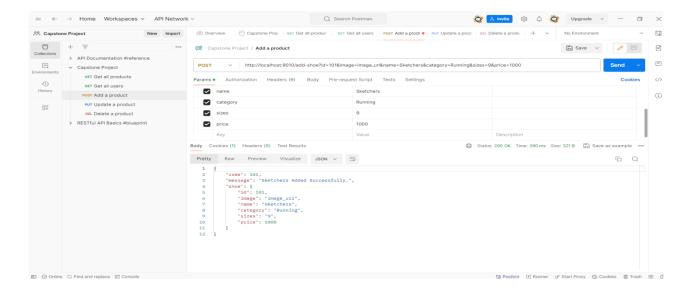
In GET all users enter URL http://localhost:9010/get-users

And click on save and run this URL above picture is get all users output

Next add another Request and enter name as Post add a Product

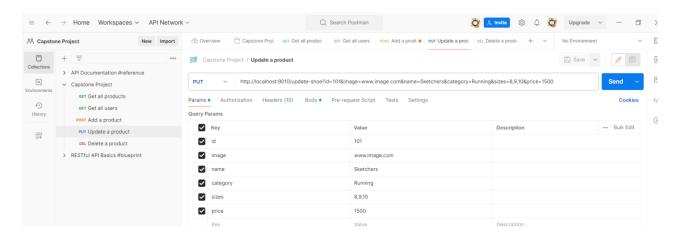


Enter URL select method as POST method click on save and send the request

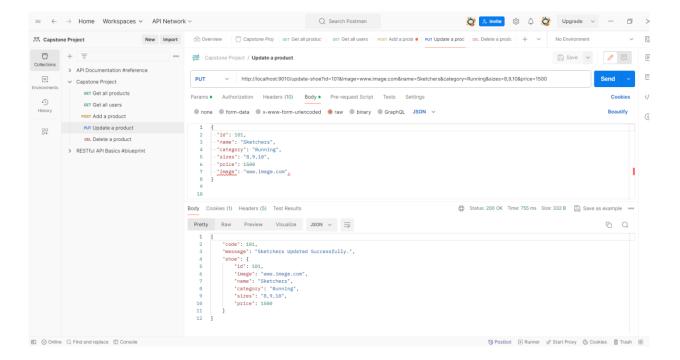


this is the output for POST add a Product.

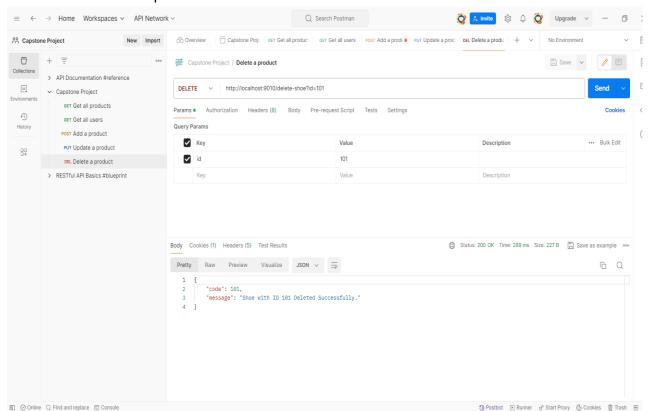
And then select another method as Put update a Product



And insert the URL click on save and send Request



This is the output for PUT Update a product Next select another request Delete a Product



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

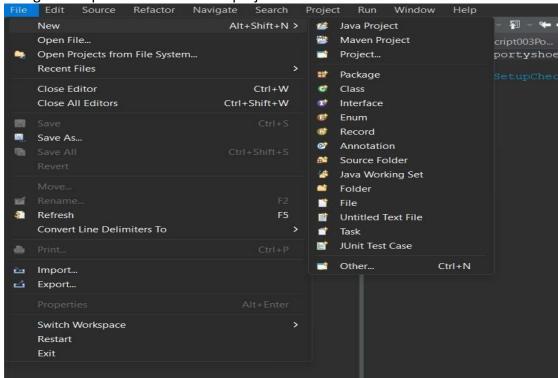
Click on save and run it

Rest-Assured:

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.

First go to Eclipse file >new>maven project



And enter name as capstone project In capstone project add a package com.spotryshoe.restAssuredscripts Put class name as getallShoes.java Code:

@Test(priority='2')

```
public void get_all_users() {

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

Output:

}

```
"id": 301,
    "image": "3.png",
    "name": "NeoFlex Athletic Shoes",
    "category": "Sports",
    "sizes": "7, 8, 9, 10",
    "price": 4500
},

{
    "id": 401,
    "image": "4.png",
    "name": "PowerStride Training Shoes",
    "category": "Sports",
    "sizes": "6, 7, 8, 9",
    "price": 6000
},

{
    "id": 501,
    "image": "5.png",
    "name": "StreetRunner Urban Sneakers",
    "category": "Sports",
    "sizes": "7, 9",
    "price": 4000
},

{
    "id": 601,
    "image": "6.png",
    "name": "VentureHike Trail Shoes",
    "category": "Sports",
    "name": "VentureHike Trail Shoes",
    "category": "Sports",
    "category"
```

```
"price": 2500
},

{
    "id": 701,
        "image": "7.png",
        "name": "EnduraGrip Sports Sneakers",
        "category": "Sports",
        "sizes": "4, 6, 9",
    "price": 5000
},

{
    "id": 801,
        "image": "8.png",
        "name": "LightStride Performance Shoes",
        "category": "Sports",
        "sizes": "7, 8",
        "price": 1200
},

{
    "id": 901,
        "image": "9.png",
        "name": "MaxFit Pro Sports Shoes",
        "category": "Sports",
        "sizes": "7, 8, 9, 10",
        "price": 4700
},

{
    "id": 111,
    "image": "10.png",
```

```
package com.sportyshoe.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();
}
}
OUT PUT:
  SLF4J: See http://www.slf4j.org/codes.html#StaticLoggerBinder for further details.
HTTP/1.1 200
Set-Cookie: JSESSIONID=85F2B6E527EE82539B03C2184871B266; Path=/; HttpOnly
Content-Type: application/json
Transfer-Encoding: chunked
Date: Fri, 26 Jan 2024 13:36:33 GMT
Keep-Allve: timeout=60
Connection: keep-alive
          "code": 101,
"message": "Nike Added Successfully.",
"shoe": (
    "id": 1020,
    "image": "www.imge.com",
    "name": "Nike",
    "category": "Running",
    "sizes": "5,67",
    "price": 2000
         }
  }
HTTP/1.1 200
Set-Cookie: JSESSIONID=1921249706A39E060AA77DC8CD5F94F3; Path=/; HttpOnly
Content-Type: application/json
Transfer-Encoding: chunked
Date: Fri, 26 Jan 2024 13:36:33 GMT
Keep-Alive: timeout=60
Connection: keep-alive
          "code": 101,
   Date: Fri, 26 Jan 2024 13:36:33 GMT
Keep-Alive: timeout=60
Connection: keep-alive
           "code": 101,
"message": "Reebok Updated Successfully.",
"shoe": {
    "id": 1020,
    "image": "www.imge123.com",
    "name": "Reebok",
    "category": "Running",
    "sizes": "5,6,7",
    "price": 2500
}
           }
   PASSED: com.sportyshoe.restAssuredScripts.PostandPutnewshoe.update_a_product
   PASSED: com.sportyshoe.restAssuredScripts.PostandPutnewshoe.add_new_product
           Default test
Tests run: 2, Failures: 0, Skips: 0
   Total tests run: 2, Passes: 2, Failures: 0, Skips: 0
```

Next add delete Rest assured codeCode:

```
package com.sportyshoe.restAssuredScripts;
import org.testng.annotations.Test;
import io.restassured.RestAssured;
public class Deleteshoe {
@Test(priority='1') public void delete_product()
```

```
RestAssured.given()
.baseUri("http://localhost:9010")
.basePath("/delete-shoe")
.queryParam("id", "1010")
.when().delete()
.then().log().all();
}
```

OUT PUT:

{

Selenium Scripts:

- 1. 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

Registration Page

```
package com.sportyshoe.Tests;
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 {
@FindBy(css="body > div:nth-child(2) > form > a")
private WebElement register;
@FindBy(name="name")
private WebElement name;
@FindBy(name="email")
private WebElement email;
@FindBy(name="password")
private WebElement password;
@FindBy(xpath = "//button[contains(@class,'btn btn-primary')]")
private WebElement registerbtn;
public RegisterPage(WebDriver driver)
{
PageFactory.initElements(driver,this);
}
public void registerPage()
{
register.click();
}
public void EnterName()
name.sendKeys("Harshi");
}
```

```
public void EnterEmail() {
  email.sendKeys("harshi@gmail.com");
}

public void EnterPassword()
{
  password.sendKeys("Harshitha@12345");
}

public void clickRegisterBtn()
{
  registerbtn.click();
}
```

OUT PUT:



Register Yourself

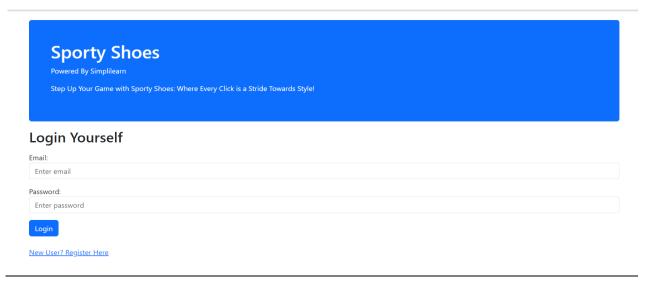
Existing User? Login Here

Login page

```
package com.sportyshoe.Tests;
import org.testng.Assert;
import org.testng.annotations.Test;
public class TestPage extends BaseTest {
  @Test
public void test() throws InterruptedException
```

```
{
RegisterPage page = new RegisterPage(driver);
page.registerPage();
page.EnterName();
page.EnterEmail();
page.EnterPassword();
Thread.sleep(3000);
page.clickRegisterBtn();
AddToCart add = new AddToCart(driver);
add.clickprofile();
add.clickHome();
add.clickAddToCart();
//add.addSecondItem();
String expectedErrMsg = "Message:Shoe Elegant Leather Loafers Added Successfully to Cart";
String acutalErrMsg = add.CheckVerifyCartMsg();
Assert.assertEquals(acutalErrMsg, expectedErrMsg);
ViewCartPage cart = new ViewCartPage(driver);
cart.clickHomeBtn();
cart.clickCartBtn();
PlaceOrder placeOrder = new PlaceOrder(driver);
placeOrder.clickPlaceOrderBtn();
String expectedMsg = "Success!";
String acutalMsg = placeOrder.CheckVerifyOrderMsg();
Assert.assertEquals(acutalMsg, expectedMsg);
}
}
```

OUTPUT:



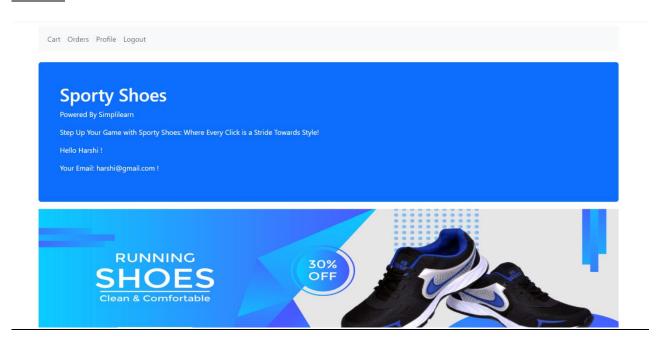
Add Product to cart page

```
package com.sportyshoe.Tests;
import java.time.Duration;
import org.openqa.selenium.JavascriptExecutor;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.interactions.Actions;
import org.openqa.selenium.support.FindBy;
import org.openqa.selenium.support.PageFactory;
import org.openqa.selenium.support.ui.WebDriverWait;
public class AddToCart {
Actions actions:
WebDriverWait wait;
JavascriptExecutor js;
public AddToCart(WebDriver driver)
{
js = (JavascriptExecutor) driver;
PageFactory.initElements(driver,this);
actions = new Actions(driver);
wait = new WebDriverWait(driver, Duration.ofSeconds(60));
```

```
}
@FindBy(css = "#mynavbar > ul > li:nth-child(3) > a")
private WebElement profile;
public void clickprofile()
{
profile.click();
}
@FindBy(css = "#mynavbar > ul > li:nth-child(1) > a")
private WebElement home;
public void clickHome()
{
home.click();
}
@FindBy(xpath = "(//a[contains(@class,'btn btn-primary')])[2]")
private WebElement firstItem;
public void clickAddToCart() throws InterruptedException
{
Thread.sleep(2000);
js.executeScript("arguments[0].scrollIntoView();", firstItem);
js.executeScript("arguments[0].click()", firstItem);
}
// @FindBy(xpath = "(//a[contains(@class, btn btn-primary')])[2]")
// private WebElement secItem;
//
// public void addSecondItem()
//{
// js.executeScript("arguments[0].scrollIntoView();", firstItem);
// js.executeScript("arguments[0].click()", firstItem);
//}
```

```
//
// @FindBy(xpath = "//p[text()=\"Message:Shoe BlueWave Running Shoes Added Successfully to Cart\"]")
@FindBy(xpath = "/html/body/div[3]/div/p")
private WebElement verifycartmsg;
public String CheckVerifyCartMsg()
{
String textmsg = verifycartmsg.getText();
return textmsg;
}
```

OUT PUT:



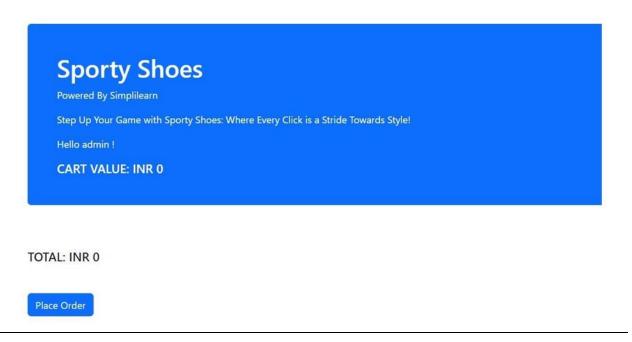
Place Order Page

```
package com.sportyshoe.Tests;
import java.time.Duration;
import org.openqa.selenium.JavascriptExecutor;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.interactions.Actions;
```

import org.openqa.selenium.support.FindBy;

```
import org.openqa.selenium.support.PageFactory;
import org.openqa.selenium.support.ui.WebDriverWait;
public class PlaceOrder {
Actions actions;
WebDriverWait wait;
JavascriptExecutor js;
public PlaceOrder(WebDriver driver)
{
js=(JavascriptExecutor)driver;
PageFactory.initElements(driver,this);
actions = new Actions(driver);
wait = new WebDriverWait(driver, Duration.ofSeconds(60));
}
@FindBy(xpath = "(//a[contains(@class,'btn btn-primary')])[1]")
private WebElement placeOrderBtn;
public void clickPlaceOrderBtn()throws InterruptedException
{
Thread.sleep(2000);
js.executeScript("arguments[0].scrollIntoView()",placeOrderBtn);
js.executeScript("arguments[0].click()",placeOrderBtn);
}
@FindBy(xpath = "/html/body/div[3]/div/strong")
private WebElement verifyorderMsg;
public String CheckVerifyOrderMsg()
{
String message = verifyorderMsg.getText();
return message;
}
```

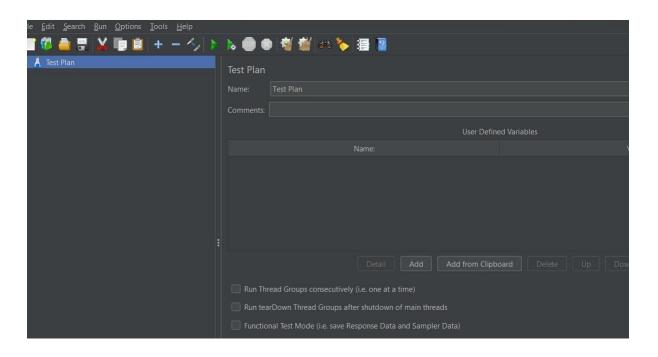
OUT PUT:



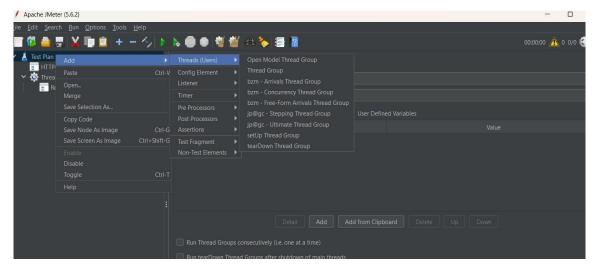
Jmeter:

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

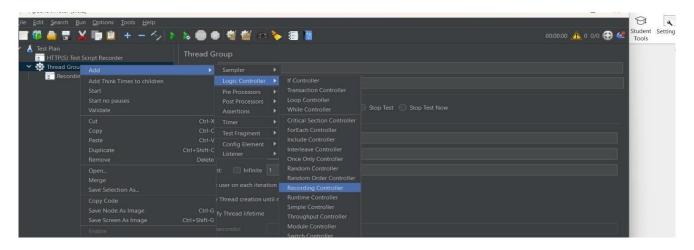
First go to Apache Jmeter



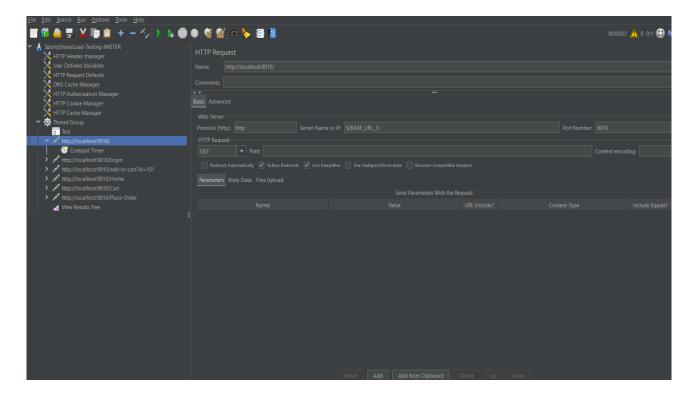
In this test plan add HTTP(s) Test Script Recorder Next Add thread group



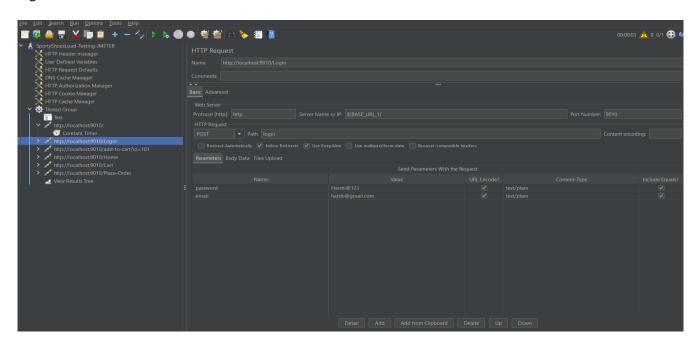
In thread group add controller >logic controller>Recording controller



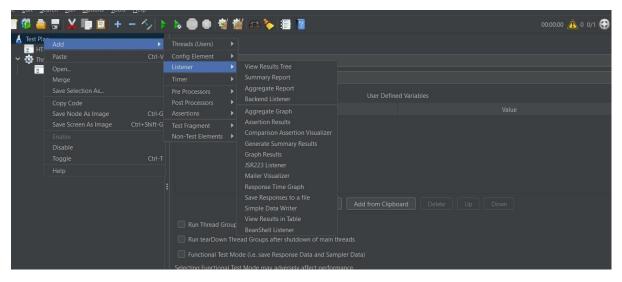
Create a http://localhost:9010/

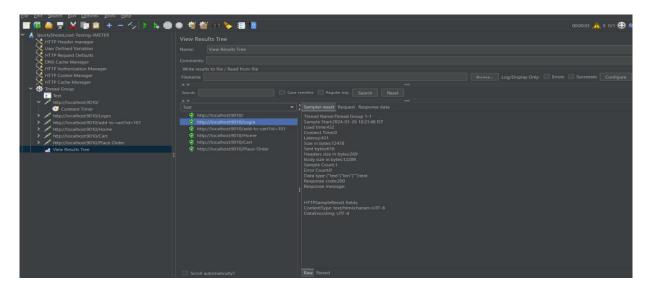


Login:



Add Listener to see results





Source Code- Cucumber-Feature-Project:

CreateShoe.feature

```
@tag
Feature: Create a new shoe in the store
   I want to test the functionality of creating a new shoe

@tag1
Scenario: Create a new shoe on the website
   Given Open the API base URL
   And Enter the shoe details
   When Hit the POST request to create a new shoe
   Then The response code should be 200
   And Print the result of adding new shoe
```

DeleteProduct.feature

```
@tag
Feature: Delete a shoe from the store
   I want to test the functionality of deleting a shoe from the store

@tag1
Scenario: Delete a shoe from the website
   Given Open the API base URL
   And there is an existing shoe with ID 101
   When hit the DELETE request for the shoe with ID 101
   Then the response code should be 200
   And the response should indicate successful deletion
```

GetProducts.feature

```
Feature: Retrieve all products from the sports shoe store
As a user,
I want to retrieve the list of all available shoes from the sports shoe
store,
So that I can browse and choose the desired products.

@tag @GetProducts
Scenario: Retrieve all products successfully
Given I am interested in viewing the available shoes
```

```
When I send a request to retrieve the list of products
Then I should receive a successful response with status code 200
And the response should contain a valid list of sports shoes
```

GetUsers.feature

```
Feature: Retrieve all registered users
I want to retrieve the list of all available register users

@tag @GetProducts
Scenario: Retrieve all registered users
Given I am interested in viewing the registered users
When I send a request to retrieve the users
Then I want to receive a successful response with status code 200
And the response should contain a valid list of users
```

UpdateProduct.feature

```
@tag
Feature: Update a shoe in the store
  I want to test the functionality of updating a shoe in the store

@tag1 @UpdateRequest
Scenario: Update a shoe on the website
    Given open the update product base url
    When hit the PUT request to update the shoe with ID 101
    Then the response code should be equal to 200
    And the response should indicate successful update
```

DeleteProductSteps.java

package com.simplilearn.cucumber.stepdefinitions; import static org.hamcrest.CoreMatchers.containsString; import io.cucumber.java.en.Given;

```
import io.cucumber.java.en.Then;
import io.cucumber.java.en.When;
import io.restassured.RestAssured;
import io.restassured.response.Response;
import io.restassured.response.ValidatableResponse;
import io.restassured.specification.RequestSpecification;
public class DeleteProductSteps {
       private Response response;
       private ValidatableResponse json;
       private RequestSpecification request;
       private String BASE URL = "http://localhost:9010";
       @Given("there is an existing shoe with ID {int}")
       public void there_is_an_existing_shoe_with_id(Integer int1) {
         request=RestAssured.given().baseUri(BASE_URL);
       }
       @When("hit the DELETE request for the shoe with ID {int}")
       public void hit the delete request for the shoe with id(Integer shoeld) {
         response=request.delete("/delete-shoe?id="+shoeId);
       }
       @Then("the response code should be {int}")
       public void the response code should be(Integer code) {
         json=response.then().statusCode(code);
       }
```

```
@Then("the response should indicate successful deletion")
public void the_response_should_indicate_successful_deletion() {
    response.then().body("message", containsString("Shoe with ID 101 Deleted Successfully"));
}
```

GetRequestSteps.java

```
package com.simplilearn.cucumber.stepdefinitions;

import org.hamcrest.Matchers;

import io.cucumber.java.en.Given;
import io.cucumber.java.en.Then;
import io.cucumber.java.en.When;
import io.restassured.RestAssured;
import io.restassured.response.Response;
import io.restassured.response.ValidatableResponse;
import io.restassured.specification.RequestSpecification;

public class GetRequestSteps {

private Response response;
private ValidatableResponse json;
```

```
private RequestSpecification request;
       private String BASE URL = "http://localhost:9010";
       @Given("I am interested in viewing the available shoes")
       public void i am interested in viewing the available shoes() {
         request=RestAssured.given().baseUri(BASE_URL);
       }
       @When("I send a request to retrieve the list of products")
       public void i_send_a_request_to_retrieve_the_list_of_products() {
         response=request.when().get("/get-shoes");
       }
       @Then("I should receive a successful response with status code {int}")
       public void i_should_receive_a_successful_response_with_status_code(Integer
code) {
         json=response.then().statusCode(code);
         System.out.println(json.toString());
       }
       @Then("the response should contain a valid list of sports shoes")
       public void the_response_should_contain_a_valid_list_of_sports_shoes() {
              response.then().body("shoes", Matchers.notNullValue());
       }
}
```

GetUserSteps.java

```
package com.simplilearn.cucumber.stepdefinitions;
import org.hamcrest.Matchers;
import io.cucumber.java.en.Given;
import io.cucumber.java.en.Then;
import io.cucumber.java.en.When;
import io.restassured.RestAssured;
import io.restassured.response.Response;
import
          io.restassured.response.ValidatableResponse;
import io.restassured.specification.RequestSpecification;
public class GetUserSteps {
       private Response response;
       private ValidatableResponse json;
       private RequestSpecification request;
       private String BASE_URL = "http://localhost:9010";
       @Given("I am interested in viewing the registered users")
       public void i_am_interested_in_viewing_the_registered_users() {
         request=RestAssured.given().baseUri(BASE URL);
       }
       @When("I send a request to retrieve the users")
```

```
public void i_send_a_request_to_retrieve_the_users() {
    response=request.when().get("/get-users");
}

@Then("I want to receive a successful response with status code {int}")
public void i_want_to_receive_a_successful_response_with_status_code(Integer code) {
    json=response.then().statusCode(code);
    System.out.println(json.toString());
}

@Then("the response should contain a valid list of users")
public void the_response_should_contain_a_valid_list_of_users() {
    response.then().body("users", Matchers.notNullValue());
}
```

PostRequestSteps.java

```
package com.simplilearn.cucumber.stepdefinitions;
import io.cucumber.java.en.Given;
import io.cucumber.java.en.Then;
import io.cucumber.java.en.When;
import io.restassured.RestAssured;
import io.restassured.response.Response;
```

```
import io.restassured.response.ValidatableResponse;
import io.restassured.specification.RequestSpecification;
public class PostRequestSteps {
       private Response response;
       private ValidatableResponse json;
       private RequestSpecification request;
       private String requestBody;
       private String BASE_URL = "http://localhost:9010";
       @Given("Open the API base URL")
       public void open the api base url() {
         request=RestAssured.given().baseUri(BASE URL);
      }
       @Given("Enter the shoe details")
       public void enter_the_shoe_details() {
              requestBody = "id=" + 101 + "&image=image url&name=Sample
Shoes&category=Sports Shoe&sizes=9&price=1999";
      }
       @When("Hit the POST request to create a new shoe")
       public void hit_the_post_request_to_create_a_new_shoe() {
              int id = 101;
    String image_url = "image_url";
    String name = "sampleShoe";
    String category = "Runnings";
```

```
int sizes = 9;
    int price = 1000;
         response=request.queryParam("id",id).queryParam("image",image_url)
        .queryParam("name",name).queryParam("category",category)
        .queryParam("sizes",sizes).queryParam("price",price).when().post("/add-shoe");
       }
       @Then("The response code should be {int}")
       public void the_response_code_should_be(Integer code) {
         json=response.then().statusCode(code);
         System.out.println(json);
       }
       @Then("Print the result of adding new shoe")
       public void print_the_result_of_adding_new_shoe() {
         System.out.println(response.getBody().asString());
       }
}
```

UpdateshoeSteps.java

```
package com.simplilearn.cucumber.stepdefinitions;
import org.hamcrest.Matchers;
import io.cucumber.java.en.Given;
import io.cucumber.java.en.Then;
import io.cucumber.java.en.When;
```

```
import io.restassured.RestAssured;
import io.restassured.response.Response;
import io.restassured.response.ValidatableResponse;
import io.restassured.specification.RequestSpecification;
public class UpdateshoeSteps {
       private Response response;
       private ValidatableResponse json;
       private RequestSpecification request;
       private String BASE URL = "http://localhost:9010";
       @Given("open the update product base url")
       public void open_the_update_product_base_url() {
         request=RestAssured.given().baseUri(BASE URL);
       }
         @When("hit the PUT request to update the shoe with ID {int}")
         public void hit the put request to update the shoe with id(Integer shoeld) {
              int id = shoeld;
      String image= "update image";
      String name = "updated Shoe";
      String category = " updated Runnings";
      int sizes = 12;
      int price = 1099;
```

```
response =request
                     .queryParam("id",id).queryParam("image",image)
               .queryParam("name",name).queryParam("category",category)
               .queryParam("sizes",sizes).queryParam("price",price)
               .when().put( "/update-shoe?id=" );
         }
         @Then("the response code should be equal to {int}")
         public void the_response_code_should_be_equal_to(Integer expectedStatusCode)
{
           json=response.then().statusCode(expectedStatusCode);
         }
         @Then("the response should indicate successful update")
         public void the_response_should_indicate_successful_update() {
            System.out.println(json.toString());
         }
}
```

TestRunner.java

```
package com.simplilearn.cucumber.testrunner; import org.junit.runner.RunWith; import io.cucumber.junit.Cucumber; import io.cucumber.junit.CucumberOptions; @RunWith(Cucumber.class)
```

```
@CucumberOptions(features = "src/test/resources/Features", glue =
{"com/simplilearn/cucumber/stepdefinitions" })
public class TestRunner {
}
```

Pom.xml

```
<?xml version="1.0" encoding="UTF-8"?>
project xmlns="http://maven.apache.org/POM/4.0.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
http://maven.apache.org/xsd/maven-4.0.0.xsd">
  <modelVersion>4.0.0</modelVersion>
 <groupId>com.simplilearn.cucumber
  <artifactId>PhaseEnd Cucumber Restassured Project</artifactId>
  <version>0.0.1-SNAPSHOT</version>
 <name>PhaseEnd Cucumber Restassured Project
  <!-- FIXME change it to the project's website -->
  <url>http://www.example.com</url>
  properties>
   project.build.sourceEncoding>UTF-8/project.build.sourceEncoding>
    <maven.compiler.target>8</maven.compiler.target>
           <maven.compiler.source>8</maven.compiler.source>
           <rest.assured.version>5.4.0</rest.assured.version>
           <junit.version>4.13.2/junit.version>
           <cucumber.version>7.15.0/cucumber.version>
     </properties>
     <dependencies>
           <!-- rest-assured -->
           <dependency>
                 <groupId>io.rest-assured
                 <artifactId>rest-assured</artifactId>
                 <version>${rest.assured.version}
                 <scope>test</scope>
           </dependency>
           <!-- rest-assured/json-path -->
           <dependency>
                 <groupId>io.rest-assured
                 <artifactId>json-path</artifactId>
                 <version>${rest.assured.version}
                 <scope>test</scope>
           </dependency>
           <!-- rest-assured/json-schema-validator -->
           <dependency>
```

```
<groupId>io.rest-assured
                <artifactId>json-schema-validator</artifactId>
                <version>${rest.assured.version}
          </dependency>
          <!-- io.rest-assured/xml-path -->
          <dependency>
                <groupId>io.rest-assured
                <artifactId>xml-path</artifactId>
                <version>${rest.assured.version}
          </dependency>
          <!-- cucumber-java -->
          <dependency>
                <groupId>io.cucumber
                <artifactId>cucumber-java</artifactId>
                <version>${cucumber.version}</version>
          </dependency>
          <!-- cucumber-junit :: junit4-->
          <dependency>
                <groupId>io.cucumber
                <artifactId>cucumber-junit</artifactId>
                <version>${cucumber.version}
                <scope>test</scope>
          </dependency>
          <!-- junit4 -->
          <dependency>
                <groupId>junit
                <artifactId>junit</artifactId>
                <version>${junit.version}
                <scope>test</scope>
          </dependency>
     </dependencies>
     <build>
          <plugins>
                <plugin>
                     <groupId>org.apache.maven.plugins
                     <artifactId>maven-surefire-plugin</artifactId>
                     <version>3.2.3
                </plugin>
          </plugins>
     </build>
</project>
```