

## COMP 9783 Front-end Development

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

Name:

Student Number:

In this lab, students will extend a React application with basic routing using React Router. They will learn to create multiple pages and navigate between them. Students will learn to create routes that can capture URL parameters and use them within components.

#### Lab objectives:

1. Install and configure React Router in a React application.
2. Create and define basic routes.
3. Use the Link component for navigation between routes.
4. Create dynamic routes with parameters.
5. Access and use route parameters in components.
6. Display dynamic content based on URL parameters.

#### Modify a react app:

1. Download this app from the Git repo:  
<https://github.com/roderickit-bernardo/Full-Stack-Files/blob/main/Frontend-Development/Zip/react-router-app.zip>
2. Extend the functionality by doing the following:
  - a. Create a new **functional component** named **Courses**.
  - b. Add a new **dynamic route** for the **Courses component**. The route will be in the form of: **/Courses/:courseId** where **courseId** represents a **course id**.

- c. On the **Courses component** create this declaration:

```
const courseConfig = [
  {
    courseId: "ENG101",
    title: "College English",
    description:
      "This course introduces students to the fundamentals of college-level writing and critical reading. Emphasis is placed on developing effective writing processes, including drafting, revising, and editing. Students will learn to construct well-organized essays with clear theses, coherent arguments, and appropriate use of evidence. Additionally, the course will cover analytical reading skills, focusing on interpreting and critically evaluating various literary genres, such as fiction, poetry, and drama. Through reading and writing assignments, students will explore themes and issues relevant to contemporary society and diverse cultural perspectives.",
  },
  {
    courseId: "MTH101",
    title: "College Math",
    description:
      "This course provides a comprehensive introduction to college-level algebra. It is designed to develop students' algebraic skills and understanding, preparing them for more advanced mathematical studies. Topics include functions and their properties, linear and quadratic equations, systems of equations, polynomial and rational functions, exponential and logarithmic functions, and an introduction to sequences and series. Emphasis is placed on problem-solving, mathematical reasoning, and real-world applications.",
  },
];
```

- d. On the **Courses component** get the **url param** passed from the route and compare from the courseConfig list. If the courseId passed from the url matches the courseId from the list then display all the attributes, otherwise navigate to the **NotFound** component.

**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**.