<u>**Report Day: 6.3**</u>

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1. What is State in React?

State is used to store **data that can change over time** in a component.

- For example, a counter value, input text, or toggle button.
- When state changes, the component **automatically re-render**

2. Using useState Hook

In functional components, we use the useState **hook** to create and manage state.

```jsx
import { useState } from 'react';

function Counter() {
  const [count, setCount] = useState(0);

  return (
    <div>
      <h2>Count: {count}</h2>
      <button onClick={() => setCount(count + 1)}>Increase</button>
    </div>
  );
}
```

3. Event Handling in React

Event handling means writing code that runs when the user does something like clicking a button or typing in a box.

- Clicking a button

- Typing in an input box

- Submitting a form

React uses **camelCase** for event names like `onClick`, `onChange`, `onSubmit`.

Common Events in React:

Event	Description
onClick	When the user clicks an element
onChange	When the value of an input changes
onSubmit	When a form is submitted
onMouseOver	When the mouse hovers over an element
onKeyDown	When a key is pressed on the keyboard

```
function ClickExample() {
  const showMessage = () => {
    alert('Button Clicked!');
  };

  return <button onClick={showMessage}>Click Me</button>;
}
```

Conclusion:

Event handling in React allows your app to respond to user actions, like clicking buttons, typing in input fields, or submitting forms. React uses camelCase names like `onClick`, `onChange`, and `onSubmit` for event handlers. You can assign a function to these events so that something happens when the user interacts with the page. For example, when a user clicks a button, an `onClick` event can trigger a function to update the state or display a message. This makes the app interactive and dynamic.