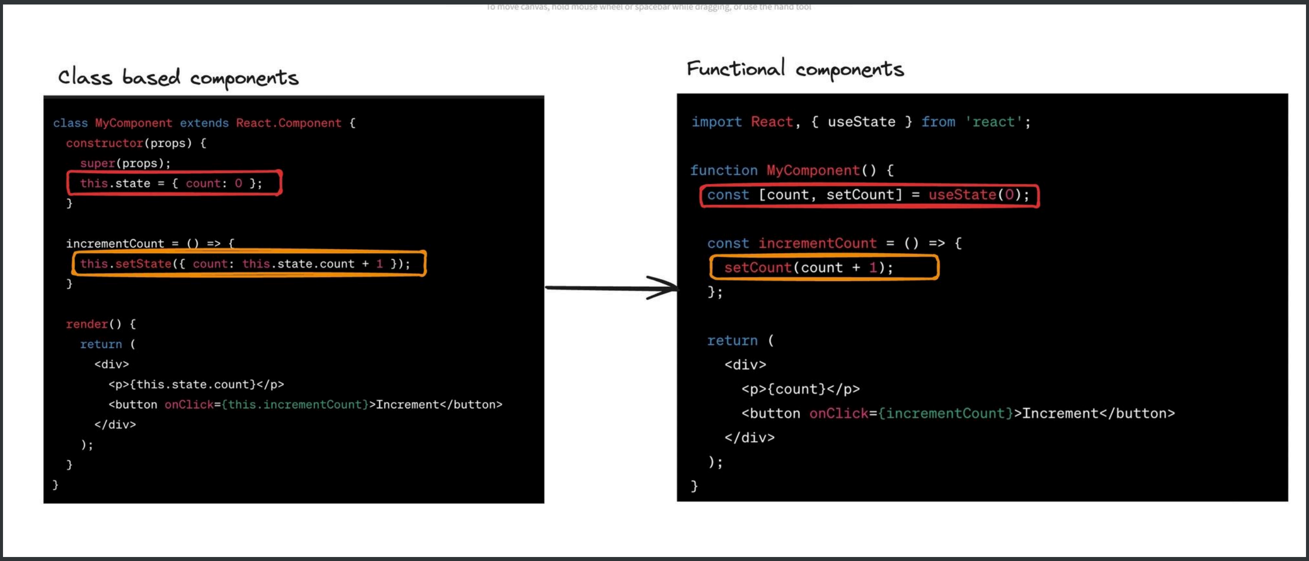
# 1 - What are hooks

## What are hooks

Hooks are a feature introduced in `React 16.8` that allow you to use state and other React features without writing a class. They are functions that let you "hook into" React state and lifecycle features from function components.

### State


To move canvas, hold mouse wheel or spacebar while dragging, or use the hand tool
Class based components
Functional components

```
class MyComponent extends React.Component {
  constructor(props) {
    super(props);
    this.state = { count: 0 };
  }

  incrementCount = () => {
    this.setState({ count: this.state.count + 1 });
  }

  render() {
    return (
      <div>
        <p>{this.state.count}</p>
        <button onClick={this.incrementCount}>Increment</button>
      </div>
    );
  }
}
```

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import React, { useState } from 'react';

function MyComponent() {
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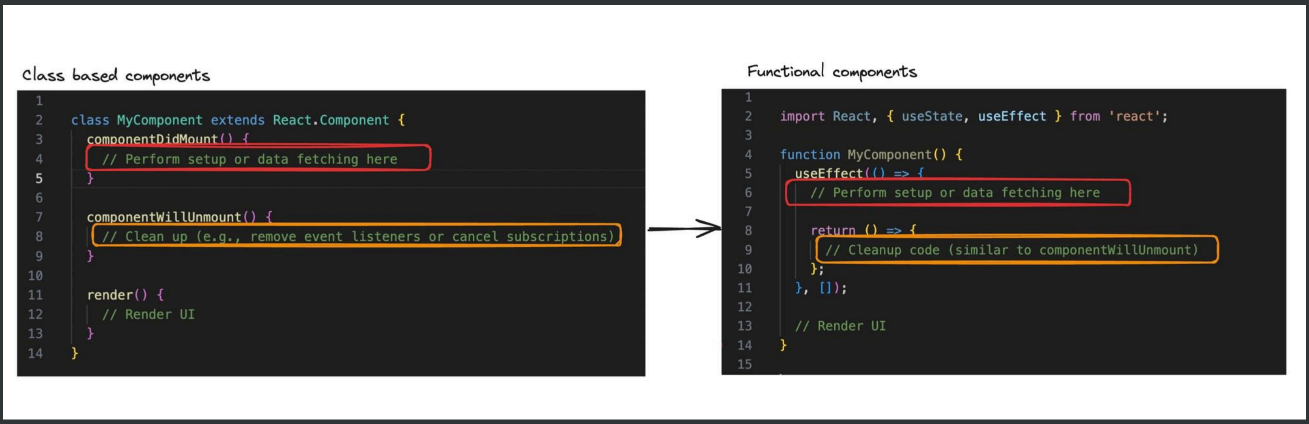
## Lifecycle events



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class MyComponent extends React.Component {
  componentDidMount() {
    // Perform setup or data fetching here
  }

  componentWillUnmount() {
    // Clean up (e.g., remove event listeners or cancel subscriptions)
  }

  render() {
    // Render UI
  }
}
```

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import React, { useState, useEffect } from 'react';

function MyComponent() {
  useEffect(() => {
    // Perform setup or data fetching here

    return () => {
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▼ Functional solution

```
import React, { useEffect, useState } from 'react'
import './App.css'

function App() {
  const [render, setRender] = useState(true);

  useEffect(() => {
    setInterval(() => {
      setRender(r => !r);
    }, 5000)
  }, []);

  return (
    <>
      {render ? <MyComponent /> : <div></div>}
    </>
  )
}


function MyComponent() {
  useEffect(() => {
    console.error("component mounted");

    return () => {
      console.log("component unmounted");
    };
  }, []);

  return <div>
    From inside my component
  </div>
}

export default App
```

Until now we’re seen some commonly used hooks in React-

1. useState
2. useEffect

3. useMemo

4. useCallback

These hooks are provided to you by the `React` library.

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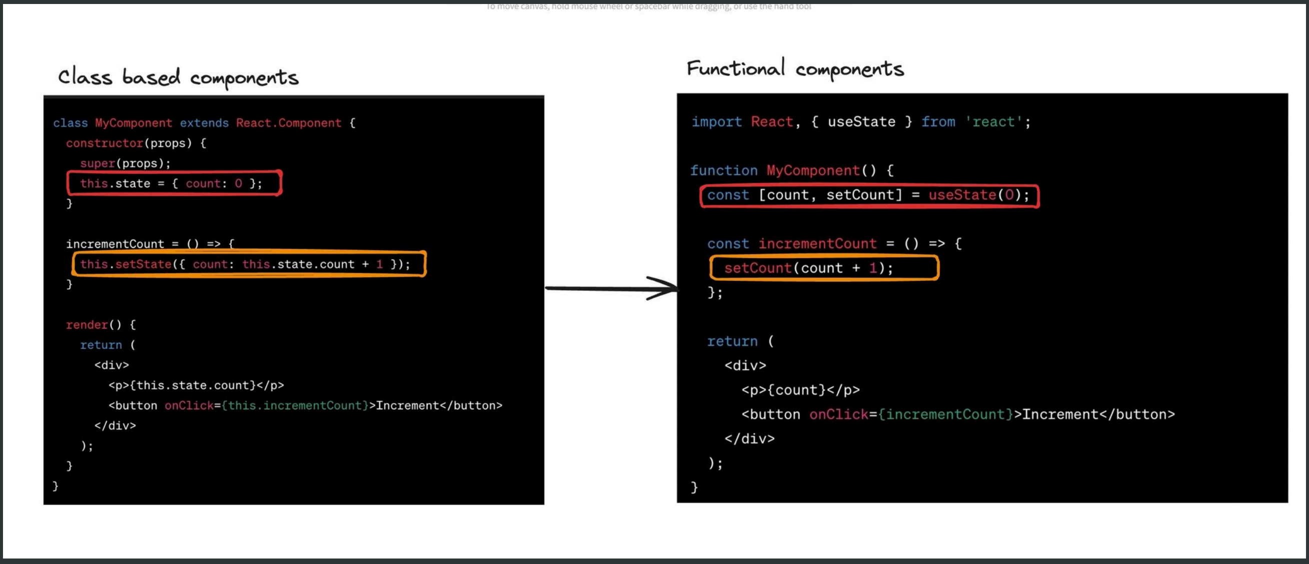
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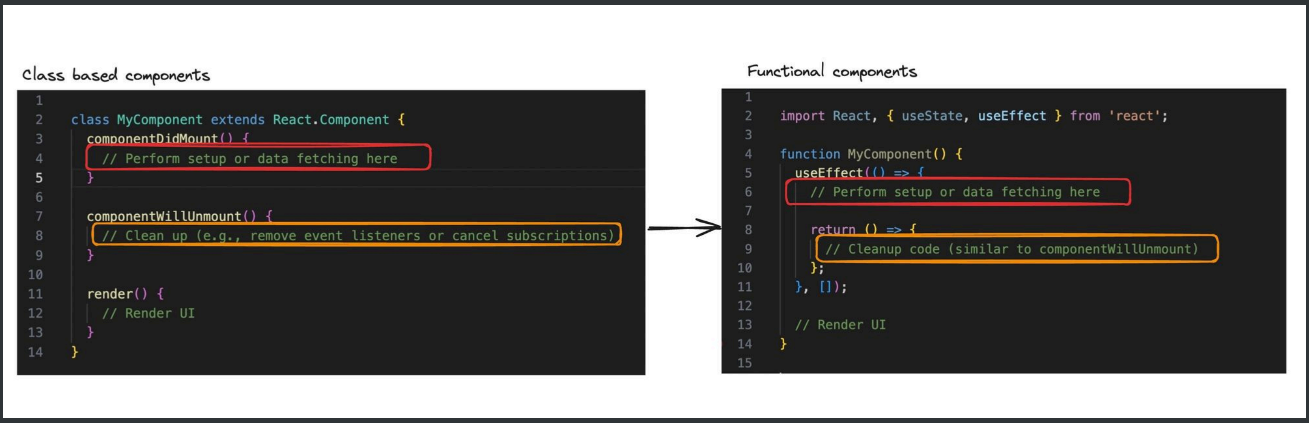

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