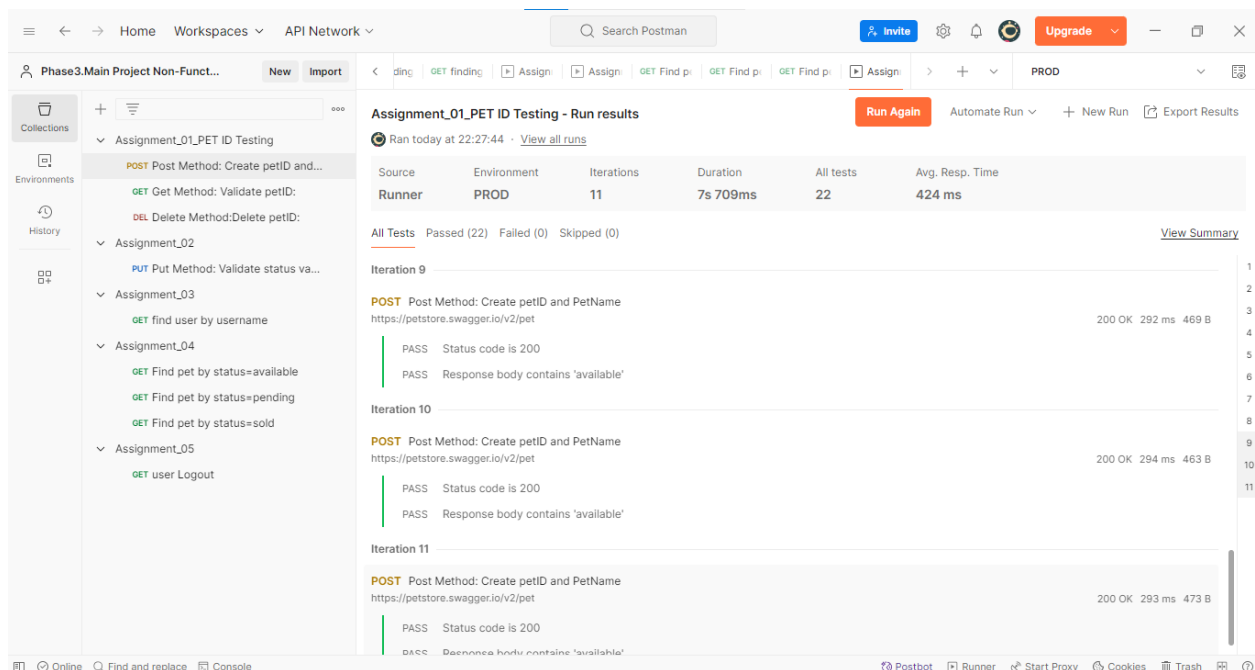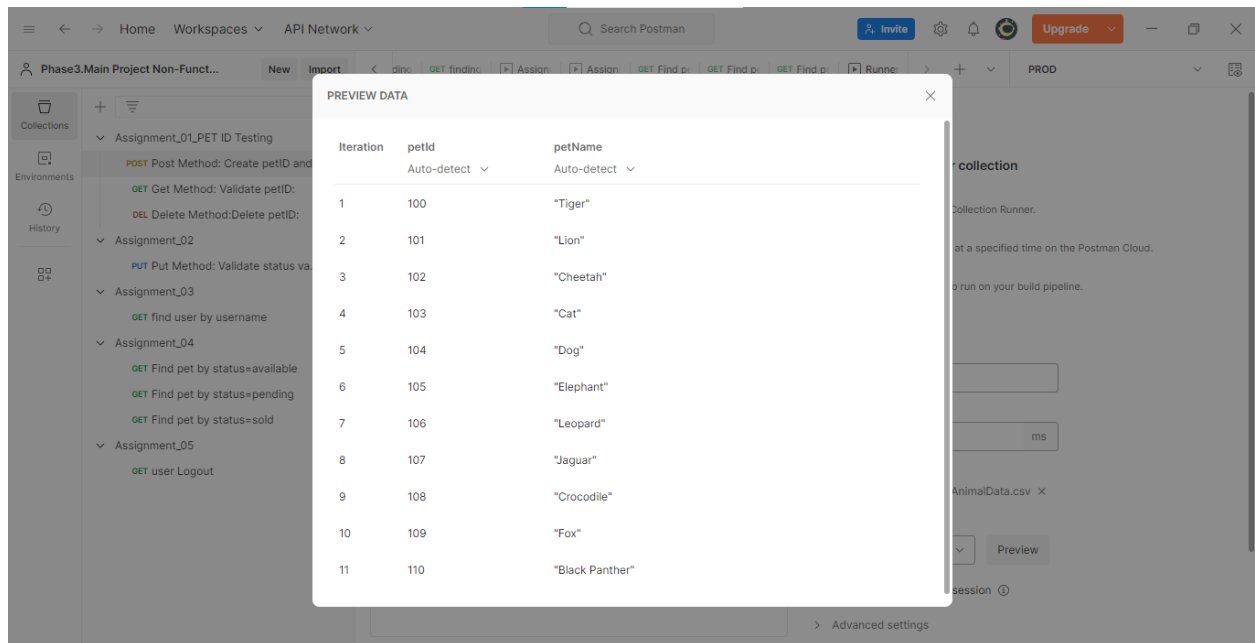**Phase 3 Final Project Assessment**   **Name: Prajwal Diwakar**

Non-Functional Testing Using Postman, REST Assured, and JMeter.

Screenshots:

Postman

C:\Users\Dell\eclipse-workspace\Phase 3 Final Project Assessment JMeter Postman RestAssured\Phase3.FinalProjectPostman>newman run "Assignment_02.postman_collection.json
"

newman

Assignment_02

→ Put Method: Validate status value
  PUT https://petstore.swagger.io/v2/pet [200 OK, 492B, 1579ms]
  √ Response to have 'id' property
  √ Status code to have 200
  √ Validate status value in response

	executed	failed
iterations	1	0
requests	1	0
test-scripts	1	0
prerequest-scripts	0	0
assertions	3	0

total run duration: 1740ms

total data received: 166B (approx)

average response time: 1579ms [min: 1579ms, max: 1579ms, s.d.: 0μs]
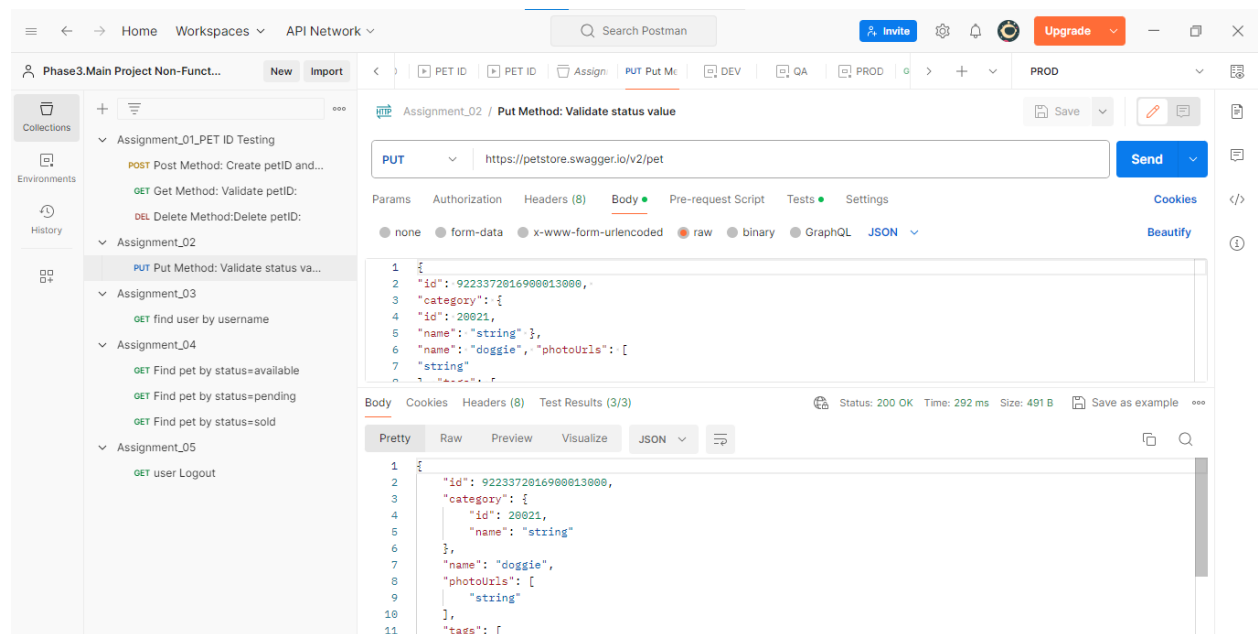
Assignment_05 / user Logout

GET   https://petstore.swagger.io/v2/user/logout   Send

Params   Authorization   Headers (6)   Body   Pre-request Script   Tests ●   Settings   Cookies

```
20
21    // Parse the response JSON
22
23    var jsonData = pm.response.json();
24
25    // Check if the 'message' field in the response is equal to "OK"
26
27    pm.test("Message is OK", function () {
28
29        pm.expect(jsonData.message).to.equal("ok");
30
31    });
```

Test scripts are written in JavaScript, and are run after the response is received. Learn more about tests scripts

Snippets

Get an environment variable

Get a global variable

Get a variable

Body   Cookies   Headers (8)   Test Results (3/3)   Status: 200 OK   Time: 881 ms   Size: 370 B   Save as example

Pretty   Raw   Preview   Visualize   JSON

```
1  {
2      "code": 200,
3      "type": "unknown",
4      "message": "ok"
5  }
```

Rest Assured


```java
package Phase3.Assignment01_RestAssured;

import static org.hamcrest.CoreMatchers.equalTo;

Run All
public class PostRequest {

    private static final String Base_Url = "https://petstore.swagger.io/v2";
    static final Logger logger=Logger.getLogger(PostRequest.class);

    @Test(description = "Post request method with the rest assured")
    Run | Debug
    public void testPostPet() {
        // Base URL for the API

        logger.info("START:: POST method to create the PET details");
        // JSON Body
        String requestBody = "{ \"id\": 344, \"category\": { \"id\": 0, \"name\": \"string\" }, \"name\": \"Doggie\", " +
                "\"photoUrls\": [ \"string\" ], \"tags\": [ { \"id\": 0, \"name\": \"string\" } ], " +
                "\"status\": \"available\" }";
```

Console
```
<terminated> PostRequest [TestNG] C:\Program Files\Java\jdk-21\bin\javaw.exe (23-Jan-2024, 10:38:41 pm – 10:38:55 pm) [pid: 11428]
2024-01-23 22:38:54 INFO  PostRequest:59 END:: POST method to create the PET details
PASSED: Phase3.Assignment01_RestAssured.PostRequest.testPostPet
        Post request method with the rest assured


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


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



```java
        logger.info("START::GET method for the PET test");
        logger.info("POST: URL "+Base_Url+ "/pet/" +petID);

        try {
            RestAssured.given().baseUri(Base_Url)
            .contentType(ContentType.JSON)
            .when().get("/pet/" +petID)
            .then().assertThat().statusCode(200);
        }
        catch(Exception e) {
            logger.error("Exception Object :: " + e.toString());
            logger.error("End Exception :: "+e.getLocalizedMessage());
        }

        String response= RestAssured.given().baseUri(Base_Url)
                .when().get("/pet/" +petID).getBody().asPrettyString();
        logger.info("Response is " +response);
        logger.info("END:: GET method for the PET test");
    }
```

Console
```
<terminated> GetRequest [TestNG] C:\Program Files\Java\jdk-21\bin\javaw.exe (23-Jan-2024, 10:39:51 pm – 10:40:03 pm) [pid: 7116]
PASSED: Phase3.Assignment01_RestAssured.GetRequest.testGetPet
        Get request method to get PET details using the petID

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


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

File Edit Source Refactor Navigate Search Project Run Window Help

Project Explorer

GetRequestU... | GetRequest.java | TestNG.xml | TestPetStor... | PostRequest... | DeleteReque... |

```java
1  package Phase3.Assignment01_RestAssured;
2
3  import io.restassured.RestAssured;
9
   Run All
10 public class DeleteRequest {
11
12     private static final String Base_Url ="https://petstore.swagger.io/v2";
13     static final Logger logger= Logger.getLogger(DeleteRequest.class);
14
15     @Test(description="Delete request method for the PET")
       Run | Debug
16     public void testGetPet() {
17
18         logger.info("START::Delete method for the PET test");
19         int petID= 344;
20         logger.info("DELETE: URL" +Base_Url+ "/pet/" +petID);
21
22         try {
23             RestAssured.given().baseUri(Base_Url)
24                 .when().delete("/pet/" +petID)
```

Problems | Servers | Terminal | Data Source... | Properties | Console | Progress | Results of r... | JUnit | Gradle Tasks | Gradle Exec...

```
<terminated> DeleteRequest [TestNG] C:\Program Files\Java\jdk-21\bin\javaw.exe  (23-Jan-2024, 10:41:31 pm – 10:41:45 pm) [pid: 16064]
PASSED: Phase3.Assignment01_RestAssured.DeleteRequest.testGetPet
        Delete request method for the PET


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


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

File Edit Source Refactor Navigate Search Project Run Window Help

Project Explorer

GetRequestU... | GetRequest.java | putRequestM... | putRequestM... | PostRequest... | DeleteReque... |

```java
1  package Phase3.Assignment02_RestAssured;
2
3  import java.util.ArrayList;
15
   Run All
16 public class putRequestMethod1 {
17
18     private static final String BASE_URL = "https://petstore.swagger.io/v2";
19     static final Logger logger= Logger.getLogger(putRequestMethod1.class);
20
21     @DataProvider(name = "statusValues")
22     public Iterator<Object[]> statusValues() {
23         final List<Object[]> statusValues = new ArrayList<Object[]> ();
24         statusValues.add(new Object[] {"available_DEV"});
25         statusValues.add(new Object[] {"available_QA"});
26         statusValues.add(new Object[] {"available_PROD"});
27
28         return statusValues.iterator();
29     }
30
31     @Test(description="put request method ", dataProvider = "statusValues")
```

Problems | Servers | Terminal | Data Source... | Properties | Console | Progress | Results of r... | JUnit | Gradle Tasks | Gradle Exec... | Cover

```
<terminated> putRequestMethod1 [TestNG] C:\Program Files\Java\jdk-21\bin\javaw.exe  (23-Jan-2024, 10:42:34 pm – 10:42:54 pm) [pid: 37776]
2024-01-23 22:42:54 INFO  putRequestMethod1:68 END:: PUT method for the PET test
PASSED: Phase3.Assignment02_RestAssured.putRequestMethod1.putCallTesting("available_QA")
        put request method
PASSED: Phase3.Assignment02_RestAssured.putRequestMethod1.putCallTesting("available_PROD")
        put request method
PASSED: Phase3.Assignment02_RestAssured.putRequestMethod1.putCallTesting("available_DEV")
        put request method


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

File   Edit   Source   Refactor   Navigate   Search   Project   Run   Window   Help

Project Explorer

- phase2-learning-junit5-gradle-26-12-2024 [ph
- phase2-learning-junit-maven [eclipse-worksp
- phase2-Practice_Jenkins-learnings [phase2-Pr
- phase2-selenium-data-driven-test-19-12-2023
- phase2-selenium-learning-exercises [phase2-s
- phase2-selenium-learning-testng-extent-repo
- phase2-selenium-listeners-19-12-2023 [phase2
- Phase3.BDD_with_restAssured_using_Cucumber
- Phase3.FinalProjectRestAssured [eclipse-works
  - src/main/java
  - src/test/java
    - Phase3.Assignment01_RestAssured
      - DeleteRequest.java
      - GetRequest.java
      - PostRequest.java
    - Phase3.Assignment02_RestAssured
      - putRequestMethod1.java
      - putRequestMethod2.java
    - Phase3.Assignment03_RestAssured
      - GetRequestUserName.java
    - Phase3.Assignment04_RestAssured
      - GetRequestAuthentication.java
    - Phase3.Assignment05.RestAssured
      - TestPetStoreFindByStatus.java
    - Phase3.Assignment06.RestAssured
      - UserLogout.java
  - src/test/resource
  - JRE System Library [jdk-21]
  - Maven Dependencies
  - src
  - target

```java
10
11    import org.apache.log4j.Logger;
12
      Run All
13    public class GetRequestUserName {
14        private static final String base_url ="https://petstore.swagger.io/v2/user/Uname001";
15        static final Logger logger= Logger.getLogger(GetRequestUserName.class);
16
17
18        @Test(description=" Get request method with rest assured")
19
          Run | Debug
20        public void TestGetMethod() {
21
22            logger.info("START::GET method for the PET test");
23            logger.info("POST: URL" +base_url);
24            try {
25
26                RestAssured.given()
27                .when().get(base_url)
28                then() statusCode(404);
```

Problems   Servers   Terminal   Data Source...   Properties   Console ×   Progress   Results of r...   JUnit   Gradle Tasks   Gradle Exec...

```
<terminated> GetRequestUserName [TestNG] C:\Program Files\Java\jdk-21\bin\javaw.exe (23-Jan-2024, 10:44:04 pm – 10:44:17 pm) [pid: 29244]
2024-01-23 22:44:16 INFO  GetRequestUserName:47 END:: GET method for the PET test
PASSED: Phase3.Assignment03_RestAssured.GetRequestUserName.TestGetMethod
        Get request method with rest assured


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


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

File   Edit   Source   Refactor   Navigate   Search   Project   Run   Window   Help

Project Explorer

- phase2-learning-junit5-gradle-26-12-2024 [ph
- phase2-learning-junit-maven [eclipse-worksp
- phase2-learning-junit-maven [eclipse-workspace master]
- phase2-selenium-data-driven-test-19-12-2023
- phase2-selenium-learning-exercises [phase2-s
- phase2-selenium-learning-testng-extent-repo
- phase2-selenium-listeners-19-12-2023 [phase2
- Phase3.BDD_with_restAssured_using_Cucumber
- Phase3.FinalProjectRestAssured [eclipse-works
  - src/main/java
  - src/test/java
    - Phase3.Assignment01_RestAssured
      - DeleteRequest.java
      - GetRequest.java
      - PostRequest.java
    - Phase3.Assignment02_RestAssured
      - putRequestMethod1.java
      - putRequestMethod2.java
    - Phase3.Assignment03_RestAssured
      - GetRequestUserName.java
    - Phase3.Assignment04_RestAssured
      - GetRequestAuthentication.java
    - Phase3.Assignment05.RestAssured
      - TestPetStoreFindByStatus.java
    - Phase3.Assignment06.RestAssured
      - UserLogout.java
  - src/test/resource
  - JRE System Library [jdk-21]
  - Maven Dependencies
  - src
  - target

```java
11    import io.restassured.http.ContentType;
12
      Run All
13    public class GetRequestAuthentication {
15
16        private static final String BASE_URL = "https://petstore.swagger.io/v2";
17        static final Logger logger= Logger.getLogger(GetRequestUserName.class);
18
19        @Test(description = "Test Authentication with rest assured")
          Run | Debug
20        public void testAuthenticationToken() {
21
22            logger.info("START::GET method for the PET Authenticaton Login");
23            logger.info("POST: URL" +BASE_URL);
24            // create user post data
25            User user = new User("Uname001" ," @tt!tude");
26
27            logger.info("user object is" +user );
28            try {
29                RestAssured.given() baseUri(BASE_URL) when()
```

Problems   Servers   Terminal   Data Source...   Properties   Console ×   Progress   Results of r...   JUnit   Gradle Tasks   Gradle Exe

```
<terminated> GetRequestAuthentication [TestNG] C:\Program Files\Java\jdk-21\bin\javaw.exe (23-Jan-2024, 10:44:52 pm – 10:45:06 pm) [pid: 19020]
2024-01-23 22:45:06 INFO  GetRequestUserName:54 END::GET method for the PET Authenticaton Login
PASSED:  Phase3.Assignment04_RestAssured.GetRequestAuthentication.testAuthenticationToken
         Test Authentication with rest assured


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


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

File   Edit   Source   Refactor   Navigate   Search   Project   Run   Window   Help

Project Explorer

```java
5   import io.restassured.http.ContentType;
6   import org.testng.annotations.Test;
7   import static org.hamcrest.Matchers.*;
8   import org.apache.log4j.Logger;
9
        Run All
10      public class TestPetStoreFindByStatus {
11
12          private static final String base_url = "https://petstore.swagger.io/v2/pet/findByStatus";
13          static final Logger logger= Logger.getLogger(TestPetStoreFindByStatus.class);
14
15          @Test
            Run | Debug
16          public void findPetsByAvailableStatus() {
17
18              logger.info("START::GET method for the find PET by status=available");
19              logger.info("GET: URL" +base_url);
20                  // Make GET call with status=available
21              RestAssured.given()
22                  .contentType(ContentType.JSON)
23                  .queryParam("status", "available")
```

Problems   Servers   Terminal   Data Source...   Properties   Console   Progress   Results of r...   JUnit   Gradle Tasks   Gradle Exec...

```
<terminated> TestPetStoreFindByStatus [TestNG] C:\Program Files\Java\jdk-21\bin\javaw.exe  (23-Jan-2024, 10:45:36 pm – 10:45:56 pm) [pid: 21348]
PASSED: Phase3.Assignment05.RestAssured.TestPetStoreFindByStatus.findPetsByPendingStatus
PASSED: Phase3.Assignment05.RestAssured.TestPetStoreFindByStatus.findPetsByAvailableStatus
PASSED: Phase3.Assignment05.RestAssured.TestPetStoreFindByStatus.findPetsBySoldStatus

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


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

File   Edit   Source   Refactor   Navigate   Search   Project   Run   Window   Help

Project Explorer

```java
9
10   import org.apache.log4j.Logger;
11
        Run All
12      public class UserLogout {
            private static final String Base_url= "https://petstore.swagger.io";
            static final Logger logger= Logger.getLogger(UserLogout.class);
15
16
17          @Test(description=" userLogout get method with the rest assured")
            Run | Debug
18          public void TestUserLogout() {
19              logger.info("START::GET method for the PET test");
20              logger.info("POST: URL" +Base_url);
21              try {
22                  RestAssured.given().baseUri(Base_url)
23                  .contentType(ContentType.JSON)
24                  .when().get("/v2/user/logout")
25                  .then().assertThat().statusCode(200)
26                  .and().assertThat().body("code", notNullValue())
27                  .and().assertThat().body("message", notNullValue());
```
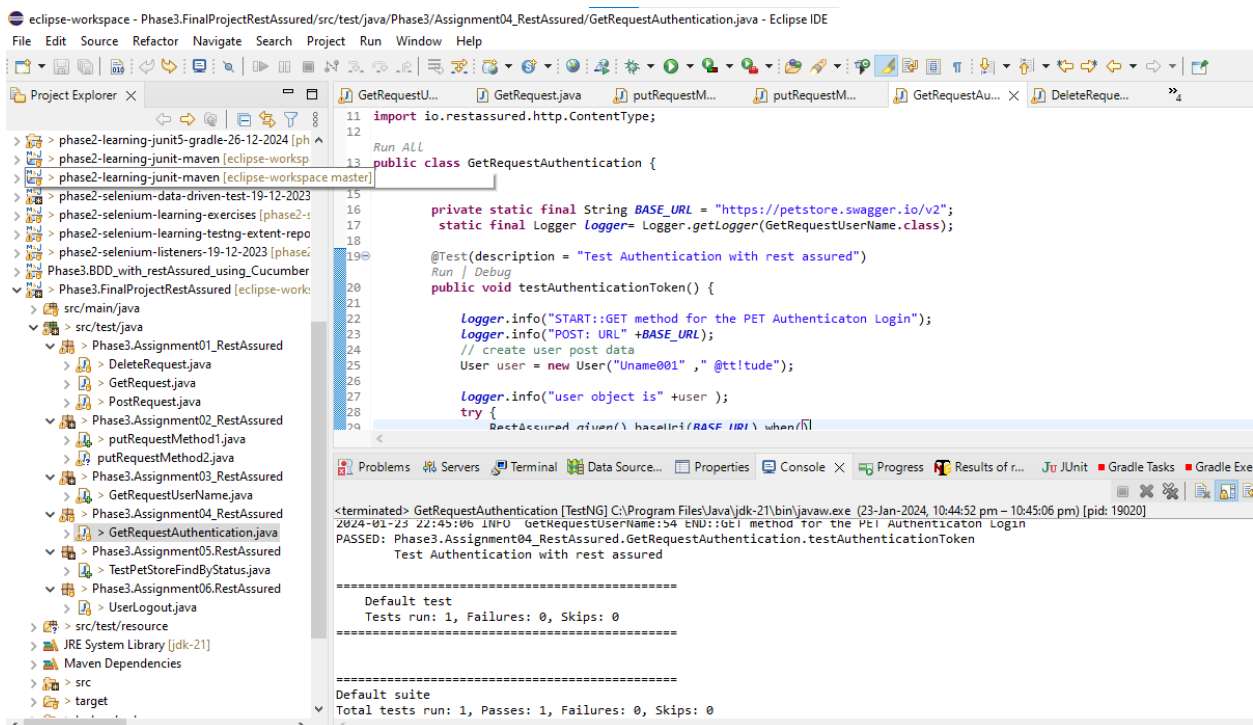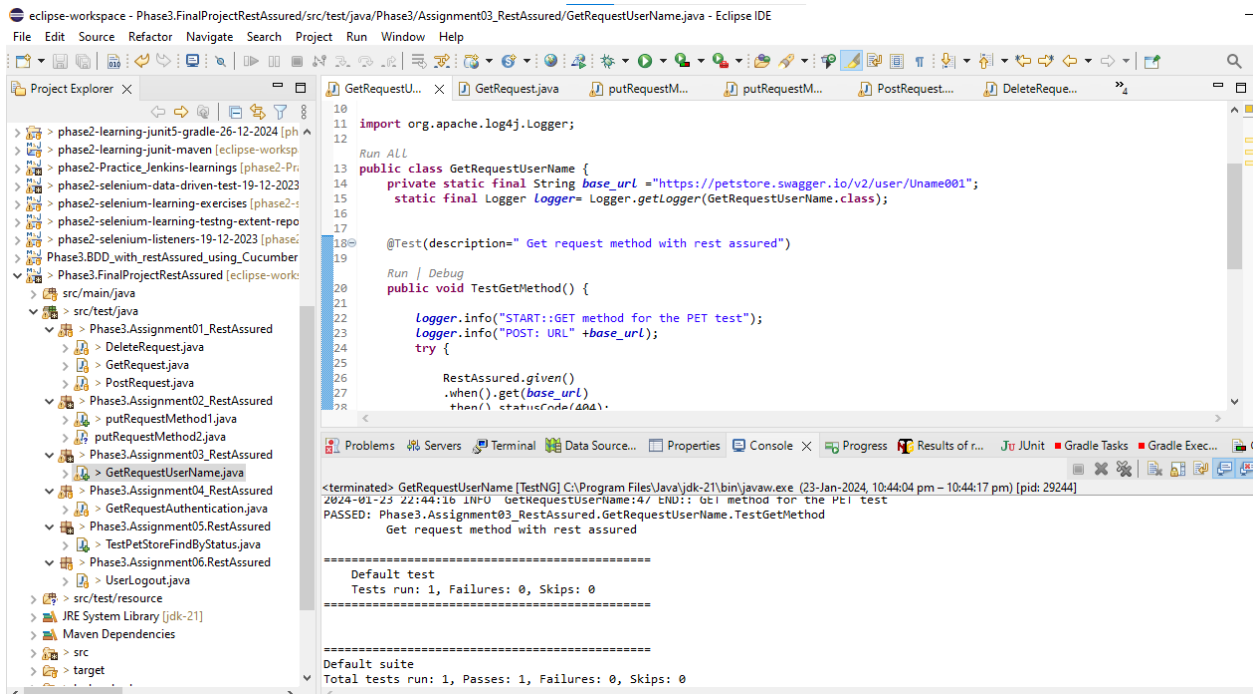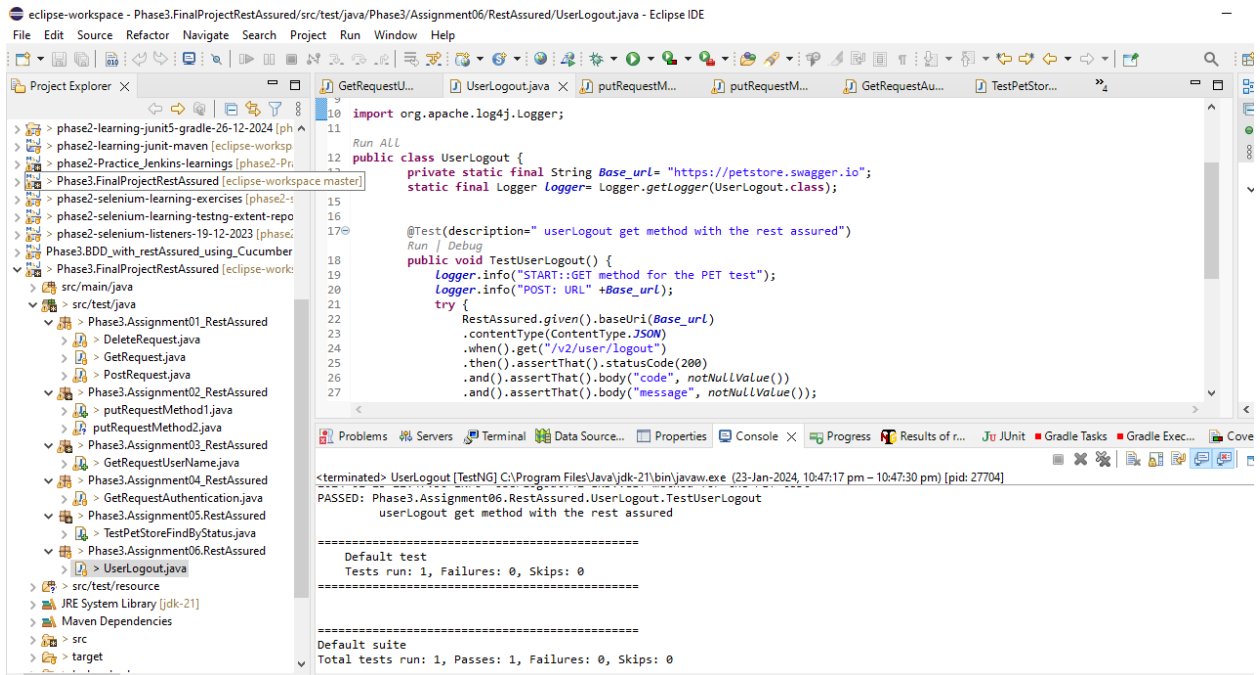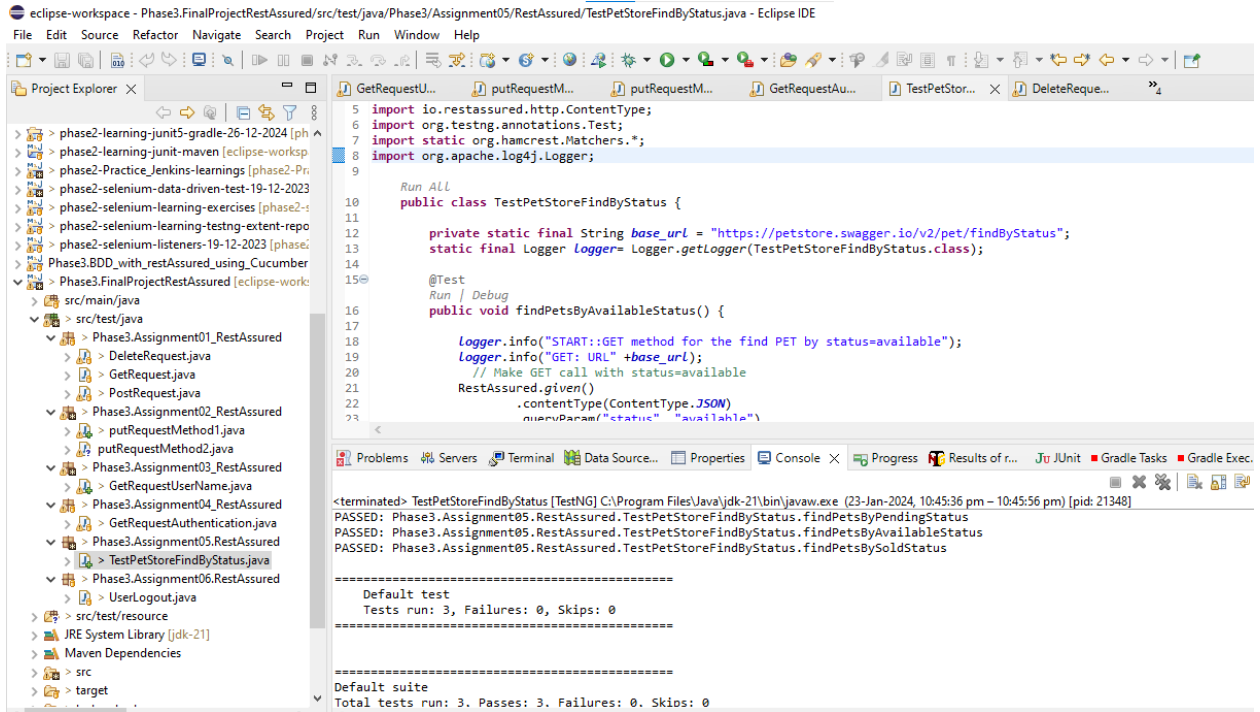
Problems   Servers   Terminal   Data Source...   Properties   Console   Progress   Results of r...   JUnit   Gradle Tasks   Gradle Exec...   Cove

```
<terminated> UserLogout [TestNG] C:\Program Files\Java\jdk-21\bin\javaw.exe  (23-Jan-2024, 10:47:17 pm – 10:47:30 pm) [pid: 27704]
PASSED: Phase3.Assignment06.RestAssured.UserLogout.TestUserLogout
    userLogout get method with the rest assured

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


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

File   Edit   Source   Navigate   Search   Project   Run   Design   Window   Help

Project Explorer

GetRequestU...   UserLogout.java   putRequestM...   TestNG.xml   GetRequestAu...   TestPetStor...

```xml
1  <?xml version="1.0" encoding="UTF-8"?>
2      Bind to grammar/schema...
3  <suite name="RestAssured Test">
4
5      <listeners>
6          <listener class-name="org.uncommons.reportng.HTMLReporter" />
7          <listener class-name="org.uncommons.reportng.JUnitXMLReporter" />
8      </listeners>
9
10     <test name="Assignment_01">
11         <classes>
12             <class name="Phase3.Assignment01_RestAssured.PostRequest"></class>
13             <class name="Phase3.Assignment01_RestAssured.GetRequest"></class>
14             <class name="Phase3.Assignment01_RestAssured.DeleteRequest"></class>
15         </classes>
16     </test>
17
18     <test name="DevTest Assignment_02">
19         <parameter name="environment" value="DEV" />
20         <classes>
21             <class name="Phase3.Assignment02_RestAssured.putRequestMethod2" />
22         </classes>
23     </test>
```

Design   Source

Problems   Servers   Terminal   Data Source...   Properties   Console   Progress   Results of r...   JUnit   Gradle Tasks   Gradle Exec...   Coverage

<terminated> Phase3.FinalProjectRestAssured_TestNG.xml [TestNG] C:\Program Files\Java\jdk-21\bin\javaw.exe (23-Jan-2024, 10:48:49 pm – 10:49:47 pm) [pid: 31200]
2024-01-23 22:49:46 INFO UserLogout:42 END::GET method for the PET test

===
RestAssured Test
Total tests run: 15, Passes: 15, Failures: 0, Skips: 0
===

Test Results Report
Overview

RestAssured Test
- Assignment_01 ✓
- DevTest Assignment_02 ✓
- QATest Assignment_02 ✓
- ProdTest Assignment_02 ✓
- Assignment_02 ✓
- Assignment_03 ✓
- Assignment_04 ✓
- Assignment_05 ✓
- Assignment_06 ✓

Test Results Report

Generated by TestNG with ReportNG at 22:48 IST on Tuesday 23 January 2024
Dell@DESKTOP-KM0QCD1 / Java 21.0.1 (Oracle Corporation) / Windows 10 10.0 (amd64)

RestAssured Test

	Duration	Passed	Skipped	Failed	Pass Rate
Assignment_01	15.450s	3	0	0	100%
DevTest Assignment_02	2.978s	1	0	0	100%
QATest Assignment_02	2.973s	1	0	0	100%
ProdTest Assignment_02	2.976s	1	0	0	100%
Assignment_02	8.788s	3	0	0	100%
Assignment_03	2.909s	1	0	0	100%
Assignment_04	3.789s	1	0	0	100%
Assignment_05	9.795s	3	0	0	100%
Assignment_06	2.900s	1	0	0	100%
Total		15	0	0	100%

JMeter

File　Edit　Search　Run　Options　Tools　Help

00:00:01　⚠ 0　0/10

- Test Plan
  - Phase3.Final Project Thread Group
    - Authentication HTTP Request
      - JSON Assertion
    - HTTP Authorization Manager
    - HTTP Request
      - XPath Assertion
    - View Results Tree

JSON Assertion

Name:	JSON Assertion
Comments:	
Assert JSON Path exists:	$.authenticated
Additionally assert value	☑
Match as regular expression	☑
Expected Value:	1　true
Expect null	☐
Invert assertion (will fail if above conditions met)	☐

File　Edit　Search　Run　Options　Tools　Help

00:00:01　⚠ 0　0/10

- Test Plan
  - Phase3.Final Project Thread Group
    - Authentication HTTP Request
      - JSON Assertion
    - HTTP Authorization Manager
    - HTTP Request
      - XPath Assertion
    - View Results Tree

HTTP Authorization Manager

| Name: | HTTP Authorization Manager |
| Comments: | |

Options
☐ Clear auth on each iteration?
☐ Use Thread Group configuration to control clearing

Authorizations Stored in the Authorization Manager

Base URL	Username:	Password:	Domain	Realm	Mechanism
	user	••••••			BASIC