

Date : 29 - 06 - 2020

Morning Session : 11.30am – 1.30 PM

By ~ Sundeeep Charan Ramkumar Today

Topics: React Intro

React is Library which just contains an architecture to have efficient component reloading.

React is not native to JS; we would need to install packages for it.

1) Npm package

2) Script file

React CDN links:

<https://reactjs.org/docs/cdn-links.html>

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

React gets singular application tag inside HTML; that is it means a singular HTML tag to mount the code , it could be the super parent element of where you are mount your HTML.

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

Lets create a function which is just going to return something of a react element

```
<script>

  const h1Element = React.createElement("h1", null, "my frist react H1 tag");

  ReactDOM.render(h1Element, document.querySelector(".container"));

</script>
```

← → ↻ ⓘ 127.0.0.1:5500/index.html

my frist react H1 tag

JSX : (JAVASCRIPT XML)

```
// JSX = JavaScript XML
const h1Element = <h1>My first React H1 tag</h1>;
ReactDOM.render(h1Element, document.querySelector(".container"));
React.createElement("div", null, React.createElement());
```

As an alternative to JSX, you can use ES6 and Javascript compiler like Babel.

<https://babeljs.io/setup#installation>

```
<script src="https://unpkg.com/@babel/standalone/babel.min.js"></script>
```

```
<div class="container"></div>

<script src="https://unpkg.com/@babel/standalone/babel.min.js"></script>

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

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

<script type="text/babel">

  const h1Element = React.createElement("h1", null, "my frist react H1 tag");

  ReactDOM.render(h1Element, document.querySelector(".container"));

</script>
```

← → ↻ ⓘ 127.0.0.1:5500/index.html

my frist react H1 tag

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

<script src="https://unpkg.com/@babel/standalone/babel.min.js"></script>

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

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

<script type="text/babel">

  const name = prompt("what is your name?");

  const h1Element = <h1>{name}</h1>;

  ReactDOM.render(h1Element, document.querySelector("#app"));

</script>
```

127.0.0.1:5500 says

what is your name?

yodraj sreenija

OK

Cancel

← → ↻ ⓘ 127.0.0.1:5500/index.html

yodraj sreenija

Types of components: Class base components, function base components

```
const boxStyle = {
  width: "100px",
  height: "100px",
  background: "red"
};
// Functional components
const App = () => {
  return (
    <div>
      <h1>Hi there</h1>
      <div style={boxStyle}>I am a box</div>
    </div>
  );
};
// const name = prompt("What is your name?");
// JSX = JavaScript XML
// const h1Element = <h1 name="something">Hi {2 > 3 ? "Good" : "Bad"}!</h1>;
ReactDOM.render(<App />, document.querySelector("#app"));
```



If you want multiple elements to return the same we have to use a wrapper element, in conclusion react expect one single element that needs to be returned from the function. If you're rendering a custom component by yourself you should always make sure that enclosing it within the angular bracket mentions it as a custom derived component.

Class base component:

```
// Class based component
class AppClass extends Component {
  constructor() {
    super();
  }

  render() {
    return (
      <>
        <h1>Hi there</h1>
        <div style={boxStyle}>I am a box</div>
      </>
    );
  }
}

// const name = prompt("What is your name?");
// JSX = JavaScript XML
// const h1Element = <h1 name="something">Hi {2 > 3 ? "Good" : "Bad"}!</h1>;
ReactDOM.render(<AppClass />, document.querySelector("#app"));
```


Hi there



If you're creating a class component you need to create a constructor and extend the built in component class you need to class super method and render method and return elements.

NPX:

Before creating react-app check your command version weather it is 5+ or not

```
HARI MANGA@LAPTOP-D8S6GDS1 MINGW64 ~/Desktop/day1  
$ npx create-react-app my-app
```

We suggest that you begin by typing:

```
cd my-app  
npm start
```

Happy hacking!

```
HARI MANGA@LAPTOP-D8S6GDS1 MINGW64 ~/Desktop/day1  
$ cd my-app
```

Npm start

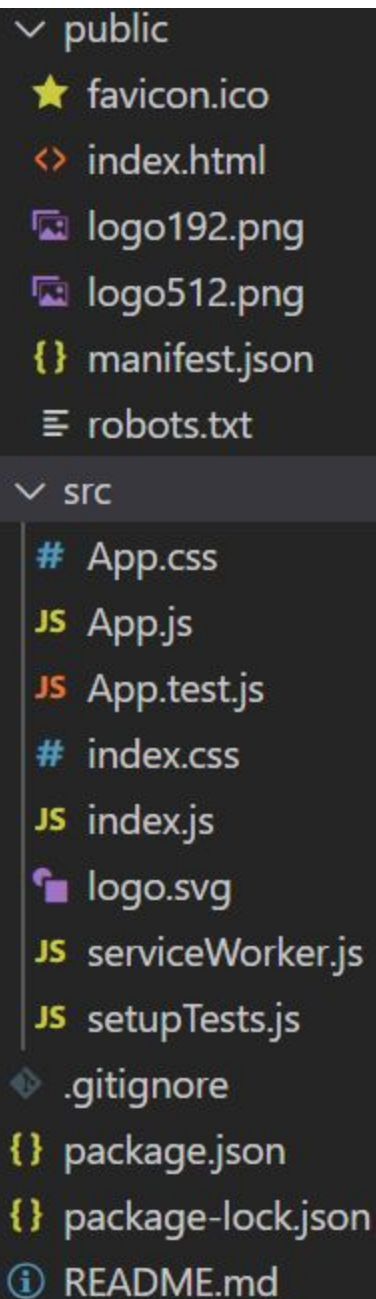
Compiled successfully!

You can now view **my-app** in the browser.

Local: `http://localhost:3000`

On Your Network: `http://192.168.0.3:3000`

Note that the development build is not optimized.
To create a production build, use `npm run build`.



- public
 - ★ favicon.ico
 - <> index.html
 - 🖼️ logo192.png
 - 🖼️ logo512.png
 - { } manifest.json
 - ≡ robots.txt
- src
 - # App.css
 - JS App.js
 - JS App.test.js
 - # index.css
 - JS index.js
 - 🖼️ logo.svg
 - JS serviceWorker.js
 - JS setupTests.js
- .gitignore
- { } package.json
- { } package-lock.json
- i README.md

Public folder something where your static folder that is the file that will not change irrespective of any code in react.

Is React a Framework or a library?

2



☐ Framework

☒ Library

76.67%

JSX is natively available in React without transpiling. True or False?

Attempted - 34
(12.93%)

EASY



☐ True

52.94%

☒ False

47.06%

Point: 50%

Class based components required which class to render the elements?

2



☐ Super

☒ Component

55%

☐ Fragment

Create-react-app uses which of the following tech to run local servers and bundling?

Attempted - 35
(13.31%)

EASY



☒ Webpack



91.43%

☐ Parcel

8.57%