

1. Class and Functional Component in ReactJS

ClassComponent.js

```
import React, { Component } from 'react';

class ClassComponent extends Component {
  render() {
    return (
      <div>
        <h3>This is a Class Component</h3>
      </div>
    );
  }
}

export default ClassComponent;
```

FunctionalComponent.js

```
import React from 'react';

const FunctionalComponent = () => {
  return (
    <div>
      <h3>This is a Functional Component</h3>
    </div>
  );
};

export default FunctionalComponent;
```

App.js

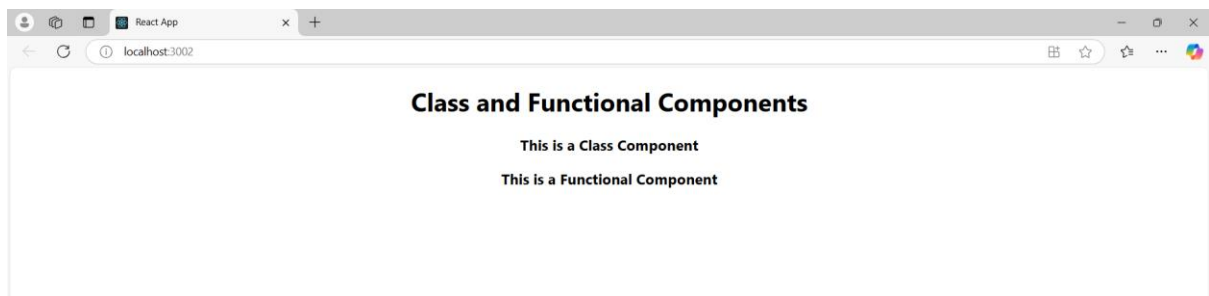
```
import React from 'react';
```

```
import './App.css';  
import ClassComponent from './ClassComponent';  
import FunctionalComponent from './FunctionalComponent';
```

```
function App() {  
  return (  
    <div className="App">  
      <h1>Class and Functional Components</h1>  
      <ClassComponent />  
      <FunctionalComponent />  
    </div>  
  );  
}
```

```
export default App;
```

output :



2. Importing and Exporting Files (Components)

WelcomeMessage.js

```
import React from 'react';

const WelcomeMessage = () => {
  return (
    <div>
      <h1>Welcome to the React Application!</h1>
    </div>
  );
};

export default WelcomeMessage;
```

App.js

```
import React from 'react';
import './App.css';
import WelcomeMessage from './WelcomeMessage';

function App() {
  return (
    <div className="App">
      <WelcomeMessage />
    </div>
  );
}

export default App;
```



3. State and Props in React

PersonClass.js

```
import React, { Component } from 'react';

class PersonClass extends Component {
  constructor(props) {
    super(props);
    this.state = { name: 'John' };
  }

  changeName = () => {
    this.setState({ name: 'Alice' });
  };

  render() {
    return (
      <div>
        <h2>Class Component with State</h2>
        <p>State (Name): {this.state.name}</p>
        <button onClick={this.changeName}>Change Name</button>
      </div>
    );
  }
}

export default PersonClass;
```

Person.js

```
import React from 'react';

const Person = (props) => {
```

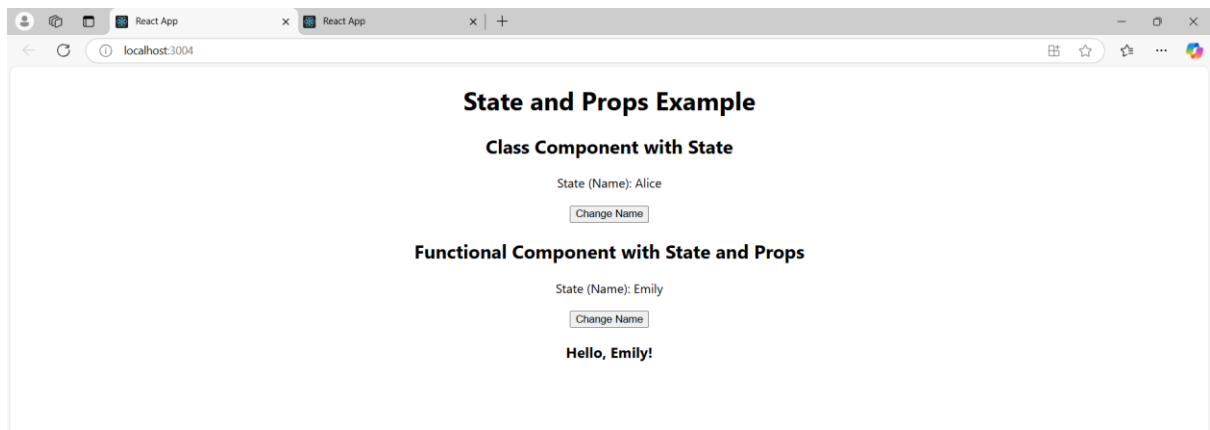
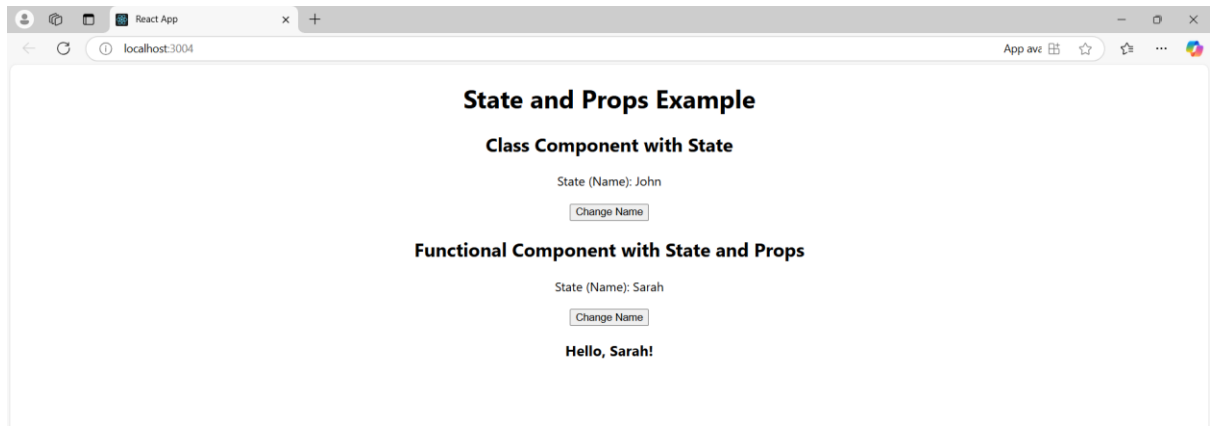
```
return (  
  <div>  
    <h3>Hello, {props.name}!</h3>  
  </div>  
);  
};
```

```
export default Person;
```

App.js

```
import React, { useState } from 'react';  
import './App.css';  
import PersonClass from './PersonClass';  
import Person from './Person';  
  
function App() {  
  const [name, setName] = useState('Sarah');  
  return (  
    <div className="App">  
      <h1>State and Props Example</h1>  
  
      <PersonClass />  
  
      <h2>Functional Component with State and Props</h2>  
  
      <p>State (Name): {name}</p>  
  
      <button onClick={() => setName('Emily')}>Change Name</button>  
  
      <Person name={name} />  
  
    </div>  
  );  
}
```

```
export default App;
```



4. DOM Events in React

App.js

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

const App = () => {
  const [text, setText] = useState("");
  const [showText, setShowText] = useState(false);

  // Handle input change
  const handleInputChange = (event) => {
    setText(event.target.value);
  };

  // Handle button click event
  const handleButtonClick = () => {
    setShowText(true);
  };

  return (
    <div className="App">
      <h1>React DOM Events Example</h1>

      {/* Input field event */}
      <input
        type="text"
        value={text}
        onChange={handleInputChange}
        placeholder="Type something..."
```



```
/>
```

```
{/* Button click event */}
```

```
<button onClick={handleButtonClick}>Show Text</button>
```

```
{/* Conditionally render text */}
```

```
{showText && <p>You typed: {text}</p>}
```

```
</div>
```

```
);
```

```
};
```

```
export default App;
```

