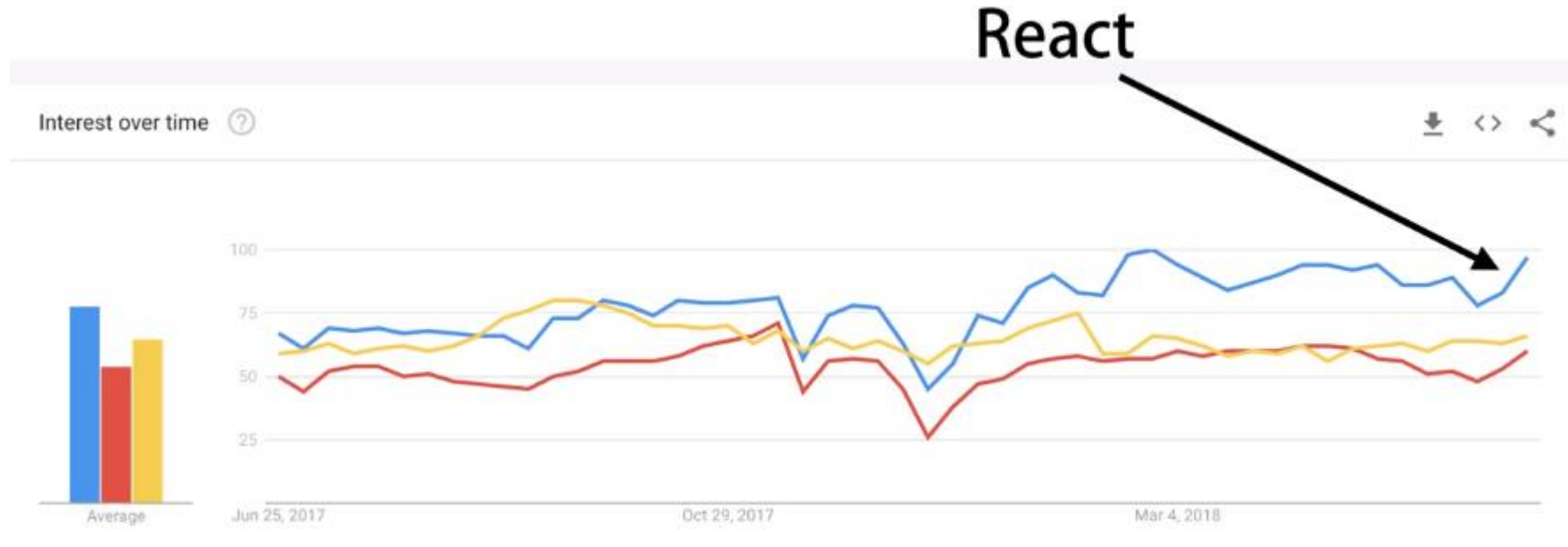# React

A FRONTEND LIBRARY

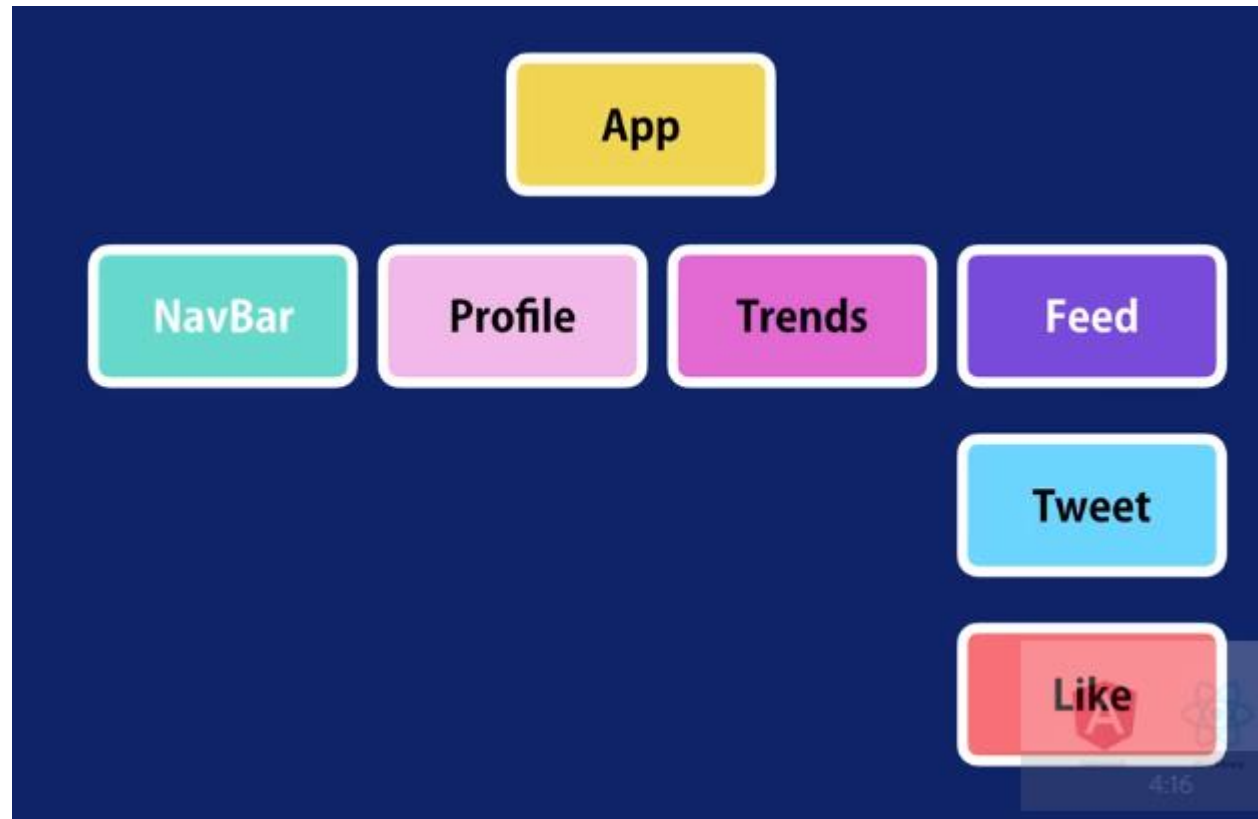# REACT- A FrontEnd Library

Developed By Google @ 2009

React Heart

Components

React Component

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

Adding React to Existing HTML Page

<!-- ... existing HTML ... -->

<div id="like_button_container"></div>

<!-- ... existing HTML ... -->

Load React same as JQuery

<!-- Load React. -->

 <!-- Note: when deploying, replace "development.js" with "production.min.js". -->

 <script src="https://unpkg.com/react@16/umd/react.development.js" crossorigin></script>

 <script src="https://unpkg.com/react-dom@16/umd/react-dom.development.js" crossorigin></script>

 <!-- Load our React component. -->

 <script src="like_button.js"></script>

LikeButton is Your component

// ... the starter code you pasted ...

const domContainer = document.querySelector('#like_button_container');

ReactDOM.render(e(LikeButton), domContainer);

Like Button Code
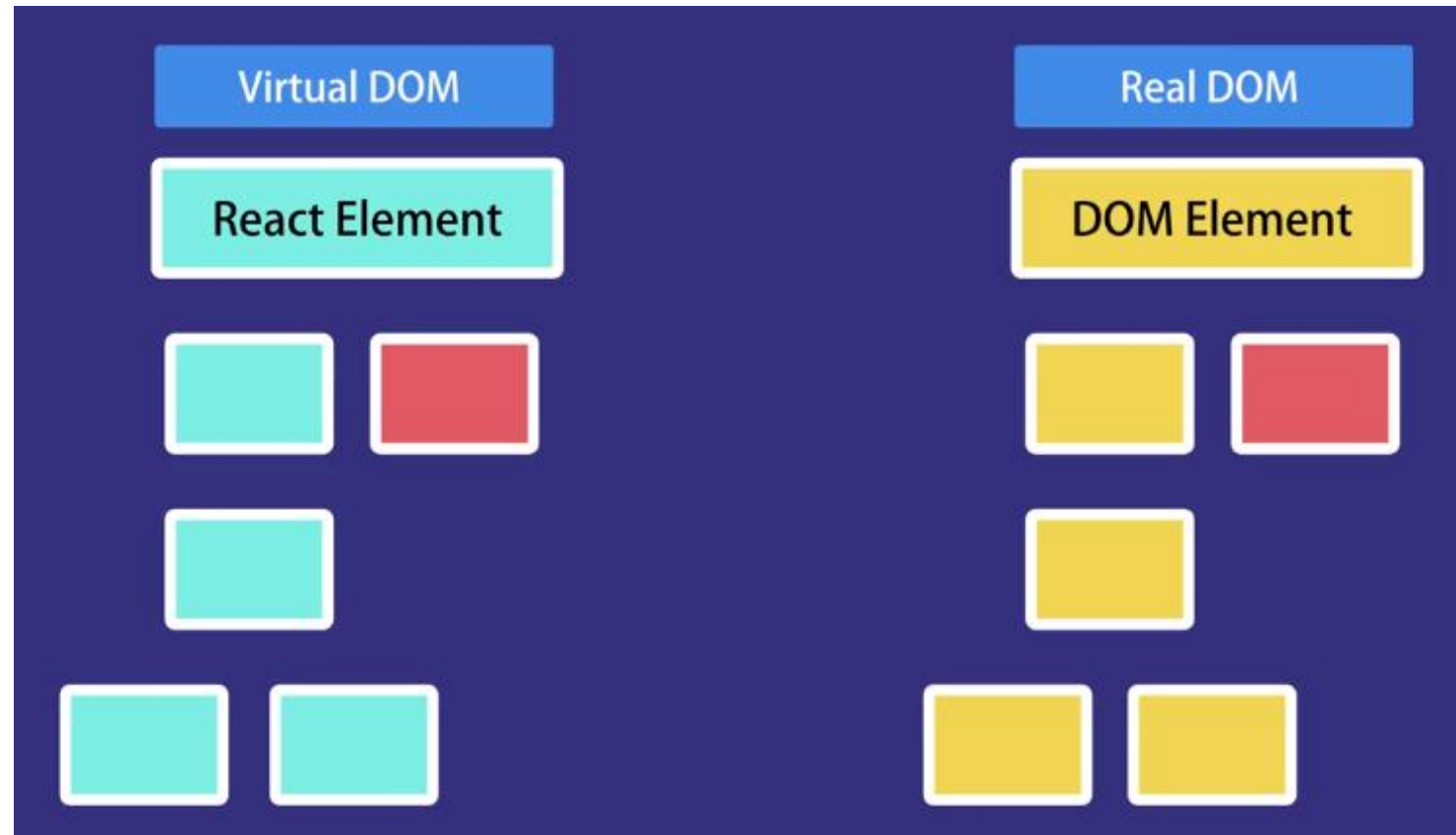
Kick Start a React App

//npm

npm init react-app my-app

//npm init <initializer> is available in npm 6+

//Yarn

yarn create react-app my-app

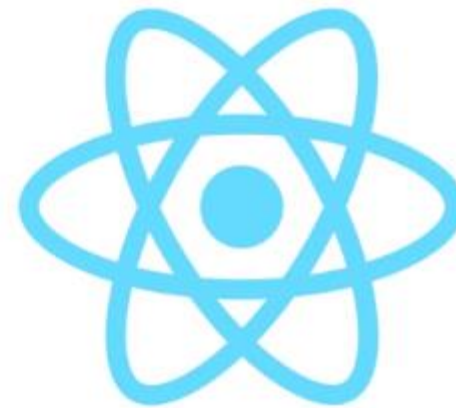//yarn create <starter-kit-package> is available in Yarn 0.25+

Virtual DOM

We Don't Do This

```javascript
const element = document.querySelector();

element.classList.add();

element.addEventListener();
```

React Vs Angular

Framework

View Library

Development Setup

Install Node, Visual Code

>npm init react-app my-app

>cd my-app

>npm start

Resources

[Creating New App](#)

[https://reactjs.org/](#)

[Official Docs](#)

Lastly Always come to me [usmanlive.com](#)

Visual Code Extensions
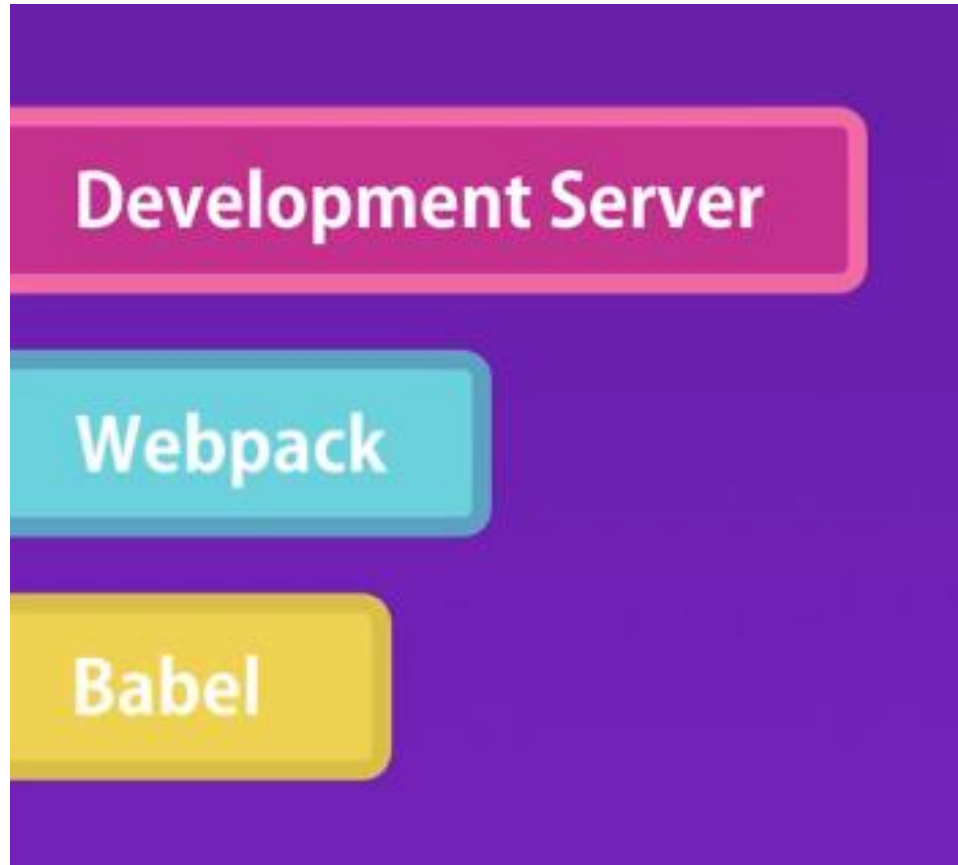
Simple React Snippets

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

```javascript
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

```
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
```
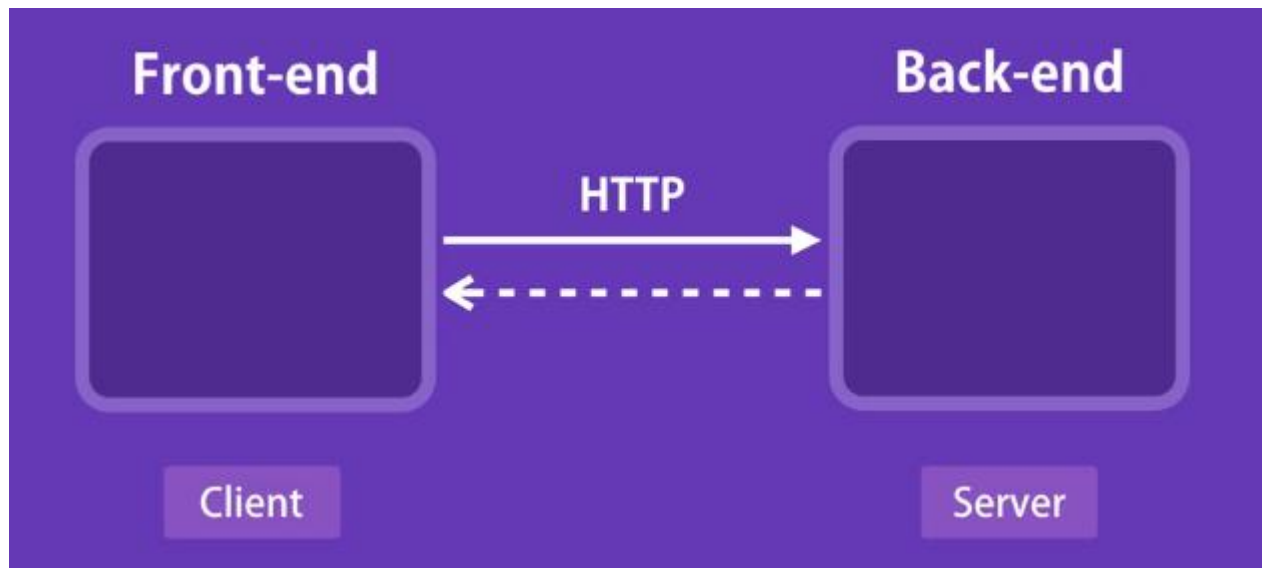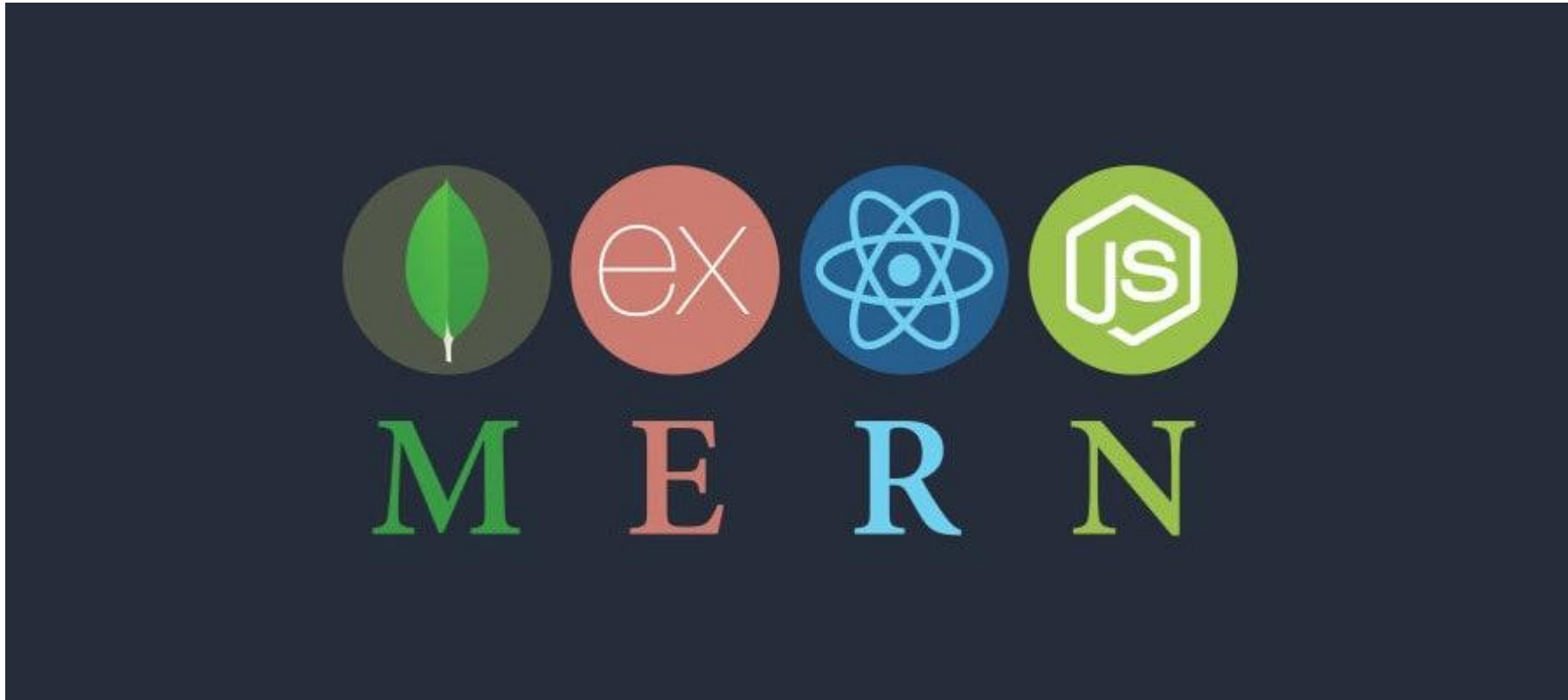
Index.js Modified

```
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