

COMP 9783 Front-end Development

Lab-4-1 - React Lists Lab. (4% of the course mark)

Name:

Student Number:

In this lab, students will learn how to effectively use lists and keys in React to render collections of data.

Lab objectives:

1. Understand how to use the map function to render a list of items dynamically.
2. Learn the importance of using unique keys for list items to ensure efficient rendering and updating.

Create a react app:

On **VSCode**, open the **terminal** and type the following commands:

1. **create-react-app react-list-app** and **press enter**. This will create the files and folders required by React.
2. On the **src folder**, **delete** the following files:
 - a. App.css
 - b. App.test.js
 - c. index.css
 - d. logo.svg
 - e. reportWebVitals.js
 - f. setupTests.js
3. **Modify ./src/index.js** and **remove the following code** and **save the changes**:
 - a. `import './index.css';`
 - b. `import reportWebVitals from './reportWebVitals';`

- c. `// If you want to start measuring performance in your app, pass a function`
- d. `// to log results (for example: reportWebVitals(console.log))`
- e. `// or send to an analytics endpoint. Learn more: https://bit.ly/CRA-vitals`
- f. `reportWebVitals();`
- 4. **Modify `./public/index.html` and update the title html code and save the changes:**
 - a. `<title>react-list-app</title>`
- 5. Inside **src** create a folder named: **components**, we will use this to organize **function components**.
- 6. In class we have demonstrated how to use the following css frameworks:
 - a. Bulma
 - b. Bootstrap
 - c. Tailwind
 - d. Sakura
- 7. Feel free to **use any css framework to style your react app**.
- 8. **Implement a component that will display any list and based on the css framework of your choice, use an appropriate css component / element to implement the list.**
 - a. Ensure that **unique keys** are **assigned** to the **parent element that repeats**.
 - b. Ensure that there are **no errors** on the **browser console** when your **app is loaded**.
 - c. You can use the following apps as reference:
 - i. <https://github.com/roderickkit-bernardo/Full-Stack-Files/tree/main/Frontend-Development/Code/Basic-App/react-basic-app>
 - ii. <https://github.com/roderickkit-bernardo/Full-Stack-Files/tree/main/Frontend-Development/Code/React/react-list-app>

Submission:

- 1. Inside the root folder of the app, **delete the node_modules folder**.
- 2. Create a **zip file** of the **app**.
- 3. Submit the **zip file** to **GBC - D2L**.