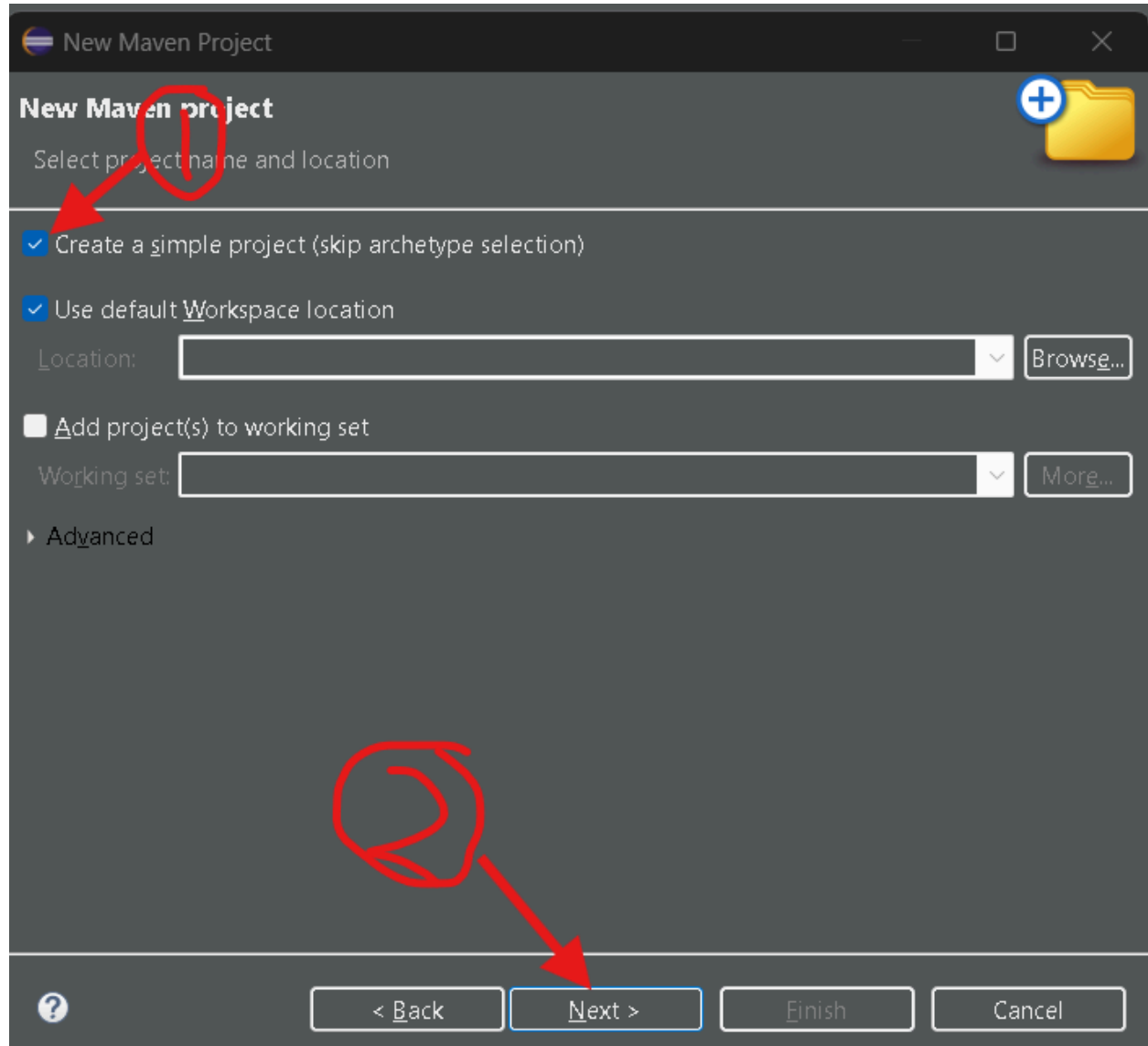


Install the TestNG:

Goto tab Help -> Eclipse Marketplace... -> Search "TestNG for Eclipse" -> Install.

Create new Project:

File tab -> New -> Project -> Expand Maven folder -> Click on Maven Project -> Next ->



New Maven Project

New Maven project

Configure project

Artifact

Group Id:

Artifact Id:

Version:

Packaging:

Name:

Description:

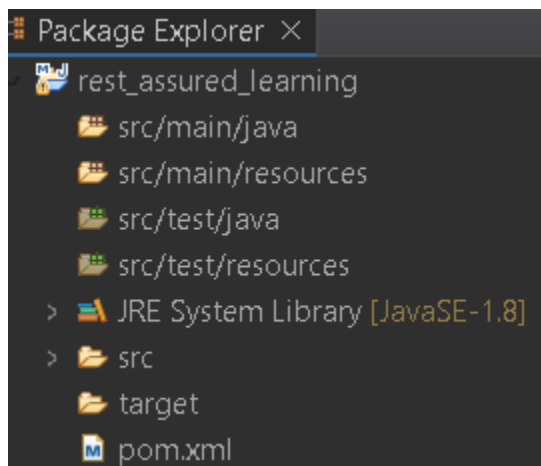
Parent Project

Group Id:

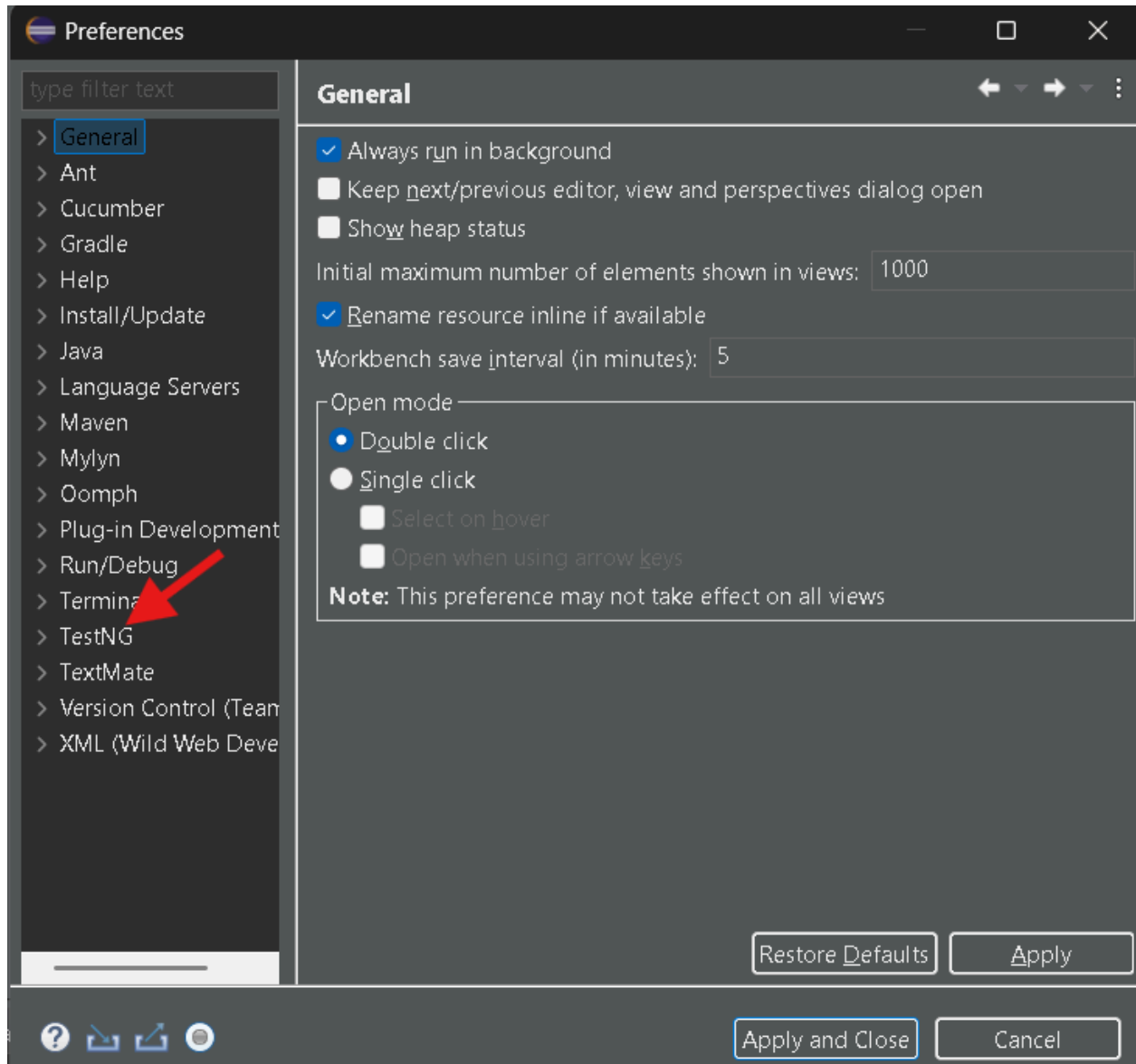
Artifact Id:

Version:

Advanced



Go to window -> Preferences -> TestNG will be visible.



Dependencies to Add:

1. Rest-Assured
2. Json-xpath
3. Json
4. Gson
5. Testng
6. Scribejava-apis
7. Json-schema-validator
8. xml-schema-validator

Get dependencies from MVN Repository:

```
<dependencies>
  <!-- https://mvnrepository.com/artifact/io.rest-assured/rest-assured -->
<dependency>
  <groupId>io.rest-assured</groupId>
  <artifactId>rest-assured</artifactId>
  <version>5.5.5</version>
  <scope>test</scope>
</dependency>

<!-- https://mvnrepository.com/artifact/io.rest-assured/json-path -->
<dependency>
  <groupId>io.rest-assured</groupId>
  <artifactId>json-path</artifactId>
  <version>5.5.5</version>
</dependency>

<!-- https://mvnrepository.com/artifact/org.json/json -->
<dependency>
  <groupId>org.json</groupId>
  <artifactId>json</artifactId>
  <version>20250517</version>
</dependency>

<!-- https://mvnrepository.com/artifact/com.google.code.gson/gson -->
<dependency>
  <groupId>com.google.code.gson</groupId>
  <artifactId>gson</artifactId>
  <version>2.13.1</version>
</dependency>

<!-- https://mvnrepository.com/artifact/org.testng/testng -->
<dependency>
  <groupId>org.testng</groupId>
  <artifactId>testng</artifactId>
  <version>7.11.0</version>
  <scope>test</scope>
</dependency>

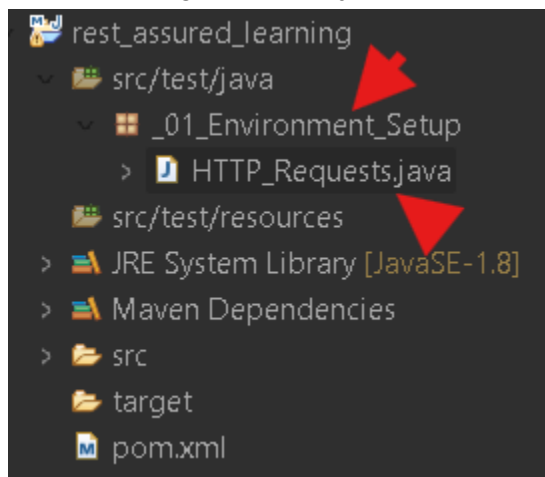
<!-- https://mvnrepository.com/artifact/com.github.scribejava/scribejava-apis -->
<dependency>
  <groupId>com.github.scribejava</groupId>
  <artifactId>scribejava-apis</artifactId>
```

```
<version>8.3.3</version>
<scope>runtime</scope>
</dependency>
```

```
<!-- https://mvnrepository.com/artifact/io.rest-assured/json-schema-validator -->
<dependency>
  <groupId>io.rest-assured</groupId>
  <artifactId>json-schema-validator</artifactId>
  <version>5.5.5</version>
</dependency>
</dependencies>
```

Delete `src/main/java` and `src/main/resources`

Create package and then java class.



given():

content type, set cookies, add auth, add param, set headers info etc

when():

get, put, post, delete

then():

validate status code, extract response, extract headers cookies & response body ...

After given is when, after when is then. So the first method is having not having dot and the following method will have dot. And semicolon at the end.

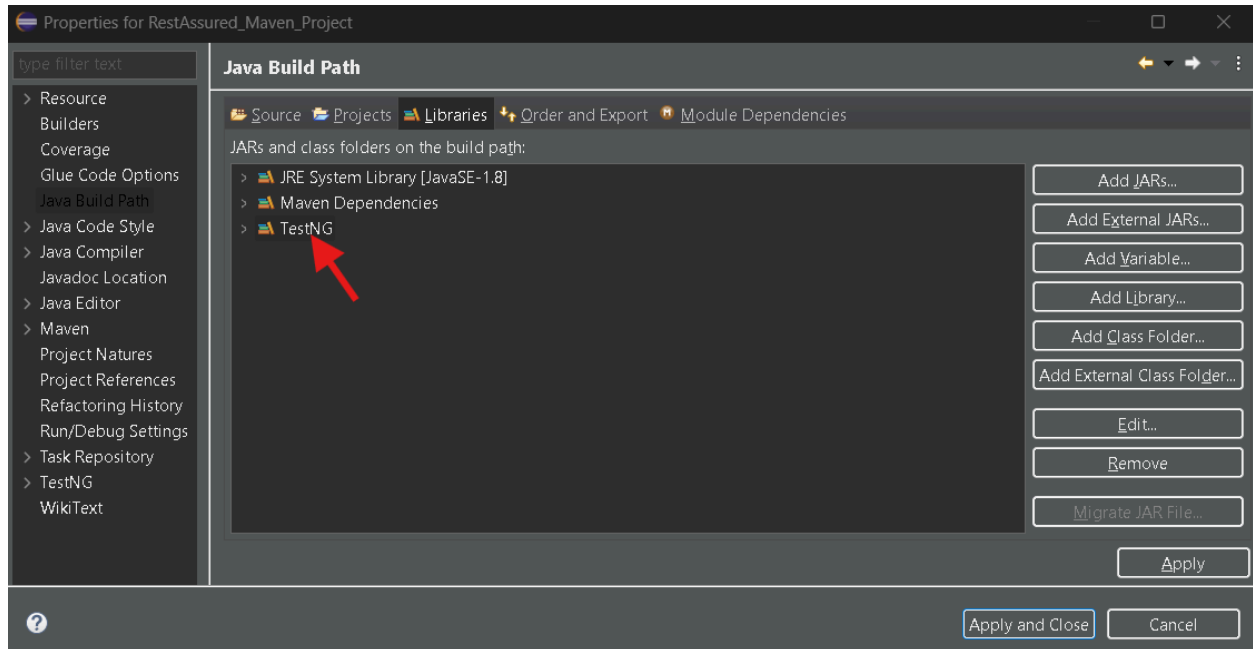
Get module from:

<https://github.com/rest-assured/rest-assured/wiki/GettingStarted#static-imports>

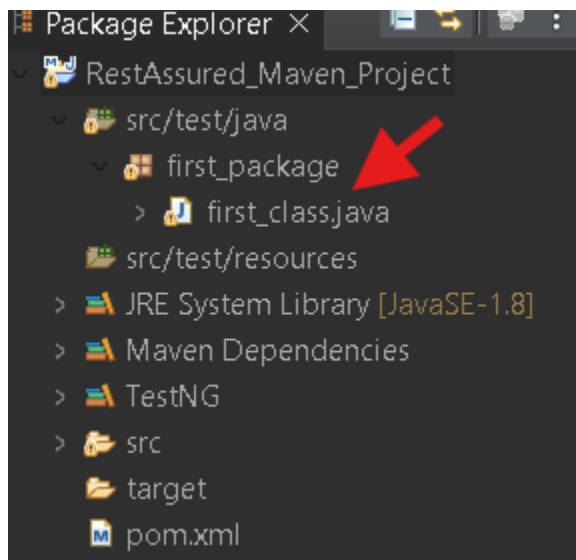
```
import static io.restassured.RestAssured.*;
import static io.restassured.matcher.RestAssuredMatchers.*;
import static org.hamcrest.Matchers.*;
```

Since TestNG is installed in POM:

Right click on the project -> properties -> Java build path -> Libraries -> Add Library -> Choose 'TestNG' -> Next -> Finish



Write the Code:



Code:

```
package first_package;
import org.testng.annotations.Test;
import static io.restassured.RestAssured.*;
import static io.restassured.matcher.RestAssuredMatchers.*;
```

```

import static org.hamcrest.Matchers.*;
public class first_class {
    @Test
    void get_Users() {
        given()

        .when()
            .get("https://reqres.in/api/users?page=2")

        .then()
            .statusCode(200)
            .body("page", equalTo(2))
            .log().all();
    }
}

```

Execute: Right click on code -> Run As -> TestNG Test

Post Request:

Goto: <https://reqres.in/signup>

Add this header to your API requests:

x-api-key: reqres-free-v1

Code:

Make @Test as the comment not to run the test.

Add header to get the api

Header hdr = new Header("x-api-key", "reqres-free-v1");

For the Post Response code is 201.

Method	Endpoint	Request	Response
GET	LIST USERS		
GET	SINGLE USER		
GET	SINGLE USER NOT FOUND		
GET	LIST <RESOURCE>		
GET	SINGLE <RESOURCE>		
GET	SINGLE <RESOURCE> NOT FOUND		
POST	CREATE	<pre>{ "name": "morpheus", "job": "leader" }</pre>	201 <pre>{ "name": "morpheus", "job": "leader", "id": "400", "createdAt": "2025-06-29T06:11:06.463Z" }</pre>

```
package first_package;
```

```
import static io.restassured.RestAssured.given;
import static org.hamcrest.Matchers.equalTo;
```

```
import java.util.HashMap;
import org.testng.annotations.Test;
import io.restassured.http.Header;
```

```
public class first_class {
```

```
//    @Test
void get_Users() {
    given()

    .when()
        .get("https://reqres.in/api/users?page=2")

    .then()
        .statusCode(200)
        .body("page", equalTo(2))
        .log().all();
}
```

```
@Test
void createUser() {
    HashMap<String, String> new_user = new HashMap<String, String>();
    new_user.put("name", "kiran");
```



```

        new_user.put("job", "SDET");
        Header hdr = new Header("x-api-key", "reqres-free-v1");

        given()
            .contentType("application/json")
            .body(new_user)
            .header(hdr)

        .when()
            .post("https://reqres.in/api/users")

        .then()
            .statusCode(201)
            .log().all();
    }
}

```

Output:

```

[RemoteTestNG] detected TestNG version 7.11.0
SLF4J(W): No SLF4J providers were found.
SLF4J(W): Defaulting to no-operation (NOP) logger implementation
SLF4J(W): See https://www.slf4j.org/codes.html#noProviders for further details.
HTTP/1.1 201 Created
Date: Sun, 29 Jun 2025 06:31:20 GMT
Content-Type: application/json; charset=utf-8
Content-Length: 78
Connection: keep-alive
CF-RAY: 957361615a778599-BOM
Report-To:
{"group":"heroku-nel","max_age":3600,"endpoints":[{"url":"https://nel.heroku.com/reports?ts=1751178680&sid=c4c9725f-1ab0-44d8-820f-430df2718e11&s=JEhQMCcTdLiPeC02qUqNyPUEdmbAQw0cl9wPtWC8u%2Fg%3D"}]}
Reporting-Endpoints:
heroku-nel=https://nel.heroku.com/reports?ts=1751178680&sid=c4c9725f-1ab0-44d8-820f-430df2718e11&s=JEhQMCcTdLiPeC02qUqNyPUEdmbAQw0cl9wPtWC8u%2Fg%3D
Nel:
{"report_to":"heroku-nel","max_age":3600,"success_fraction":0.005,"failure_fraction":0.05,"response_headers":["Via"]}
X-Powered-By: Express
Access-Control-Allow-Origin: *
Ratelimit-Policy: 100;w=60
Ratelimit-Limit: 100
Ratelimit-Remaining: 96

```

Ratelimit-Reset: 25
Etag: W/"4e-/OFa0bynDu6lKPja0ZRdDXkl/jY"
Via: 1.1 vegur
cf-cache-status: DYNAMIC
Server: cloudflare
server-timing:
cfL4;desc="?proto=TCP&rtt=26227&min_rtt=23292&rtt_var=10066&sent=6&recv=6&lost=0&retrans=0&sent_bytes=3106&recv_bytes=849&delivery_rate=121243&wnd=252&unsent_bytes=0&cid=44d98e3da5c150e0&ts=386&x=0"

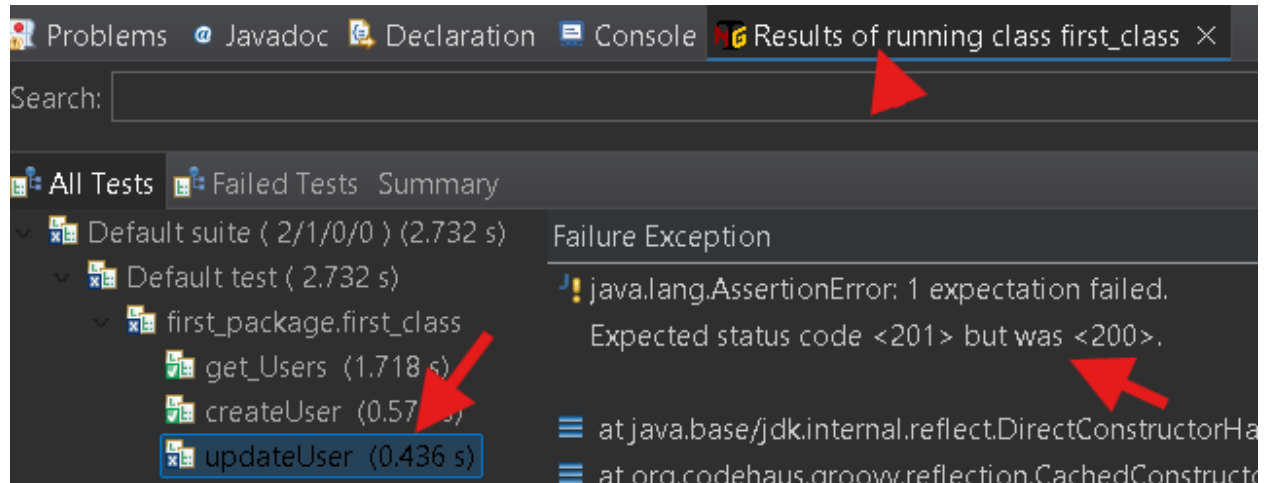
```
{
  "name": "kiran",
  "job": "SDET",
  "id": "67",
  "createdAt": "2025-06-29T06:31:20.777Z"
}
```

PASSED: first_package.first_class.createUser

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

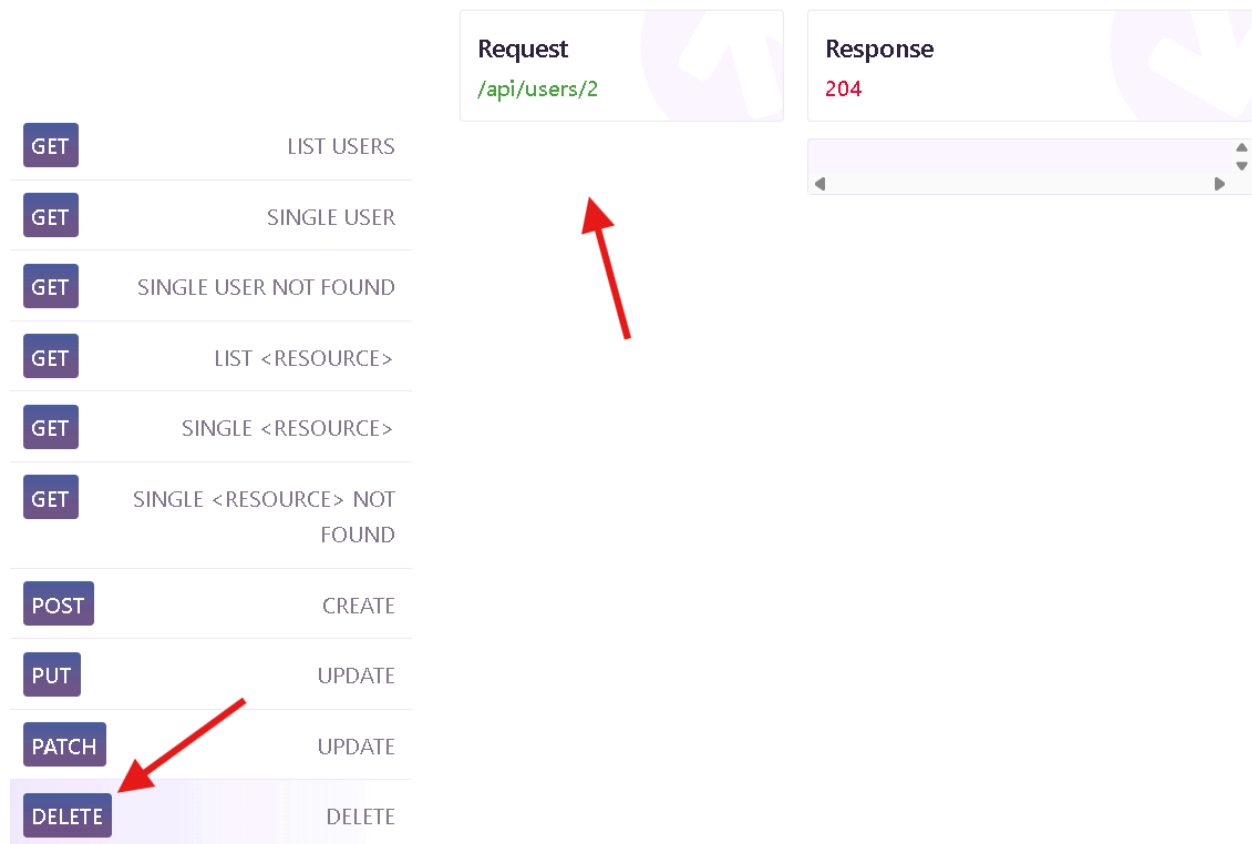
```
=====
Default suite
Total tests run: 1, Passes: 1, Failures: 0, Skips: 0
=====
```

To check the Error:



For Delete:

Does not take any from request side, So given() is empty.



Code:

```
package first_package;
import static io.restassured.RestAssured.given;
import static org.hamcrest.Matchers.equalTo;
import java.util.HashMap;
import org.testng.annotations.Test;
import io.restassured.http.Header;
public class first_class {
    int id;
    @Test(priority = 1)
    void get_Users() {
        given()

        .when()
            .get("https://reqres.in/api/users?page=2")

        .then()
            .statusCode(200)
            .body("page", equalTo(2))
            .log().all();
    }
    @Test(priority = 2)
    void post_User() {
        HashMap<String, String> new_user = new HashMap<String, String>();
        new_user.put("name", "kiran");
        new_user.put("job", "SDET");
        Header hdr = new Header("x-api-key", "reqres-free-v1");
        id=given()
            .contentType("application/json")
            .body(new_user)
            .header(hdr)

        .when()
            .post("https://reqres.in/api/users")
            .jsonPath().getInt("id");
//        .then()
//            .statusCode(201)
//            .log().all();
    }
    @Test(priority = 3, dependsOnMethods= {"post_User"})
    void put_User() {
        HashMap<String, String> new_user = new HashMap<String, String>();
        new_user.put("name", "routh");
```

```

        new_user.put("job", "QA");
        Header hdr = new Header("x-api-key", "reqres-free-v1");
        given()
            .contentType("application/json")
            .body(new_user)
            .header(hdr)

        .when()
            .put("https://reqres.in/api/users/" + id)

        .then()
            .statusCode(200)
            .log().all();
    }
    @Test(priority = 4, dependsOnMethods = {"post_User"})
    void delete_user() {
        given()

        .when()
            .delete("https://reqres.in/api/users/" + id)

        .then()
            .statusCode(401)
            .log().all();
    }
}

```

Output:

```

[RemoteTestNG] detected TestNG version 7.11.0
SLF4J(W): No SLF4J providers were found.
SLF4J(W): Defaulting to no-operation (NOP) logger implementation
SLF4J(W): See https://www.slf4j.org/codes.html#noProviders for further details.
HTTP/1.1 200 OK
Date: Sun, 29 Jun 2025 07:13:28 GMT
Content-Type: application/json; charset=utf-8
Transfer-Encoding: chunked
Connection: keep-alive
Content-Encoding: gzip
Report-To:
{"group":"heroku-nel","max_age":3600,"endpoints":[{"url":"https://nel.heroku.com/reports?ts=175
1179466&sid=c4c9725f-1ab0-44d8-820f-430df2718e11&s=MVMHw3JUUzoRJXMx8BtbnAYHV
K78IHdfhB%2BpAz0vIV8%3D"}]}

```

Reporting-Endpoints:

heroku-nel=https://nel.heroku.com/reports?ts=1751179466&sid=c4c9725f-1ab0-44d8-820f-430df2718e11&s=MVMHw3JUUzoRJXMx8BtbnAYHVK78IHdfhB%2BpAz0vIV8%3D

Nel:

{"report_to":"heroku-nel","max_age":3600,"success_fraction":0.005,"failure_fraction":0.05,"response_headers":["Via"]}

X-Powered-By: Express

Access-Control-Allow-Origin: *

Ratelimit-Policy: 100;w=60

Ratelimit-Limit: 100

Ratelimit-Remaining: 98

Ratelimit-Reset: 60

Etag: W/"440-ZjsmMKR8P3usr2uJZbOCGCxC3Uw"

Via: 1.1 vegur

Cache-Control: max-age=14400

CF-Cache-Status: HIT

Age: 1742

Vary: Accept-Encoding

Server: cloudflare

CF-RAY: 95739f16ece0850d-BOM

server-timing:

cfL4;desc="?proto=TCP&rtt=32014&min_rtt=28691&rtt_var=12089&sent=7&recv=7&lost=0&retrans=0&sent_bytes=3107&recv_bytes=747&delivery_rate=99157&cwnd=252&unsent_bytes=0&cid=5ed3dd4b4dabe010&ts=128&x=0"

```
{
  "page": 2,
  "per_page": 6,
  "total": 12,
  "total_pages": 2,
  "data": [
    {
      "id": 7,
      "email": "michael.lawson@reqres.in",
      "first_name": "Michael",
      "last_name": "Lawson",
      "avatar": "https://reqres.in/img/faces/7-image.jpg"
    },
    {
      "id": 8,
      "email": "lindsay.ferguson@reqres.in",
      "first_name": "Lindsay",
      "last_name": "Ferguson",
      "avatar": "https://reqres.in/img/faces/8-image.jpg"
    }
  ]
}
```

```
    },
    {
      "id": 9,
      "email": "tobias.funke@reqres.in",
      "first_name": "Tobias",
      "last_name": "Funke",
      "avatar": "https://reqres.in/img/faces/9-image.jpg"
    },
    {
      "id": 10,
      "email": "byron.fields@reqres.in",
      "first_name": "Byron",
      "last_name": "Fields",
      "avatar": "https://reqres.in/img/faces/10-image.jpg"
    },
    {
      "id": 11,
      "email": "george.edwards@reqres.in",
      "first_name": "George",
      "last_name": "Edwards",
      "avatar": "https://reqres.in/img/faces/11-image.jpg"
    },
    {
      "id": 12,
      "email": "rachel.howell@reqres.in",
      "first_name": "Rachel",
      "last_name": "Howell",
      "avatar": "https://reqres.in/img/faces/12-image.jpg"
    }
  ],
  "support": {
    "url":
      "https://contentcaddy.io?utm_source=reqres&utm_medium=json&utm_campaign=referral",
    "text": "Tired of writing endless social media content? Let Content Caddy generate it for you."
  }
}
```

HTTP/1.1 200 OK

Date: Sun, 29 Jun 2025 07:13:29 GMT

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

Transfer-Encoding: chunked

Connection: keep-alive

Content-Encoding: gzip

Report-To:

```
{"group":"heroku-nel","max_age":3600,"endpoints":[{"url":"https://nel.heroku.com/reports?ts=1751181209&sid=c4c9725f-1ab0-44d8-820f-430df2718e11&s=TFLkw0OfK08%2BzesmCgih2imifzUHW4%2FdURE0g%2BYaXvA%3D"}]}
```

Reporting-Endpoints:

heroku-nel=https://nel.heroku.com/reports?ts=1751181209&sid=c4c9725f-1ab0-44d8-820f-430df2718e11&s=TFLkw0OfK08%2BzesmCgih2imifzUHW4%2FdURE0g%2BYaXvA%3D

Nel:

```
{"report_to":"heroku-nel","max_age":3600,"success_fraction":0.005,"failure_fraction":0.05,"response_headers":["Via"]}
```

X-Powered-By: Express

Access-Control-Allow-Origin: *

Ratelimit-Policy: 100;w=60

Ratelimit-Limit: 100

Ratelimit-Remaining: 96

Ratelimit-Reset: 60

Etag: W/"42-j2OeDVej752HmuGpLtCYM/UOACg"

Via: 1.1 vegur

CF-Cache-Status: DYNAMIC

Vary: Accept-Encoding

Server: cloudflare

CF-RAY: 95739f1ef87d85a1-BOM

server-timing:

cfl4;desc="?proto=TCP&rtt=37104&min_rtt=34937&rtt_var=14649&sent=5&recv=6&lost=0&retrans=0&sent_bytes=3108&recv_bytes=850&delivery_rate=121246&wnd=252&unsent_bytes=0&cid=a802fa4092dac8f7&ts=318&x=0"

```
{
  "name": "routh",
  "job": "QA",
  "updatedAt": "2025-06-29T07:13:29.668Z"
}
```

HTTP/1.1 401 Unauthorized

Date: Sun, 29 Jun 2025 07:13:30 GMT

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

Content-Length: 72

Connection: keep-alive

CF-RAY: 95739f215ab885ea-BOM

Report-To:

```
{"group":"heroku-nel","max_age":3600,"endpoints":[{"url":"https://nel.heroku.com/reports?ts=1751181210&sid=c4c9725f-1ab0-44d8-820f-430df2718e11&s=UKLgtgyRpn7CGzYDVxieULYi8ti7CDtJOBGfanH6Z8Q%3D"}]}
```


Reporting-Endpoints:

heroku-nel=https://nel.heroku.com/reports?ts=1751181210&sid=c4c9725f-1ab0-44d8-820f-430df2718e11&s=UKLgtgyRpn7CGzYDVxieULYi8ti7CDtJOBGfanH6Z8Q%3D

Nel:

{"report_to":"heroku-nel","max_age":3600,"success_fraction":0.005,"failure_fraction":0.05,"response_headers":["Via"]}

X-Powered-By: Express

Access-Control-Allow-Origin: *

Ratelimit-Policy: 100;w=60

Ratelimit-Limit: 100

Ratelimit-Remaining: 95

Ratelimit-Reset: 60

Etag: W/"48-+Z5A4MsbyryWjwqUCtZ7548heDc"

Via: 1.1 vegur

cf-cache-status: DYNAMIC

Server: cloudflare

server-timing:

cfL4;desc="?proto=TCP&rtt=27804&min_rtt=27078&rtt_var=11607&sent=5&recv=6&lost=0&retrans=0&sent_bytes=3107&recv_bytes=747&delivery_rate=128785&wnd=252&unsent_bytes=0&cid=61917cccf08a4ad9&ts=316&x=0"

```
{
  "error": "Missing API key.",
  "how_to_get_one": "https://reqres.in/signup"
}
```

PASSED: first_package.first_class.get_Users

PASSED: first_package.first_class.put_User

PASSED: first_package.first_class.post_User

PASSED: first_package.first_class.delete_user

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

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