

## Hands-on 2

### Objectives

- Explain React components
- Identify the differences between components and JavaScript functions
- Identify the types of components
- Explain class component
- Explain function component
- Define component constructor
- Define render() function

In this hands-on lab, you will learn how to:

- Create a class component
- Create multiple components
- Render a component

### Prerequisites

The following is required to complete this hands-on lab:

- Node.js
- NPM
- Visual Studio Code

### Notes

Estimated time to complete this lab: **30 minutes.**

Create a react app for Student Management Portal named StudentApp and create a component named Home which will display the Message “Welcome to the Home page of Student Management Portal”. Create another component named About and display the Message “Welcome to the About page of the Student Management Portal”. Create a third component named Contact and display the Message “Welcome to the Contact page of the Student Management Portal”. Call all the three components.

1. Create a React project named “StudentApp” type the following command in terminal of Visual studio:

```
C:>npx create-react-app StudentApp
```

2. Create a new folder under Src folder with the name “Components”. Add a new file named “Home.js”
3. Type the following code in Home.js

```
import React, {Component} from 'react';

import class Home extends Component{
  render(){
    <div>
      <h3> Welcome to the Home Page of Student Management Portal </h3>
    </div>
  }
}
```

4. Under Src folder add another file named “About.js”

5. Repeat the same steps for Creating “About” and “Contact” component by adding a new file as ”About.js”, “Contact.js” under “Src” folder and edit the code as mentioned for “Home” Component.
6. Edit the App.js to invoke the Home, About and Contact component as follows:

```
import logo from './logo.svg';
import './App.css';
import {Home} from './Components/Home';
import {About} from './Components/About';
import {Contact} from './Components/Contact';

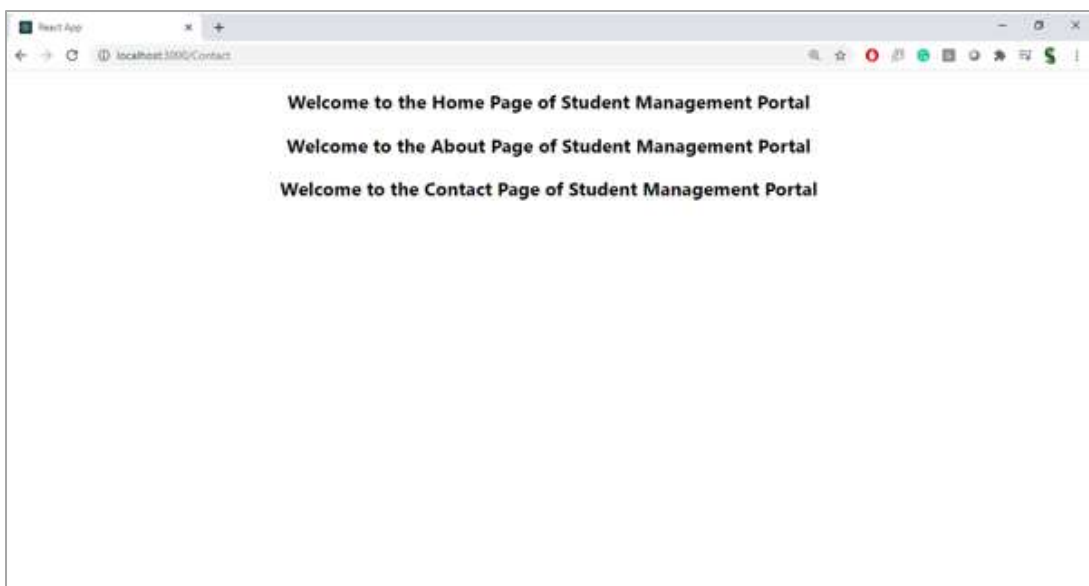
function App() {
  return (
    <div className="container">
      <Home/>
      <About/>
      <Contact/>
    </div>
  );
}

export default App;
```

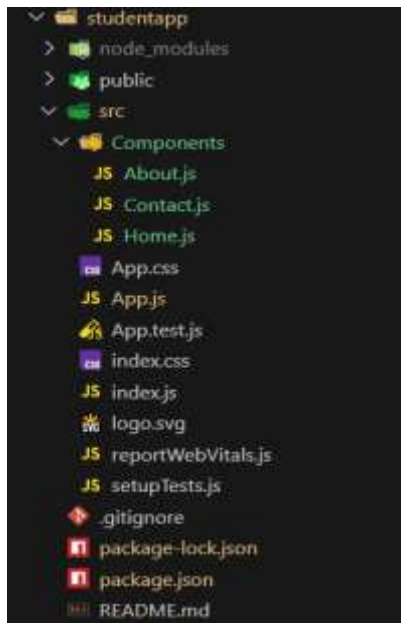
7. In command Prompt, navigate into StudentApp and execute the code by typing the following command:

```
C:\studentapp>npm start
```

8. Open browser and type “localhost:3000” in the address bar:



## Implementation



### App.js

```
import './App.css';
import Home from './Components/Home';
import About from './Components/About';
import Contact from './Components/Contact';
function App() {
  return (
    <div className="App">
      <Home />
      <About />
      <Contact />
    </div>
  );
}
export default App;
```

### Home.js

```
import React from 'react';
function Home() {
  return (
    <div>
      <h2>Welcome to the Home page of Student Management Portal</h2>
    </div>
  );
}

export default Home;
```

### About.js

```
import React from 'react';

function About() {
  return (
    <div>
      <h2>Welcome to the About page of the Student Management Portal</h2>
    </div>
  );
}

export default About;
```

### Contact.js

```
import React from 'react';

function Contact() {
  return (
    <div>
      <h2>Welcome to the Contact page of the Student Management Portal</h2>
    </div>
  );
}

export default Contact;
```

### Output

