

# REACT.JS

Jose Annunziato

# Create React App

- Creating a React application requires Node.js
- To create a React app, type the following at the command line

```
npx create-react-app web-dev
```

- The above creates a new folder called `web-dev` containing a Node.js project implementing a React.js Web application

# Running a React Application

- Once React application created, navigate to folder and run

```
cd web-dev
```

```
npm start
```

- The default React app appears in a browser window

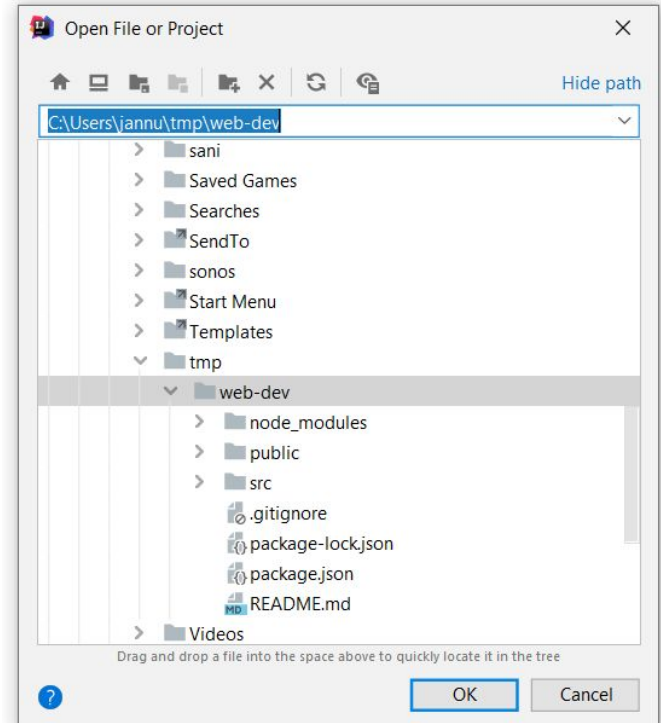


Edit `src/App.js` and save to reload.

[Learn React](#)

# Editing React.js with an IDE

- Open the new React project with an IDE such as IntelliJ
- With IDE *IntelliJ* or *VS Code* select File/Open
- Navigate to folder where you created the project
- Select *web-dev* and click OK



# Project File Structure

- The **Project** window lists the content of the React project

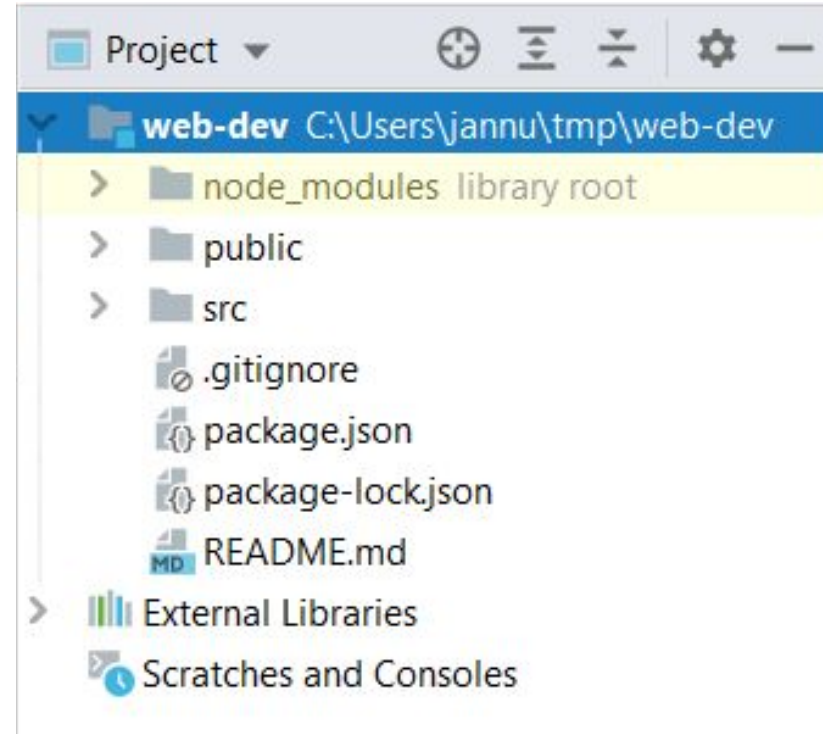
**node\_modules** - libraries

**public** - root of website

**src** - React components

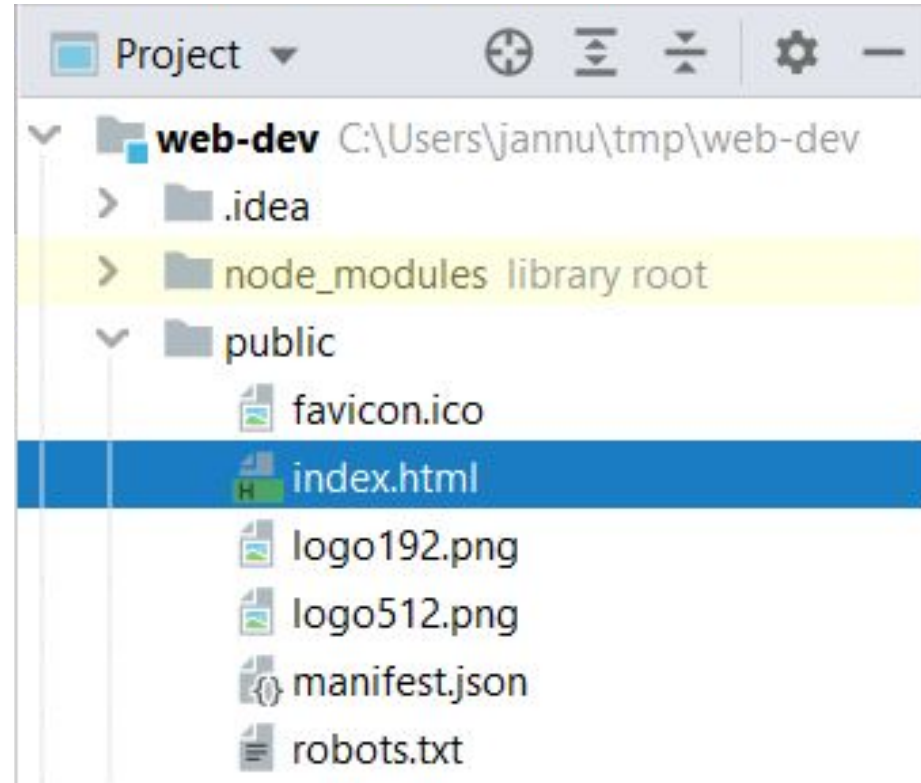
**.gitignore** - files to ignore

**package.json** - project description



# Index HTML

- ***public*** folder is root of Web server
- ***public/index.html*** is root content



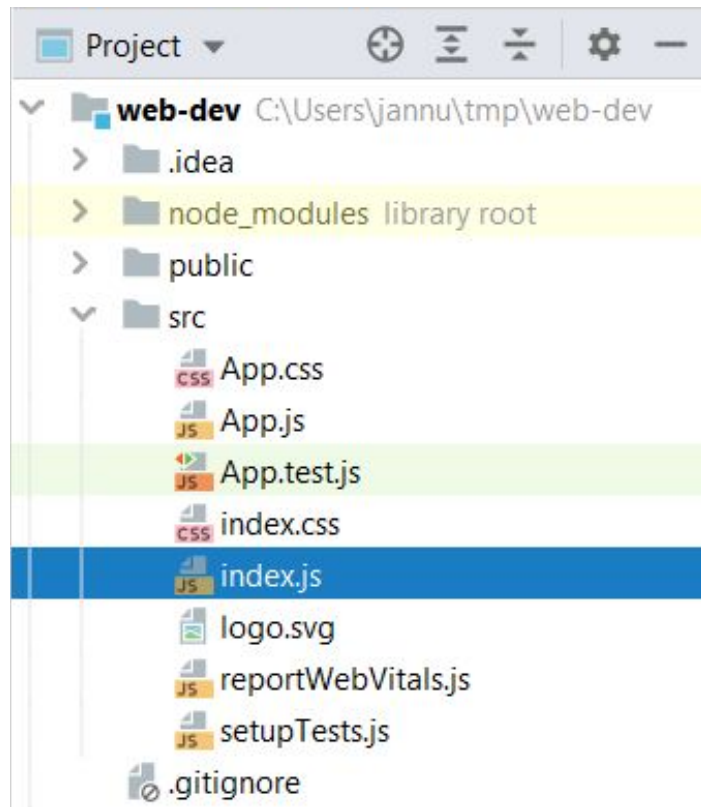
# Index Root DIV

- *index.html* is mostly empty
  - Most relevant content is
- ```
<div id="root"></div>
```
- React.js uses JavaScript to dynamically write HTML into above DIV element

```
<!DOCTYPE html>  
<html lang="en">  
  <head>  
    <title>React App</title>  
  </head>  
  <body>  
    <div id="root"></div>  
  </body>  
</html>
```

# index.js

- ***src*** folder contains JavaScript code using the React.js library that injects HTML into ***index.html***
- ***src/index.js*** is the root of the JavaScript code





# index.js

React and ReactDOM  
are part of React

App.js implements  
default React app

index.js imports  
App.js

ReactDOM renders  
app in root

```
import React from 'react';  
import ReactDOM from 'react-dom';  
import App from './App.js';
```

```
const root = ReactDOM.createRoot(  
  document.getElementById(  
    'root')  
));
```

```
root.render(  
  <React.StrictMode>  
    <App />  
  </React.StrictMode>);
```

# App.js is just a function

```
function App() {  
  return (  
    <div className="App">  
      <header className="App-header">  
        <img src={logo} className="App-logo" alt="logo" />  
        <p>  
          Edit <code>src/App.js</code> and save to reload.  
        </p>  
      </header>  
    </div>  
  );  
}  
export default App;
```

App.js is a function that returns the content we want to render in ***index.html***.  
Note the highlighted content

# App.js Content

- This is the content rendered by App.js
- Note the highlighted text in previous slide
- We can edit the content



Edit src/App.js and save to reload.

[Learn React](#)

# Edit App.js

```
function App() {  
  return (  
    <div className="App">  
      <header className="App-header">  
        <img src={logo} className="App-logo" alt="logo" />  
        <p>  
          Welcome to Web Dev!  
        </p>  
      </header>  
    </div>  
  );  
}  
export default App;
```

