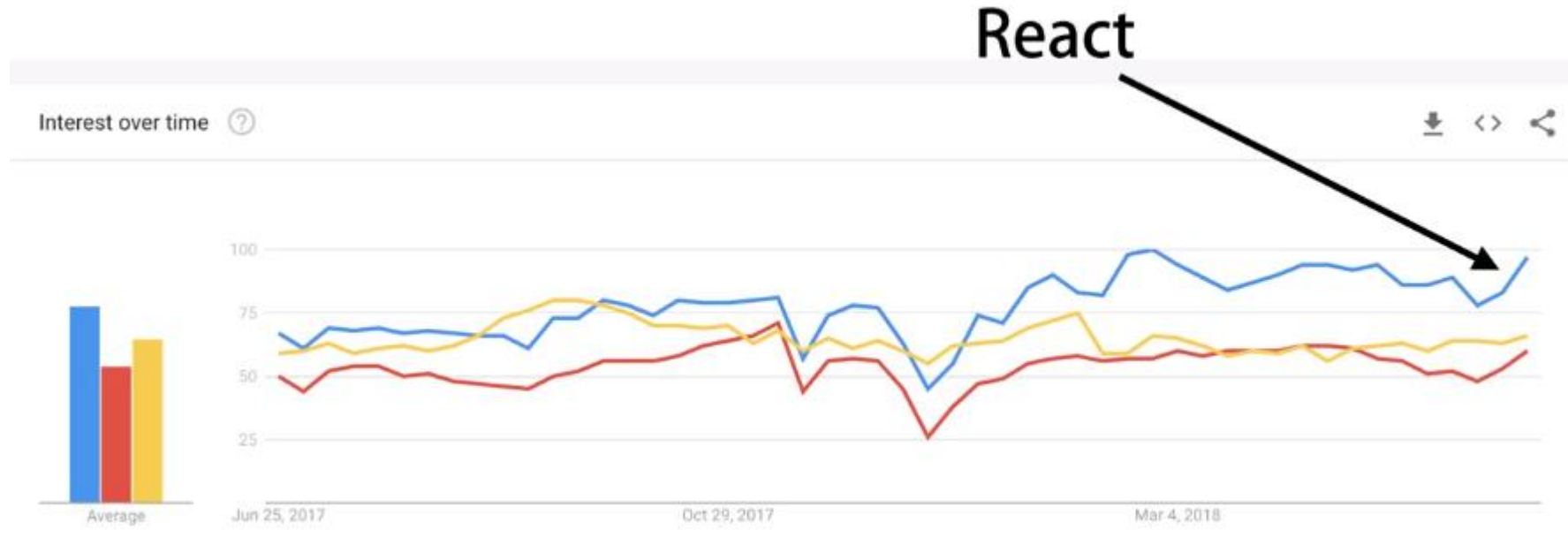


React

A FRONTEND LIBRARY

REACT- A FrontEnd Library

Developed By Google @ 2009



React Heart

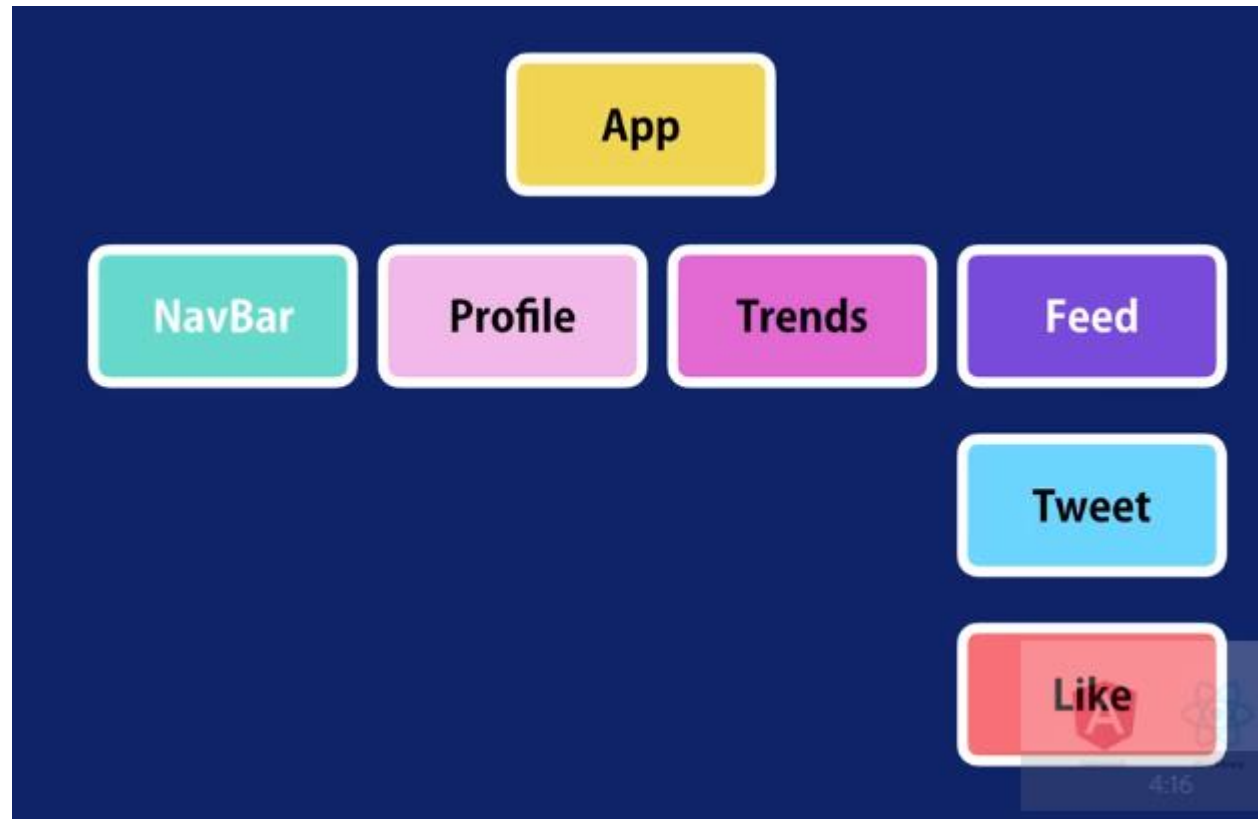
COMPONENTS

```
<x>  
...  
</x>
```

A piece of the UI



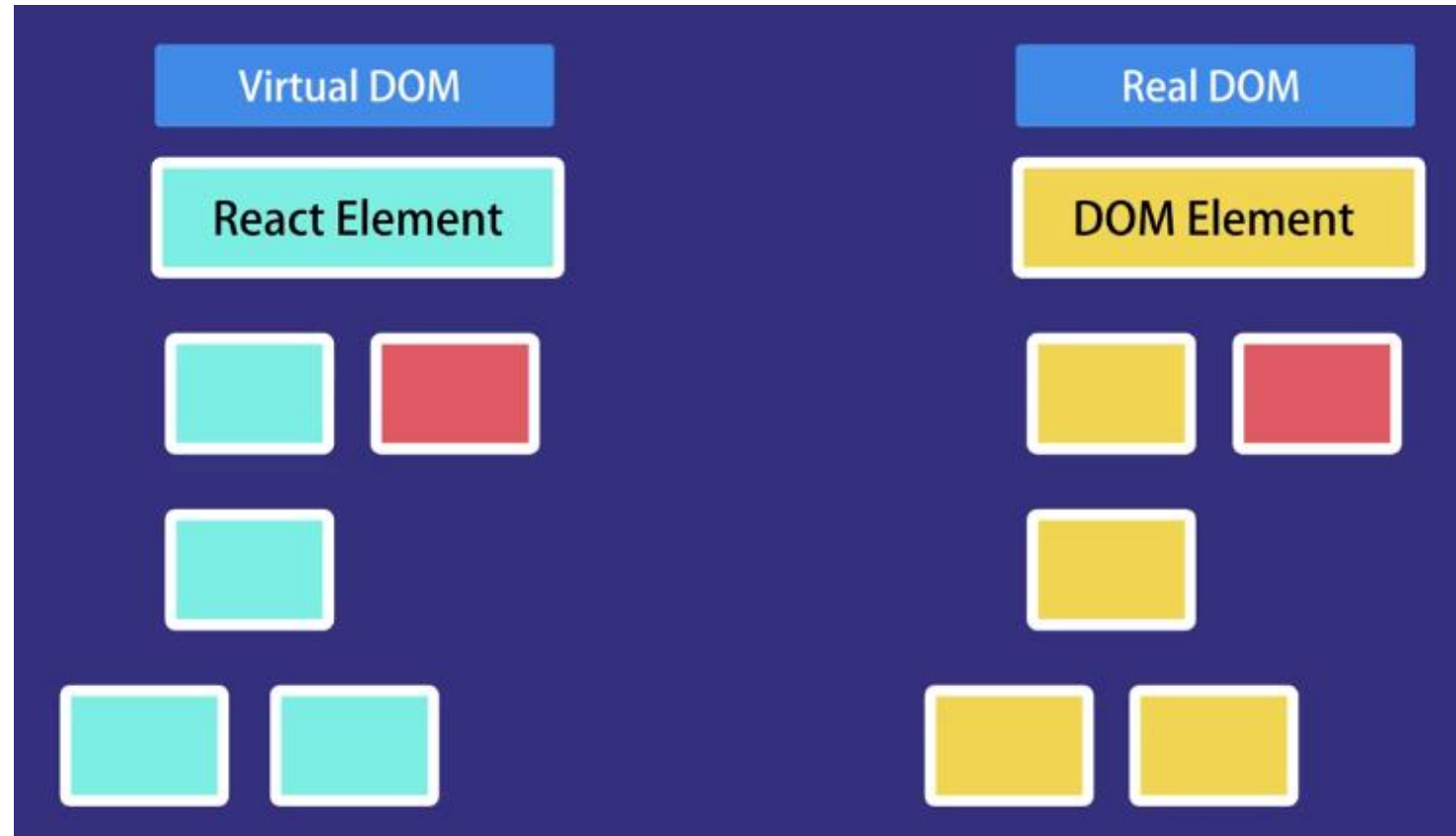
Components



React Component

```
class Tweet extends Component {  
  state = { }  
  render() {  
    return ( );  
  }  
}
```

Virtual DOM



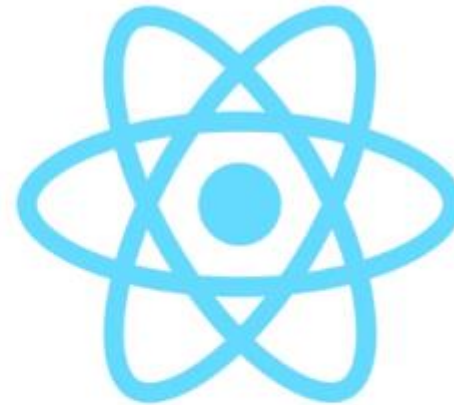
We Don't Do This

```
const element = document.querySelector();  
element.classList.add();  
element.addEventListener();
```

React Vs Angular



Framework



View Library

Development Setup

Install Node, Visual Code

```
>npm i -g create-react-app
```

```
>create-react-app my-first-react-app
```

```
>cd my-first-react-app
```

```
>npm start
```

Visual Code Extensions

Simple React Snippets

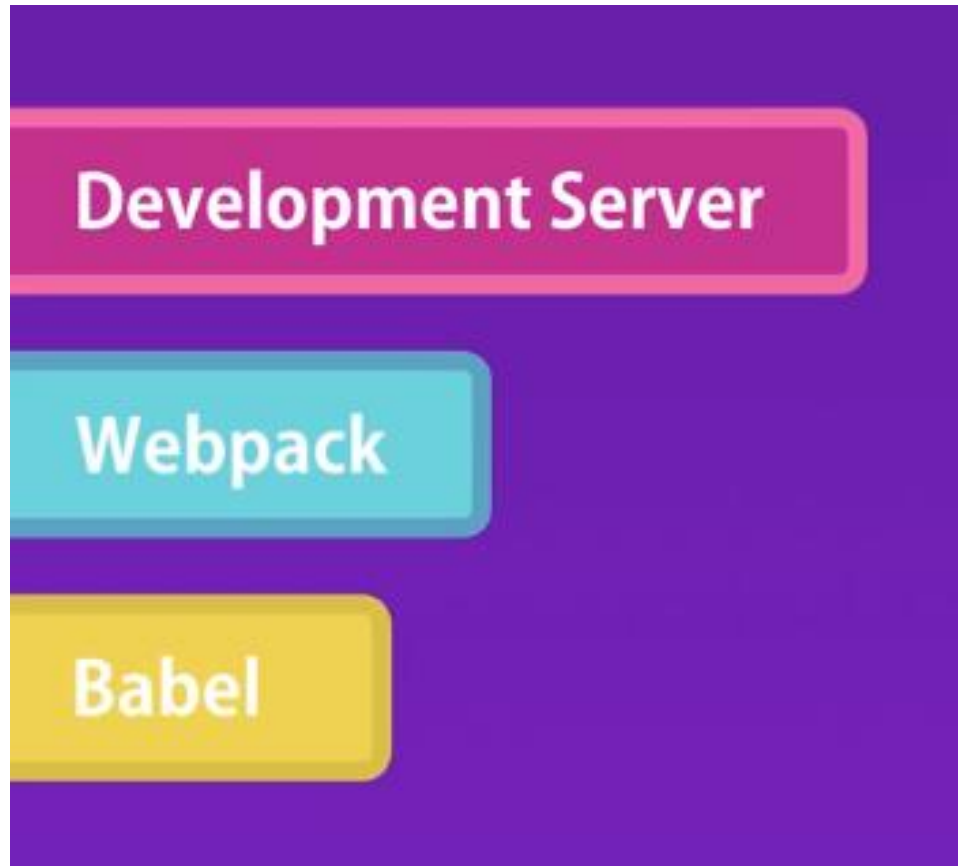
Prettier

"editor.formatOnSave": true,

- Add in User Settings

Ayu Mirage Theme “Dark One 😊”

create-react-app Manages



Use npm eject for Custom Configurations

Folder Structure

node_modules

- Node Packages

public

- Public Assets css, images, icons etc

src

- React Source Code

index.js

- Entry Point

src/index.js

```
import React from 'react';
import ReactDOM from 'react-dom';
import './index.css';
import App from './App';
import * as serviceWorker from './serviceWorker';

ReactDOM.render(<App />, document.getElementById('root'));

// If you want your app to work offline and load faster, you can change
// unregister() to register() below. Note this comes with some pitfalls.
// Learn more about service workers: http://bit.ly/CRA-PWA
serviceWorker.unregister();
```

public/index.html

```
<noscript>You need to enable JavaScript to  
run this app.</noscript>
```

```
<div id="root"></div>
```

```
import React, { Component } from 'react';
import './App.css';
class App extends Component {
  render() {
    return (
      <div className="App">
        From App Component
      </div>
    );
  }
}
export default App;
```

← Strange ?

JSX- JavaScript XML



The screenshot shows the Babel REPL interface. The browser address bar displays the URL: `babeljs.io/repl#?babili=false&browsers=&build=&builtIns=false&spec=false&loose=false&code_lz...`. The page header features the Babel logo, the version `6.x`, and navigation links for `Docs`, `Setup`, `Try it out` (highlighted), `Blog`, `Search`, `Donate`, `Team`, and `GitHub`. The main content area is split into two panels. The left panel contains the input code:

```
1 const element = <h1>Hello World</h1>;
```

. The right panel shows the output code:

```
1 "use strict";  
2  
3 var element = React.createElement(  
4   "h1",  
5   null,  
6   "Hello World"  
7 );
```



```
npm start
```

Starts the development server.

```
npm run build
```

Bundles the app into static files for production.

```
npm test
```

Starts the test runner.

```
npm run eject
```

Removes this tool and copies build dependencies, configuration files and scripts into the app directory. If you do this, you can't go back!

We suggest that you begin by typing:

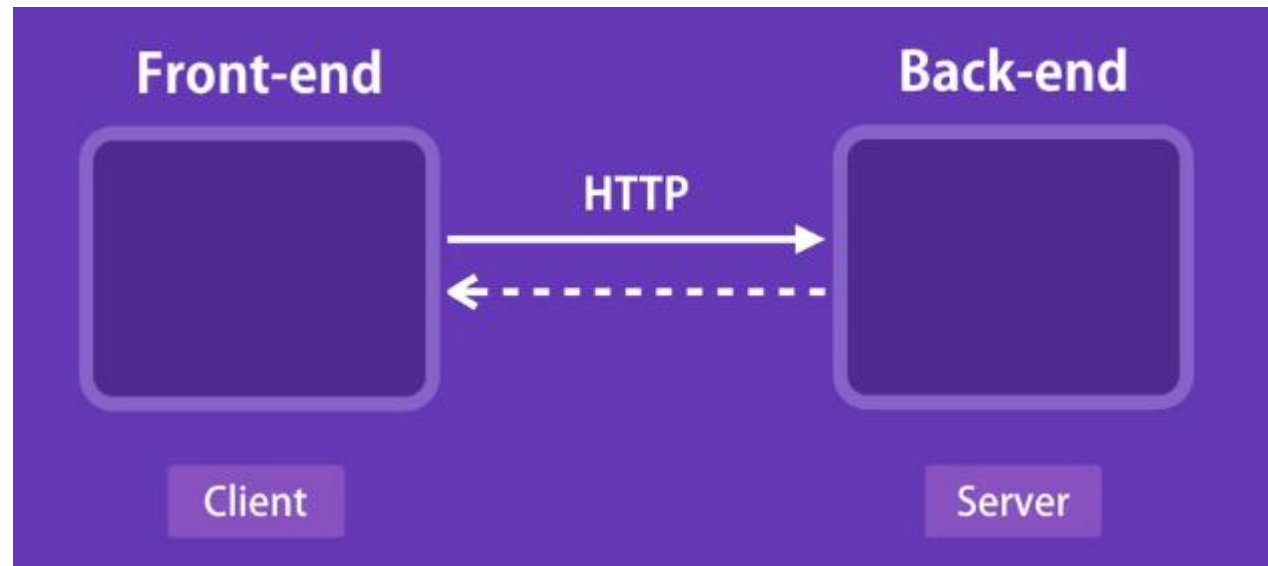
```
cd react-app
```

```
npm start
```

Index.js Modified

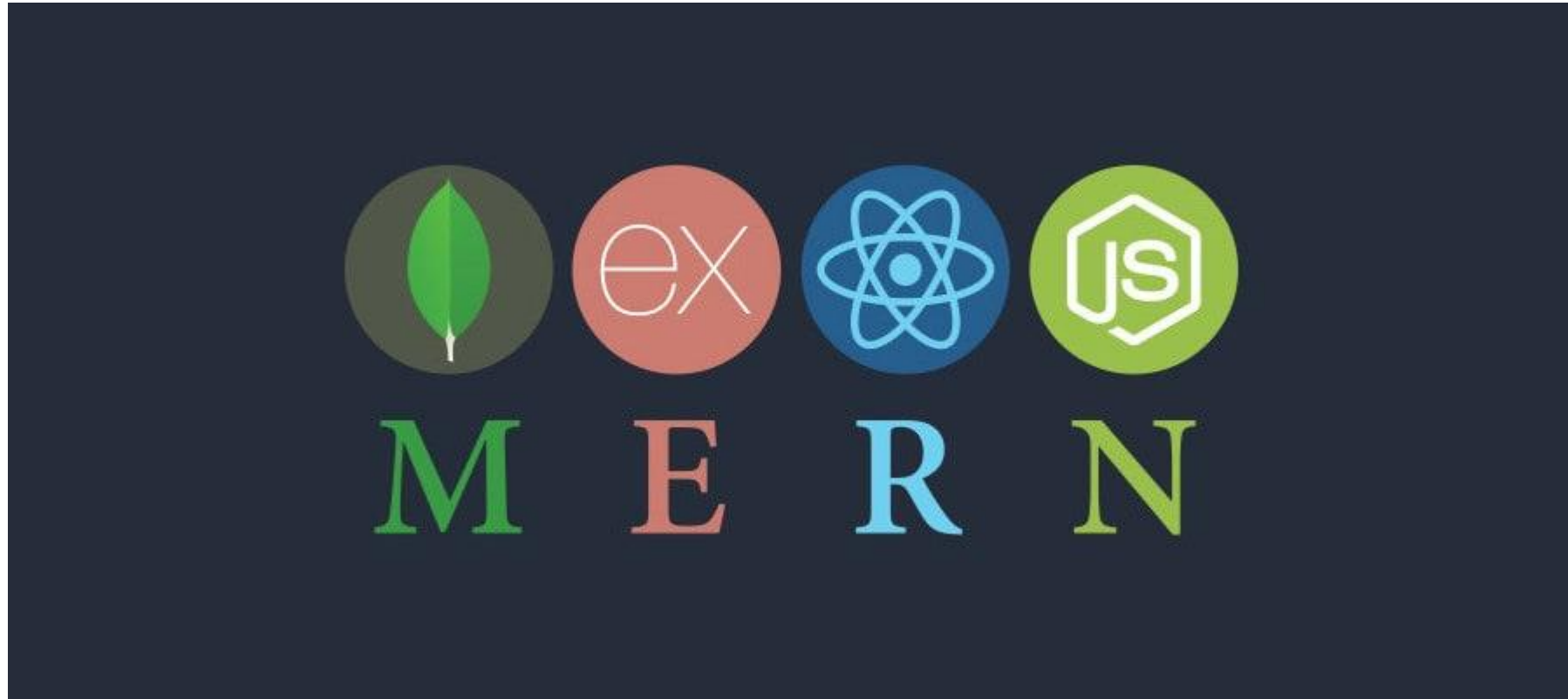
```
import React from 'react';  
import ReactDOM from 'react-dom';  
const element = <p>Hello My Class</p>  
ReactDOM.render(element,  
document.getElementById('root'));
```

Full Stack Architecture



MERN Stack

Mongo, Express, React, Node



<https://scotch.io/@deityhub/getting-started-with-the-mern-stack>