**API (Application programming Interfaces)**

**Points to remember:**

1. **Http** protocol is independent of any language
2. **API** is interface between front end (Client) and backend(server)
3. **Resources** – It represents API/Collection which is accessed from the server.

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Description automatically generated

1. **Parameters** – They are the part of URL path.

**2 types: -**

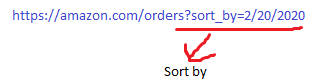
1. **Path parameters** – It is used to point out the specific resource. **Example:**

A diagram of a computer program

Description automatically generated with medium confidence

1. Query parameters – It is used to sort the resources. Query parameters are always denoted by ‘?’

**Example:**



1. **Headers** – We are sending additional details to process our https request into the server. For example: Authorization Details
2. **End Point Request URL can be constructed as below**:  
   Base URL/resource/(Query/Path) Parameters
3. **Serialization**: In rest assured context it is the process of converting java object into request body.
4. **Deserialization**: In rest assured context, it is the process of converting the response body back to java object.
5. For 7th and 8th point – Java object is obstructed with the support of POJO Classes.
6. **Jackson Databind** or **gson** dependency need to be added for serialization / deserialization.

**Different types of methods: (CRUD)**

1. **Put method** – It is used to replace all current representations with new content from the server using URL/address.
2. **Get method** – It is used to retrieve the information from the server using end point (URL/Address)
3. **Post method** – It is used to send the data to the server for ex – File upload, customer information etc. to create the resource on the server using URL/address
4. **Delete method** – It is used to remove all current representations from the server using URL/address.

**Prerequisites:**

1. Rest Assured Testing Basics
2. Serialization and Deserialization using POJO classes
3. Request and Response Spec Builders
4. Understanding of Cucumber
5. Maven project set up