

🔧 Current Skill Introduction to Components

Introduction to Component

So far we have learned what React and **JSX** are. We have learned their functionalities, their advantages and their limitations. These are big steps we've made but there's a lot more cool stuff waiting for us!

Now, we're going to learn more about one of the most important features in React: 'component', so we're going to see:

- What is a component?
- How to create a component?
- What are the various component types?
- How to use a component?
- What is HOC in React?

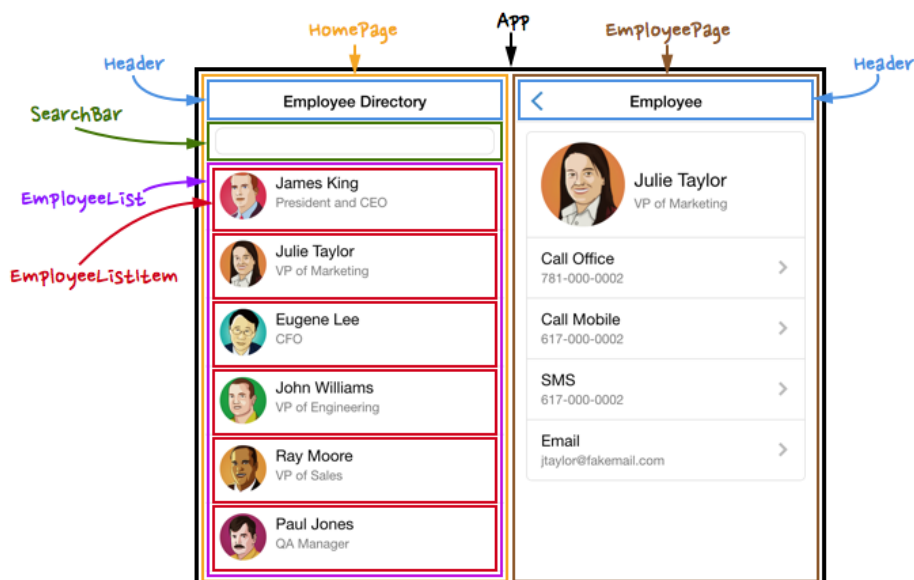
What is a Component ?

First thing's first, before we start off by defining the React component, let's have a look at the definition of a component.



By a simple search on Google, we encounter a lot of complicated definitions but let's try and keep it simple. A component is a piece of code that can be reused and made to cooperate with other components to create a UI.

Let's have a look at the image below and see how it's structured:



Advantages of using components

Working with components makes web development much easier. The reasons are:

- **Reusability:**

Every implemented component can, if not must, be reused while building our web application.

Let's take the example of a sidebar on a dashboard, it will be used whichever page we display.

- **Maintainability:**

Every component is implemented separately from the others so it can be maintained without affecting other UI compositions.

- **Platform independence:**

In reality, the web components are built using HTML, CSS and JavaScript which make it a cross-platform.

- **Privacy:**

Since every component is built to operate alone, that ensures that its content is more private than shared code.

What is a React Component?



Components are the building blocks of any React app. You will notice that a typical React app will have plenty of them.

Simply put, a component is a JavaScript class or function that optionally accepts inputs i.e. properties or props and returns a React element that describes how a section of the UI (User Interface) should look like.

```
// My first component
```

```
const Greeting = () => <h1>Hello World from my first component!</h1>;
```



This is a functional component (called Greeting) written using ES6's arrow function syntax. It takes no props and returns an h1 tag with the text "Hello World from my first component!"



