

## Day 3: Component

14 December 2022 06:59 PM

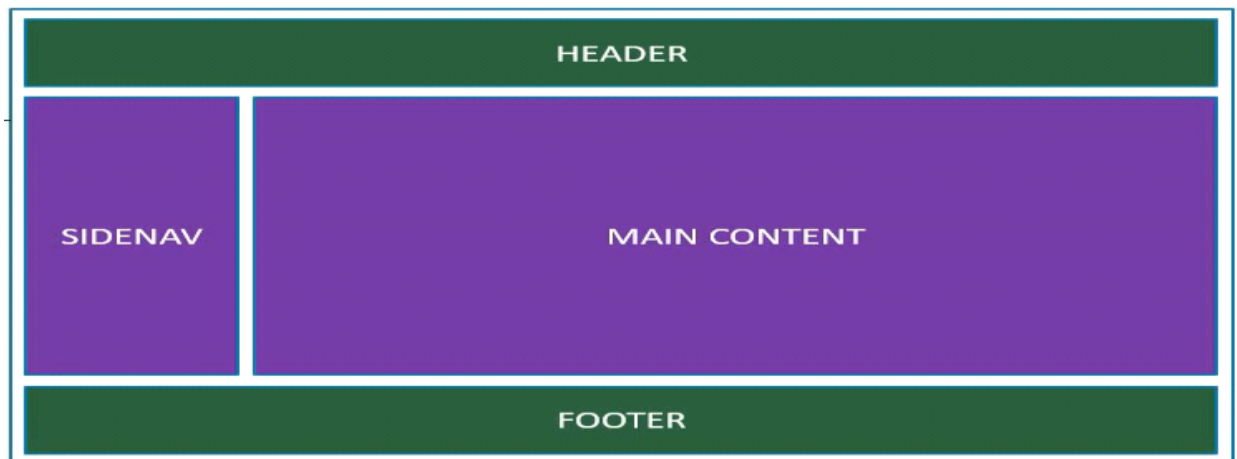
### What is Component?

The entire application is divided into a small logical group of code, which is known as components.

A Component is considered as the core building blocks of a React application.

Each component work independently from one another and merge all in a parent component, which will be the final UI of your application.

Every React component have their own structure, methods as well as API, They can be reusable as per your need.



In ReactJS, we have mainly two types of components. They are

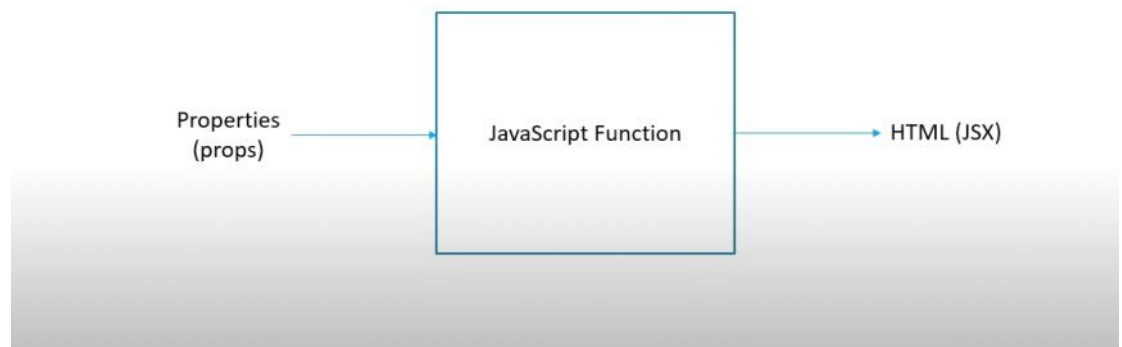
#### Functional Components:

The simplest way to define a component is to write a JavaScript function.

A valid React component because it accepts a single “props” (which stands for properties) object argument with data and returns a React element. We call such components “function components” because they are literally JavaScript functions.

The functional component is also known as a stateless component because they do not hold or manage state.

## Functional Components



#### Class Components:

class component is pretty simple; just define a class that extends Component and has a render function

The class component is also known as a stateful component because they can hold or manage local state.

## Class Components



Difference between functional component and class component

## Component Types

### Stateless Functional Component

JavaScript Functions

```
function Welcome(props) {  
  return <h1>Hello, {props.name}</h1>;  
}
```

### Stateful Class Component

Class extending Component class  
Render method returning HTML

```
class Welcome extends React.Component {  
  render() {  
    return <h1>Hello, {this.props.name}</h1>;  
  }  
}
```

## Functional vs Class components

### Functional

- Simple functions
- Use Func components as much as possible
- Absence of 'this' keyword
- Solution without using state
- Mainly responsible for the UI
- Stateless/ Dumb/ Presentational

### Class

- More feature rich
- Maintain their own private data - state
- Complex UI logic
- Provide lifecycle hooks
- Stateful/ Smart/ Container

