**What is an API Testing?**

API testing is a type of Testing that focues on validating Application Programming interface to ensure they Work as expected in term of..

-Functionality

-Realiability

-Perforrmance

-Security

For Example:

Waiter in a restaurant -it takes your order(request)

-tells to the kitchen(server)

-brings foods to you back(respond)

Api allows the communication between different Software Componants

Examples in real life:

* Mobile app calling a server to fetch data
* Web app sending a login request
* Chat app sending a message to a backend server

**Role of Software Tester in API Testing**

-Understand the API documentation

-Create positive and negative test cases

-Verify different response codes and response data

-Validate business logic at the API layer

-Automate APIs using tools like Postman or Rest Assure

**Postman Navigation**

**Sidebar Section**

Access your Collections, APIs, Environments, and History

**Header Section**

* Set the HTTP method (GET, POST, PUT, DELETE)
* Enter the request URL
* Send button to execute the request

**Builder Section**

* Add parameters, headers, body (raw, form-data)
* Select authentication type

**Response Section**

* Shows the response from the server
  + Status code (e.g., 200 OK)
  + Time taken
  + Size
  + Body (formatted JSON/XML)
  + Headers

**Create a New Request in Postman**

1. Open Postman
2. Click + or New → HTTP Request
3. Choose method (GET/POST)
4. Enter URL (e.g., https://jsonplaceholder.typicode.com/posts)
5. Click **Send**

**GET Request in Postman**

* URL: https://jsonplaceholder.typicode.com/posts/1
* Method: GET
* Send → Response will be in JSON

**Response example:**

{

"userId": 1,

"id": 1,

"title": "sunt aut facere repellat",

"body": "quia et suscipit..."

}

**POST Request in Postman**

**Steps:**

1. Method: POST
2. URL: https://jsonplaceholder.typicode.com/posts
3. Go to **Body** tab
4. Select **raw** and choose **JSON**
5. Enter JSON data:

{

"title": "API Test",

"body": "This is a post request",

"userId": 1

}

1. Click **Send**

**You will get:**

* Status: 201 Created
* A new id in response

**What are Request Parameters?**

Request parameters are **key-value pairs** sent in a request to pass information to the server. They're used mostly in:

* **GET requests** (in URL)
* **POST requests** (in body or query)