

API

→ How To make Connection to API .

In Backend, you will define API Endpoint

Ex: `https://api.example.com/users`

It's a URL to which you make requests.

use HTTP methods (Get (retrieve), POST (send data), PUT/PATCH (update data), DELETE (remove data)).

HTTP requests → use libraries or built-in methods to make HTTP requests.

Commonly used libraries include 'axios' & 'fetch' in Javascript

Connecting to a REST API in front-end Application

(using `fetch` (Built-in JS method)).

`fetch('https://api.example.com/users')`

• `then(response => response.json())`

• `then(data => console.log(data))`

• `catch(error => console.error(`Error fetching data: ${error}`));`

Post request (sending data to server),

```
const userData = {  
    name: 'John Doe',  
    email: 'John.doe@gmail.com'  
};
```

→ // Data to send
to the server.

```
// Send data to server,  
fetch('https://api.example.com/users', {  
    method: 'POST',  
    headers: {  
        'Content-Type': 'application/json'  
    },  
    body: JSON.stringify(userData)  
})  
    .then(response => response.json())  
    .then(data => console.log('User created:', data))  
    .catch(error => console.error('Error creating user:',  
        error));
```

Suppose, movements = [{ movement }]

For each (function() of movement) → Call Back functions.

Here, if loop over array f for each iteration, it will execute call back function. It will pass in each current element as an argument.

1) Count request =
String in available

new XMLHttpRequest();

2) And second, we need a string containing URL to which AJAX call actually be made.
So, API's (for free API's just search and you will find, then select category as you want)

→ And that selected one, no Authentication; HTTPS - Yes
CORS → Yes or maybe unknown. [without cors we can't access a 3rd party API]

[For opening Request]
request.open('GET', 'url---');

3) Send request
request.send(); → Simply we can't send off this way

So this AJAX, call that we just send off here, is being done in background, while rest of code keeps running.

And instead we need to register a callback on request object for load event

```
request.addEventListener('load', function() {  
    console.log(this.responseText);
```

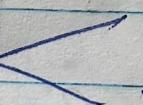
Till here with the 3 steps we could get off but in form of JSON which means in string.

So we need to convert / parse.

```
request.addEventListener('load', function() {  
    const data = JSON.parse(this.responseText);  
    console.log(data);
```

const data = JSON --- (); → destructuring data.

Here
Actually we are storing all the input data of HTML file and containing it there and storing here in a variable

1) new Request  XMLHttpRequest {Any request }
JSON

2) open (GET, PUT, POST) → Anything

3) send

4) parse-

Here, we took CountriesContainer. insertAdjacentHTML ("beforeend", html)

So, basically we use this to add extra data
without removing existing data