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RestAssured jars are used to automate restAPI’s.

Most of us know about web automation only but API go and business layer and send data presentation layer (Web). But core is business layer so verify all business logics by API testing.

Day by day focus on API testing. 70 to 80% issue find in the logic.

Rest API defines a set of operation where dev can perform request and receive

API act as intermediate get data from db and display in presentation

Talk with backend using https

What is the EndPoints: When some tells you to start testing then ask what is the end points?

End point is divided into

EndPoint = BaseURL/Resouces?Parameter

BaseURL: Google.com

Resouces: Every site has multiple resouces like /index.php also like page.

Parameters: ?lsdldj

Separated by ?

Types of request: Get, Post, Put and delete

Get: Retrieve some info and back to user. Parameter need to send on URL

Post: Add something to your backend. Parameters should sent in the form of xml/Json in body.

Header/Cookies: Kind of authentication, Authorization. For security purpose we use header. Depends upon the website.

RestAPI is stateless so need key for login

Key Principles of rest API

1. Represent everything with unique id; a URI
2. Stateless communication
3. Make use of standard http methods
4. Get
5. Post
6. Put
7. Delete

Example:

**import** com.google.gson.JsonObject;

**import** io.restassured.RestAssured;

**import** io.restassured.http.Method;

**import** io.restassured.path.json.JsonPath;

**import** io.restassured.response.Response;

**import** io.restassured.specification.RequestSpecification;

**public** **class** SimpleTest {

**public** **static** **void** main(String ...arg) {

/\*RestAssured.baseURI = "http://dummy.restapiexample.com/api/v1/employees";

RequestSpecification request = RestAssured.given();

Response response = request.request(Method.GET);

int status = response.getStatusCode();

System.out.println(status);

String responseBody = response.getBody().asString();

System.out.println(responseBody);\*/

RestAssured.*baseURI* = "http://dummy.restapiexample.com/api/v1/create";

RequestSpecification request = RestAssured.*given*();

request.header("Content-Type", "application/json");

JsonObject obj = **new** JsonObject();

obj.addProperty("name", "AutoTester");

obj.addProperty("salary", 3000);

obj.addProperty("age", 30);

System.***out***.println(obj.toString());

//Please note the Content-Type request Header which has a value of “application/json”. This is because the content of our HTTP Post Request body will be a JSON message. Please also note that the JsonObject we have created earlier is then set to Http Request body as a String.

request.body(obj.toString());

//Send HTTP Post Request

Response response = request.request(Method.***POST***);

String responseBody = response.getBody().asString();

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

JsonPath path = response.jsonPath();

String employeeId = path.getString("id");

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

}

}