



HOOKS

What are Hooks?

Hooks are special functions that let you 'hook into' React features. In a sense, a hook "listens" for changes in order to trigger a response. Hooks give us the ability to use state, manage side-effects and use other features within functional components.

State

State is a variable where one can store and preserve property values that are pertinent to the application between function calls or for function components between re-renders.

Two kinds of state:

1. *Component state (useState)*
2. *Global State (Context, Redux)*

State does not persist after re-loading the page.

Side-effects

A "**side effect**" is anything that affects something outside the scope of the function being executed

To manage these side-effects we will use the **useEffect** hook

Why Use Hooks

- Wasn't built into React originally
- Originally used Classes and Lifecycles
- Hard to reuse certain logic between components
- Complex components hard to understand
- Classes are confusing

useState Hook syntax

useState hook is a function that takes an optional default value as an argument and returns an array with two indexes

```
1 const [title, setTitle] = useState('React Hooks')
```

- First index: *current state*
- Second index: *function to update the state*

By convention we destructure these two values when defining our useState Hook.

useEffect Hook

function that handles asynchronous operations

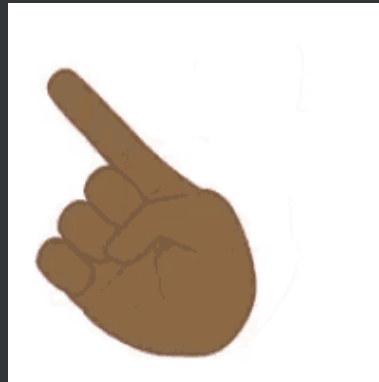
Syntax: `useEffect(func, array)`

```
1  useEffect(  
2    ()=>{  
3      /* logic */  
4    },  
5    [/*dependancy array*/]  
6  )
```

Great for data fetching, handling subscriptions
and manually changing the DOM, & updating
based on state or props

useContext Hook

Gives us a way to consume have global state from the Context API without using Redux.



**NOT A REPLACEMENT FOR
REDUX**

Hook Rules

1. **Only Call Hooks from React Function Components**
2. **Hooks must always be called in the same order**
3. **Don't call Hooks inside loops, conditions, or nested functions.**
4. **useEffect Hook MUST return a function**
5. **no async before the useEffect callback function**