

Component in details

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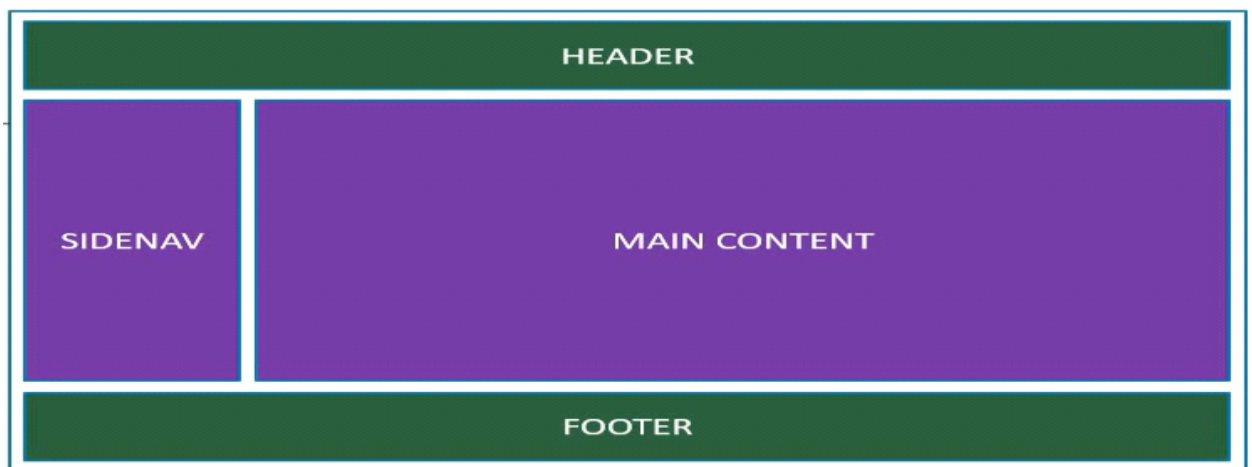
What is Component?

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.



we have mainly two types of components - Functional component and class component

Different ways to create react components:

Create new file and give extension .js or .jsx both will work

When creating a React component, the component's name *MUST* start with an upper case letter

e.g. HelloComponent.js or HelloComponent.jsx

1)class syntax

```
import React from 'react'; //import React object from React package
```

```
//create class HelloComponent and HelloComponent should extends  
React.Component class
```

```
class HelloComponent extends React.Component {
```

```
}
```

```
export default HelloComponent; // export HelloComponentso that  
can be used in other component
```

If you run above code. You will get the

Error :No `render` method found on the returned component instance: you may have forgotten to define `render`.

It means every react class component requires a render method founds

NOTE: Every render method should return something to output window

Render method should return the JSX element to output window

Final code :	<pre>import React from 'react'; class HelloComponent extends React.Component { render() { // Return JSX Element return <h1>Hello World!</h1>; } } export default HelloComponent;</pre>
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import statement can be written in more better way:

Final code :	<pre>import React, { Component } from 'react'; class HelloComponent extends Component { render() { // Return JSX Element return <h1>Hello World!</h1>; } } export default HelloComponent;</pre>
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----- Function
syntax-----

Function declaration syntax	<pre>function HelloComponent() { return (<> <h1>Hello World!</h1> <h1>Function Declaration Syntax!</h1> </>); } export default HelloComponent;</pre>
Function Expression Syntax	<pre>const HelloComponent = function () { return (<> <h1>Hello World!</h1> <h1>Function Expression Syntax!</h1> </>); } export default HelloComponent;</pre>
Multiline Arrow Syntax	<pre>const HelloComponent = () => { return (<> <h1>Hello World!</h1> <h1>Multiline Arrow Syntax!</h1> </>); } export default HelloComponent;</pre>
Singleline Arrow Syntax	<pre>const HelloComponent = () => (<> <h1>Hello World!</h1> <h1>Singleline Arrow Syntax!</h1> </>); export default HelloComponent;</pre>