# REST API AUTOMATION MARCH 2022 UDEMY

# BASICS:

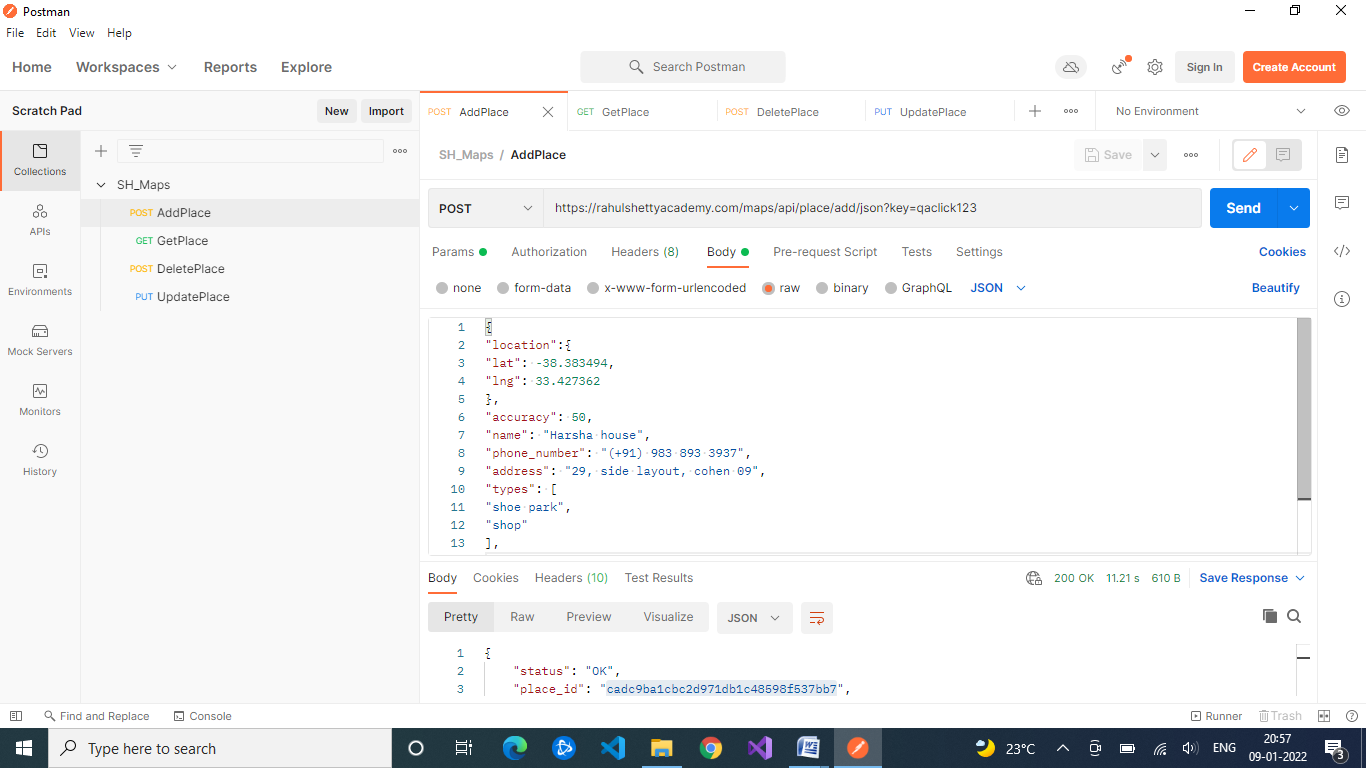
C:\RESTAPIAutomation\DemoProject

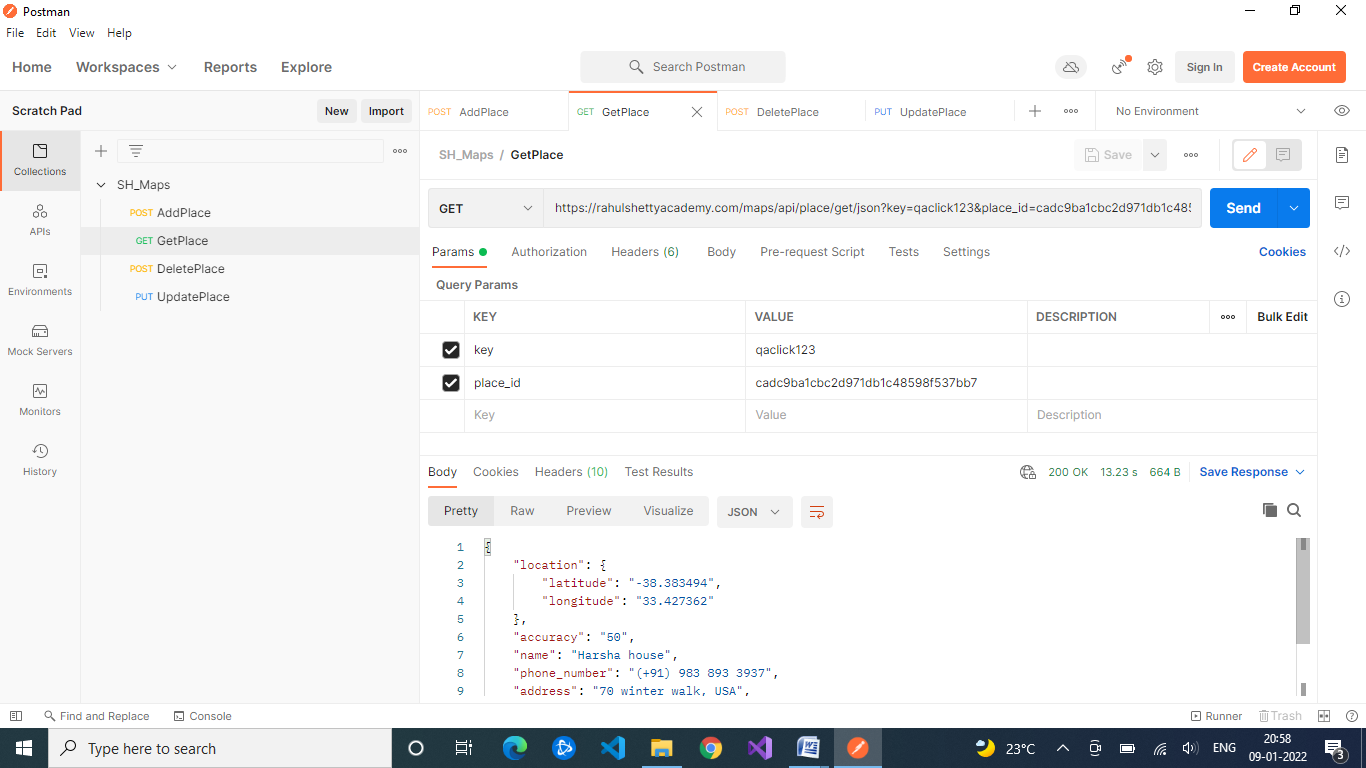
* End point: Address where API is hosted on the Server.
* HTTP methods which are commonly used to communicate with Rest API’s are
* **GET, POST, PUT, and DELETE**
* GET- The GET method is used to extract information from the given server using a given URI. While using GET request, it should only extract data and should have no other effect on the data. No Payload/Body required
* **How to send input data in GET?**  
  Ans: Using Query Parameters
* POST- A POST request is used to send data to the server, for example, customer information, file upload, etc. using HTML forms.
* **How to send input data in POST?**  
  Ans: Using Form Parameters /Body Payload
* PUT- Replaces all current representations of the target resource with the uploaded content.
* DELETE- Removes all current representations of the target resource given by a URI.
* **Resources:  
  Resources represent API/Collection which can be accessed from the Server**
* Google.com/maps  
  google.com/search  
  google.com/images
* **Path Parameters:**  
  ***Path parameters*** are variable parts of a URL path. They are typically used to point to a specific resource within a collection, such as a user identified by ID
* <https://www.google.com/Images/1123343>  
  <https://www.google.com/docs/1123343>  
  <https://amazon.com/orders/112>
* <https://www.google.com/search?q=newyork&oq=newyork&aqs=chrome..69i57j0l7.2501j0j7&sourceid=chrome&ie=UTF-8>
* **Query Parameters:**  
  Query Parameter is used to sort/filter the resources.
* Query Parameters are identified with?””
* https://amazon.com/orders?sort\_by=2/20/2020
* **Headers/Cookies**:
* Headers represent the meta-data associated with the API request and response. In layman terms, we were sending Additional details to API to process our request.  
  Example : Authorization details
* **End Point Request URL can be constructed as below**  
  Base URL/resource/(Query/Path)Parameters

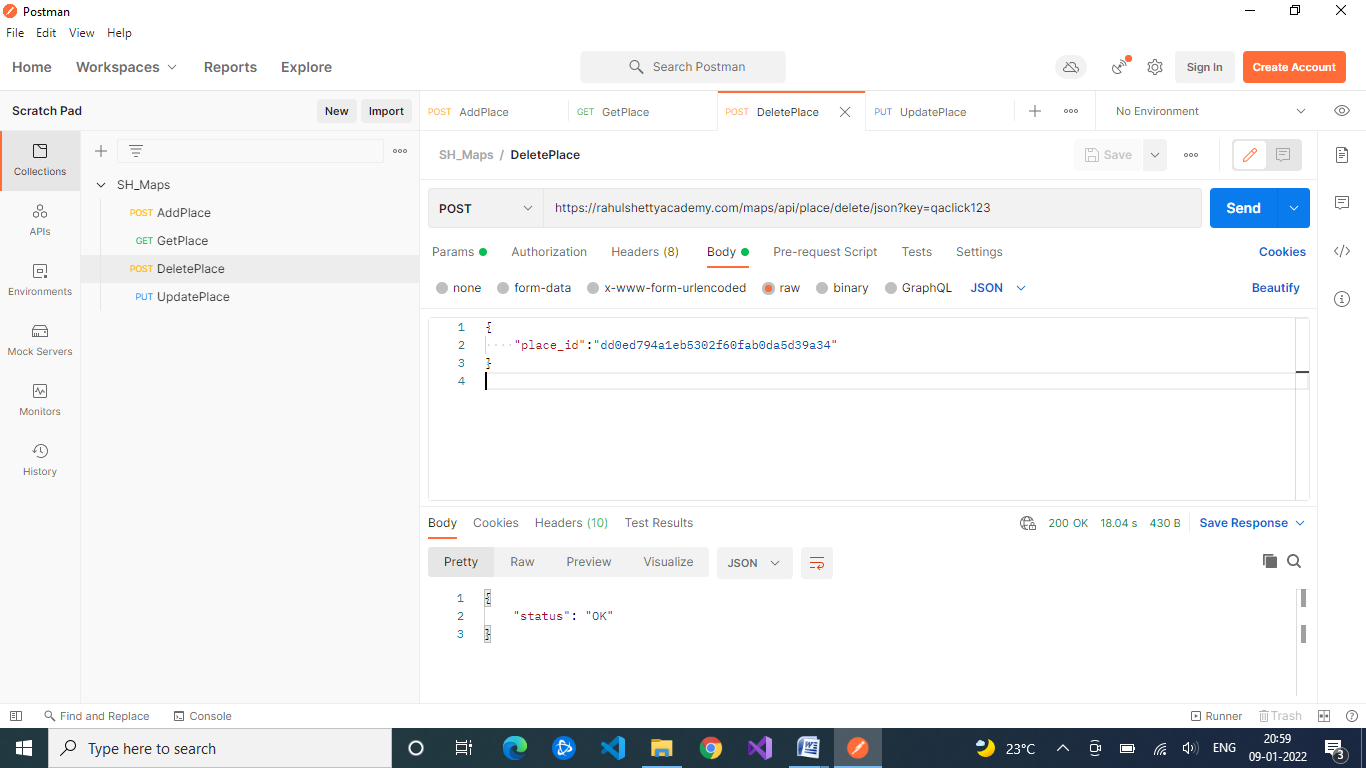
# POSTMAN: POST,GET,DELETE,PUT

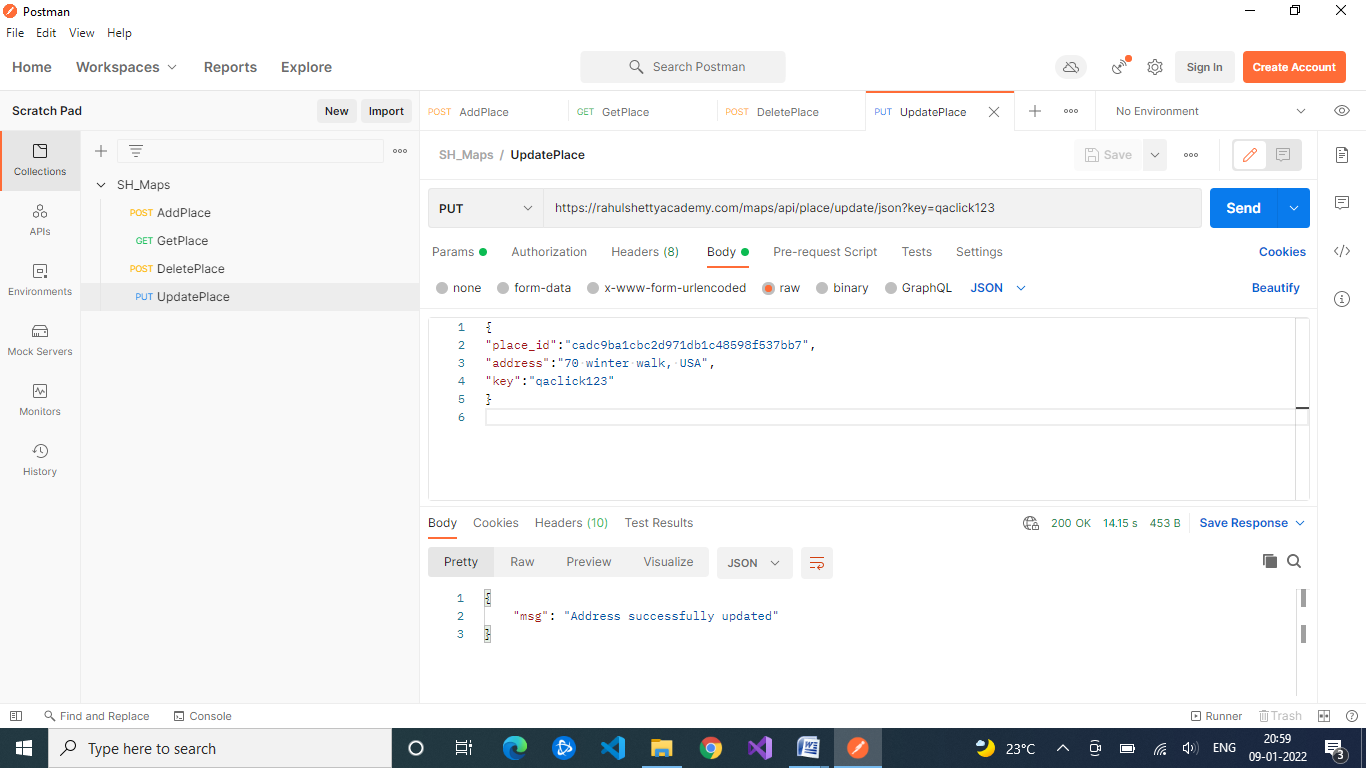
Install postman by going to official website

* Create new collection and provide name for it as SH\_Maps
* Click on view more actions … button and click on Add request
* Provide Base URL and append Resource to it in the table pass query params and in body provide payload and click on send button and observe the response









# Download Java and Eclipse

Download Java and eclipse from following paths:

Place java jdk in c:/programfiles/java and take the path inside till jdk and set env variable system variable

<https://www.eclipse.org/downloads/>

* Open eclipse with workspace C:\RESTAPIAutomation and create demoproject java project
* Right click on project and configure-> convert to maven
* Include <dependencies> tag in pom.xml and take dependencies from maven repository
* Search with restassured, testng, hamcrest keywords and take latest and add to pom.xml
* <https://mvnrepository.com/artifact/org.hamcrest/hamcrest/2.2>
* Project-> build automatically ticked

# POST Request Automation:

Right click on src folder and create a new class with name Basics.java and include following:

package restapiautomation;

import io.restassured.RestAssured;

import static io.restassured.RestAssured.\*;

public class Basics {

public static void main(String[] args) {

// validate if Add Place API is workimg as expected

//given - all input details

//when - Submit the API -resource,http method

//Then - validate the response

RestAssured.baseURI= "https://rahulshettyacademy.com";

given().log().all().queryParam("key", "qaclick123").header("Content-Type","application/json")

.body("{\r\n"

+ "\"location\":{\r\n"

+ "\"lat\": -38.383494,\r\n"

+ "\"lng\": 33.427362\r\n"

+ "},\r\n"

+ "\"accuracy\": 50,\r\n"

+ "\"name\": \"Shree house\",\r\n"

+ "\"phone\_number\": \"(+91) 983 893 3937\",\r\n"

+ "\"address\": \"29, side layout, cohen 09\",\r\n"

+ "\"types\": [\r\n"

+ "\"shoe park\",\r\n"

+ "\"shop\"\r\n"

+ "],\r\n"

+ "\"website\": \"http://google.com\",\r\n"

+ "\"language\": \"French-IN\"\r\n"

+ "}\r\n"

+ "").when().post("maps/api/place/add/json")

.then().log().all().assertThat().statusCode(200);

}

}

# SECTION 5 : POST, PUT and GET automation:

package restapiautomation;

import io.restassured.RestAssured;

import io.restassured.path.json.JsonPath;

import static io.restassured.RestAssured.\*;

import static org.hamcrest.Matchers.\*;

import org.testng.Assert;

import files.Payload;

import files.ReUsableMethods;

public class Basics {

public static void main(String[] args) {

// validate adding place then update place using place id and then get place id and assert it with actual

//given - all input details

//when - Submit the API -resource,http method

//Then - validate the response

//ADD PLACE

RestAssured.*baseURI*= "https://rahulshettyacademy.com";

String response = *given*().log().all().queryParam("key", "qaclick123").header("Content-Type","application/json")

.body(Payload.*AddPlace*()).when().post("maps/api/place/add/json")

.then().assertThat().statusCode(200).body("scope", *equalTo*("APP"))

.header("server", "Apache/2.4.18 (Ubuntu)").extract().response().asString();

System.***out***.println(response);

JsonPath js = new JsonPath(response);

String placeId = js.getString("place\_id");

System.***out***.println(placeId);

//UPDATE PLACE

String newAddress = "Winter Walk, Africa";

*given*().log().all().queryParam("key","qaclick123").header("Content-Type","application/json")

.body("{\r\n"

+ "\"place\_id\":\""+placeId+"\",\r\n"

+ "\"address\":\""+newAddress+"\",\r\n"

+ "\"key\":\"qaclick123\"\r\n"

+ "}\r\n"

+ "")

.when().put("maps/api/place/update/json")

.then().assertThat().log().all().statusCode(200).body("msg", *equalTo*("Address successfully updated"));

//GET PLACE

String getPlaceResponse = *given*().log().all().queryParam("key", "qaclick123")

.queryParam("place\_id", placeId)

.when().get("maps/api/place/get/json")

.then().assertThat().log().all().statusCode(200).extract().response().asString();

JsonPath js1 = ReUsableMethods.*rawToJson*(getPlaceResponse);

String actualAddress = js1.getString("address");

System.***out***.println(actualAddress);

Assert.*assertEquals*(actualAddress, newAddress);

}

}

Payload.java:

package files;

public class Payload {

public static String AddPlace() {

return "{\r\n"

+ "\"location\":{\r\n"

+ "\"lat\": -38.383494,\r\n"

+ "\"lng\": 33.427362\r\n"

+ "},\r\n"

+ "\"accuracy\": 50,\r\n"

+ "\"name\": \"Harsha New house\",\r\n"

+ "\"phone\_number\": \"(+91) 983 893 3937\",\r\n"

+ "\"address\": \"29, side layout, cohen 09\",\r\n"

+ "\"types\": [\r\n"

+ "\"shoe park\",\r\n"

+ "\"shop\"\r\n"

+ "],\r\n"

+ "\"website\": \"http://google.com\",\r\n"

+ "\"language\": \"French-IN\"\r\n"

+ "}";

}

}

ReUsableMethods.java:

package files;

import io.restassured.path.json.JsonPath;

public class ReUsableMethods {

public static JsonPath rawToJson(String response)

{

JsonPath js1 = new JsonPath(response);

return js1;

}

}

# SECTION 6: Nested Json

ComplexJsonParse.java:

package restapiautomation;

import files.Payload;

import io.restassured.path.json.JsonPath;

public class ComplexJsonParse {

/\*TEST CASES:

\* 1. Print No of courses returned by API

\* 2.Print Purchase Amount

\* 3. Print Title of the first course

\* 4. Print All course titles and their respective Prices

\* 5. Print no of copies sold by RPA Course

\* 6. Verify if Sum of all Course prices matches with Purchase Amount

\*/

public static void main(String[] args)

{

JsonPath js = new JsonPath(Payload.*CoursePrice*());

//1.Print No of courses returned by API

System.***out***.println("1.Print No of courses returned by API");

int coursesCount = js.getInt("courses.size()");

System.***out***.println(coursesCount);

//2.Print Purchase Amount

System.***out***.println("2.Print Purchase Amount");

int totalAmount = js.getInt("dashboard.purchaseAmount");

System.***out***.println(totalAmount);

//3.Print Title of the first course

System.***out***.println("3.Print Title of the first course");

String titleFirstCourse = js.getString("courses[0].title");

System.***out***.println(titleFirstCourse);

//4. Print All course titles and their respective Prices

System.***out***.println("4. Print All course titles and their respective Prices");

for(int i=0;i<coursesCount;i++)

{

String courseTitles = js.get("courses["+i+"].title");

System.***out***.println(courseTitles);

System.***out***.println(js.get("courses["+i+"].price").toString());

}

//5. Print no of copies sold by RPA Course

System.***out***.println("5. Print no of copies sold by RPA Course");

for(int i=0;i<coursesCount;i++)

{

String courseTitles = js.get("courses["+i+"].title");

if(courseTitles.equalsIgnoreCase("RPA"))

{

int copies = js.get("courses["+i+"].copies");

System.***out***.println(copies);

break;

}

}

}

}

SumValidation.java:

package restapiautomation;

import org.testng.Assert;

import org.testng.annotations.Test;

import files.Payload;

import io.restassured.path.json.JsonPath;

public class SumValidation {

*@Test*

public void sumOfCourses()

{

//6. Verify if Sum of all Course prices matches with Purchase Amount

System.***out***.println("6. Verify if Sum of all Course prices matches with Purchase Amount");

int sum = 0;

JsonPath js=new JsonPath(Payload.*CoursePrice*());

int count= js.getInt("courses.size()");

for(int i=0;i<count;i++)

{

int price=js.getInt("courses["+i+"].price");

int copies=js.getInt("courses["+i+"].copies");

int amount = price \* copies;

System.***out***.println(amount);

sum = sum + amount;

}

System.***out***.println(sum);

int purchaseAmount =js.getInt("dashboard.purchaseAmount");

Assert.*assertEquals*(sum, purchaseAmount);

}

}

# SECTION 7: Parameterization

DynamicJson.java:

package files;

import io.restassured.RestAssured;

import io.restassured.path.json.JsonPath;

import static io.restassured.RestAssured.\*;

import org.testng.annotations.DataProvider;

import org.testng.annotations.Test;

public class DynamicJson {

@Test(dataProvider="BooksData")

public void addBook(String isbn, String aisle)

{

RestAssured.baseURI="http://216.10.245.166";

String response = given().header("Content-Type","application/json")

.body(Payload.Addbook(isbn,aisle))

.when().post("/Library/Addbook.php")

.then().log().all().assertThat().statusCode(200)

.extract().response().asString();

JsonPath js = ReUsableMethods.rawToJson(response);

String id = js.get("ID");

System.out.println(id);

}

@DataProvider(name="BooksData")

public Object[][] getData()

{

return new Object[][] {{"first","101"},{"second","102"},{"third","103"}};

}

}

Payload.java:

public static String Addbook(String isbn, String aisle)

{

String payload = "{\r\n"

+ " \"name\":\"Learn Appium Automation with Java\",\r\n"

+ " \"isbn\":\""+isbn+"\",\r\n"

+ " \"aisle\":\""+aisle+"\",\r\n"

+ " \"author\":\"John Foe\"\r\n"

+ "}";

return payload;

}

Handle Static JSON from External source:

Basics.java:

package restapiautomation;

import io.restassured.RestAssured;

import io.restassured.path.json.JsonPath;

import static io.restassured.RestAssured.\*;

import static org.hamcrest.Matchers.\*;

import java.io.IOException;

import java.nio.file.Files;

import java.nio.file.Paths;

import org.testng.Assert;

import files.Payload;

import files.ReUsableMethods;

public class Basics {

public static void main(String[] args) throws IOException {

// validate adding place then update place using place id and then get place id and assert it with actual

//given - all input details

//when - Submit the API -resource,http method

//Then - validate the response

//ADD PLACE

RestAssured.baseURI= "https://rahulshettyacademy.com";

String response = given().log().all().queryParam("key", "qaclick123").header("Content-Type","application/json")

//one way by passing Json file to body from our system

.body(new String(Files.readAllBytes(Paths.get("C:\\RESTAPIAutomation\\addPlace.json")))).when().post("maps/api/place/add/json")

//other way by passing payload file and calling method from it to body

//.body(Payload.AddPlace()).when().post("maps/api/place/add/json")

.then().assertThat().statusCode(200).body("scope", equalTo("APP"))

.header("server", "Apache/2.4.18 (Ubuntu)").extract().response().asString();

System.out.println(response);

JsonPath js = new JsonPath(response);

String placeId = js.getString("place\_id");

System.out.println(placeId);

//UPDATE PLACE

String newAddress = "Winter Walk, Africa";

given().log().all().queryParam("key","qaclick123").header("Content-Type","application/json")

.body("{\r\n"

+ "\"place\_id\":\""+placeId+"\",\r\n"

+ "\"address\":\""+newAddress+"\",\r\n"

+ "\"key\":\"qaclick123\"\r\n"

+ "}\r\n"

+ "")

.when().put("maps/api/place/update/json")

.then().assertThat().log().all().statusCode(200).body("msg", equalTo("Address successfully updated"));

//GET PLACE

String getPlaceResponse = given().log().all().queryParam("key", "qaclick123")

.queryParam("place\_id", placeId)

.when().get("maps/api/place/get/json")

.then().assertThat().log().all().statusCode(200).extract().response().asString();

JsonPath js1 = ReUsableMethods.rawToJson(getPlaceResponse);

String actualAddress = js1.getString("address");

System.out.println(actualAddress);

Assert.assertEquals(actualAddress, newAddress);

}

}

# SECTION 8: Jira API

Download JIRA:

Jira Trial licence code:

B0LE-N6WI-ZHAD-HHUV

**Jira app: username: harsha, password: shree, email:** [**prince.harsha6@gmail.com**](mailto:prince.harsha6@gmail.com)

**C:\Users\admin\Atlassian\Jira\bin**

**Double click on start-jira to start service and then open localhost:8080 in browser to start JIRA**

JIRA APIs link:

<https://docs.atlassian.com/jira-software/REST/7.3.1/>

POSTMAN:

**JIRAAUTH**:

POST request, Url: <http://localhost:8080/rest/auth/1/session>

Body: raw json type:

{ "username":"harsha","password":"shree7117"}

Response:

{

    "session": {

        "name": "JSESSIONID",

        "value": "50C84CCE0CA7345765F1F9B6B29E48FB"

    },

    "loginInfo": {

        "loginCount": 3,

        "previousLoginTime": "2022-03-10T20:21:34.140+0530"

    }

}

**CREATEISSUE**: Get session id from above and use for cookie value

POST request, Url: <http://localhost:8080/rest/api/2/issue>

Header: Key: Cookie, Value: JSESSIONID=50C84CCE0CA7345765F1F9B6B29E48FB

Body: raw json type:

{

    "fields":{

        "project":

        {

            "key":"RSA"

        },

        "summary":"Harsha Credit card defect",

        "description": "Creating my first bug",

        "issuetype":{

            "name":"Bug"

        }

    }

}

Response:

{

    "id": "10100",

    "key": "RSA-1",

    "self": "http://localhost:8080/rest/api/2/issue/10000"

}

* Create issue like above in postman and remember the id value generated in response

**Create a Java class in project Eclipse as follows:**

**JiraTest.java:**

package files;

import static io.restassured.RestAssured.\*;

import java.io.File;

import org.testng.Assert;

import io.restassured.RestAssured;

import io.restassured.filter.session.SessionFilter;

import io.restassured.path.json.JsonPath;

public class JiraTest

{

public static void main(String[] args)

{

RestAssured.baseURI="http://localhost:8080";

//Login Scenario

SessionFilter session=new SessionFilter();

String response=given().relaxedHTTPSValidation().header("Content-Type","application/json").body("{\r\n" +

" \"username\": \"harsha\",\r\n" +

" \"password\": \"shree7117\"\r\n" +

"}").log().all().filter(session).when().post("/rest/auth/1/session").then().log().all().extract().response().asString();

String expectedMessage ="Hi How are you?";

//Add comment

String addCommentResponse = given().pathParam("key", "10100").log().all().header("Content-Type","application/json").body("{\r\n" +

" \"body\": \""+expectedMessage+"\",\r\n" +

" \"visibility\": {\r\n" +

" \"type\": \"role\",\r\n" +

" \"value\": \"Administrators\"\r\n" +

" }\r\n" +

"}").filter(session).when().post("/rest/api/2/issue/{key}/comment").then().log().all()

.assertThat().statusCode(201).extract().response().asString();

JsonPath js=new JsonPath(addCommentResponse);

String commentId= js.getString("id");

//Add Attachment

given().header("X-Atlassian-Token","no-check").filter(session).pathParam("key", "10100")

.header("Content-Type","multipart/form-data")

.multiPart("file",new File("jira.txt")).when().

post("rest/api/2/issue/{key}/attachments").then().log().all().assertThat().statusCode(200);

//Get Issue

String issueDetails=given().filter(session).pathParam("key", "10100")

.queryParam("fields", "comment")

.log().all().when().get("/rest/api/2/issue/{key}").then()

.log().all().extract().response().asString();

System.out.println(issueDetails);

JsonPath js1 =new JsonPath(issueDetails);

int commentsCount=js1.getInt("fields.comment.comments.size()");

for(int i=0;i<commentsCount;i++)

{

String commentIdIssue =js1.get("fields.comment.comments["+i+"].id").toString();

if (commentIdIssue.equalsIgnoreCase(commentId))

{

String message= js1.get("fields.comment.comments["+i+"].body").toString();

System.out.println(message);

Assert.assertEquals(message, expectedMessage);

}

}

}

}

* Create another file in root project with name:

Jira.txt :

Hello

This is Automation Testing

**OUTPUT:**

Request method: POST

Request URI: http://localhost:8080/rest/auth/1/session

Proxy: <none>

Request params: <none>

Query params: <none>

Form params: <none>

Path params: <none>

Headers: Accept=\*/\*

Content-Type=application/json

Cookies: <none>

Multiparts: <none>

Body:

{

"username": "harsha",

"password": "shree7117"

}

HTTP/1.1 200

X-AREQUESTID: 1149x168x1

Referrer-Policy: strict-origin-when-cross-origin

X-XSS-Protection: 1; mode=block

X-Content-Type-Options: nosniff

X-Frame-Options: SAMEORIGIN

Content-Security-Policy: sandbox

Strict-Transport-Security: max-age=31536000

Set-Cookie: atlassian.xsrf.token=B0LE-N6WI-ZHAD-HHUV\_52e2b0a31c823d570c9c9298d183740d8b26403c\_lout; Path=/

X-AUSERNAME: anonymous

Set-Cookie: JSESSIONID=21F9BD57D811CE2703D8BD1EB669FF1A; Path=/; HttpOnly

X-Seraph-LoginReason: OK

Cache-Control: no-cache, no-store, no-transform

Content-Encoding: gzip

Vary: User-Agent

Content-Type: application/json;charset=UTF-8

Transfer-Encoding: chunked

Date: Sat, 12 Mar 2022 13:39:01 GMT

Keep-Alive: timeout=20

Connection: keep-alive

{

"session": {

"name": "JSESSIONID",

"value": "21F9BD57D811CE2703D8BD1EB669FF1A"

},

"loginInfo": {

"loginCount": 9,

"previousLoginTime": "2022-03-12T19:06:55.288+0530"

}

}

Request method: POST

Request URI: http://localhost:8080/rest/api/2/issue/10100/comment

Proxy: <none>

Request params: <none>

Query params: <none>

Form params: <none>

Path params: key=10100

Headers: Accept=\*/\*

Content-Type=application/json

Cookies: <none>

Multiparts: <none>

Body:

{

"body": "Hi How are you?",

"visibility": {

"type": "role",

"value": "Administrators"

}

}

HTTP/1.1 201

X-AREQUESTID: 1149x169x1

X-ASESSIONID: 1hvi2np

Referrer-Policy: strict-origin-when-cross-origin

X-XSS-Protection: 1; mode=block

X-Content-Type-Options: nosniff

X-Frame-Options: SAMEORIGIN

Content-Security-Policy: sandbox

Strict-Transport-Security: max-age=31536000

X-Seraph-LoginReason: OK

Set-Cookie: atlassian.xsrf.token=B0LE-N6WI-ZHAD-HHUV\_77dc62e64604261c0c6e9eb48edbbbe126f6bee0\_lin; Path=/

X-AUSERNAME: harsha

Location: http://localhost:8080/rest/api/2/issue/10100/comment/10001

Cache-Control: no-cache, no-store, no-transform

Content-Encoding: gzip

Vary: User-Agent

Content-Type: application/json;charset=UTF-8

Transfer-Encoding: chunked

Date: Sat, 12 Mar 2022 13:39:01 GMT

Keep-Alive: timeout=20

Connection: keep-alive

{

"self": "http://localhost:8080/rest/api/2/issue/10100/comment/10001",

"id": "10001",

"author": {

"self": "http://localhost:8080/rest/api/2/user?username=harsha",

"name": "harsha",

"key": "JIRAUSER10000",

"emailAddress": "prince.harsha6@gmail.com",

"avatarUrls": {

"48x48": "http://localhost:8080/secure/useravatar?avatarId=10341",

"24x24": "http://localhost:8080/secure/useravatar?size=small&avatarId=10341",

"16x16": "http://localhost:8080/secure/useravatar?size=xsmall&avatarId=10341",

"32x32": "http://localhost:8080/secure/useravatar?size=medium&avatarId=10341"

},

"displayName": "prince.harsha6@gmail.com",

"active": true,

"timeZone": "Asia/Calcutta"

},

"body": "Hi How are you?",

"updateAuthor": {

"self": "http://localhost:8080/rest/api/2/user?username=harsha",

"name": "harsha",

"key": "JIRAUSER10000",

"emailAddress": "prince.harsha6@gmail.com",

"avatarUrls": {

"48x48": "http://localhost:8080/secure/useravatar?avatarId=10341",

"24x24": "http://localhost:8080/secure/useravatar?size=small&avatarId=10341",

"16x16": "http://localhost:8080/secure/useravatar?size=xsmall&avatarId=10341",

"32x32": "http://localhost:8080/secure/useravatar?size=medium&avatarId=10341"

},

"displayName": "prince.harsha6@gmail.com",

"active": true,

"timeZone": "Asia/Calcutta"

},

"created": "2022-03-12T19:09:02.213+0530",

"updated": "2022-03-12T19:09:02.213+0530",

"visibility": {

"type": "role",

"value": "Administrators"

}

}

HTTP/1.1 200

X-AREQUESTID: 1149x170x1

X-ASESSIONID: 1hvi2np

Referrer-Policy: strict-origin-when-cross-origin

X-XSS-Protection: 1; mode=block

X-Content-Type-Options: nosniff

X-Frame-Options: SAMEORIGIN

Content-Security-Policy: sandbox

Strict-Transport-Security: max-age=31536000

X-Seraph-LoginReason: OK

Set-Cookie: atlassian.xsrf.token=B0LE-N6WI-ZHAD-HHUV\_62e723443de7083e9fed699123cc248011d9ccf5\_lin; Path=/

X-AUSERNAME: harsha

Cache-Control: no-cache, no-store, no-transform

Content-Encoding: gzip

Vary: User-Agent

Content-Type: application/json;charset=UTF-8

Transfer-Encoding: chunked

Date: Sat, 12 Mar 2022 13:39:03 GMT

Keep-Alive: timeout=20

Connection: keep-alive

[

{

"self": "http://localhost:8080/rest/api/2/attachment/10001",

"id": "10001",

"filename": "jira.txt",

"author": {

"self": "http://localhost:8080/rest/api/2/user?username=harsha",

"name": "harsha",

"key": "JIRAUSER10000",

"emailAddress": "prince.harsha6@gmail.com",

"avatarUrls": {

"48x48": "http://localhost:8080/secure/useravatar?avatarId=10341",

"24x24": "http://localhost:8080/secure/useravatar?size=small&avatarId=10341",

"16x16": "http://localhost:8080/secure/useravatar?size=xsmall&avatarId=10341",

"32x32": "http://localhost:8080/secure/useravatar?size=medium&avatarId=10341"

},

"displayName": "prince.harsha6@gmail.com",

"active": true,

"timeZone": "Asia/Calcutta"

},

"created": "2022-03-12T19:09:03.396+0530",

"size": 33,

"mimeType": "text/plain",

"content": "http://localhost:8080/secure/attachment/10001/jira.txt"

}

]

Request method: GET

Request URI: http://localhost:8080/rest/api/2/issue/10100?fields=comment

Proxy: <none>

Request params: <none>

Query params: fields=comment

Form params: <none>

Path params: key=10100

Headers: Accept=\*/\*

Cookies: JSESSIONID=21F9BD57D811CE2703D8BD1EB669FF1A

Multiparts: <none>

Body: <none>

HTTP/1.1 200

X-AREQUESTID: 1149x171x1

X-ASESSIONID: 1hvi2np

Referrer-Policy: strict-origin-when-cross-origin

X-XSS-Protection: 1; mode=block

X-Content-Type-Options: nosniff

X-Frame-Options: SAMEORIGIN

Content-Security-Policy: sandbox

Strict-Transport-Security: max-age=31536000

X-Seraph-LoginReason: OK

Set-Cookie: atlassian.xsrf.token=B0LE-N6WI-ZHAD-HHUV\_939a8be5b19d213e54a32bf9714934f66ad3fa27\_lin; Path=/

X-AUSERNAME: harsha

Cache-Control: no-cache, no-store, no-transform

Content-Encoding: gzip

Vary: User-Agent

Content-Type: application/json;charset=UTF-8

Transfer-Encoding: chunked

Date: Sat, 12 Mar 2022 13:39:03 GMT

Keep-Alive: timeout=20

Connection: keep-alive

{

"expand": "renderedFields,names,schema,operations,editmeta,changelog,versionedRepresentations",

"id": "10100",

"self": "http://localhost:8080/rest/api/2/issue/10100",

"key": "RSA-2",

"fields": {

"comment": {

"comments": [

{

"self": "http://localhost:8080/rest/api/2/issue/10100/comment/10001",

"id": "10001",

"author": {

"self": "http://localhost:8080/rest/api/2/user?username=harsha",

"name": "harsha",

"key": "JIRAUSER10000",

"emailAddress": "prince.harsha6@gmail.com",

"avatarUrls": {

"48x48": "http://localhost:8080/secure/useravatar?avatarId=10341",

"24x24": "http://localhost:8080/secure/useravatar?size=small&avatarId=10341",

"16x16": "http://localhost:8080/secure/useravatar?size=xsmall&avatarId=10341",

"32x32": "http://localhost:8080/secure/useravatar?size=medium&avatarId=10341"

},

"displayName": "prince.harsha6@gmail.com",

"active": true,

"timeZone": "Asia/Calcutta"

},

"body": "Hi How are you?",

"updateAuthor": {

"self": "http://localhost:8080/rest/api/2/user?username=harsha",

"name": "harsha",

"key": "JIRAUSER10000",

"emailAddress": "prince.harsha6@gmail.com",

"avatarUrls": {

"48x48": "http://localhost:8080/secure/useravatar?avatarId=10341",

"24x24": "http://localhost:8080/secure/useravatar?size=small&avatarId=10341",

"16x16": "http://localhost:8080/secure/useravatar?size=xsmall&avatarId=10341",

"32x32": "http://localhost:8080/secure/useravatar?size=medium&avatarId=10341"

},

"displayName": "prince.harsha6@gmail.com",

"active": true,

"timeZone": "Asia/Calcutta"

},

"created": "2022-03-12T19:09:02.213+0530",

"updated": "2022-03-12T19:09:02.213+0530",

"visibility": {

"type": "role",

"value": "Administrators"

}

}

],

"maxResults": 1,

"total": 1,

"startAt": 0

}

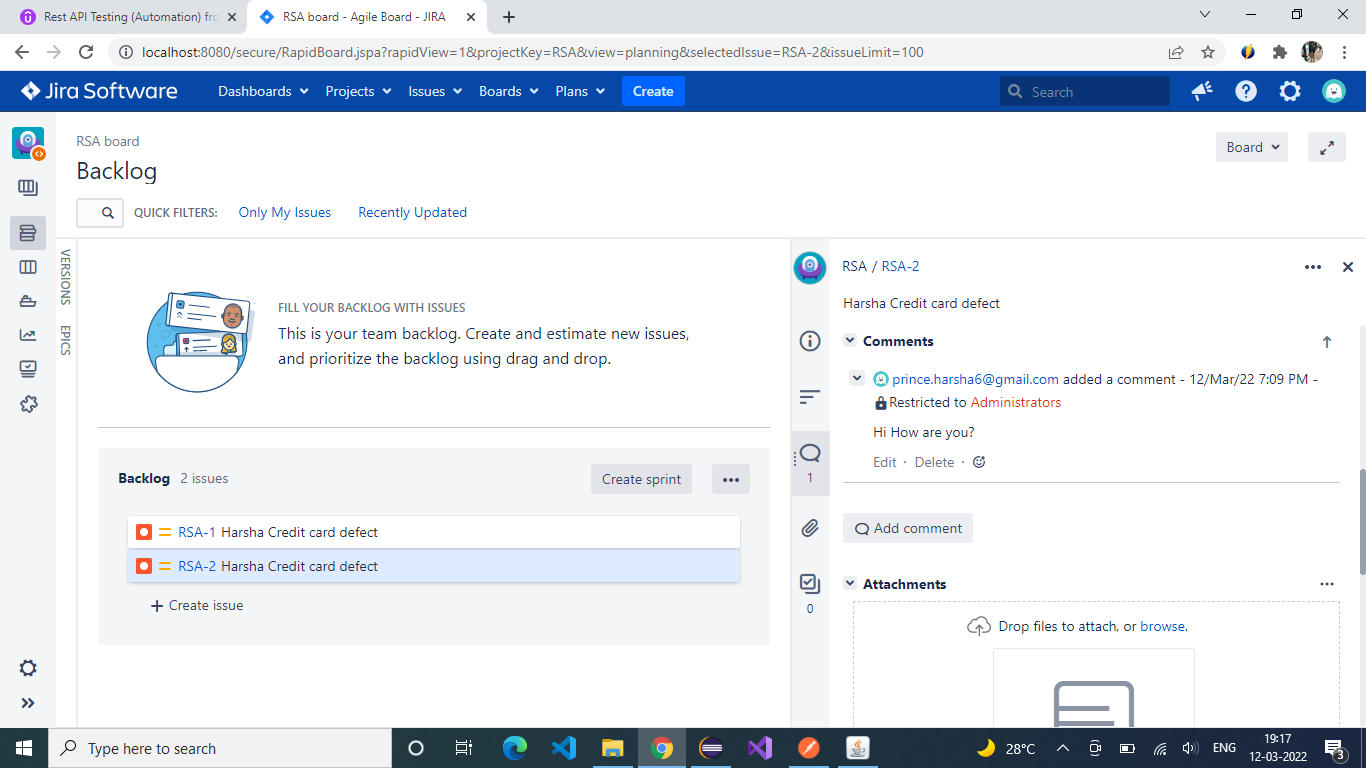
}

}

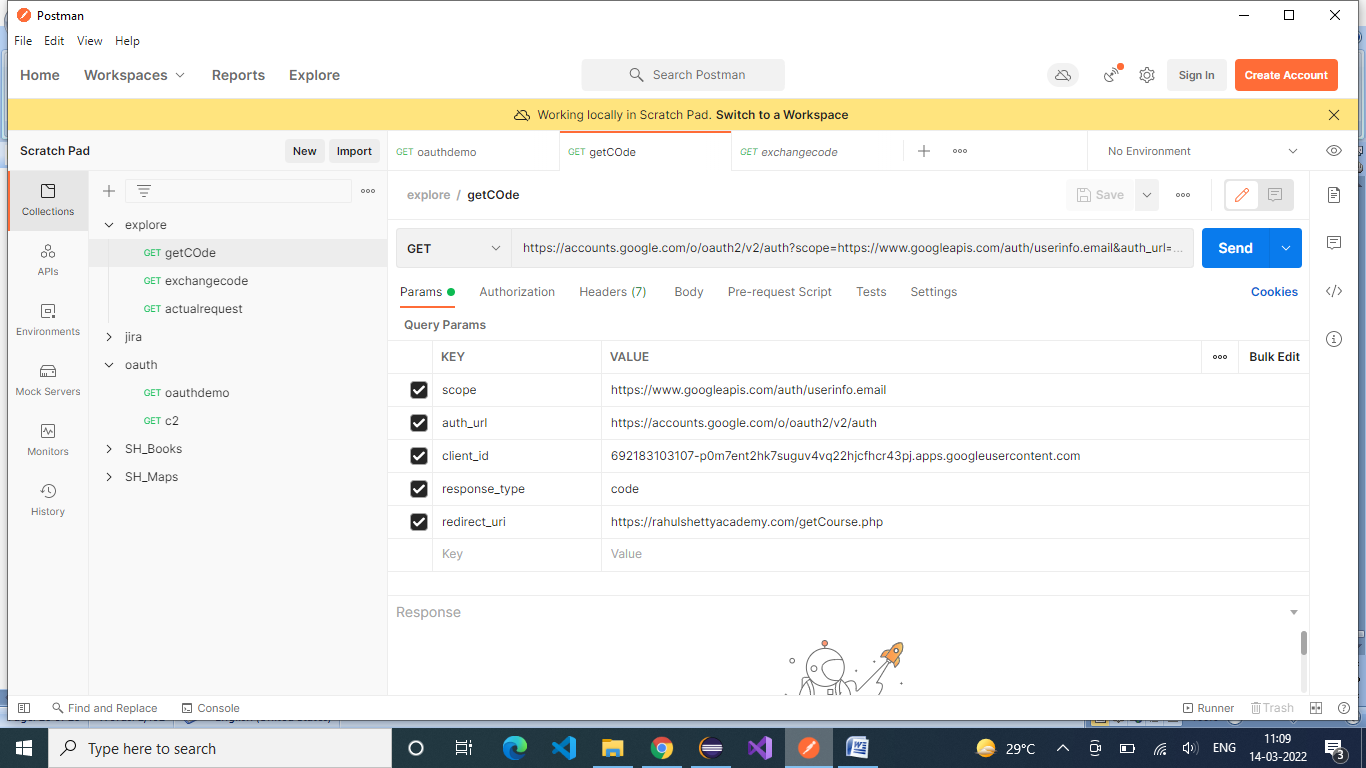
{"expand":"renderedFields,names,schema,operations,editmeta,changelog,versionedRepresentations","id":"10100","self":"http://localhost:8080/rest/api/2/issue/10100","key":"RSA-2","fields":{"comment":{"comments":[{"self":"http://localhost:8080/rest/api/2/issue/10100/comment/10001","id":"10001","author":{"self":"http://localhost:8080/rest/api/2/user?username=harsha","name":"harsha","key":"JIRAUSER10000","emailAddress":"prince.harsha6@gmail.com","avatarUrls":{"48x48":"http://localhost:8080/secure/useravatar?avatarId=10341","24x24":"http://localhost:8080/secure/useravatar?size=small&avatarId=10341","16x16":"http://localhost:8080/secure/useravatar?size=xsmall&avatarId=10341","32x32":"http://localhost:8080/secure/useravatar?size=medium&avatarId=10341"},"displayName":"prince.harsha6@gmail.com","active":true,"timeZone":"Asia/Calcutta"},"body":"Hi How are you?","updateAuthor":{"self":"http://localhost:8080/rest/api/2/user?username=harsha","name":"harsha","key":"JIRAUSER10000","emailAddress":"prince.harsha6@gmail.com","avatarUrls":{"48x48":"http://localhost:8080/secure/useravatar?avatarId=10341","24x24":"http://localhost:8080/secure/useravatar?size=small&avatarId=10341","16x16":"http://localhost:8080/secure/useravatar?size=xsmall&avatarId=10341","32x32":"http://localhost:8080/secure/useravatar?size=medium&avatarId=10341"},"displayName":"prince.harsha6@gmail.com","active":true,"timeZone":"Asia/Calcutta"},"created":"2022-03-12T19:09:02.213+0530","updated":"2022-03-12T19:09:02.213+0530","visibility":{"type":"role","value":"Administrators"}}],"maxResults":1,"total":1,"startAt":0}}}

Hi How are you?

**OUTPUT IN JIRA:**



# SECTION 9: Google/Facebook Oauth 2.0:



# SECTION 10: OAuth2.0 Authorization Code Automation:

OAuthAutomation.java:

package restapiautomation;

import static io.restassured.RestAssured.\*;

import org.openqa.selenium.By;

import org.openqa.selenium.Keys;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

import io.restassured.path.json.JsonPath;

public class OAuthAutomation {

public static void main(String[] args) throws InterruptedException {

/\*System.setProperty("webdriver.chrome.driver", "C://chromedriver.exe");

WebDriver driver = new ChromeDriver();

driver.get("https://accounts.google.com/o/oauth2/v2/auth/oauthchooseaccount?scope=https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fuserinfo.email&auth\_url=https%3A%2F%2Faccounts.google.com%2Fo%2Foauth2%2Fv2%2Fauth&client\_id=692183103107-p0m7ent2hk7suguv4vq22hjcfhcr43pj.apps.googleusercontent.com&response\_type=code&redirect\_uri=https%3A%2F%2Frahulshettyacademy.com%2FgetCourse.php&flowName=GeneralOAuthFlow");

//driver.findElement(By.xpath("//div[@class='BHzsHc']")).click();

driver.findElement(By.cssSelector("input[type='email']")).sendKeys("princeharsha466");

driver.findElement(By.cssSelector("input[type='email']")).sendKeys(Keys.ENTER);

Thread.sleep(3000);

driver.findElement(By.cssSelector("input[type='password']")).sendKeys("shree7117");

driver.findElement(By.cssSelector("input[type='password']")).sendKeys(Keys.ENTER);

Thread.sleep(4000);

String url = driver.getCurrentUrl(); \*/

String url = "https://rahulshettyacademy.com/getCourse.php?code=4%2F0AX4XfWghl6eTH3VXfkQ1BkgfIgYuWmmQtf\_ER07h-YYCDB7PiDBpkb7Lmsz5WNQngB6E0w&scope=email+https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fuserinfo.email+openid&authuser=1&prompt=consent";

String partialcode = url.split("code=")[1];

String code = partialcode.split("&scope")[0];

System.***out***.println(code);

String accessTokenResponse = *given*().urlEncodingEnabled(false)

.queryParam("code",code)

.queryParams("client\_id","692183103107-p0m7ent2hk7suguv4vq22hjcfhcr43pj.apps.googleusercontent.com")

.queryParams("client\_secret", "erZOWM9g3UtwNRj340YYaK\_W")

.queryParams("redirect\_uri","https://rahulshettyacademy.com/getCourse.php")

.queryParams("grant\_type","authorization\_code")

.when().log().all()

.post("https://www.googleapis.com/oauth2/v4/token").asString();

JsonPath js = new JsonPath(accessTokenResponse);

String accessToken = js.getString("access\_token");

String response = *given*().queryParam("access\_token",accessToken)

.when().log().all()

.get("https://rahulshettyacademy.com/getCourse.php").asString();

System.***out***.println(response);

}

}

**OUTPUT:**

4%2F0AX4XfWghl6eTH3VXfkQ1BkgfIgYuWmmQtf\_ER07h-YYCDB7PiDBpkb7Lmsz5WNQngB6E0w

Request method: POST

Request URI: https://www.googleapis.com/oauth2/v4/token?code=4%2F0AX4XfWghl6eTH3VXfkQ1BkgfIgYuWmmQtf\_ER07h-YYCDB7PiDBpkb7Lmsz5WNQngB6E0w&client\_id=692183103107-p0m7ent2hk7suguv4vq22hjcfhcr43pj.apps.googleusercontent.com&client\_secret=erZOWM9g3UtwNRj340YYaK\_W&redirect\_uri=https://rahulshettyacademy.com/getCourse.php&grant\_type=authorization\_code

Proxy: <none>

Request params: <none>

Query params: code=4%2F0AX4XfWghl6eTH3VXfkQ1BkgfIgYuWmmQtf\_ER07h-YYCDB7PiDBpkb7Lmsz5WNQngB6E0w

client\_id=692183103107-p0m7ent2hk7suguv4vq22hjcfhcr43pj.apps.googleusercontent.com

client\_secret=erZOWM9g3UtwNRj340YYaK\_W

redirect\_uri=https://rahulshettyacademy.com/getCourse.php

grant\_type=authorization\_code

Form params: <none>

Path params: <none>

Headers: Accept=\*/\*

Content-Type=application/x-www-form-urlencoded; charset=ISO-8859-1

Cookies: <none>

Multiparts: <none>

Body: <none>

Request method: GET

Request URI: https://rahulshettyacademy.com/getCourse.php?access\_token=ya29.A0ARrdaM9xWd87i1C4a1\_Npq9QxIJpeRuR\_Cb8uyJIsHp3t4IdFg1LODsruB02Ajfx-3HiT52X0u4TR5mhIvbdRaKrjLj4dvx7ZE-iJIfbfZytQYDvUa7-w\_pSjxyxezDDOvk9c-7BpJ3vFyKlUZsRRt\_tTWzK

Proxy: <none>

Request params: <none>

Query params: access\_token=ya29.A0ARrdaM9xWd87i1C4a1\_Npq9QxIJpeRuR\_Cb8uyJIsHp3t4IdFg1LODsruB02Ajfx-3HiT52X0u4TR5mhIvbdRaKrjLj4dvx7ZE-iJIfbfZytQYDvUa7-w\_pSjxyxezDDOvk9c-7BpJ3vFyKlUZsRRt\_tTWzK

Form params: <none>

Path params: <none>

Headers: Accept=\*/\*

Cookies: <none>

Multiparts: <none>

Body: <none>

{ "instructor": "RahulShetty", "url": "rahulshettycademy.com", "services": "projectSupport", "expertise": "Automation", "courses": { "webAutomation": [ { "courseTitle": "Selenium Webdriver Java", "price": "50" }, { "courseTitle": "Cypress",

"price": "40"

},

{

"courseTitle": "Protractor",

"price": "40"

}

],

"api": [

{

"courseTitle": "Rest Assured Automation using Java",

"price": "50"

},

{

"courseTitle": "SoapUI Webservices testing",

"price": "40"

}

],

"mobile": [

{

"courseTitle": "Appium-Mobile Automation using Java",

"price": "50"

}

]

},

"linkedIn": "https://www.linkedin.com/in/rahul-shetty-trainer/"

}

# SECTION 11: De-serialization using POJO Classes

OAuthAutomation.java:

package restapiautomation;

import static io.restassured.RestAssured.\*;

import org.openqa.selenium.By;

import org.openqa.selenium.Keys;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

import io.restassured.parsing.Parser;

import io.restassured.path.json.JsonPath;

import pojo.GetCourse;

public class OAuthAutomation {

public static void main(String[] args) throws InterruptedException {

/\*System.setProperty("webdriver.chrome.driver", "C://chromedriver.exe");

WebDriver driver = new ChromeDriver();

driver.get("https://accounts.google.com/o/oauth2/v2/auth/oauthchooseaccount?scope=https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fuserinfo.email&auth\_url=https%3A%2F%2Faccounts.google.com%2Fo%2Foauth2%2Fv2%2Fauth&client\_id=692183103107-p0m7ent2hk7suguv4vq22hjcfhcr43pj.apps.googleusercontent.com&response\_type=code&redirect\_uri=https%3A%2F%2Frahulshettyacademy.com%2FgetCourse.php&flowName=GeneralOAuthFlow");

//driver.findElement(By.xpath("//div[@class='BHzsHc']")).click();

driver.findElement(By.cssSelector("input[type='email']")).sendKeys("princeharsha466");

driver.findElement(By.cssSelector("input[type='email']")).sendKeys(Keys.ENTER);

Thread.sleep(3000);

driver.findElement(By.cssSelector("input[type='password']")).sendKeys("shree7117");

driver.findElement(By.cssSelector("input[type='password']")).sendKeys(Keys.ENTER);

Thread.sleep(4000);

String url = driver.getCurrentUrl(); \*/

String url = "https://rahulshettyacademy.com/getCourse.php?code=4%2F0AX4XfWjPgzplbIMVl-2a6dVfeOS8HuJUzGG2ktuAT9cwI9hylOHoifJfoB-wT0mN3zrG4A&scope=email+https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fuserinfo.email+openid&authuser=1&prompt=none";

String partialcode = url.split("code=")[1];

String code = partialcode.split("&scope")[0];

System.out.println(code);

//Get code using authorization code mechanism

String accessTokenResponse = given().urlEncodingEnabled(false)

.queryParam("code",code)

.queryParams("client\_id","692183103107-p0m7ent2hk7suguv4vq22hjcfhcr43pj.apps.googleusercontent.com")

.queryParams("client\_secret", "erZOWM9g3UtwNRj340YYaK\_W")

.queryParams("redirect\_uri","https://rahulshettyacademy.com/getCourse.php")

.queryParams("grant\_type","authorization\_code")

.when().log().all()

.post("https://www.googleapis.com/oauth2/v4/token").asString();

JsonPath js = new JsonPath(accessTokenResponse);

String accessToken = js.getString("access\_token");

//Get access token using code generated previous section

GetCourse gc = given().queryParam("access\_token",accessToken).expect().defaultParser(Parser.JSON)

.when()

.get("https://rahulshettyacademy.com/getCourse.php").as(GetCourse.class);

System.out.println(gc.getLinkedIn());

System.out.println(gc.getInstructor());

}

}

OUTPUT:

4%2F0AX4XfWjPgzplbIMVl-2a6dVfeOS8HuJUzGG2ktuAT9cwI9hylOHoifJfoB-wT0mN3zrG4A

Request method: POST

Request URI: https://www.googleapis.com/oauth2/v4/token?code=4%2F0AX4XfWjPgzplbIMVl-2a6dVfeOS8HuJUzGG2ktuAT9cwI9hylOHoifJfoB-wT0mN3zrG4A&client\_id=692183103107-p0m7ent2hk7suguv4vq22hjcfhcr43pj.apps.googleusercontent.com&client\_secret=erZOWM9g3UtwNRj340YYaK\_W&redirect\_uri=https://rahulshettyacademy.com/getCourse.php&grant\_type=authorization\_code

Proxy: <none>

Request params: <none>

Query params: code=4%2F0AX4XfWjPgzplbIMVl-2a6dVfeOS8HuJUzGG2ktuAT9cwI9hylOHoifJfoB-wT0mN3zrG4A

client\_id=692183103107-p0m7ent2hk7suguv4vq22hjcfhcr43pj.apps.googleusercontent.com

client\_secret=erZOWM9g3UtwNRj340YYaK\_W

redirect\_uri=https://rahulshettyacademy.com/getCourse.php

grant\_type=authorization\_code

Form params: <none>

Path params: <none>

Headers: Accept=\*/\*

Content-Type=application/x-www-form-urlencoded; charset=ISO-8859-1

Cookies: <none>

Multiparts: <none>

Body: <none>

https://www.linkedin.com/in/rahul-shetty-trainer/

RahulShetty

OAuthAutomation.java: Complete

package restapiautomation;

import static io.restassured.RestAssured.\*;

import java.util.ArrayList;

import java.util.Arrays;

import java.util.List;

import org.openqa.selenium.By;

import org.openqa.selenium.Keys;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

import org.testng.Assert;

import io.restassured.parsing.Parser;

import io.restassured.path.json.JsonPath;

import pojo.Api;

import pojo.GetCourse;

import pojo.WebAutomation;

public class OAuthAutomation {

public static void main(String[] args) throws InterruptedException {

String[] courseTitles = {"Selenium Webdriver Java","Cypress","Protractor"};

/\*System.setProperty("webdriver.chrome.driver", "C://chromedriver.exe");

WebDriver driver = new ChromeDriver();

driver.get("https://accounts.google.com/o/oauth2/v2/auth/oauthchooseaccount?scope=https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fuserinfo.email&auth\_url=https%3A%2F%2Faccounts.google.com%2Fo%2Foauth2%2Fv2%2Fauth&client\_id=692183103107-p0m7ent2hk7suguv4vq22hjcfhcr43pj.apps.googleusercontent.com&response\_type=code&redirect\_uri=https%3A%2F%2Frahulshettyacademy.com%2FgetCourse.php&flowName=GeneralOAuthFlow");

//driver.findElement(By.xpath("//div[@class='BHzsHc']")).click();

driver.findElement(By.cssSelector("input[type='email']")).sendKeys("princeharsha466");

driver.findElement(By.cssSelector("input[type='email']")).sendKeys(Keys.ENTER);

Thread.sleep(3000);

driver.findElement(By.cssSelector("input[type='password']")).sendKeys("shree7117");

driver.findElement(By.cssSelector("input[type='password']")).sendKeys(Keys.ENTER);

Thread.sleep(4000);

String url = driver.getCurrentUrl(); \*/

String url = "https://rahulshettyacademy.com/getCourse.php?code=4%2F0AX4XfWjPgzplbIMVl-2a6dVfeOS8HuJUzGG2ktuAT9cwI9hylOHoifJfoB-wT0mN3zrG4A&scope=email+https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fuserinfo.email+openid&authuser=1&prompt=none";

String partialcode = url.split("code=")[1];

String code = partialcode.split("&scope")[0];

System.***out***.println(code);

//Get code using authorization code mechanism

String accessTokenResponse = *given*().urlEncodingEnabled(false)

.queryParam("code",code)

.queryParams("client\_id","692183103107-p0m7ent2hk7suguv4vq22hjcfhcr43pj.apps.googleusercontent.com")

.queryParams("client\_secret", "erZOWM9g3UtwNRj340YYaK\_W")

.queryParams("redirect\_uri","https://rahulshettyacademy.com/getCourse.php")

.queryParams("grant\_type","authorization\_code")

.when().log().all()

.post("https://www.googleapis.com/oauth2/v4/token").asString();

JsonPath js = new JsonPath(accessTokenResponse);

String accessToken = js.getString("access\_token");

//Get access token using code generated previous section

GetCourse gc = *given*().queryParam("access\_token",accessToken).expect().defaultParser(*Parser*.***JSON***)

.when()

.get("https://rahulshettyacademy.com/getCourse.php").as(GetCourse.class);

System.***out***.println(gc.getLinkedIn());

System.***out***.println(gc.getInstructor());

System.***out***.println(gc.getCourses().getApi().get(1).getCourseTitle());

//1.Get price of Course title having soapui webservices testing

List<Api> apiCourses = gc.getCourses().getApi();

for(int i=0;i<apiCourses.size();i++)

{

if(apiCourses.get(i).getCourseTitle().equalsIgnoreCase("SoapUI Webservices testing"))

{

System.***out***.println(apiCourses.get(i).getPrice());

}

}

//2.Get the course Names of WebAutomation and assert it with expected list

ArrayList<String> a = new ArrayList<String>();

List<WebAutomation> w = gc.getCourses().getWebAutomation();

for(int j=0;j<w.size();j++)

{

a.add(w.get(j).getCourseTitle());

}

List<String> expectedList = Arrays.*asList*(courseTitles);

Assert.*assertTrue*(a.equals(expectedList));

}

}

# SECTION 12: Serialization

SerialTest.java:

package restapiautomation;

import static io.restassured.RestAssured.\*;

import java.util.ArrayList;

import java.util.List;

import io.restassured.RestAssured;

import pojo.AddPlace;

import pojo.Location;

public class SerialTest {

public static void main(String args[]) {

AddPlace p = new AddPlace();

p.setAccuracy(50);

p.setName("Frontline house");

List<String> myList = new ArrayList<String>();

myList.add("shoe park");

myList.add("shoe");

p.setTypes(myList);

Location l = new Location();

l.setLat(-38.383494);

l.setLng(33.427362);

p.setLocation(l);

p.setAddress("29, side layout, cohen 09");

p.setLanguage("French-IN");

p.setPhone\_number("(+91)9113283893");

p.setWebsite("https://rahulshettyacademy.com");

RestAssured.*baseURI*= "https://rahulshettyacademy.com";

String res=

*given*().log().all().queryParam("key","qaclick123")

.body(p)

.when().post("maps/api/place/add/json")

.then().assertThat().log().all().statusCode(200).extract().response().asString();

System.***out***.println(res);

**AddPlace.java:**

package pojo;

import java.util.List;

public class AddPlace {

private int accuracy;

private String name;

private String phone\_number;

private String address;

private String website;

private String language;

private Location location;

private List<String> types;

public int getAccuracy() {

return accuracy;

}

public void setAccuracy(int accuracy) {

this.accuracy = accuracy;

}

public String getName() {

return name;

}

public void setName(String name) {

this.name = name;

}

public String getPhone\_number() {

return phone\_number;

}

public void setPhone\_number(String phone\_number) {

this.phone\_number = phone\_number;

}

public String getAddress() {

return address;

}

public void setAddress(String address) {

this.address = address;

}

public String getWebsite() {

return website;

}

public void setWebsite(String website) {

this.website = website;

}

public String getLanguage() {

return language;

}

public void setLanguage(String language) {

this.language = language;

}

public Location getLocation() {

return location;

}

public void setLocation(Location location) {

this.location = location;

}

public List<String> getTypes() {

return types;

}

public void setTypes(List<String> types) {

this.types = types;

}

}

**Location.java:**

package pojo;

public class Location {

private double lat;

private double lng;

public double getLat() {

return lat;

}

public void setLat(double lat) {

this.lat = lat;

}

public double getLng() {

return lng;

}

public void setLng(double lng) {

this.lng = lng;

}

}

**OUTPUT:**

Request method: POST

Request URI: https://rahulshettyacademy.com/maps/api/place/add/json?key=qaclick123

Proxy: <none>

Request params: <none>

Query params: key=qaclick123

Form params: <none>

Path params: <none>

Headers: Accept=\*/\*

Content-Type=text/plain; charset=ISO-8859-1

Cookies: <none>

Multiparts: <none>

Body:

{"accuracy":50,"name":"Frontline house","phone\_number":"(+91)9113283893","address":"29, side layout, cohen 09","website":"https://rahulshettyacademy.com","language":"French-IN","location":{"lat":-38.383494,"lng":33.427362},"types":["shoe park","shoe"]}

HTTP/1.1 200 OK

Date: Wed, 16 Mar 2022 04:02:02 GMT

Server: Apache/2.4.18 (Ubuntu)

Access-Control-Allow-Origin: \*

Access-Control-Allow-Methods: POST

Access-Control-Max-Age: 3600

Access-Control-Allow-Headers: Content-Type, Access-Control-Allow-Headers, Authorization, X-Requested-With

Content-Length: 194

Keep-Alive: timeout=5, max=100

Connection: Keep-Alive

Content-Type: application/json;charset=UTF-8

{

"status": "OK",

"place\_id": "6aec2ce04268fa38685d0396736e10f9",

"scope": "APP",

"reference": "5412c48a05a108ba6c669b58bfde51ec5412c48a05a108ba6c669b58bfde51ec",

"id": "5412c48a05a108ba6c669b58bfde51ec"

}

{"status":"OK","place\_id":"6aec2ce04268fa38685d0396736e10f9","scope":"APP","reference":"5412c48a05a108ba6c669b58bfde51ec5412c48a05a108ba6c669b58bfde51ec","id":"5412c48a05a108ba6c669b58bfde51ec"}

# Request and Response Spec Builders:

}

}