

Lesson 02 Demo 01

Creating a React Application Using React Components

Objective: To create a React application with a class component to display a desired text

Tools required: Node terminal, React app, and Visual Studio Code

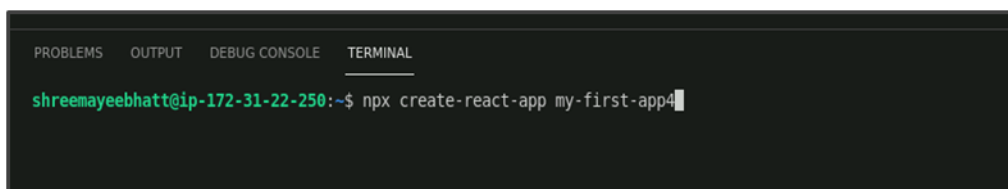
Prerequisites: Knowledge of creating a React app and understanding of the folder structure

Steps to be followed:

1. Create a new React app
2. Create a Class component
3. Render the component
4. Run the application

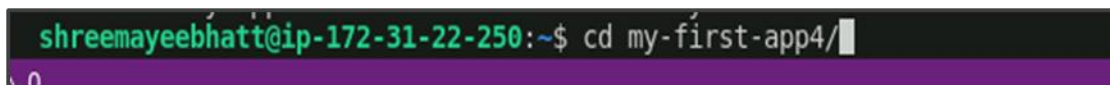
Step 1: Create a new React app

- 1.1 Open your terminal and execute the following command to create a new React app:
npx create-react-app my-first-app4



```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL
shreemayeebhatt@ip-172-31-22-250:~$ npx create-react-app my-first-app4
```

- 1.2 Move to the newly created directory by running the following command:
cd my-first-app4



```
shreemayeebhatt@ip-172-31-22-250:~$ cd my-first-app4/
```

Note: Open your project in Visual Studio Code

Step 2: Create a Class component

2.1 Open the **src/App.js** file and replace the existing code in **App.js** with the following code

```
import React from 'react';
class FirstApp extends React.Component {
  render() {
    return <h2>This is my first Assignment</h2>;
  }
}

export default FirstApp;
```

2.2 Define a class component named **FirstApp** with the help of the code, that extends the **React.Component** class

```
JS App.js  X
src > JS App.js > ...
1  import React from 'react';
2
3  class FirstApp extends React.Component {
4    render() {
5      return <h2>This is my first Assignment</h2>;
6    }
7  }
8
9  export default FirstApp;
10
```

Note: The above code has a **render** method that returns a JSX element **<h2>This is my first Assignment</h2>**

Step 3: Render the component

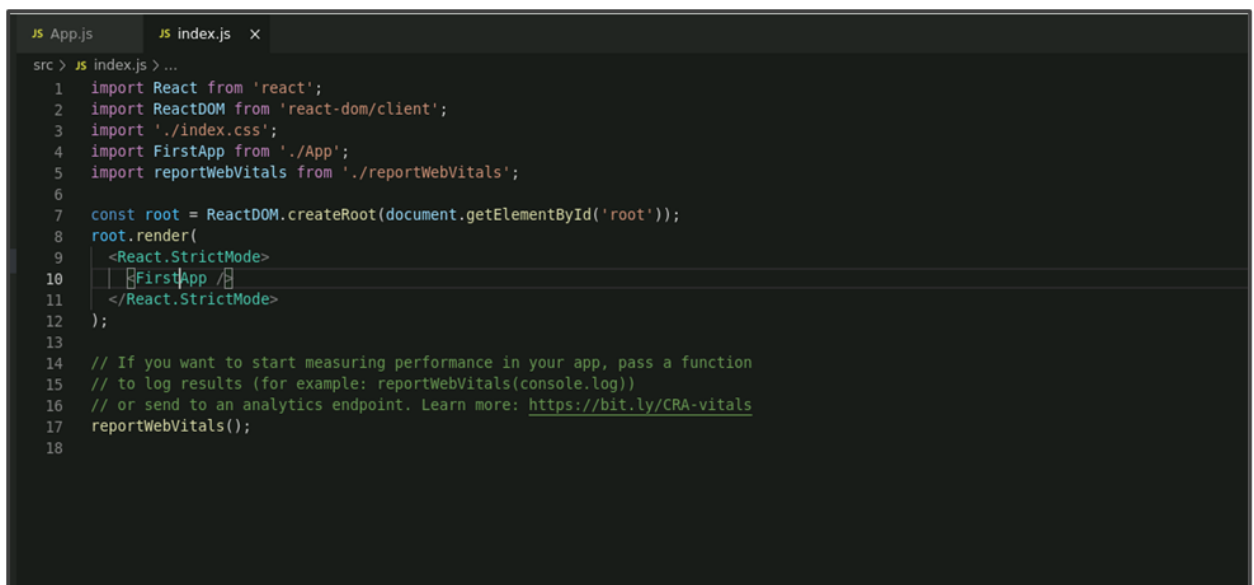
3.1 In `src/index.js`, import the **FirstApp** component:

```
import FirstApp from './App';
```

3.2 Inside the **ReactDOM.render** method, replace the second argument with the following code:

```
<FirstApp />:
```

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

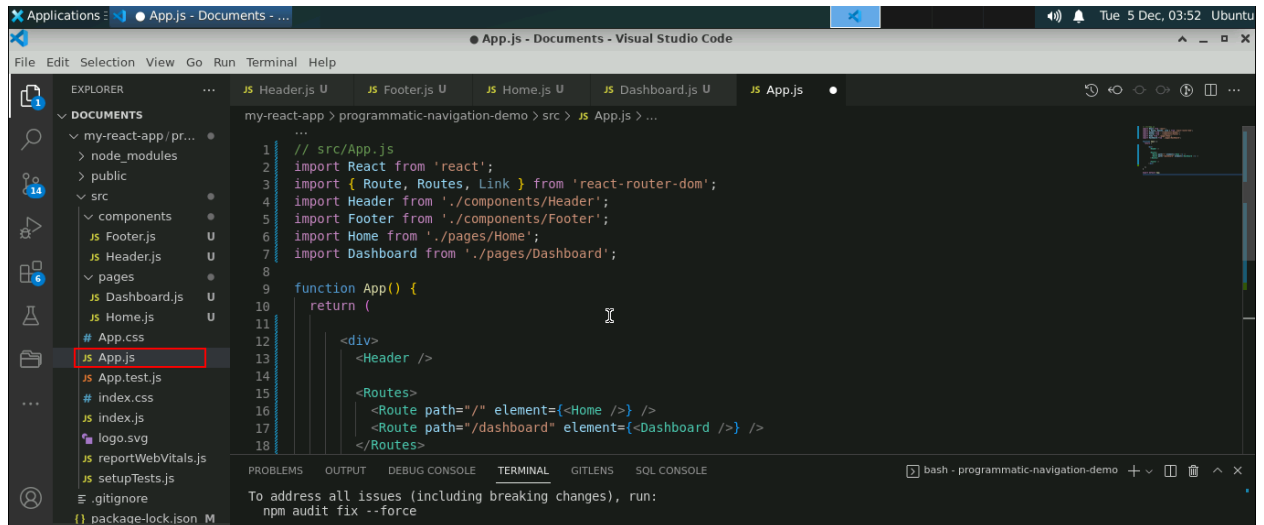


```
JS App.js JS index.js x  
src > JS index.js > ...  
1 import React from 'react';  
2 import ReactDOM from 'react-dom/client';  
3 import './index.css';  
4 import FirstApp from './App';  
5 import reportWebVitals from './reportWebVitals';  
6  
7 const root = ReactDOM.createRoot(document.getElementById('root'));  
8 root.render(  
9   <React.StrictMode>  
10     <FirstApp />  
11   </React.StrictMode>  
12 );  
13  
14 // If you want to start measuring performance in your app, pass a function  
15 // to log results (for example: reportWebVitals(console.log))  
16 // or send to an analytics endpoint. Learn more: https://bit.ly/CRA-vitals  
17 reportWebVitals();  
18
```

Step 4: Run the application

4.1 In the terminal, navigate to the project directory (**my-first-app4**) and execute the following command to start the development server and run the app:

npm start

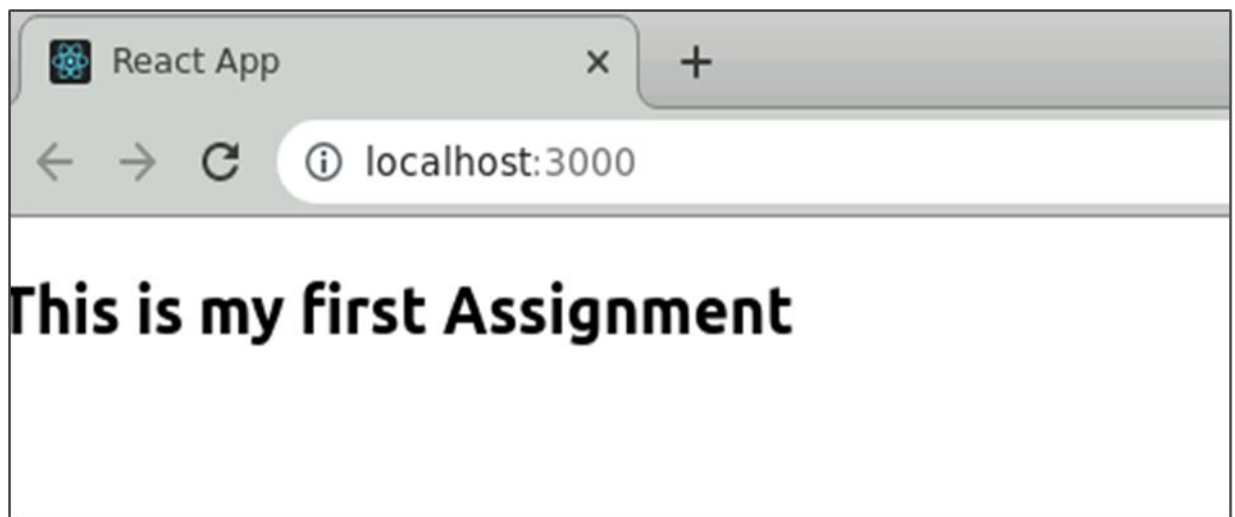


The screenshot shows the Visual Studio Code interface. The Explorer panel on the left displays the project structure for 'my-react-app'. The file 'App.js' is highlighted in the Explorer. The main editor area shows the content of 'App.js', which includes imports for React, React Router DOM, and various components, followed by a function 'App()' that returns a JSX element. The terminal at the bottom shows the command 'npm start' being executed.

```
1 // src/App.js
2 import React from 'react';
3 import { Route, Routes, Link } from 'react-router-dom';
4 import Header from './components/Header';
5 import Footer from './components/Footer';
6 import Home from './pages/Home';
7 import Dashboard from './pages/Dashboard';
8
9 function App() {
10   return (
11     <div>
12       <Header />
13       <Routes>
14         <Route path="/" element={<Home />} />
15         <Route path="/dashboard" element={<Dashboard />} />
16       </Routes>
17     </div>
18   );
19 }
```

4.2 Once the server starts successfully, open **http://localhost:3000** in your browser to view the app:





By following these steps, you have successfully created a React application with a class component to display the desired text.