REST Assured - Basic

Request Types, Response, Serialization & Deserialization, Json and JsonPath

Introduction

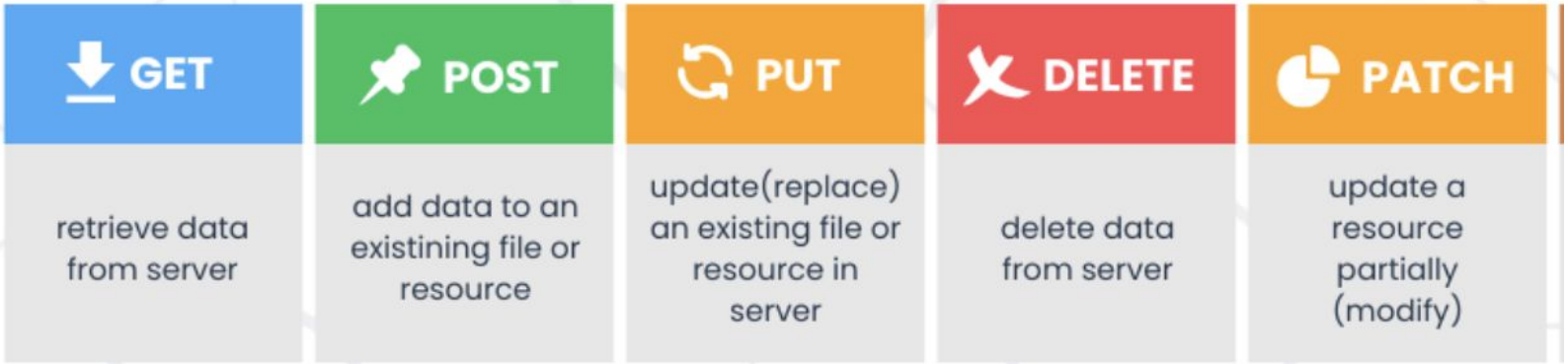
What is REST Assured?

REST Assured is an open-source Java library that is used for testing RESTful web services.

Features:

- Open source API Testing framework
- BDD like syntax, readable
- Seamless integration with other frameworks like TestNG and Cucumber

Http Request Methods



REST Assured Syntax

- **Given()**
  - The precondition for the request, for example, headers, contentType, body
- **When()**
  - The action for sending the request for example, request method, url, etc.
- **Then()**
  - Processing the response, assertion, extraction, logging ,etc.

```
this.userId = given() RequestSpecification
        .contentType(ContentType.JSON)
        .body(payload)
        .when()
        .post( s: "https://reqres.in/api/users") Response
        .then() ValidatableResponse
        .log().body()
        .statusCode( i: 201)
        .body( s: "name", equalTo(userName))
        .extract().body().jsonPath().getInt( path: "id");
```

Query & Path Parameter

Query Parameter

Rest Assured Demo / To do List / **Get List**

GET https://gorest.co.in/public/v2/todos?page=1&per_page=100

Params • Authorization Headers (8) Body Pre-request Script Tests Settings

Query Params

	Key	Value
☑	page	1
☑	per_page	100
	Key	Value

Path Parameter

Rest Assured Demo / To do List / **Get Detail**

GET https://gorest.co.in/public/v2/todos/14117

Params Authorization Headers (8) Body Pre-request Script Tests Settings

Query Params

	Key	Value
	Key	Value

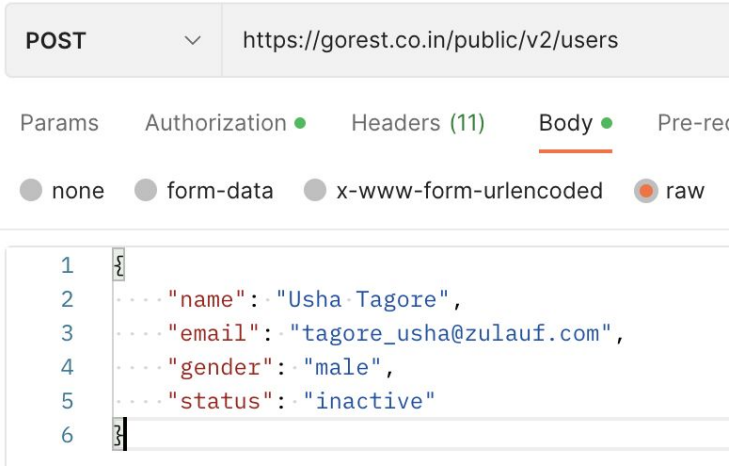
Sending a Request Body

What is Serialization?

Serialization is the process of converting an object into a byte stream, which can be written to a file, sent over a network, or stored in a database.

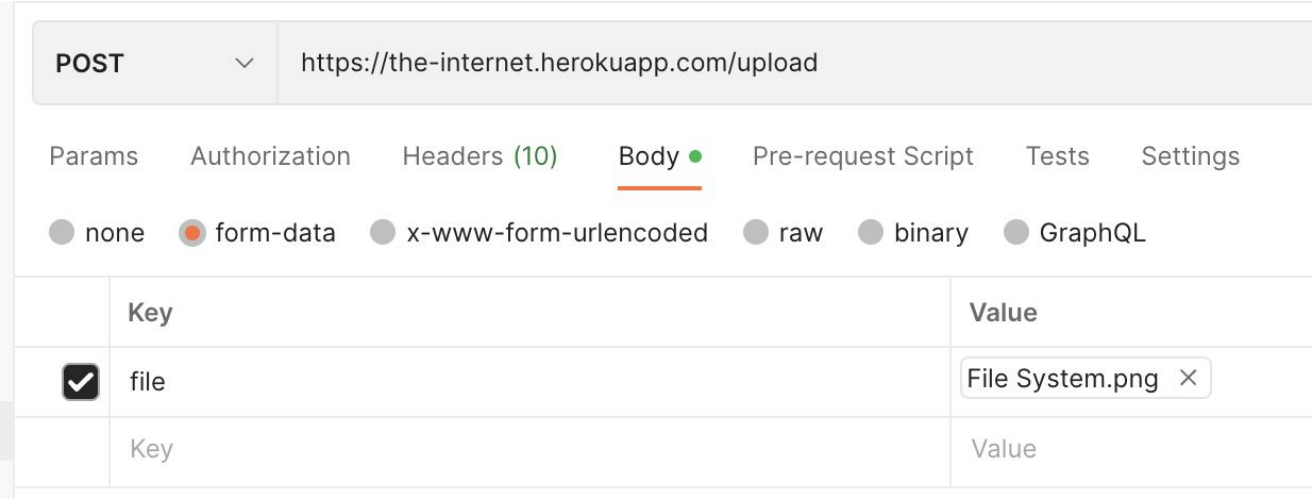
When does Serialization happen?

In REST Assured, when we pass an object as the request body, serialization happens automatically.



File Upload

https://the-internet.herokuapp.com/upload



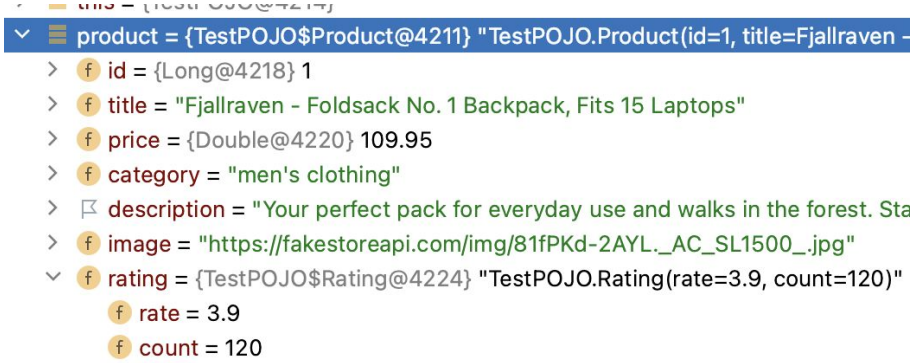
Parsing a Json Response

Deserialization

- **What is deserialization ?**
  - Deserialization is the process of converting a byte stream into an object.
- **How to perform deserialization in REST Assured?**
  - **POJO**
  - **JsonObject (Map)**
  - **Tree (JsonPath)**

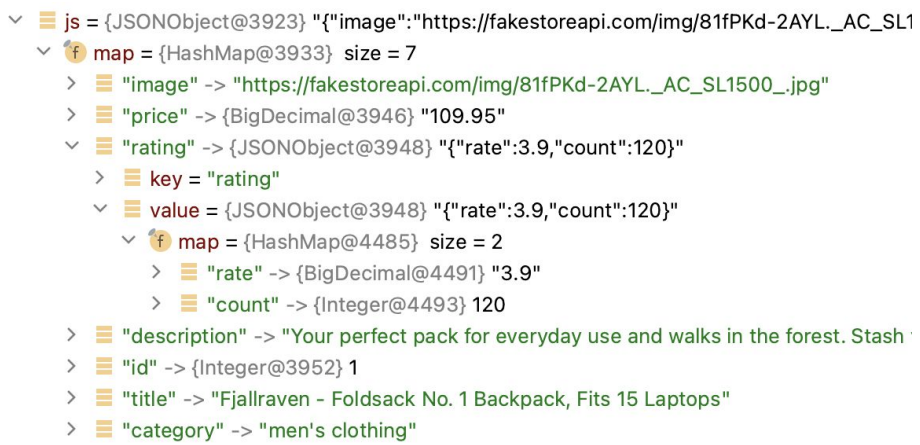
POJO


```
{
    "id": 1,
    "title": "Fjallraven - Foldsack No. 1 Backpack, Fits 15 Laptops",
    "price": 109.95,
    "description": "Your perfect pack for everyday use and walks in the forest.
    "category": "men's clothing",
    "image": "https://fakestoreapi.com/img/81fPKd-2AYL._AC_SL1500_.jpg",
    "rating": {
        "rate": 3.9,
        "count": 120
    }
}
```

JsonObject (Map)

```
{
    "id": 1,
    "title": "Fjallraven - Foldsack No. 1 Backpack, Fits 15 Laptops",
    "price": 109.95,
    "description": "Your perfect pack for everyday use and walks in the forest.
    "category": "men's clothing",
    "image": "https://fakestoreapi.com/img/81fPKd-2AYL._AC_SL1500_.jpg",
    "rating": {
        "rate": 3.9,
        "count": 120
    }
}
```

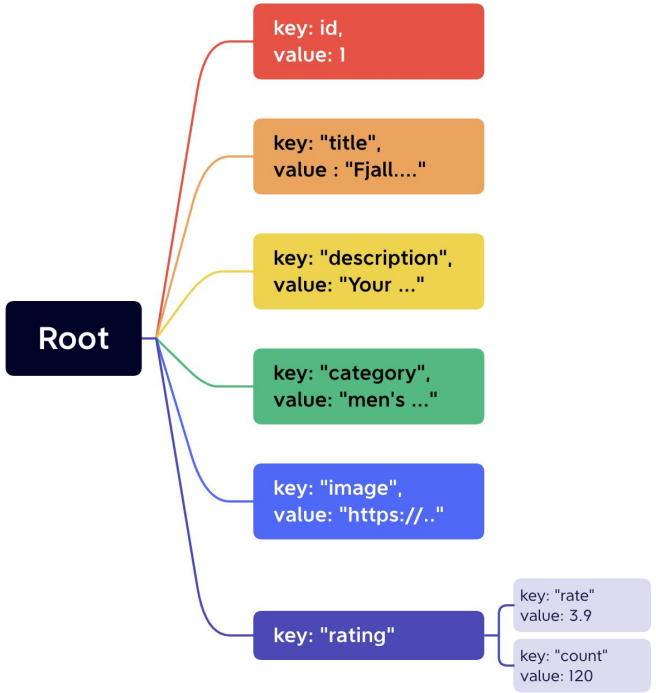


JsonPath

Objects and Maps are good, but they are too cumbersome. What if I just want to know a specific value from the response?

JsonPath (View the json as a tree!)


```
{
    "id": 1,
    "title": "Fjallraven - Foldsack No. 1 Backpack, Fits 15 Laptops",
    "price": 109.95,
    "description": "Your perfect pack for everyday use and walks in the forest.
    "category": "men's clothing",
    "image": "https://fakestoreapi.com/img/81fPKd-2AYL._AC_SL1500_.jpg",
    "rating": {
        "rate": 3.9,
        "count": 120
    }
}
```

Challenge: Json Array


```
[
    {
        "id": 1,
        "title": "Fjallraven - Foldsack No. 1 Backpack, Fits 15 Laptops",
        "price": 109.95,
        "description": "Your perfect pack for everyday use and walks in the forest. Stash your
        "category": "men's clothing",
        "image": "https://fakestoreapi.com/img/81fPKd-2AYL._AC_SL1500_.jpg",
        "rating": {
            "rate": 3.9,
            "count": 120
        }
    },
    {
        "id": 2,
        "title": "Mens Casual Premium Slim Fit T-Shirts ",
        "price": 22.3,
        "description": "Slim-fitting style, contrast raglan long sleeve, three-button henley pl
            wearing. And Solid stitched shirts with round neck made for durability and a great
            Henley style round neckline includes a three-button placket.",
        "category": "men's clothing",
        "image": "https://fakestoreapi.com/img/71-3HjGNDUL._AC_SY879._SX._UX._SY._UY_.jpg",
        "rating": {
            "rate": 4.1,
            "count": 259
        }
    }
]
```