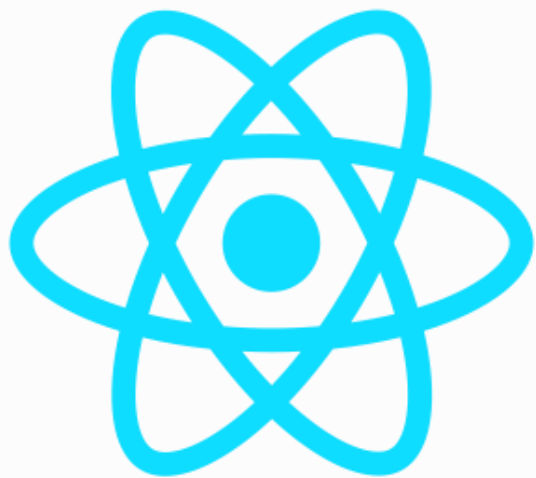


REACT JS

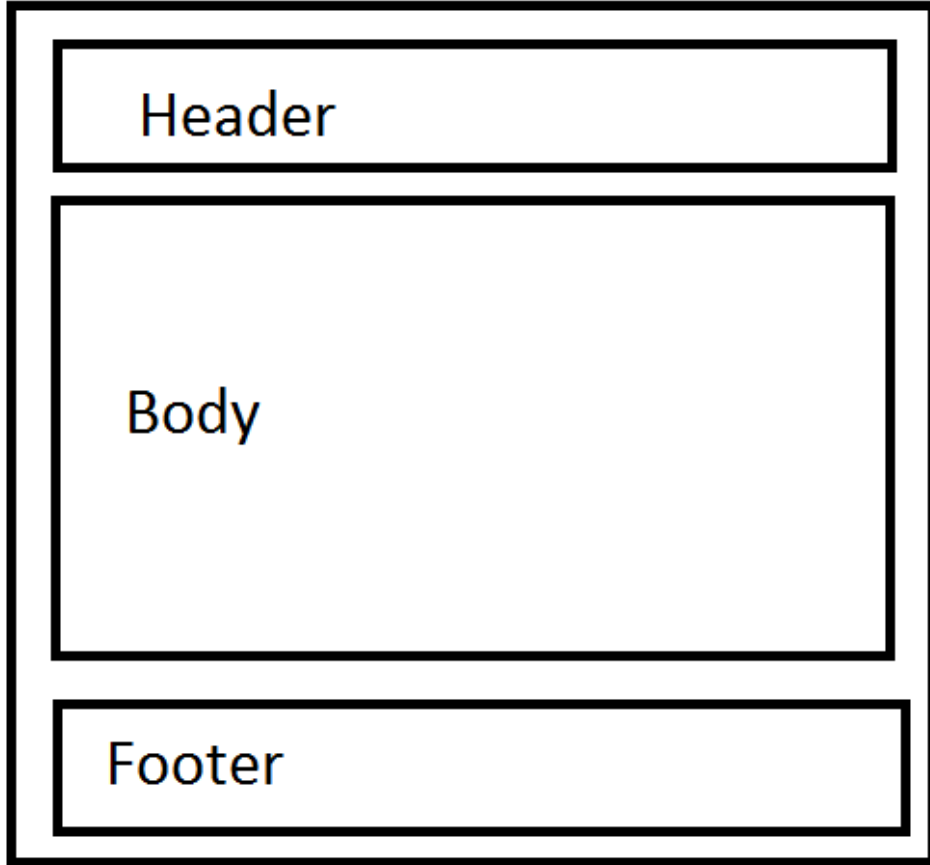
LAYOUT, HOC, REFS



React JS



What is Layout?



This component does exactly what its name says - it defines the **layout of the application**.

It simply accepts children as props and **render** them to the DOM together or without other child components.

```
import React from 'react';

const Layout = ({children}) =>{
  return(
    <>
      <div>
        <ToolBar/>
        <Sides/>
        <Backdrop/>
      </div>
      <main>{children}</main>
    </>
  )
}

export default Layout;
```

```
import React from "react";
import Layout from "../components/Layout/Layout";

function App() {
  return (
    <>
      <Layout>
        <p>Test</p>
      </Layout>
    <>
  );
}

export default App;
```

HOC

A higher-order component (HOC) is an advanced technique in React for reusing component logic. HOCs are not part of the React API, per se. They are a pattern that emerges from React's compositional nature.

```
const EnhancedComponent = higherOrderComponent(WrappedComponent);
```

React.Fragment

The `React.Fragment` component lets you return multiple elements in a `render()` method without creating an additional DOM element:

```
render() {  
  return (  
    <React.Fragment>  
      Some text.  
      <h2>A heading</h2>  
    </React.Fragment>  
  );  
}
```

You can also use it with the shorthand `<></>` syntax. For more information, see [React v16.2.0: Improved Support for Fragments](#).

Refs and the DOM

Refs provide a way to access DOM nodes or React elements created in the render method

- Managing focus, text selection, or media playback.
- Triggering imperative animations.
- Integrating with third-party DOM libraries.

```
class MyComponent extends React.Component {  
  constructor(props) {  
    super(props);  
  
    this.inputRef = React.createRef();  
  }  
  
  render() {  
    return <input type="text" ref={this.inputRef} />;  
  }  
  
  componentDidMount() {  
    this.inputRef.current.focus();  
  }  
}
```

React.createRef creates a [ref](#) that can be attached to React elements via the ref attribute.