Introduction to React Hooks

Web Development Boot Camp

Lesson 10.3

Partner Activity:
Managing React State

With a partner, discuss the various methods used in React state management.

What are some of the advantages/disadvantages with these methods?

Suggested Time:
5 minutes

Managing state can be difficult because there is no one-size-fits-all solution.

But there is another way.

Comparing Ways to Manage State

01 Class Components with `setState()`

Advantages

- Component and children will re-render with up-to-date data.

Disadvantages

- Updating state from nested components can be difficult.
- Since state only flows one way, all components that need access to the state must be children of the same stateful component.

02 Functional Components with `useState()`

Advantages

- Easier to read and debug, and no need to use `this`
- Access to Hooks

Disadvantages

- Needs to use other Hooks to manage complex levels of state.
- Not supported by older codebases, which will still need to use class components for state.

As of React 16.8, Facebook recommends using functional components whenever possible.

Introducing React Hooks

Hooks are functions that let you "hook into" React state and lifecycle features from stateless components.

In This Lesson, We Will Cover Two Hooks

01 `useState`: Allows you to use state in a functional component.

02 `useEffect`: Replaces lifecycle methods like `componentDidMount` and `componentDidUpdate`.

03 **Custom Hooks:** Create your own reusable Hooks!

Effect is a term used to describe the result of affecting the “outside world.” This includes data fetching, subscribing to events, and making changes to the DOM.

The Two Rules of Hooks

01

Do not call Hooks from within loops, conditionals, or nested functions.

- Hooks must always be called in the same order, like component lifecycle methods.
- This makes it possible for React to store the state of Hooks when using `useState` or `useEffect`.

02

Do not call Hooks from within regular JavaScript functions.

- This makes it so that all stateful logic is easy to find for the developer (you).

<Time to Code>