**WEEK-6  
Superset ID: 6361172  
  
1. Explain React components.**

React components are the main building blocks of a React app. They let you break the UI into smaller, reusable parts. Each component can have its own layout, data (state), and behavior.

**2. Identify the differences between components and JavaScript functions.**

|  |  |
| --- | --- |
| React Component | JavaScript Function |
| Used to build UI | Used to perform tasks or return data |
| Returns JSX (HTML-like code) | Returns data or value |
| Can have state and lifecycle methods | No state or lifecycle |
| Follows special React rules | Normal JavaScript syntax |

**3. Identify the types of components.**

* Class Components
* Function Components

**4. Explain class component**.

A class component is written using a class that extends React.Component.

* Uses a constructor to set state
* Has a render() method to return JSX
* Supports lifecycle methods (like componentDidMount())

Example:

class MyComponent extends React.Component {  
 constructor(props) {  
 super(props);  
 this.state = { count: 0 };  
 }  
  
 render() {  
 return <h1>Hello</h1>;  
 }  
}

**5. Explain function component**.

A function component is a simple JavaScript function that returns JSX.

* Shorter and easier than class components
* Can use Hooks (like useState()) to handle state and side effects

Example:

function MyComponent() {  
 return <h1>Hello</h1>;  
}

**6. Define component constructor**.

The constructor is a special method in class components.

* It runs when the component is created
* Used to initialize state and bind methods
* super(props) must be called inside it

**7. Define render() function.**

The render() function is used in class components.

* Returns the JSX (UI) to show on the screen
* Called every time the component updates