

WHAT IS HOOKS ?

Hooks are the **functions** to use some react **features** in functional components.

In other words, Hooks are functions that make **Functional components** work like **Class components**.

What is useState?

useState Hook is a function to **add State** in Functional Component.

What is state?

State is nothing but just **values or variables** of your component.

App.js - 06_CODE - Visual Studio Code

```
1 import React, { useState } from "react";
2
3 const App = () => {
4     const [counter, setCounter] = useState(0);
5
6     function increaseCounter() {
7         setCounter(counter + 1);
8     }
9
10    return (
11        <div>
12            <h1>Counter: {counter}</h1>
13            <button onClick={increaseCounter}>Increase</button>
14        </div>
15    );
16
17 export default App;
18
```

Subscribe

• App.js - 06_CODE - Visual Studio Code

```
const App = () => {
  const [counter, setCounter] = useState(0);
  const [name, setName] = useState("");
  function increaseCounter() {
    setCounter(counter + 1);
  }
  return (
    <div>
      <input type="text" onChange={e => setName(e.target.value)} />
      <h1>{name} has clicked {counter} time</h1>
      <button onClick={increaseCounter}>Increase</button>
    </div>
  );
};
export default App;
```

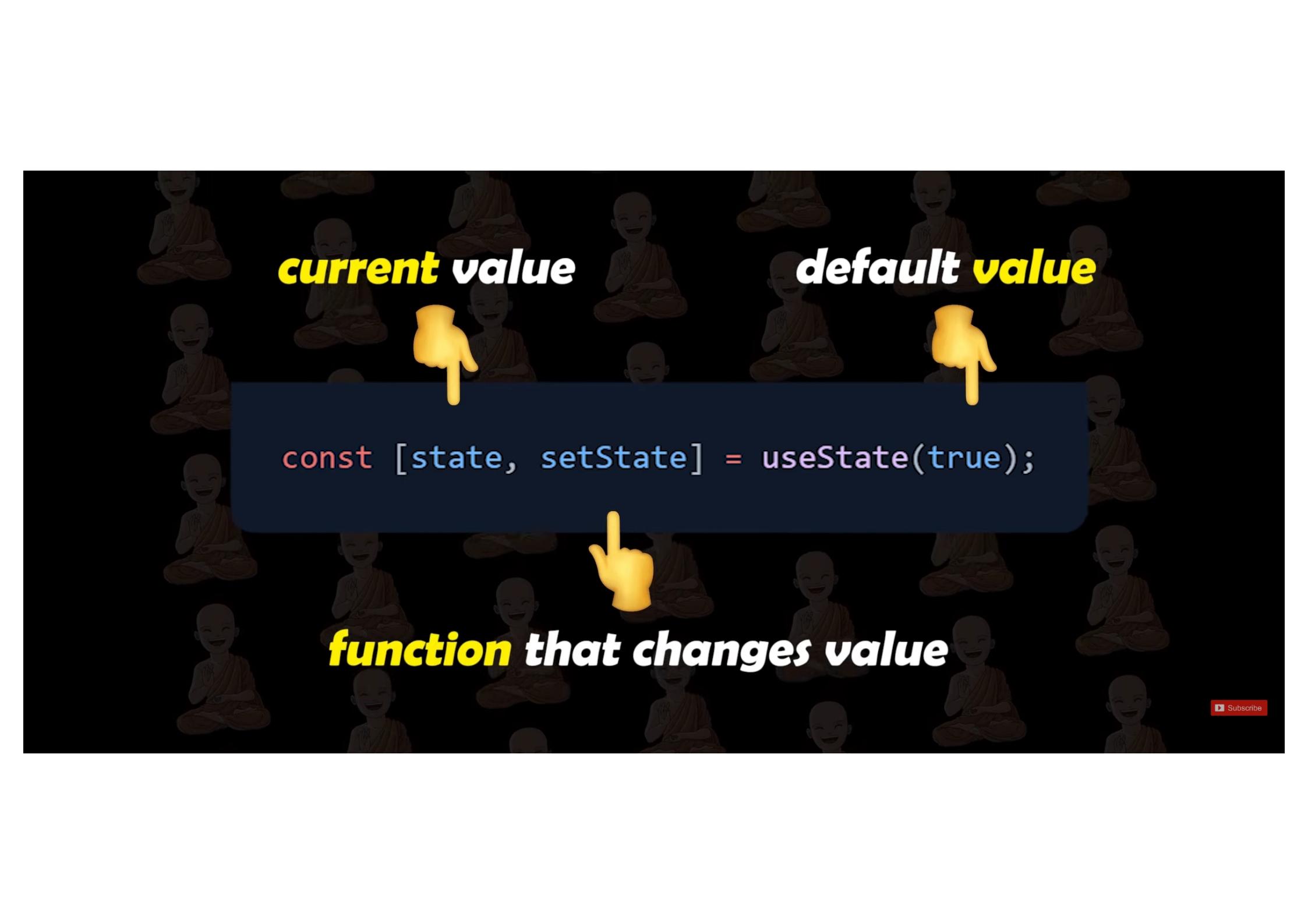
useState with Object

```
App.js
: > JS App.js > [e] App
1 import React, { useState } from "react";
2
3 const App = () => {
4     const [counter, setCounter] = useState(0);
5     const [name, setName] = useState("React");
6     const [list, increaseCounter] = useState([1, 2, 3]);
7     const [inputValue, setInputValue] = useState("");
8     const [buttonDisabled, setButtonDisabled] = useState(false);
9
10    return (
11        <div>
12            <input type="text" onChange={e=> setInputValue(e.target.value)} />
13            <h1>Counter: {counter}</h1>
14            <button onClick={increaseCounter}>Increase</button>
15        </div>
16    );
17};
18
```

Subscribe

App.js - 06_CODE - Visual Studio Code

```
src > App.js > App > increaseCounter > setDetails() callback
1 import React, { useState } from "react";
2
3 const App = () => {
4     const [details, setDetails] = useState({ counter: 0, name: "" });
5
6     function increaseCounter() {
7         setDetails((prev) => ({
8             ...prev,
9             counter: prev.counter + 1,
10        }));
11    }
12
13    console.log(details);
14    return (
15        <div>
16            <input type='text' onChange={(e) => e.target.value} />
17            <h1>
18                {details.name} has clicked {details.counter} times!!
19            </h1>
20            <button onClick={increaseCounter}>Increase</button>
21        </div>
22    );
23}
```



current value

default value



```
const [state, setState] = useState(true);
```



function that changes value

What is side Effect?

Side effects are actions which are performed with the “Outside world”.

We perform a side effect when we need to reach outside of our React components to do something.

`useEffect`

UseEffect is used to perform side effects in our component.

What is side Effect?

Side effects are actions which are performed with the “Outside world”.

What is side Effect?

Side effects are actions which are performed with the “Outside world”.

We perform a side effect when we need to reach outside of our React components to do something.

Some Common Side Effects

**Fetching data from API
updating the DOM document
& window**

Some Common Side Effects

**Fetching data from API
updating the DOM document
& window**

**Timer functions setTimeout
& setInterval**



[Subscribe](#)

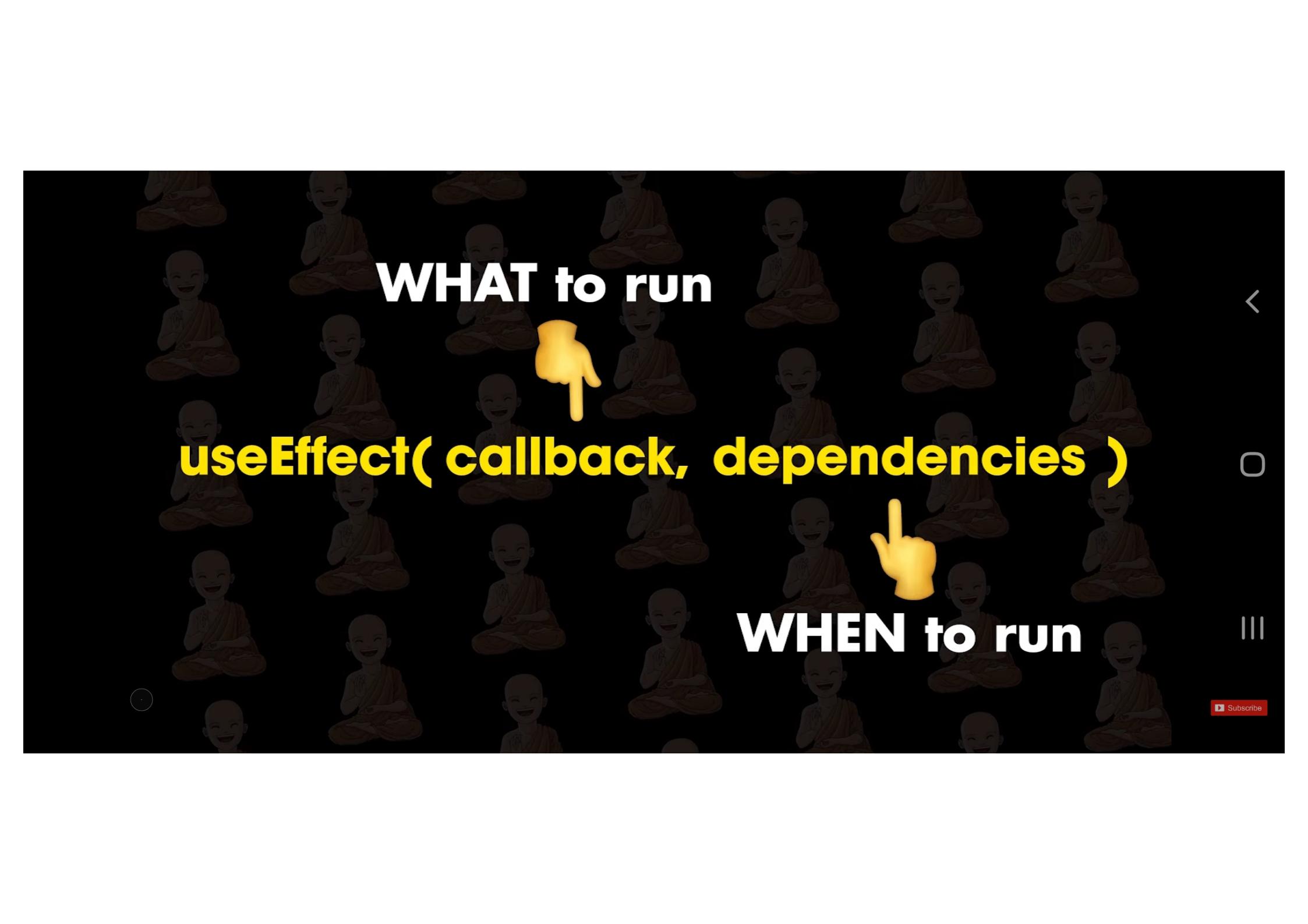
Function - side Effect logic



`useEffect(callback, dependencies)`



**Array of variables
(Optional)**



WHAT to run



useEffect(callback, dependencies)



WHEN to run



[Subscribe](#)

Class Component

`componentDidMount`

`componentDidUpdate`

`useEffect`

`componentWillUnmount`

VARIATION OF USEEFFECT

- `useEffect` without dependencies
- `useEffect` with empty array
- `useEffect` with variables

useEffect with an empty array

```
1 import React, { useState, useEffect } from "react";
2
3 const App = () => {
4     const [count, setCount] = useState(0)
5
6     useEffect(() => {
7         document.title = ` ${count} new messages!`
8     }, []);
9
10    return (
11        <div>
12            <h1>{count}</h1> Messages!
13            <button onClick={() => setCount(count + 1)}> Create</button>
14        </div>
15    );
16}
17
18 export default App;
```

```
App.js - 06_CODE - Visual Studio Code
App.js
src > App.js > App
1 import React, { useState, useEffect } from "react";
2
3 const App = () => {
4     const [count, setCount] = useState(0);
5
6     useEffect(() => {
7         document.title = `${count} new messages!`;
8     });
9
10    return (
11        <div>
12            <h3>{count} new Messages!</h3>
13            <button onClick={() => setCount(count + 1)}>Increase</button>
14        </div>
15    );
16};
17
18 export default App;
```

Subscribe

```
App.js
```

```
src > App.js > App
```

```
1 import React, { useState, useEffect } from "react";
2
3 const App = () => {
4   const [count, setCount] = useState(0);
5
6   useEffect(() => {
7     document.title = `${count} new messages!`;
8   }, []);
9
10  return (
11    <div>
12      <p>${count} new messages!</p>
13      <button onClick={() => setCount(count + 1)}>Increment</button>
14    </div>
15  );
16}
17
```

useEffect with an empty array

Subscribe

```
• App.js - 06_CODE - Visual Studio Code
App.js
src > App.js > App
1 import React, { useState, useEffect } from "react";
2
3 const App = () => {
4     const [count, setCount] = useState(0);
5
6     useEffect(() => {
7         document.title = `${count} new messages!`;
8     }, []);
9
10    return (
11        <div>
12            <h3>{count} new Messages!</h3>
13            <button onClick={() => setCount(count + 1)}>Increase</button>
14        </div>
15    );
16};
17
18 export default App;
```

Subscribe

useEffect with variables

```
App.js - 06_CODE - Visual Studio Code
src > App.js > App > useEffect() callback
  3 const App = () => {
  4   const [count, setCount] = useState(0);
  5   const [otherCount, setOtherCount] = useState(0);
  6
  7   useEffect(() => {
  8     document.title = `${otherCount} new messages!`;
  9   }, [otherCount]);
 10
 11   return (
 12     <div>
 13       <h3>{count} new Messages!</h3>
 14       <button onClick={() => setCount(count + 1)}>Increase</button>
 15       <br />
 16       <button onClick={() => setOtherCount(otherCount + 5)}>
 17         Increase by 5
 18       </button>
 19     </div>
 20   );
}
```

Subscribe

• App.js - 06_CODE - Visual Studio Code

The screenshot shows a dark-themed instance of Visual Studio Code with the file 'App.js' open. The code implements a functional component 'App' that uses the useState hook to manage two state variables: 'count' (initially 0) and 'otherCount' (initially 5). It also includes a useEffect hook to update the document's title whenever either state variable changes. The UI part of the component consists of a

element containing an

for 'count', a button to 'Increase' it, an for 'Other Count : otherCount', and another button to 'Increase by 5'.

```
3  const App = () => {
4      const [count, setCount] = useState(0);
5      const [otherCount, setOtherCount] = useState(5);
6
7      useEffect(() => {
8          document.title = `${otherCount} new messages!`;
9      }, [otherCount, count, ..]);
10
11     return (
12         <div>
13             <h3>{count} new Messages!</h3>
14             <button onClick={() => setCount(count + 1)}>Increase</button>
15             <h3>Other Count : {otherCount}</h3>
16             <button onClick={() => setOtherCount(otherCount + 5)}>
17                 Increase by 5
18             </button>
19         </div>
20     );
}
```

Clean-up Function in useEffect

```
src > App.js > [e] App > useEffect() callback
  3  const [time, setTime] = useState(0);
  4  const [start, setStart] = useState(false);
  5
  6  useEffect(() => {
  7    const timer = setInterval(() => {
  8      setTime(time + 1);
  9    }, 1000);
 10
 11  return () => {
 12    cleanInterval(timer);
 13  };
 14});
 15
 16  return (
 17    <div>
 18      <h3>{time} in seconds</h3>
 19    </div>
 20  );
}
```

App.js - 06_CODE - Visual Studio Code



p.js X

App.js > [o] App > ↗ useEffect() callback

```
3  const App = () => {
4      const [count, setCount] = useState(0); 
5
6      useEffect(() => {
7          console.log("Run useEffect", count);
8
9          return () => {
10              console.log("Clean up", count);
11          };
12      }, [count]);
13
14      return (
15          <>
16              <h3>Count {count}</h3>
17              <button onClick={() => setCount(count + 1)}>Increment</button>
18      );
19  }
```

Subscribe

useEffect

UseEffect is used to perform side effects in our component.

**Fetching data from API
updating the DOM - document & window
Timer functions - setInterval & setTimeout**

 Subscribe

Back online

3 VARIATION OF USEEFFECT

- **useEffect without dependencies** - it runs with first render and also run on anything changes.
- **useEffect with empty array** - it runs only on first render.
- **useEffect with variables** - it runs on first render and runs with that variable change.

React Hooks Number 03

useContext Hook

What is useContext?

useContext Hook is used to manage global data in react application.



Global State



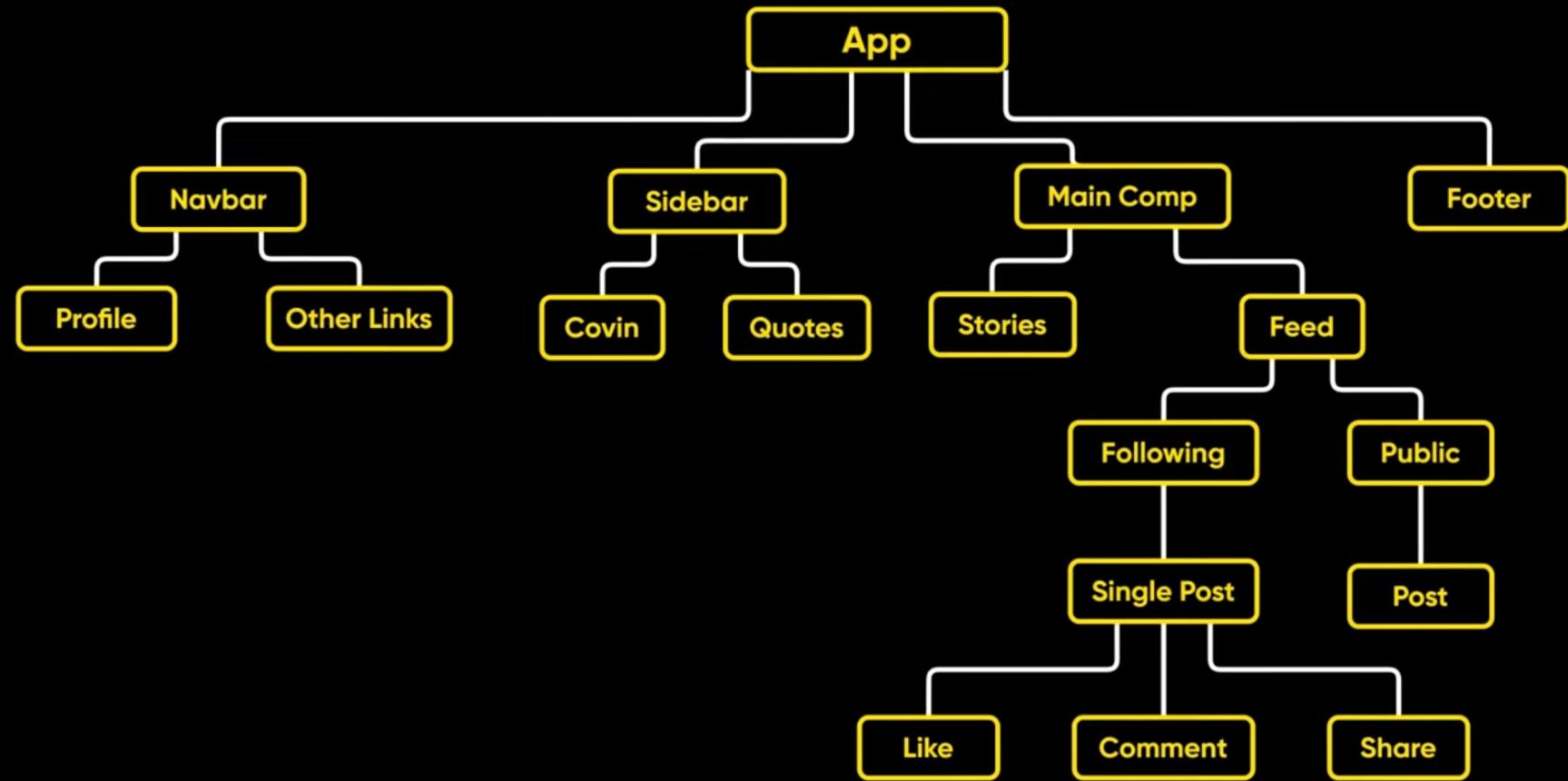
Services



Themes



User Settings



[Subscribe](#)

HOW TO CREATE CONTEXT?

Create context requires 3 Simple Steps:

- 1. Creating the Context**
- 2. Providing the Context**
- 3. Consuming the Context**

App.js - 06_CODE - Visual Studio Code

```
src > App.js > [e] App
1 import React, { createContext } from "react";
2 import MainComponent from "./components/MainComponent";
3
4 const LoginContext = createContext();
5
6 const App = () => {
7     return (
8         <LoginContext.Provider value={true}>
9             <div>
10                 <MainComponent />
11             </div>
12         </LoginContext.Provider>
13     );
14 };
15
16 export default App;
```

SinglePost.js - 06_CODE - Visual Studio Code

App.js MainComponent.js SinglePost.js

src > components > SinglePost.js > SinglePost

```
1 import React from "react";
2
3 const SinglePost = () => {
4     return <h3>Single POST</h3>;
5 };
6
7 export default SinglePost;
8
```

Subscribe

• App.js - 06_CODE - Visual Studio Code

src > App.js > ...

```
1 import React, { createContext } from "react";
2 import MainComponent from "./components/MainComponent";
3
4 export const LoginContext = createContext();
5
6 const App = () => {
7     return (
8         <LoginContext.Provider value={true}>
9             <div>
10                 <MainComponent />
11             </div>
12         </LoginContext.Provider>
13     );
14 };
15
16 export default App;
```

Subscribe

```
• SinglePost.js - 06_CODE - Visual Studio Code
  □ □ □ | 08 - □ ×
  ⌂ App.js ⌂ MainComponent.js ⌂ SinglePost.js •
src > components > SinglePost.js > ...
1 import React, {useContext} from "react";
2 import {LoginContext} from '../App'
3
4 const SinglePost = () => {
5   useContext()
6   return <h3>Single POST</h3>;
7 }
8
9 export default SinglePost;
10
```



Subscribe

SinglePost.js - 06_CODE - Visual Studio Code

App.js MainComponent.js SinglePost.js

src > components > SinglePost.js > SinglePost

```
1 import React, { useContext } from "react";
2 import { LoginContext } from "../App";
3
4 const SinglePost = () => {
5     const login = useContext(LoginContext);
6     console.log(login);
7     return <h3>Single POST</h3>;
8 };
9
10 export default SinglePost;
11
```

Subscribe

USECONTEXT

UseContext Hook is used to manage global data in react.

If you want to pass data just for Child component, then you can use props.

• App.js - 06_CODE - Visual Studio Code

src > App.js > ...

```
1 import React, { createContext } from "react";
2 import MainComponent from "./components/MainComponent";
3
4 export const LoginContext = createContext();
5
6 const App = () => {
7     return (
8         <LoginContext.Provider value={ture}>
9             <div>
10                 <MainComponent />
11             </div>
12         </LoginContext.Provider>
13     );
14 };
15
16 export default App;
```

Subscribe

LoginContextProvider.js - 06_CODE - Visual Studio Code

App.js LoginContextProvider.js X MainComponent.js SinglePost.js

src > context > LoginContextProvider.js > LoginContextProvider

```
1 import React, { createContext, useState } from "react";
2
3 export const LoginContext = createContext();
4
5 const LoginContextProvider = ({ children }) => {
6   const [userDetails, setUserDetails] = useState(true);
7   return (
8     <LoginContext.Provider value={userDetails}>
9       {children}
10      </LoginContext.Provider>
11    );
12  };
13
14 export default LoginContextProvider;
15
```

Subscribe

• SinglePost.js - 06_CODE - Visual Studio Code

App.js LoginContextProvider.js MainComponent.js SinglePost.js •

> components > SinglePost.js > ...

```
1 import React, { useContext } from "react";
2 import { LoginContext } from "../context/LoginContextProvider";
3
4 const SinglePost = () => {
5     const login = useContext(LoginContext);
6     console.log(login);
7     return <h3>Single POST</h3>;
8 }
9
10 export default SinglePost;
11
```

Subscribe

React Hooks Number 04

useRef Hook

What is useRef?

- UseRef allows us to access DOM elements.
- for creating mutable variables which will not re-render the component.



App.js X

c > JS App.js > [o] App

```
1 import React, { useEffect, useState } from "react";
2
3 const App = () => {
4     const [name, setName] = useState("");
5     const [count, setCount] = useState(0);
6
7     useEffect(() => {
8         setCount((prev) => prev + 1);
9     });
10
11    return (
12        <div>
13            <input type='text' onChange={(e) => setName(e.target.value)} />
14            <h2>Name : {name}</h2>
15            <h2>Renders : {count}</h2>
16        </div>
17    );
}
```

Subscribe

App.js - 06_CODE - Visual Studio Code

```
src > App.js > App > useEffect() callback
```

```
1 import React, { useEffect, useRef, useState } from "react";
2
3 const App = () => {
4     const [name, setName] = useState("");
5     const count = useRef(0);
6
7     useEffect(() => {
8         count.current = count.current + 1;
9     });
10
11    return (
12        <div>
13            <input type='text' onChange={(e) => setName(e.target.value)} />
14            <h2>Name : {name}</h2>
15            <h2>Renders : {count.current}</h2>
16        </div>
17    );
18};
19
20 export default App.
```

JS App.js

```
src > JS App.js > App > handleClick
1 import React, { useRef } from "react";
2
3 const App = () => {
4     const inputEle = useRef();
5     const handleClick = () => {
6         console.log(inputEle.current);
7         inputEle.current.style.width = "300px";
8         inputEle.current.focus();
9     };
10
11    return (
12        <div>
13            <input type='text' ref={inputEle} />
14            <button onClick={handleClick}>Click Here</button>
15        </div>
16    );
17};
18
```

Subscribe

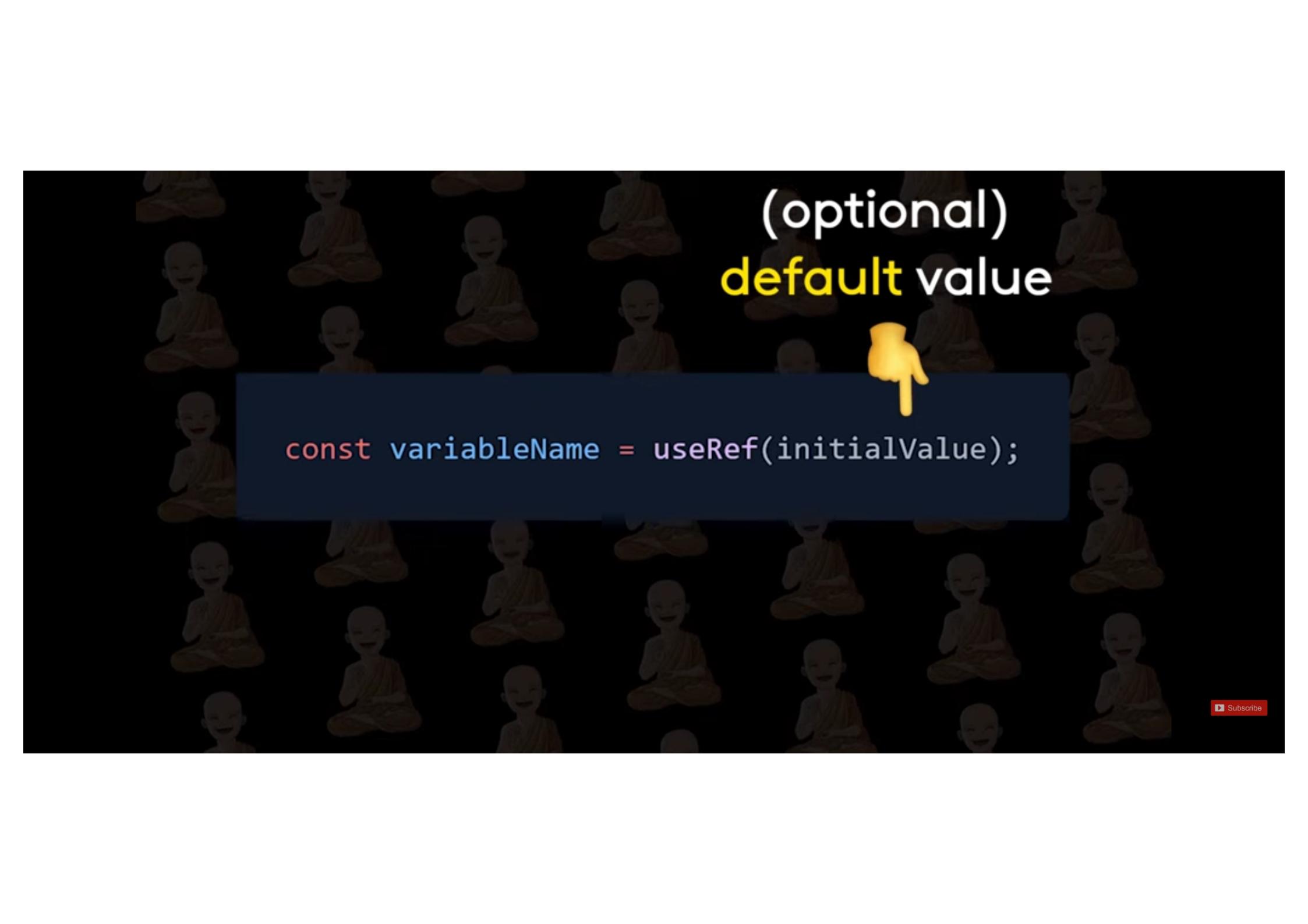
useRef



useRef is allow us to create mutable variables which don't cause re-render.



It is very useful to direct access DOM elements.



(optional)
default value



```
const variableName = useRef(initialValue);
```

React Hooks Number 05

useReducer Hook

What is useReducer?

- useReducer is used to manage state in our react application.
- In other words, useReducer works like a state management tool.

What is State Management?



State Management is used to manage all states of application in a simple way.



Always use the `useReducer` hook when you have a lot of states and methods to handle.

src >  App.js >  reducer

```
1 import React, { useReducer } from "react";
2
3 const initialState = { count: 0 };
4
5 const reducer = (state, action) => {
6   switch(action.type) {
7     case "increase":
8       return { count: state.count + 1 };
9
10    case "decrease":           █
11       return { count: state.count - 1 };
12
13    default:
14      return state;
15  }
16};
17
```

 [Subscribe](#)

```
13     default:
14         return state;
15     }
16 };
17
18 const App = () => {
19     const [state, dispatch] = useReducer(reducer, initialState);
20
21     const increaseCount = () => {
22         dispatch({ type: "increase" });
23     };
24
25     const decreaseCount = () => {
26         dispatch({ type: "decrease" });
27     };
28
29     return (
30         <div>
31             <h2>Count : {state.count}</h2>
32             <button onClick={increaseCount}>Increase</button>
```

```
JS App.js ●
src > JS App.js > [red] reducer
1 import React, { useReducer } from "react";
2
3 const ACTION = {
4     INCREASE : "increase",
5     DECREASE : "decrease"
6 }
7
8 const initialState = { count: 0 };
9
10 const reducer = (state, action) => {
11     switch (action.type) {
12         case ACTION.INCREASE:
13             return { count: state.count + 1 };
14
15         case ACTION.DECREASE:
16             return { count: state.count - 1 };
17     }
}
```

Subscribe

```
js App.js  X
src > js App.js > ...
1 import React, { useReducer } from "react";
2
3 const App = () => {
4     const [state, dispatch] = useReducer(reducer, initialState);
5
6     const increaseCount = () => {
7         dispatch({ type: ACTION.INCREASE });
8     };
9
10    const decreaseCount = () => {
11        dispatch({ type: ACTION.DECREASE });
12    };
13
14    return (
15        <div>
16            <h2>Count : {state.count}</h2>
17            <button onClick={increaseCount}>Increase</button>
18            <button onClick={decreaseCount}>Decrease</button>
19        </div>
20    );
21};
```

Subscribe

React Hooks Number 06

useLayoutEffect Hook

What is useLayoutEffect?



useLayoutEffect works exactly the same as useEffect (Also the same syntax).



**But the difference is
“When it's run”**



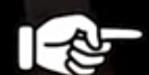
- But the difference is
“When it’s run”**
- useEffect Runs After the
DOM is printed on the browser.**
- useLayoutEffect runs Before the
DOM is printed on the browser**



Whenever we want to run code before the DOM is printed



Height



Width



Anything related to layout

useLayoutEffect runs Synchronously

```
useLayoutEffect(() => {
  const dimension = textRef.current.getBoundingClientRect();
  textRef.current.style.paddingTop = `${dimension.height}px`;
}, [toggle]);
```





The most common use case of `useLayoutEffect` is to get the dimension of the layout.



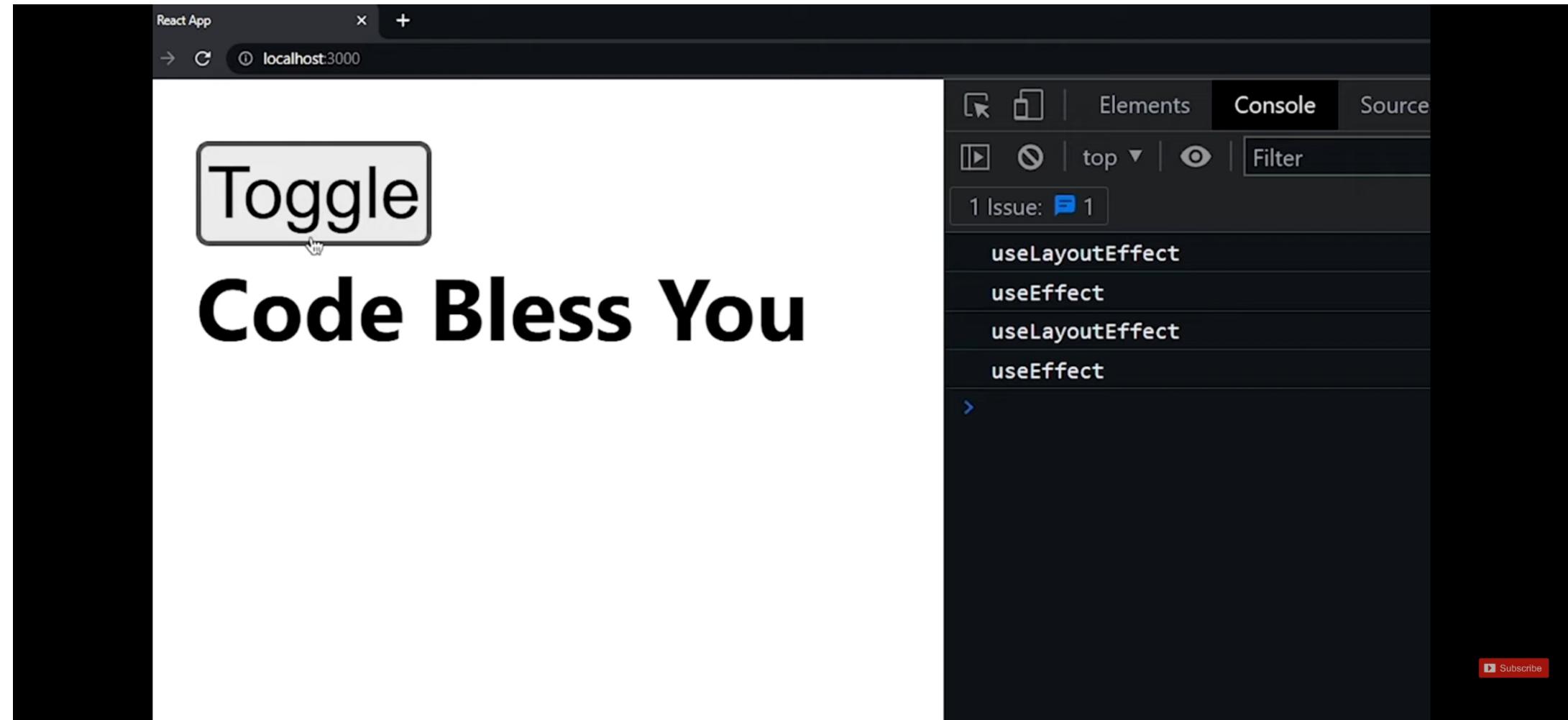
That's why its name is `useLayoutEffect`.

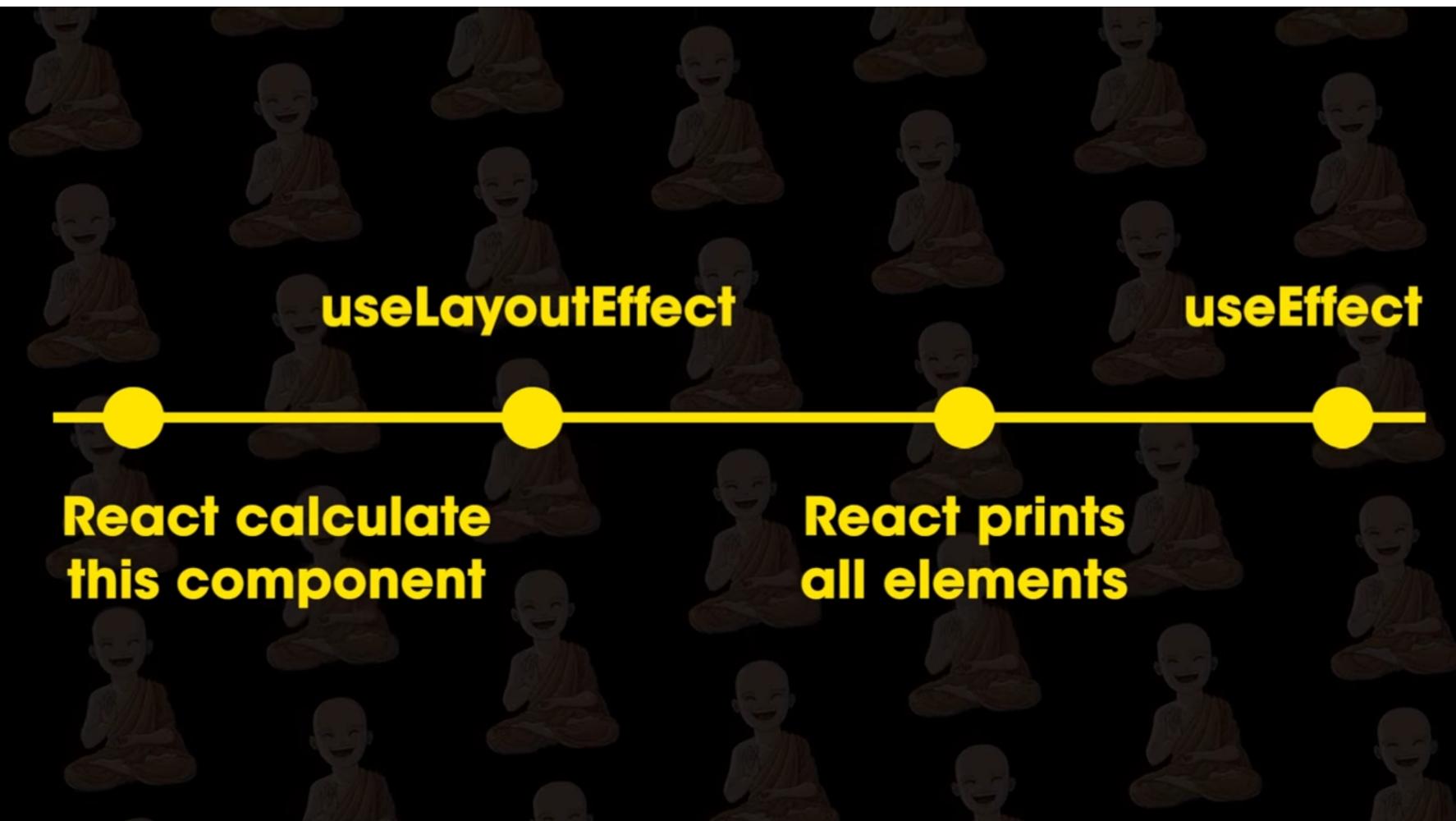
JS App.js X

src > JS App.js > [ej] App

```
1 import React, { useEffect, useState, useLayoutEffect } from "react";
2
3 const App = () => {
4     const [toggle, setToggle] = useState(false);
5
6     useEffect(() => {
7         console.log("useEffect");
8     }, [toggle]);
9
10    useLayoutEffect(() => {
11        console.log("useLayoutEffect");
12    }, [toggle]);|  []
13    return (
14        <>
15            <button onClick={() => setToggle(!toggle)}>Toggle</button>
16            {toggle && <h4>Code Bless You</h4>}
```

Subscribe





useLayoutEffect

useEffect

**React calculate
this component**

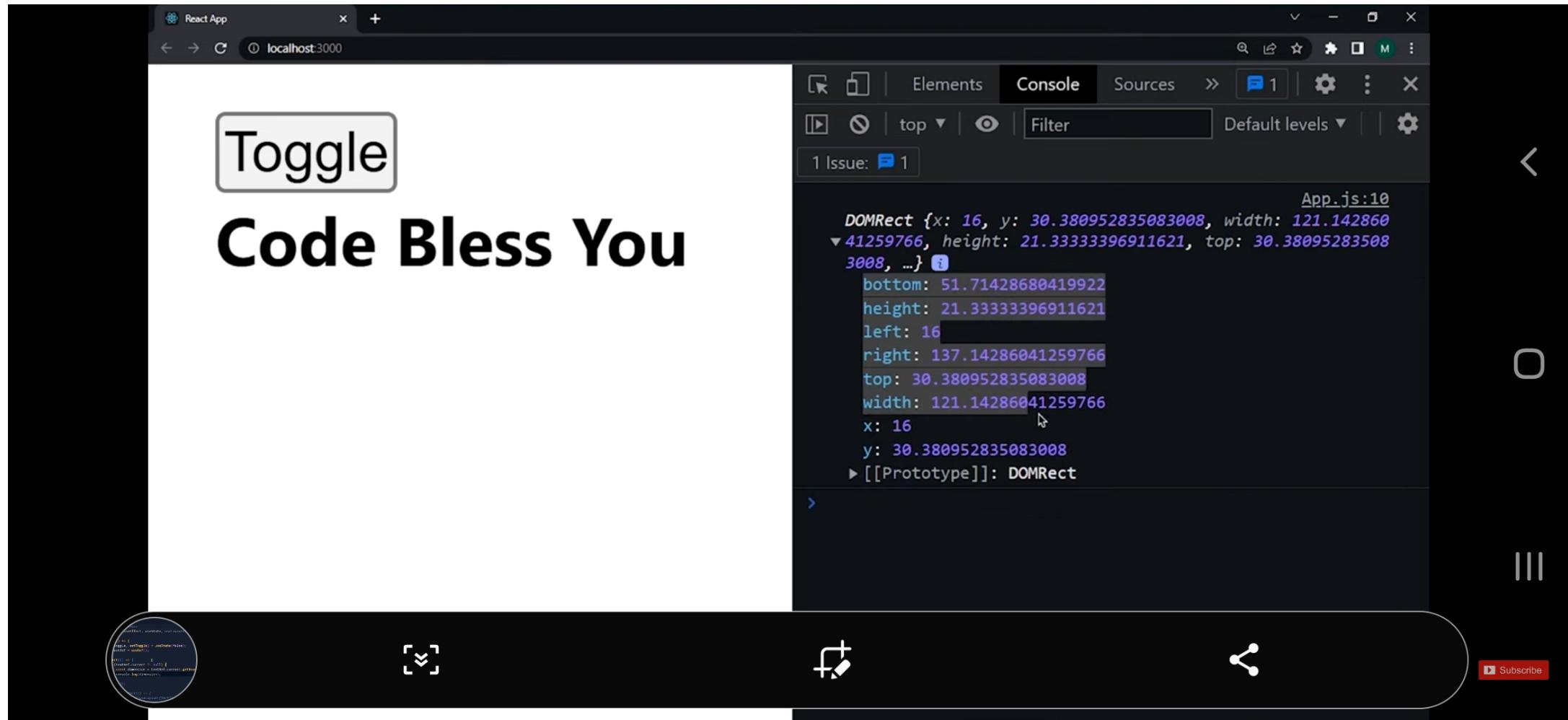
**React prints
all elements**

JS App.js X

src > JS App.js > [ej] App > useEffect() callback

```
1 import React, { useEffect, useState, useLayoutEffect, useRef } from "react"
2
3 const App = () => {
4     const [toggle, setToggle] = useState(false);
5     const textRef = useRef();
6
7     useEffect(() => {
8         if (textRef.current != null) {
9             const dimension = textRef.current.getBoundingClientRect();
10            console.log(dimension);
11        }
12    }, [toggle]);
13
14    // useLayoutEffect(() => {
15    //     console.log("useLayoutEffect");
16    // }, [toggle]);
```

Subscribe



JS App.js

src > JS App.js > App > useEffect() callback

```
1 import React, { useEffect, useState, useLayoutEffect, useRef } from "react"
2
3 const App = () => {
4     const [toggle, setToggle] = useState(false);
5     const textRef = useRef();
6
7     useEffect(() => {
8         if (textRef.current != null) {
9             const dimension = textRef.current.getBoundingClientRect();
10            textRef.current.style.paddingTop = `${dimension.height}px`;
11        }
12    }, [toggle]);
13
14    // useLayoutEffect(() => {
15    //     console.log("useLayoutEffect");
16    // }, [toggle]);
```

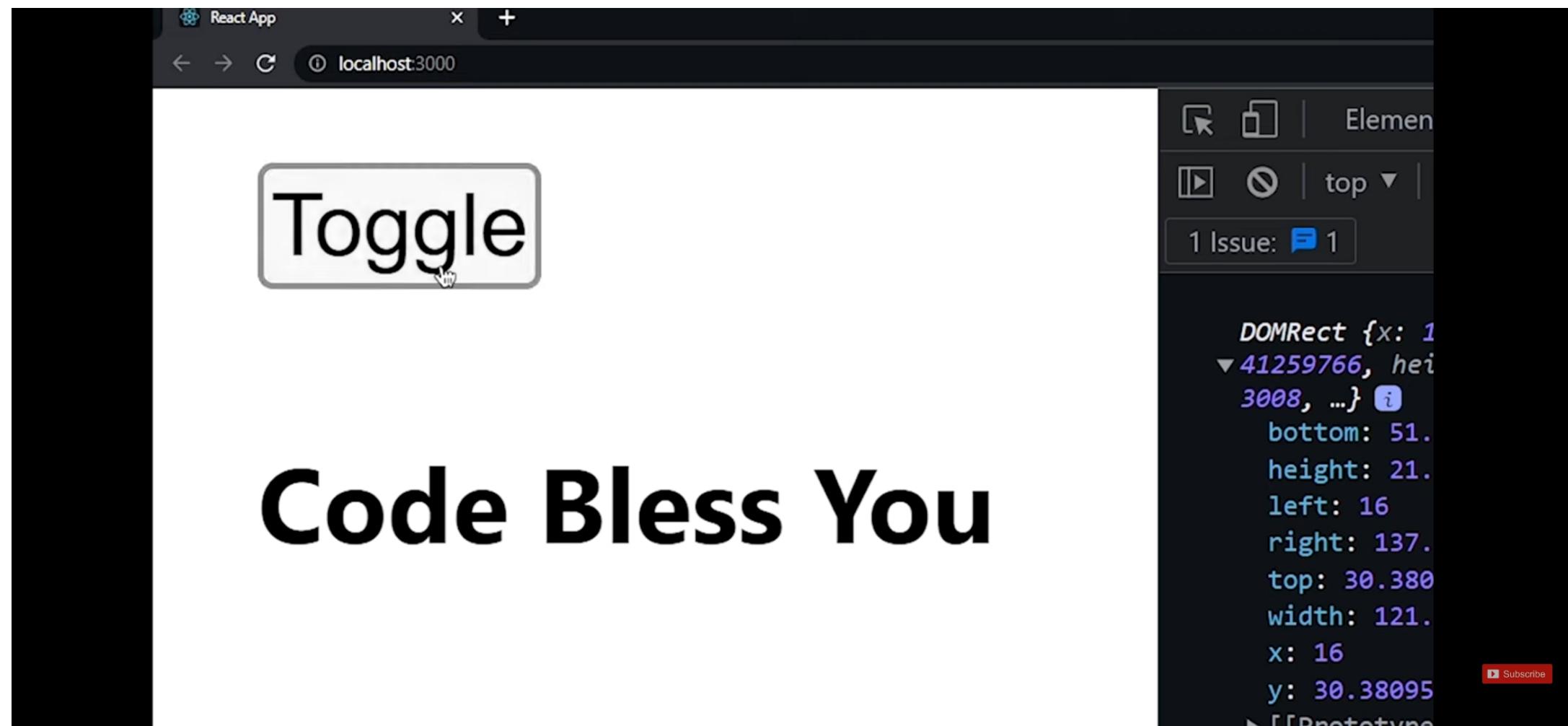
Subscribe

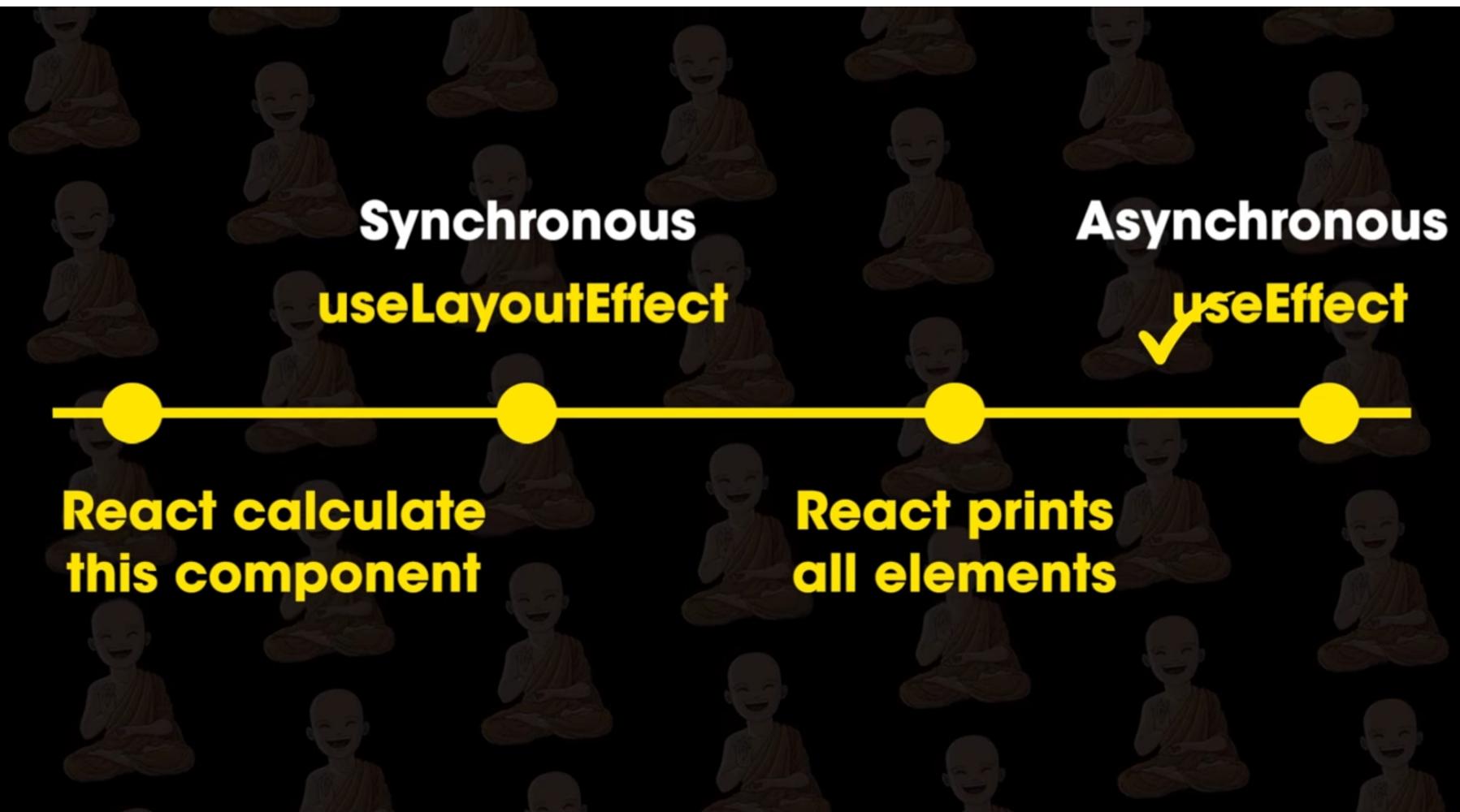
App.js - 06_CODE - Visual Studio Code

```
1 import React, { useEffect, useState, useLayoutEffect, useRef } from "react";
2
3 const App = () => {
4     const [toggle, setToggle] = useState(false);
5     const textRef = useRef();
6
7     useLayoutEffect(() => {
8         if (textRef.current != null) {
9             const dimension = textRef.current.getBoundingClientRect();
10            textRef.current.style.paddingTop = `${dimension.height}px`;
11        }
12    }, [toggle]);
13
14 // useLayoutEffect(() => {
15 //     console.log("useLayoutEffect");
16 // }, [toggle]);
17 return (
18     <>
19         <button onClick={() => setToggle(!toggle)}>Toggle</button>
20         {toggle && <h4 ref={textRef}>Code Bless You</h4>}
21     </>

```

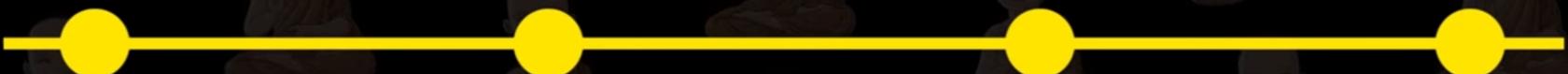
Subscribe





Synchronous
useLayoutEffect

Asynchronous
useEffect



**React calculate
this component**

**React prints
all elements**

React Hooks Number 07

useMemo Hook

What is useMemo?



useMemo hook is used to apply Memoization in React.

What is Memoization?



Memoization is a technique for improving the performance of code.



It is useful to avoid expensive calculations on every render when the returned value is not change.

App.js > [ej] App

```
import React, { useState } from "react";

const App = () => {
  const [number, setNumber] = useState(0);
  const [dark, setDark] = useState(false);

  const calculation = expensiveFunction(number);
  const cssStyle = {
    backgroundColor: dark ? "black" : "white",
    color: dark ? "white" : "black",
  };

  return (
    <div style={cssStyle}>
      <input
        onChange={(e) => setNumber(e.target.valueAsNumber)}>
```

Subscribe

App.js

```
src > App.js > App
3  const App = () => {
4      const [number, setNumber] = useState(0);
5      const [dark, setDark] = useState(false);
6
7      const calculation = expensiveFunction(number);
8      const cssStyle = {
9          backgroundColor: dark ? "black" : "white",
10         color: dark ? "white" : "black",
11     };
12
13     return (
14         <div style={cssStyle}>
15             <input
16                 .....
17                 .....
18                 .....
19                 .....
20                 .....
21             />
22             <h2>Calculation: {calculation}</h2>
23             <button onClick={() => setDark(!dark)}>Toggle</button>
```

Subscribe

js App.js

```
src > js App.js > ⚡ expensiveFunction
  ...
  19      />
  20      <h2>Calculation: {calculation}</h2>
  21      <button onClick={() => setDark(!dark)}>Toggle</button>
  22      </div>
  23  );
  24 }
  25
  26 function expensiveFunction(num) {
  27   console.log("Loop Started");
  28   for (let i = 0; i < 10000000000; i++) {}
  29   return num;
  30 }
  31
  32 export default App;
  33
```



Subscribe

js App.js

```
src > js App.js > [o] App > [o] memoCalculation
1 import React, { useState, useMemo } from "react";
2
3 const App = () => {
4     const [number, setNumber] = useState(0);
5     const [dark, setDark] = useState(false);
6
7     const memoCalculation = useMemo(() => {
8         return expensiveFunction(number)
9     }, [number])
10
11    const calculation = expensiveFunction(number);  I
12    const cssStyle = {
13        backgroundColor: dark ? "black" : "white",
14        color: dark ? "white" : "black",
15    };
16
17    return (
18        <div style={cssStyle}>
```

Subscribe

js App.js

```
src > js App.js > [o] App
10
11     const cssStyle = {
12         backgroundColor: dark ? "black" : "white",
13         color: dark ? "white" : "black",
14     };
15
16     return (
17         <div style={cssStyle}>
18             <input
19                 onChange={(e) => setNumber(e.target.valueAsNumber)}
20                 type='number'
21                 value={number}
22             />
23             <h2>Calculation: {calculation}</h2>
24             <button onClick={() => setDark(!dark)}>Toggle</button>
25         </div>
26     );
27 }
```



Subscribe

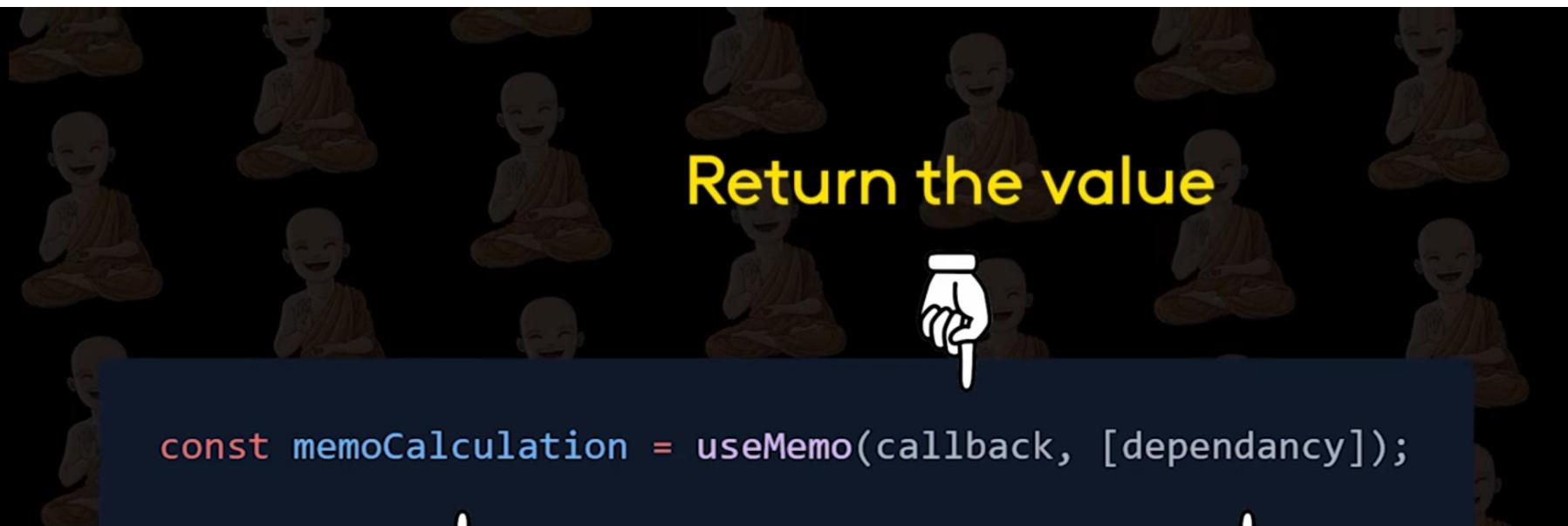
useMemo



useMemo is used to improve performance of our react application.



We can stop running unwanted functions on Re-rendering.



Return the value



```
const memoCalculation = useMemo(callback, [dependancy]);
```



Store in variable



Dependency
Array



**We perform all side effects in
useEffect hook.**



**All expensive functions ,calculation
in useMemo hook.**

...



Subscribe

React Hooks Number 08

useCallback Hook



Subscribe

What is useCallback?

- 👉 **useCallback is used to return Memoize function.**
- 👉 **It's also useful for preventing functions from being re-created on re-rendering.**

App.js - 06_CODE - Visual Studio Code

```
App.js  x
src > App.js > App
1 import React, { useState } from "react";
2 import PrintTable from "./PrintTable";
3
4 const App = () => {
5     const [number, setNumber] = useState(1);
6     const [darkTheme, setDarkTheme] = useState(false);
7
8     const cssStyle = {
9         backgroundColor: darkTheme ? "black" : "white",
10        color: darkTheme ? "white" : "black",
11    };
12
13    const calculateTable = () => {
14        return [number * 1, number * 2, number * 3, number * 4, number * 5];
15    };
16
17    return (
18        <div style={cssStyle}>
19            <input
20                onChange={(e) => setNumber(e.target.valueAsNumber)}
21                type='number'
```

JS App.js X

```
src > JS App.js > [o] App > [o] darkTheme
1 import React, { useState } from "react";
2 import PrintTable from "./PrintTable";
3
4 const App = () => {
5     const [number, setNumber] = useState(1);
6     const [darkTheme, setDarkTheme] = useState(false);
7     const cssStyle = {
8         backgroundColor: darkTheme ? "black" : "white",
9         color: darkTheme ? "white" : "black",
10    };
11
12    const calculateTable = () => {
13        return [number * 1, number * 2, number * 3, number * 4, number * 5];
14    };
15
16    return (
17        <div style={cssStyle}>
```

Subscribe

```
JS App.js X
src > JS App.js > [e] App
10         color: darkTheme ? "white" : "black",
11     };
12
13     const calculateTable = () => {
14         return [number * 1, number * 2, number * 3, number * 4, number * 5];
15     };
16
17     return (
18         <div style={cssStyle}>
19             <input
20                 onChange={(e) => setNumber(e.target.valueAsNumber)}
21                 type='number'
22                 value={number}
23             />
24             <PrintTable calculateTable={calculateTable} />
25             <button onClick={() => setDarkTheme(!darkTheme)}>Toggle</button>
26         </div>

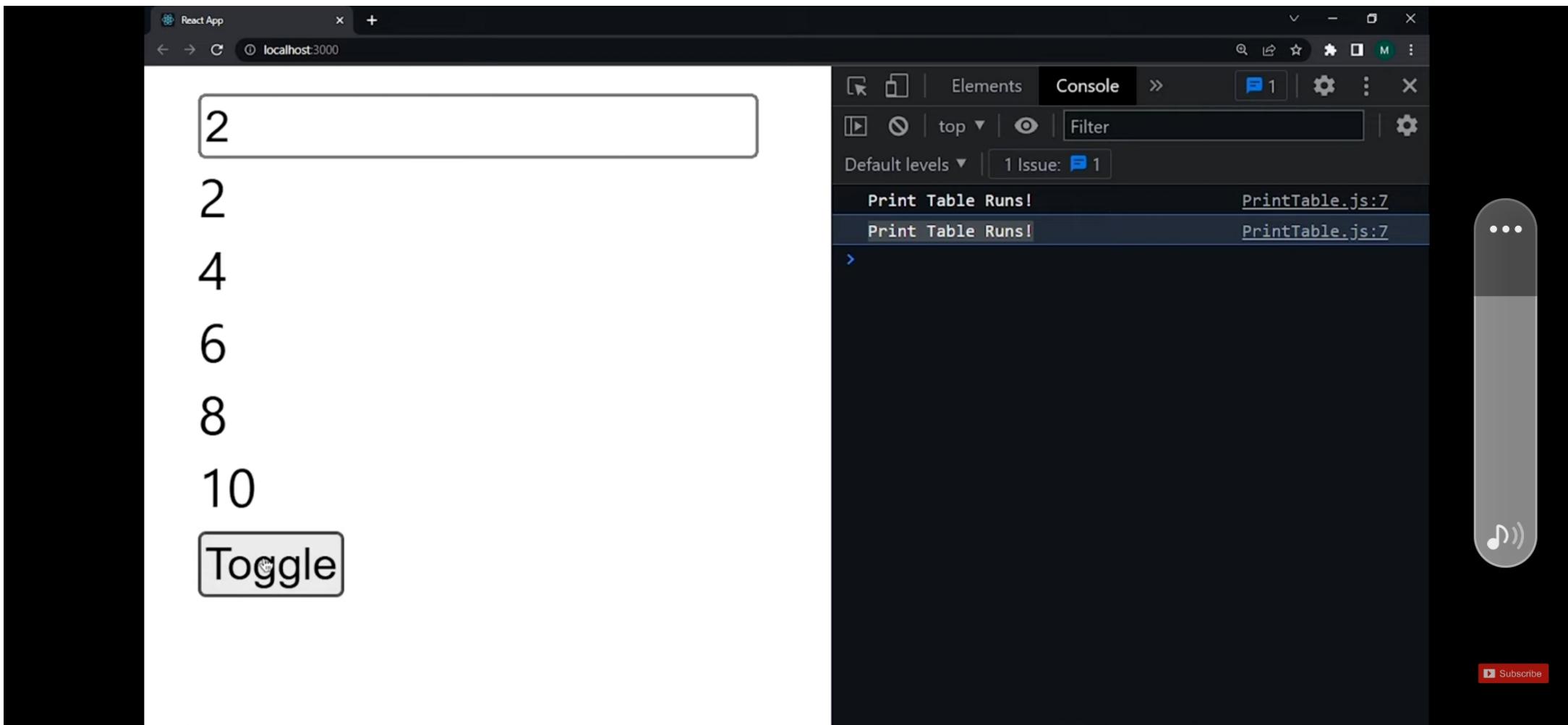
```

JS App.js

JS PrintTable.js X

```
src > JS PrintTable.js > [↻] PrintTable
1 import React, { useEffect, useState } from "react";
2
3 const PrintTable = ({ calculateTable }) => {
4     const [rows, setRows] = useState([]);
5
6     useEffect(() => {
7         console.log("Print Table Runs!");
8         setRows(calculateTable());
9     }, [calculateTable]);
10
11    return rows.map((row, index) => {
12        return <p key={index}>{row}</p>;
13    });
14}
15
16 export default PrintTable;
```

Subscribe



```
JS App.js ● JS PrintTable.js
src > JS App.js > [e] App > [e] calculateTable > [i] useCallback() callback
1 import React, { useState, useCallback } from "react";
2 import PrintTable from "./PrintTable";
3
4 const App = () => {
5     const [number, setNumber] = useState(1);
6     const [darkTheme, setDarkTheme] = useState(false);
7
8     const calculateTable = useCallback(() => {
9         return [number * 1, number * 2, number * 3, number * 4, number * 5];
10    }, [number]);
11
12     const cssStyle = {
13         backgroundColor: darkTheme ? "black" : "white",
14         color: darkTheme ? "white" : "black",
15     };
16
17     return (
18         <div style={cssStyle}>
```



**useCallback syntax is same as
useMemo hook.**

useCallback

Memoize Function

calculate(2) ✓

useMemo

Memoize Value

X calculate(2)



Subscribe

And The Last One

Custom Hooks



[Subscribe](#)

What is Custom hook?



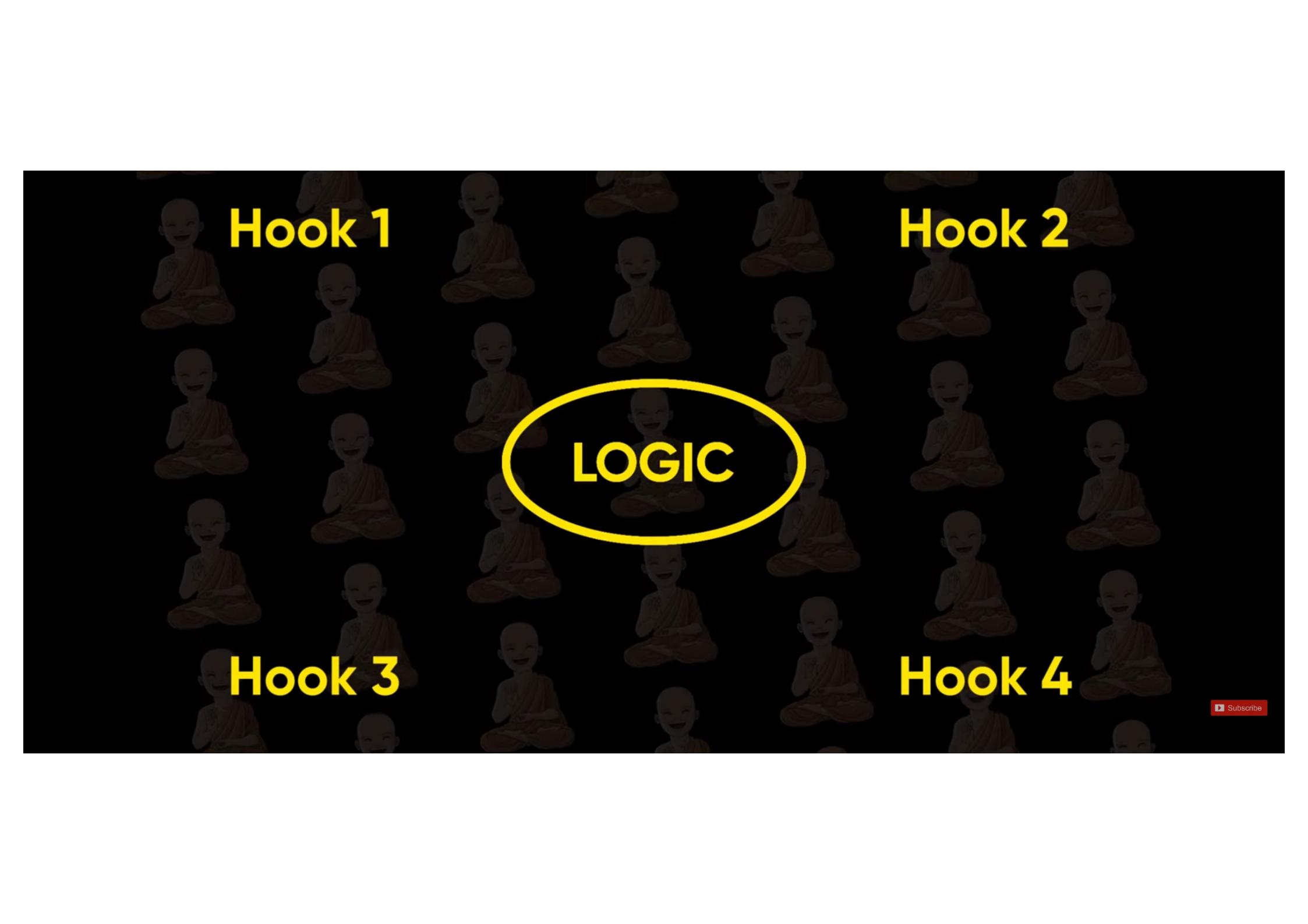
Custom hooks are basically a reusable function.



In simple terms, Custom hooks are your own hooks that you create for your own use and you can use them multiple times in your project.



Subscribe



Hook 1

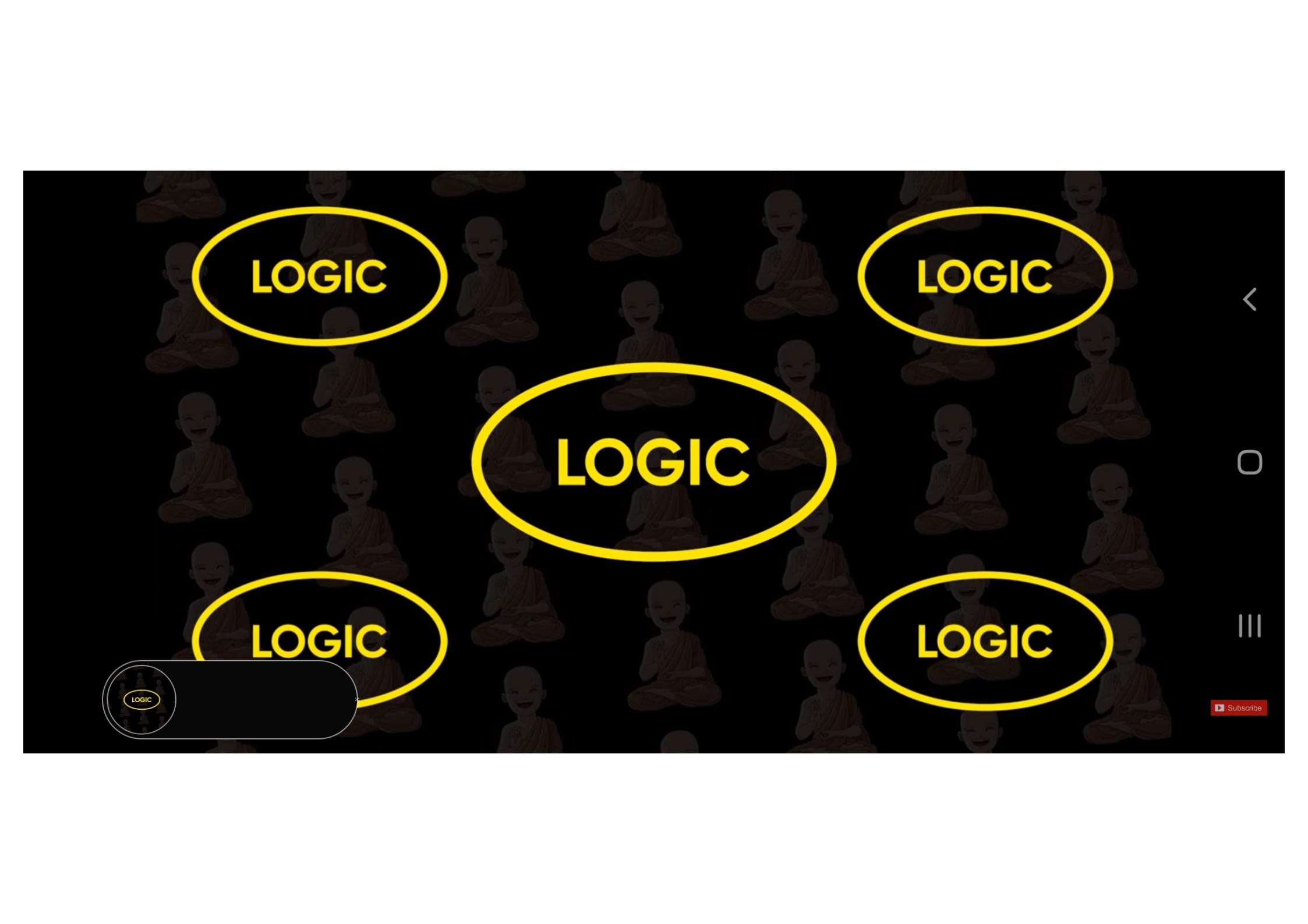
Hook 2

LOGIC

Hook 3

Hook 4

 [Subscribe](#)



LOGIC

LOGIC

LOGIC

LOGIC

LOGIC



Subscribe

CUSTOM HOOK

LOGIC

```
JS App.js  X
src > JS App.js > [ej] App
1 import React, { useEffect, useState } from "react";
2
3 const App = () => {
4   const [responses, setResponses] = useState([]);
5
6   useEffect(() => {
7     fetch("https://jsonplaceholder.typicode.com/users")
8       .then((res) => res.json())
9       .then((data) => setResponses(data));
10  }, []);
11
12  return (
13    <>
14      {responses.map((res) => {
15        return (
16          <h4 key={res.id}>
```

JS App.js

```
src > JS App.js > [e] App
  .then((res) => res.json())
  .then((data) => setResponses(data));
10    }, []);
11
12    return (
13      <>
14        {responses.map((res) => {
15          ...return (
16            ...<h4 key={res.id}>
17              ...{res.id}. {res.name}
18            ...</h4>
19            ...);
20          ...});}
21        </>
22      );
23    };

```



tabii watch Abdülhamid Episode 89

Subscribe

App.js - 06_CODE - Visual Studio Code

EXPLORER ...

06_CODE

- > node_modules
- > public
- > src
 - > customhooks
 - App.js
 - index.css
 - index.js
 - reportWebVitals.js
 - .gitignore
 - package-lock.json
 - package.json
 - README.md

src > App.js > App

```
1 import React, { useEffect, useState } from
2
3 const App = () => {
4     const [responses, setResponses] = useState([])
5
6     useEffect(() => {
7         fetch("https://jsonplaceholder.typicode.com")
8             .then(res) => res.json()
9             .then(data) => setResponses(data)
10    }, []);
11
12    return (
13        <>
14            {responses.map(res) => (
15                return (
16                    <div>
17                        <h1>{res.title}</h1>
18                        <p>{res.body}</p>
19                    </div>
20                )
21            )}
22        </>
23    );
24}
```

C:\Users\Admin\Documents\Code Bless You\0P23_CUSTOM HOOKS\01_PROJECTS\06_CODE\src\customhooks

Subscribe

JS App.js

JS useFetch.js

```
src > customhooks > JS useFetch.js > [e] useFetch
1 import React, { useEffect, useState } from "react";
2
3 const useFetch = (url) => [
4     const [responses, setResponses] = useState([]);
5
6     useEffect(() => {
7         fetch(url)
8             .then((res) => res.json())
9             .then((data) => setResponses(data));
10    }, []);
11
12    return responses;
13]
14
15 export default useFetch;
```

Subscribe

BBC Hindi हमास संचालित स्वास्थ्य मंत्रालय का दावा- ग़ज़ा में हुए इसराइली हमले में 51 लोगों की हुई...

```
src > JS App.js  X  JS useFetch.js
1 import React from 'react',
2 import useFetch from "./customhooks/useFetch";
3
4 const App = () => {
5     const data = useFetch("https://jsonplaceholder.typicode.com/users");
6
7     return (
8         <>
9             {data.map((res) => {
10                 return (
11                     <h4 key={res.id}>
12                         {res.id}. {res.name}
13                     </h4>
14                 );
15             })}
16     </>
)
```

Custom hooks



Custom hooks are your logic which you created as reusable function.



You can use multiple hooks and create something that will help you to skip repeated tasks in your projects.

When you created a
reusable function.

 **You can use multiple hooks and
create something that will help
you to skip repeated tasks in
your projects.**

 **You can simply use that custom
hooks in your different projects.**



Subscribe