What Is React, and What Is It Commonly Used For?

React is one of the most popular JavaScript libraries for building user interfaces and web applications. Originally developed and maintained by Facebook, React has gained huge popularity in web development due to its efficiency, flexibility, and features.

A fundamental concept in React is the creation of reusable UI components. These components, such as buttons, cards, and avatar components, can be easily reused throughout your application. You can nest these components inside each other to build more complex, dynamic interfaces.

One of the key advantages of React is that these custom components can update and render independently as data changes.

Unlike traditional JavaScript, which requires direct manipulation of the DOM (Document Object Model), React uses a virtual DOM, which improves performance and efficiency. You'll learn more about the virtual DOM and how it works in upcoming lessons.

In addition to reusable components, React also provides a powerful way to manage the state of your application. State refers to the data that determines how a component renders and behaves.

With React, you can easily track and update the state of components, ensuring that the UI reflects the most current data. You will learn more about working with state in future lessons.

While there are many libraries within the JavaScript ecosystem, freeCodeCamp will mainly be focused on teaching React because of its widespread use and demand in the industry.

Our next few lessons will dive deeper into building custom components, managing state, and more.

Questions

What is one of the key advantages of React?

It is only used for building mobile applications.

It requires direct manipulation of the DOM for better performance.

It uses a virtual DOM to improve performance and efficiency.

It cannot handle dynamic updates to UI components.

What is the purpose of state in React?

State determines the styling of UI components.

State tracks and updates data that affects how a component renders and behaves.

State is used to manage the DOM directly.

State is only used in functional components.

Why is freeCodeCamp focusing on teaching React?

React is the only JavaScript library available.

React has widespread use and demand in the industry.

React is easy to learn and does not require state management.

React is better for building back-end services.