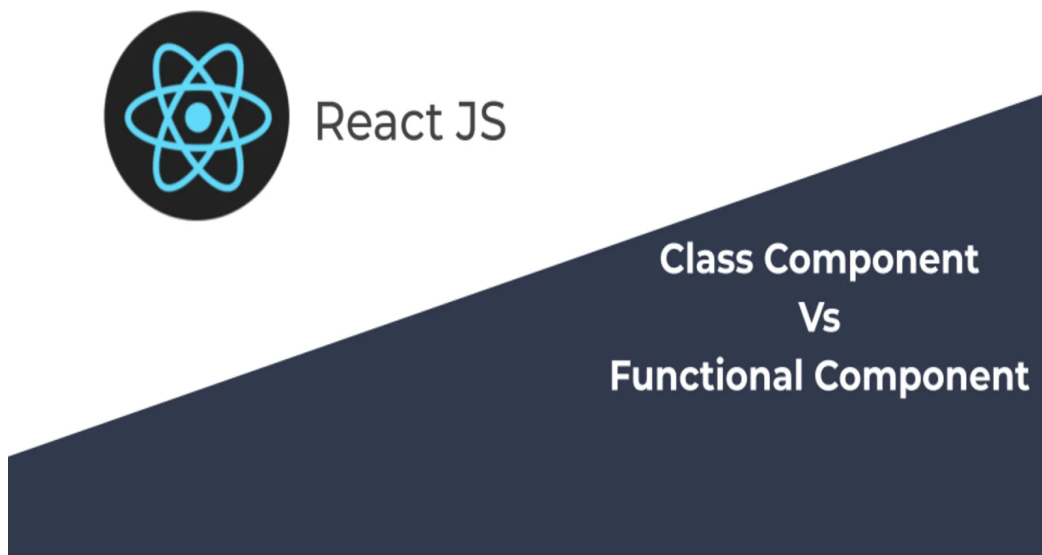


Class Components Vs Functional Components



In this Note, we want to show you the differences between **functional** and **class components** in React and when you should choose which one.

Functional Components:

Functional components are some of the **more common** components that will come across while working in React. These are simply **JavaScript functions**. We can create a functional component to React by writing a JavaScript function.

```
const Car={()=> {  
  return <h2>Hi, I am also a Car!</h2>;  
}
```

Class Components:

This is the **bread** and **butter** of most modern web apps built in ReactJS. These components are simple classes (made up of multiple functions that add functionality to the application).

```
class Car extends React.Component {  
  render() {  
    return <h2>Hi, I am a Car!</h2>;  
  }  
}
```

Hooks are a new addition to **React 16.8**. They let you use **state** and other React features **without** writing a **class**.

If you write a function component and realize you need to add some state to it, **previously** you had to **convert** it to a **class component**. Now you can use a **Hook** inside the existing function component to manage the **state** and no need to convert it into the **Class component**. Instead of Classes, one can use Hooks in the Functional component as this is a much easier way of managing the state. Hooks can only be used in functional components, **not in-class components**.

Differences:

Functional Components	Class Components
<ul style="list-style-type: none"> A functional component is just a plain JavaScript function that accepts props as an argument and returns a React element. 	<ul style="list-style-type: none"> A class component requires you to extend from React.Component and create a render function that returns a React element.
<ul style="list-style-type: none"> There is no render method used in functional components. 	<ul style="list-style-type: none"> It must have the render() method returning HTML
<ul style="list-style-type: none"> Also known as Stateless components as they simply accept data and display them in some form, that they are mainly responsible for rendering UI. 	<ul style="list-style-type: none"> Also known as Stateful components because they implement and state.
<ul style="list-style-type: none"> React lifecycle methods (for example, componentDidMount) cannot be used in functional components. 	<ul style="list-style-type: none"> React lifecycle methods can be used inside class components (for example, componentDidMount).