

RESTful APIs

REST (Representational State Transfer) is an architectural style for designing networked applications.

Resources: Everything in REST is considered a resource, a user, a document etc.

HTTP Method: GET \rightarrow Retrieve information from the server

POST \rightarrow Submit data to the server to create a new resource.

PUT \rightarrow Update an existing resource on the ~~to~~ server.

DELETE \rightarrow Remove a resource from the server.

Statelessness: Each API call is independent, and the server does not store any information about the client state between requests.

Representation: Resources can be represented in multiple formats such as JSON or XML.

Endpoints: URLs that represent the various resources in the API

Using Fetch API

It allows you to make HTTP requests from the frontend.

GET Request:

```
fetch ('https://example.com/users')  
  .then (response => response.json())  
  .then (data => console.log (data))  
  .catch (err => console.log (err));
```

Using Axios

It makes handling API requests easier.

GET Request:

```
axios.get ('https://example.com/users')  
  .then (response => { console.log (response.data); })  
  .catch (error => { console.error (error); });
```

Endpoint

GET /books : Retrieve a list of books

Fetch all Books:

```
function fetchBooks () {  
  fetch ('https://example.com/books')  
    .then (response => response.json())  
    .then (books => { console.log (books);  
    })  
    .catch (err => console.log (err));  
}
```