How to Call an API?

What is an API?

Think of API as a postman who takes your letter to another person and gets back with a response.

In simplest words, API is like a middle-man that helps client and server communicate with each other.
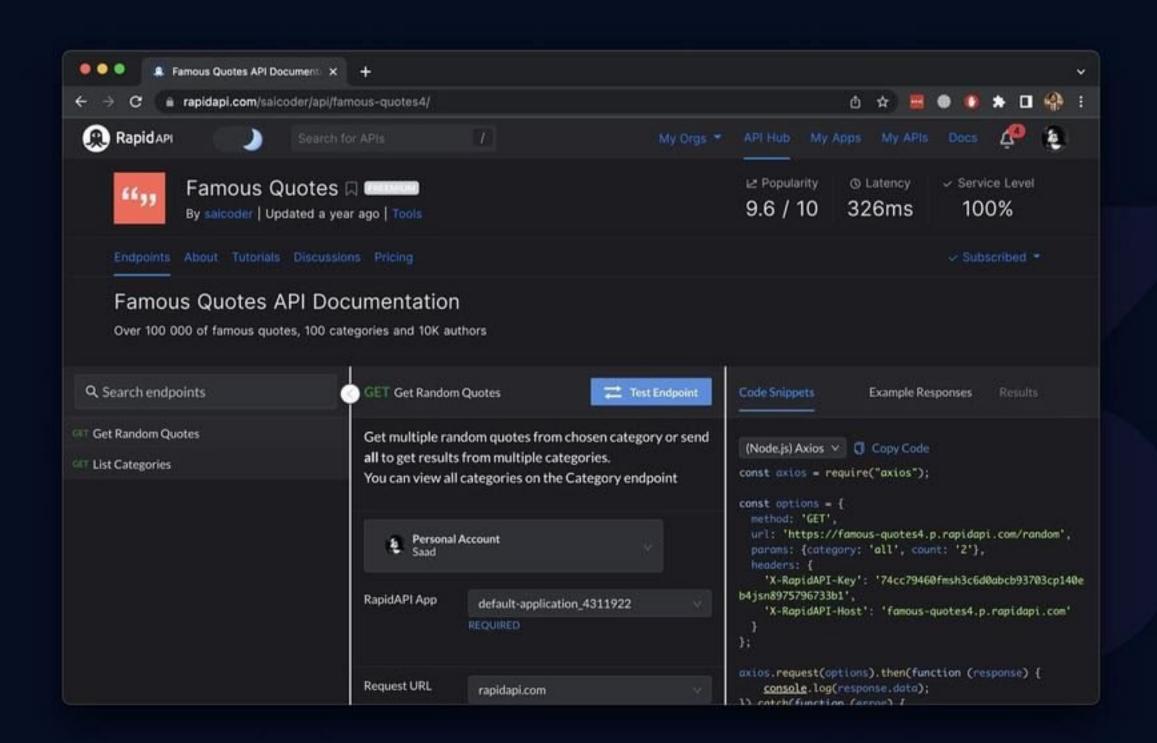
Call an API

There are four steps to call an API:

1. Find an API
2. Request it
3. Handle response
4. Error handling

We will be using **JavaScript** to make the API call.

`JS`

1. Find an API

We can use **RapidAPI Hub**, the home of over 35k+ APIs. I will use the Famous Quotes API from the Hub.

2.1 Request an API

We can use JavaScript **fetch** method to request an API.

```js
// syntax

fetch('API_URL', {
    // additional config
})
    .then(response => response.json())
    .then(data => console.log(data))
    .catch(err => console.log(err));
```

2.2 Request an API

We will make a **GET** request to the API. Don't worry about the headers. You can find them on RapidAPI Hub.

```js
// requesting famous quotes API using fetch

fetch('https://famous-quotes4.p.rapidapi.com/random?category=all&count=1', {
    method: 'GET',
    headers: {
        'X-RapidAPI-Key': 'your-rapidapi-key',
        'X-RapidAPI-Host': 'famous-quotes4.p.rapidapi.com',
    },
})
```

`JS`

4. Error handling

Lastly, let's do some error handling in case the API request fails.

```js
// requesting famous quotes API using fetch

fetch('https://famous-quotes4.p.rapidapi.com/random?category=all&count=1', {
    method: 'GET',
    headers: {
        'X-RapidAPI-Key': 'your-rapidapi-key',
        'X-RapidAPI-Host': 'famous-quotes4.p.rapidapi.com',
    },
})
    .then(response ⇒ response.json())
    .then(response ⇒ console.log(response))
    .catch(err ⇒ console.error(err));
```

API Response

You will see a response like the following when you run your JavaScript file.

```json
[
  {
    "text": "That neither our thoughts, nor passions, nor ideas formed by the imagination, exist without the mind, is what every body will allow.",
    "author": "George Berkeley",
    "id": 37917,
    "category": "imagination"
  }
]
```