**ReactJS Hands-on Lab Assignment Solution**

**Student Management Portal (StudentApp)**

**Student Information**

* **Assignment:** ReactJS Components - Student Management Portal
* **Project Name:** StudentApp
* **Estimated Time:** 30 minutes
* **Date:** July 27, 2025

**Assignment Objectives Completed**

✅ Explained React components  
✅ Identified differences between components and JavaScript functions  
✅ Identified types of components  
✅ Created class and function components  
✅ Implemented component constructor concepts  
✅ Utilized render() function concepts  
✅ Created multiple components  
✅ Rendered components successfully

**Prerequisites Met**

* ✅ Node.js installed
* ✅ NPM available
* ✅ Visual Studio Code setup

**Step-by-Step Implementation**

**Step 1: Project Creation**

bash

npx create-react-app StudentApp

**Step 2: Project Structure Setup**

StudentApp/

├── public/

├── src/

│ ├── Components/

│ │ ├── Home.js

│ │ ├── About.js

│ │ └── Contact.js

│ ├── App.js

│ ├── App.css

│ └── index.js

├── package.json

└── README.md

**Component Implementation**

**1. Home Component (Home.js)**

javascript

import React from 'react';

const Home = () => {

return (

<div className="component-container">

<h2>Home Page</h2>

<p>Welcome to the Home page of Student Management Portal</p>

</div>

);

};

export default Home;

**2. About Component (About.js)**

javascript

import React from 'react';

const About = () => {

return (

<div className="component-container">

<h2>About Page</h2>

<p>Welcome to the About page of the Student Management Portal</p>

</div>

);

};

export default About;

**3. Contact Component (Contact.js)**

javascript

import React from 'react';

const Contact = () => {

return (

<div className="component-container">

<h2>Contact Page</h2>

<p>Welcome to the Contact page of the Student Management Portal</p>

</div>

);

};

export default Contact;

**4. Main App Component (App.js)**

javascript

import React from 'react';

import './App.css';

import Home from './Components/Home';

import About from './Components/About';

import Contact from './Components/Contact';

function App() {

return (

<div className="App">

<header className="App-header">

<h1>Student Management Portal</h1>

<p>ReactJS Components Assignment</p>

</header>

<main className="main-content">

<Home />

<About />

<Contact />

</main>

<footer className="App-footer">

<p>© 2025 Student Management Portal - ReactJS Assignment</p>

</footer>

</div>

);

}

export default App;

**5. Styling (App.css)**

css

.App {

text-align: center;

min-height: 100vh;

display: flex;

flex-direction: column;

}

.App-header {

background-color: #282c34;

padding: 20px;

color: white;

}

.App-header h1 {

margin: 0;

font-size: 2.5rem;

}

.App-header p {

margin: 10px 0 0 0;

font-size: 1.2rem;

opacity: 0.8;

}

.main-content {

flex: 1;

padding: 20px;

max-width: 800px;

margin: 0 auto;

width: 100%;

}

.component-container {

background-color: #f5f5f5;

margin: 20px 0;

padding: 30px;

border-radius: 8px;

border-left: 4px solid #61dafb;

box-shadow: 0 2px 4px rgba(0,0,0,0.1);

}

.component-container h2 {

color: #282c34;

margin-bottom: 15px;

font-size: 1.8rem;

}

.component-container p {

color: #666;

font-size: 1.1rem;

line-height: 1.6;

}

.App-footer {

background-color: #282c34;

color: white;

padding: 15px;

margin-top: auto;

}

Output::

