wawiwa
React
2022 © Wawiwa Tech | Confidential


wawiwa
21 - Http
visual design
2022 © Wawiwa Tech | Confidential

https://platform.blossom-kc.com/wawiwa_tech/Launcher?assignment=38881&ref=https%3A%2F%2Fplatform.blossom-kc.com%2Fwawiwa_tech%2F...

wawiwa

¿Qué es HTTP?

Internet es creado por muchos recursos alojados en servidores diferentes. Para acceder al contenido de internet, el navegador debe pedir a estos servidores los recursos que quiere.

Este protocolo de solicitudes y respuestas te permite ver todas las páginas que abres en tu navegador.

La transferencia de los recursos sucede usando Transmission Control Protocol (Protocolo de Control de Transmisión), o TCP.

TCP es usado para manejar varios tipos de conexiones de internet en la cual una computadora o dispositivo quiere mandar algo a otro.

HTTP (Hypertext Transfer Protocol - “Protocolo de Transferencia de Hipertexto”) es el comando de lenguaje que los dispositivos en los dos lados de la conexión deben seguir para comunicarse.

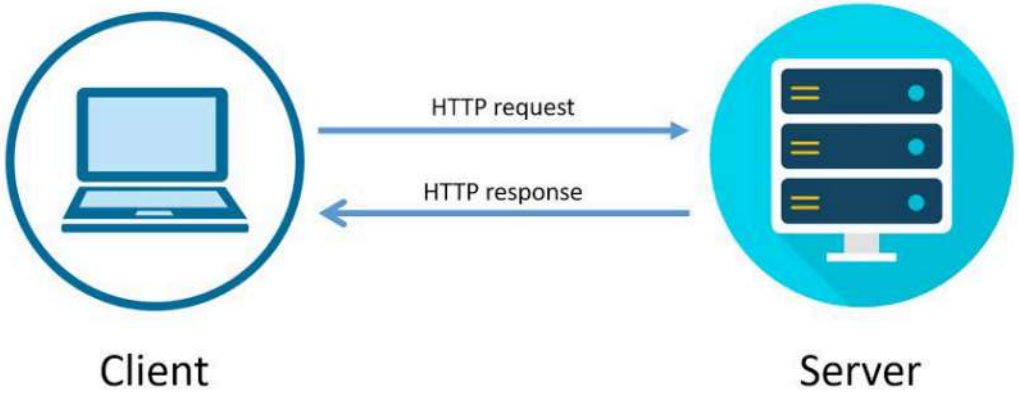
PDF.js viewer

wawiwa

¿Qué es una solicitud de HTTP?

Una solicitud HTTP es un **mensaje enviado del cliente al servidor**, pidiéndole al servidor ejecutar una acción específica.

La solicitud incluye información como el URL del recurso que al que cliente quiere acceder, el tipo de solicitud (por ejemplo GET o POST), y cualquier información que el cliente quiere enviar al servidor.



https://platform.blossom-kc.com/wawiwa_tech/Launcher?assignment=38881&ref=https%3A%2F%2Fplatform.blossom-kc.com%2Fwawiwa_tech%2F...

wawiwa

¿Qué es HTTPS?

HTTPS (HyperText Transfer Protocol Secure - “Protocolo de Transferencia de Hipertexto segura”) es un protocolo para comunicación **segura** en internet.

Es usado para transmitir información sensible, como número de tarjetas de créditos y credenciales de inicio de sesión, de una manera segura.

HTTPS es una variación del HTTP estándar (HyperText Transfer Protocol) que es usado para transmitir información en internet.

La diferencia entre HTTPS y HTTP es que HTTPS encripta la información que está siendo transmitida, haciendo **mucho más difícil para cualquiera interceptar o espiar en la comunicación**.

PDF.js viewer

wawiwa

What is API

API stands for Application Programming Interface.

API is actually some kind of interface which is having a set of functions.
These set of functions will allow programmers to acquire some specific features or the data of an application.

For example, the weather bureau's software system contains daily weather data. The weather app on your phone "talks" to this system via APIs and shows you daily weather updates on your phone.

PDF.js viewer

https://platform.blossom-kc.com/wawiwa_tech/Launcher?assignment=38881&ref=https%3A%2F%2Fplatform.blossom-kc.com%2Fwawiwa_tech%2F...

wawiwa

How do APIs Works?

The process typically works as follows:

1. A client sends a request to the API. The request specifies the action that the client wants the API to perform, such as retrieving data or triggering an action.
2. The API processes the request and sends a response back to the client. The response includes the results of the requested action, such as the requested data or a confirmation of the action that was performed.
3. The client receives the response and processes the results.

The request and response are typically sent using a specific protocol, such as HTTP or HTTPS. The request and response include a set of predefined rules and structures, such as the format of the data being sent and received, the parameters that can be passed in the request, and the format of the response.

https://platform.blossom-kc.com/wawiwa_tech/Launcher?assignment=38881&ref=https%3A%2F%2Fplatform.blossom-kc.com%2Fwawiwa_tech%2F...

PDF.js viewer

wawiwa

How do APIs Works?

The process typically works as follows:

1. A client sends a request to the API. The request specifies the action that the client wants the API to perform, such as retrieving data or triggering an action.
2. The API processes the request and sends a response back to the client. The response includes the results of the requested action, such as the requested data or a confirmation of the action that was performed.
3. The client receives the response and processes the results.

The request and response are typically sent using a specific protocol, such as HTTP or HTTPS. The request and response include a set of predefined rules and structures, such as the format of the data being sent and received, the parameters that can be passed in the request, and the format of the response.

wawiwa

Send a Request to an API

To send a request to an API in React, you can use the fetch function or a library such as axios. Axios and the fetch function are both ways to make HTTP requests in JavaScript, but there are some key differences between the two:

1. **Syntax**: axios uses a more concise and easier to read syntax compared to the fetch function.
2. **Abstraction**: axios provides a higher level of abstraction compared to the fetch function. This means that it provides more built-in features, such as automatic transformation of data to JSON, support for request and response interceptors, and the ability to cancel requests.
3. **Error handling**: axios has better error handling compared to the fetch function.
4. **Browser compatibility:** fetch is part of the standard JavaScript API and is available in modern browsers, but may not be available in older browsers. axios, on the other hand, is a library that can be used in any JavaScript environment, including older browsers.

https://platform.blossom-kc.com/wawiwa_tech/Launcher?assignment=38881&ref=https%3A%2F%2Fplatform.blossom-kc.com%2Fwawiwa_tech%2F...

PDF.js viewer

wawiwa

Using Fetch Function

An example of using the fetch function to send a GET request to an API in React:

```
const [data, setData] = useState(null);

useEffect(() => {
  fetch('https://api.example.com/data')
    .then(response => response.json())
    .then(data => setData(data))
    .catch(error => console.error(error));
}, []);
```

The fetch function is used to send the request, and the response is processed using the then method. The response is expected to be in JSON format, so the json method is used to parse the response. The resulting data is then stored in the data state using the setData function.

PDF.js viewer

https://platform.blossom-kc.com/wawiwa_tech/Launcher?assignment=38881&ref=https%3A%2F%2Fplatform.blossom-kc.com%2Fwawiwa_tech%2...
14/11/24, 9:30 p.m.

wawiwa

Using Axios

To use this library, you must install it: `npm install axios`

An example of using axios to send a GET request to an API in React:

```
import axios from 'axios';

const [data, setData] = useState(null);

useEffect(() => {
  axios.get('https://api.example.com/data')
    .then(response => setData(response.data))
    .catch(error => console.error(error));
}, []);
```

- The get method from the axios library is used to send the GET request to the API.
- The response data is then stored in the data state using the setData function.
- Note that in both examples, it is important to handle errors that may occur during the API request, as shown in the catch block.

PDF.js viewer
11/14

https://platform.blossom-kc.com/wawiwa_tech/Launcher?assignment=38881&ref=https%3A%2F%2Fplatform.blossom-kc.com%2Fwawiwa_tech%2...

14/11/24, 9:30 p.m.

wawiwa

Example of Custom Hook - Fetches an age prediction based on a name using API

usePredictAge :

```
import { useState, useEffect } from 'react';
export default function usePredictAge(name) {
  const [age, setAge] = useState(null);
  const [loading, setLoading] = useState(true);
  const [error, setError] = useState(null);

  useEffect(() => {
    const fetchAge = async () => {
      try {
          const response = await fetch(`https://api.agify.io?name=${name}`);
          console.log("response");
          console.log(response);
          const data = await response.json();
        setAge(data.age);
        setLoading(false);
      } catch (error) {
        setError(error);
        setLoading(false);
      }
    };
    fetchAge();
  }, [name]);
  return { age, loading, error };
}
```


https://agify.io/

PDF.js viewer

12/14

wawiwa

Example of Custom Hook - Fetches an age prediction based on a name using API

App.js :

```
import React from 'react';
import usePredictAge from './usePredictAge';

function App() {
  const name = "Michael";
  const { age, loading, error } = usePredictAge(name);
  if (loading) return <p>Loading...</p>;
  if (error) return <p>Error: {error.message}</p>;
  return <p>{name} is {age} years old</p>;
}
export default App;
```


https://platform.blossom-kc.com/wawiwa_tech/Launcher?assignment=38881&ref=https%3A%2F%2Fplatform.blossom-kc.com%2Fwawiwa_tech%2...

PDF.js viewer

wawiwa

Exercise 20

Use the “Bored API” - A free API that provides suggestions for random activities to help you find something to do.

Explore it, send a Get request and present the response.

API URL: https://www.boredapi.com/api/activity

Show a “Loading…” while getting the data.

For example: