

REACT.JS

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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 is 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](#)

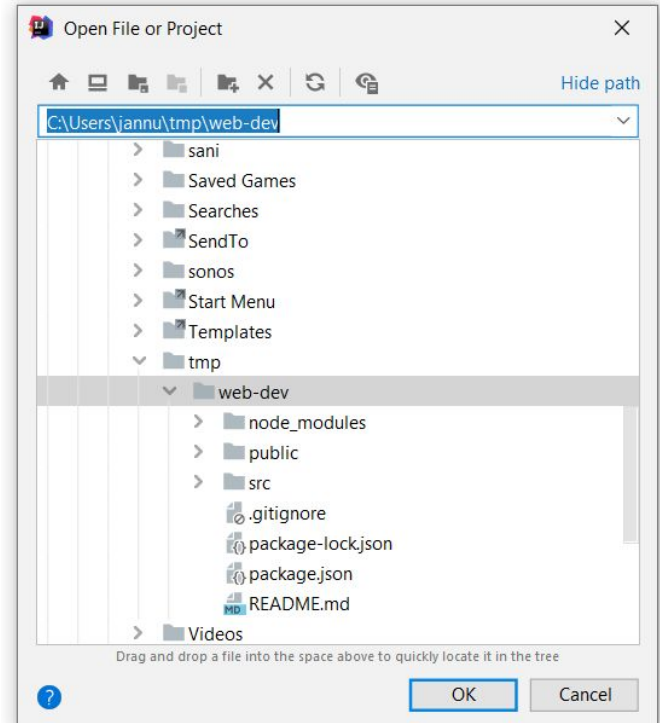
Editing React.js with an IDE

Open the new React project with an IDE such as IntelliJ

Start IntelliJ and select File/Open

Navigate to the 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

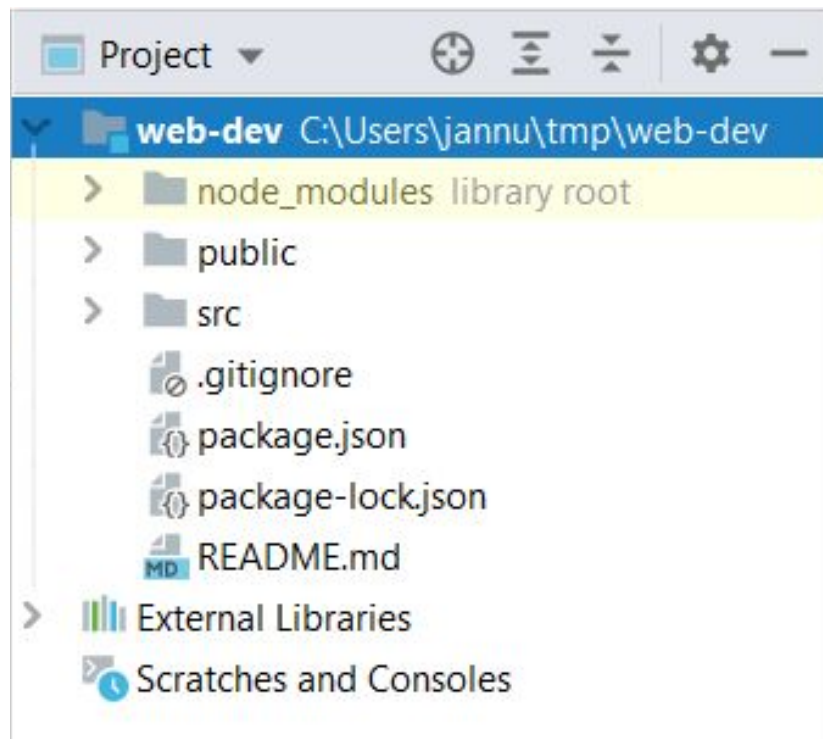
node_modules - libraries

public - root of website

src - React components

.gitignore - files to ignore

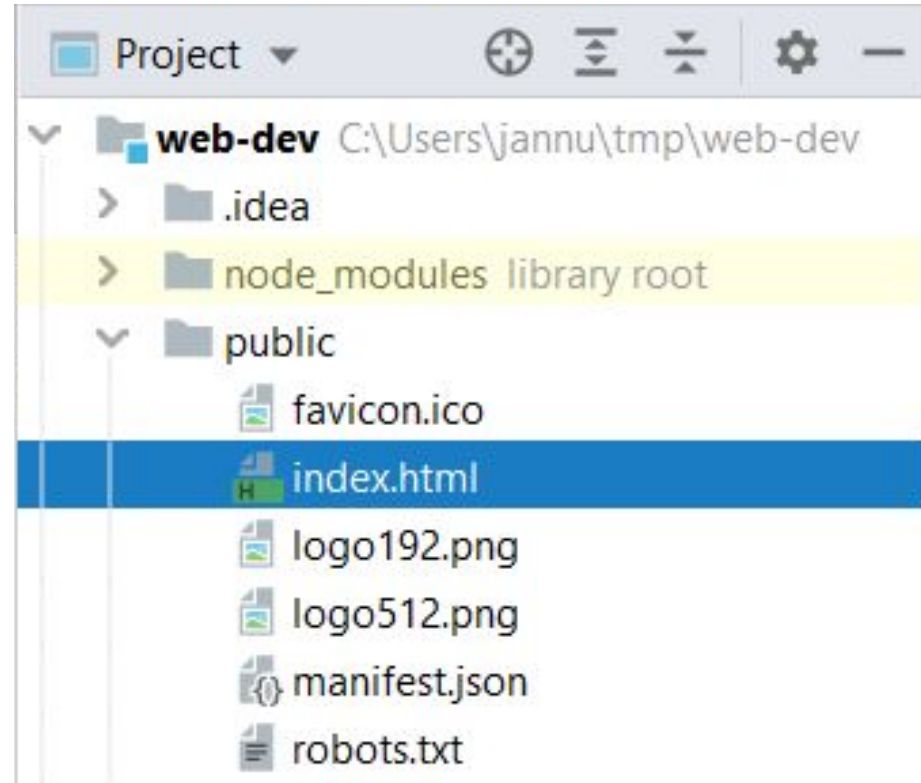
package.json - project description



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>
```

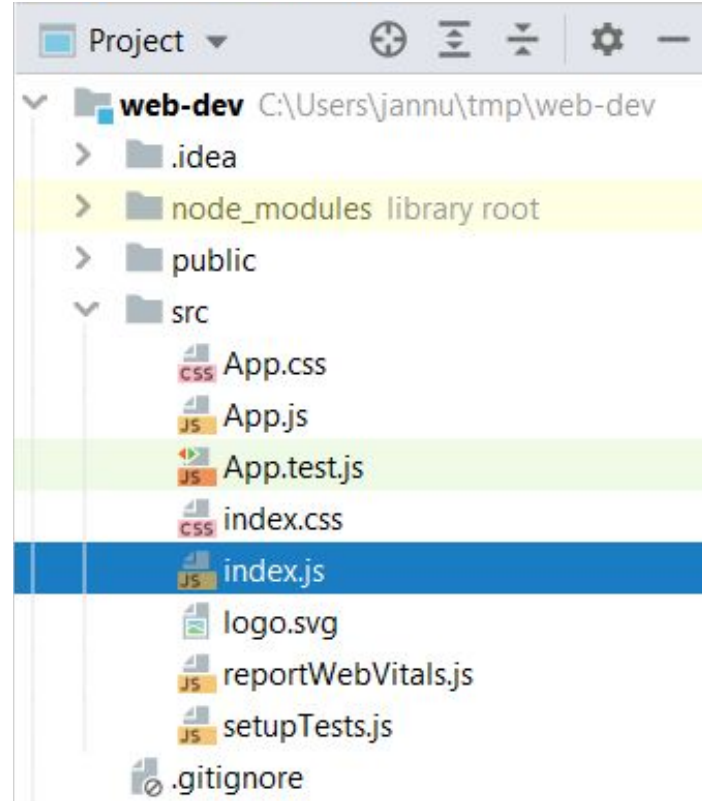
React.js uses JavaScript to dynamically write HTML into above DIV element

```
<!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';
```

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

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;
```

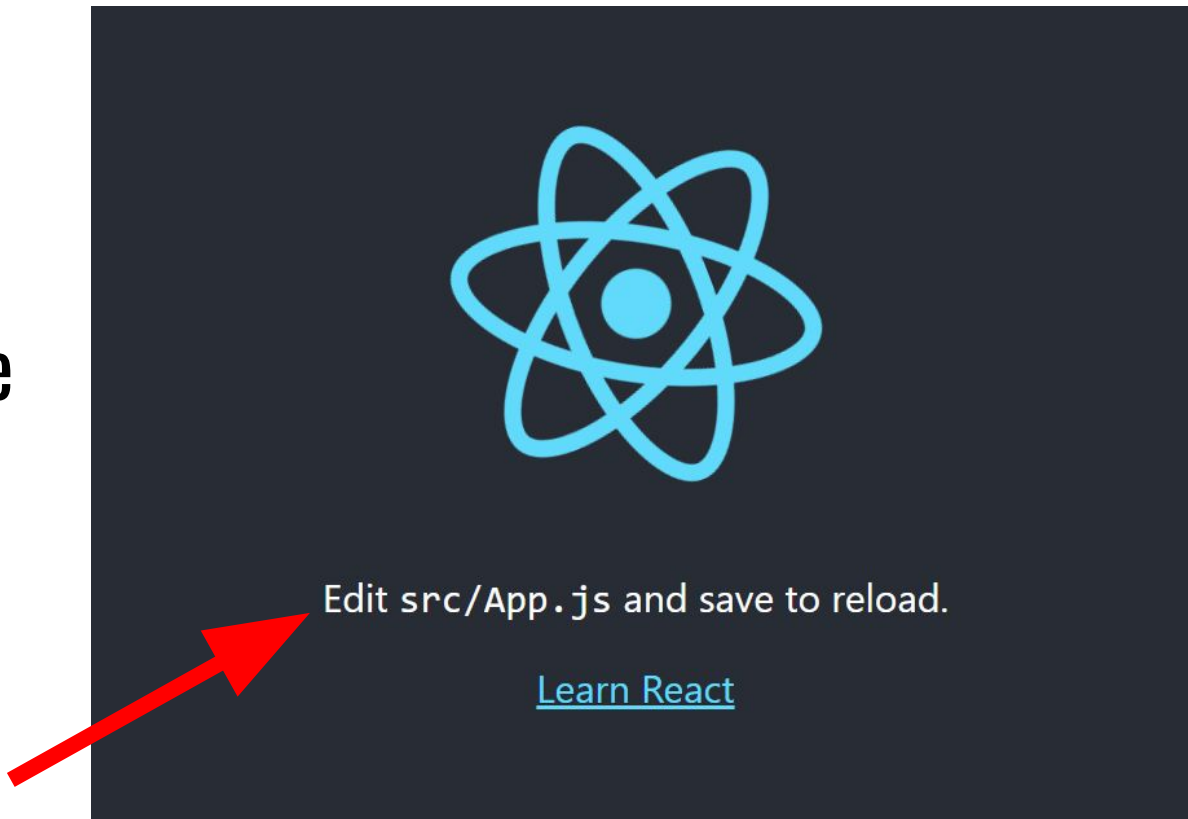
App.js is a function that returns the content we want to render in index.html. Note the highlighted content

App.js Content

This is the content
rendered by App.js

Note the highlighted
text in previous slide

We can edit the
content



Edit 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;
```

