API Consumption with curl

What is curl?

curl is a command-line tool that allows you to transfer data to or from a server using various protocols (HTTP, HTTPS, FTP, etc.). It is commonly used to test and interact with APIs.

Commands Used

1. Check curl version

curl - -version

Displays the installed version of curl and supported protocols.

2. Fetch a web page

curl http://example.com

Shows the HTML content of the page.

3. Fetch data from an API

curl https://jsonplaceholder.typicode.com/posts

Returns a JSON array of posts from the public API JSONPlaceholder.

4. Fetch only headers

curl -I https://jsonplaceholder.typicode.com/posts

Displays only the HTTP headers of the response (status, content-type, etc.).

5. Make a POST request

curl -X POST -d "title=foo&body=bar&userId=1" https://jsonplaceholder.typicode.com/posts

Sends data to the API to create a new post. The response simulates the creation and returns a new post with id 101.

Definitions:

- **Header:** Extra information sent with HTTP requests or responses (like Content-Type, Status).
- **POST:** HTTP method used to send data to a server to create or update a resource.

- **GET:** HTTP method used to request data from a server.
- **JSON:** JavaScript Object Notation, a format for structuring data, commonly used in APIs.

Example Output

Example response from the POST request:

```
json
{
    "title": "foo",
    "body": "bar",
    "userId": "1",
    "id": 101
    }
```

What I learned

- How to install and check curl on my system.
- How to use curl to make GET and POST requests to an API.
- How to view HTTP headers using the -I option.
- The difference between GET and POST requests.
- How to interpret JSON responses from an API.