**React Lab**

**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

**Hands-On Objectives**

• Create a class component  
• Create multiple components  
• Render a component

**Prerequisites**

• Node.js  
• NPM  
• Visual Studio Code

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

**Lab Instructions**

**Step 1: Create React App**

Open Visual Studio Code Terminal and run:

npx create-react-app StudentApp

**Step 2: Create Components Folder and Add Home.js**

Inside src folder, create a folder named **Components**  
Inside it, create a file named **Home.js**

**Home.js**

import React, { Component } from 'react';

class Home extends Component {

render() {

return <h1>Welcome to the Home page of Student Management Portal</h1>;

}

}

export default Home;

**Step 3: Create About.js and Contact.js**

Inside the same Components folder, create the following two files:

**About.js**

import React, { Component } from 'react';

class About extends Component {

render() {

return <h1>Welcome to the About page of the Student Management Portal</h1>;

}

}

export default About;

**Contact.js**

import React, { Component } from 'react';

class Contact extends Component {

render() {

return <h1>Welcome to the Contact page of the Student Management Portal</h1>;

}

}

export default Contact;

**Step 4: Edit App.js to Render the Components**

In src/App.js, replace the code with:

import React from 'react';

import Home from './Components/Home';

import About from './Components/About';

import Contact from './Components/Contact';

function App() {

return (

<div>

<Home />

<About />

<Contact />

</div>

);

}

export default App;

**Step 5: Run the Application**

In the terminal, navigate to the StudentApp directory and run:

npm start

**Step 6: View the Application**

Open your browser and go to:

http://localhost:3000

You should see the following messages:

* Welcome to the Home page of Student Management Portal
* Welcome to the About page of the Student Management Portal
* Welcome to the Contact page of the Student Management Portal

