

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 middleman 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.

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.

The screenshot displays the RapidAPI Hub interface for the 'Famous Quotes' API. The browser address bar shows the URL `rapidapi.com/salcoder/api/famous-quotes4/`. The API details section includes a star rating of 9.6 / 10, a latency of 326ms, and a service level of 100%. The 'Endpoints' tab is active, showing a list of endpoints on the left: 'GET Get Random Quotes' and 'GET List Categories'. The 'GET Get Random Quotes' endpoint is selected, showing its description: 'Get multiple random quotes from chosen category or send all to get results from multiple categories. You can view all categories on the Category endpoint'. Below the description, there are fields for 'Personal Account' (Saad), 'RapidAPI App' (default-application_4311922), and 'Request URL' (rapidapi.com). A 'Test Endpoint' button is visible. On the right, the 'Code Snippets' tab is active, showing a Node.js Axios code snippet for making a GET request to the API endpoint.

```
(Node.js) Axios Copy Code
const axios = require("axios");

const options = {
  method: 'GET',
  url: 'https://famous-quotes4.p.rapidapi.com/random',
  params: {category: 'all', count: '2'},
  headers: {
    'X-RapidAPI-Key': '74cc79460fmsh3c6d0abcb93703cp140eb4jsn8975796733b1',
    'X-RapidAPI-Host': 'famous-quotes4.p.rapidapi.com'
  }
};

axios.request(options).then(function (response) {
  console.log(response.data);
}).catch(function (error) {
  console.log(error);
});
```

2.1 Request an API

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



```
// 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.

```
// 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',
  },
})
```

4. Error handling

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

```
// 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.

```
[
  {
    "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"
  }
]
```