

## COMP 9783 Front-end Development

### Lab-3-1 - First React Lab. (1% of the course mark)

Name:

Student Number:

The First React Lab is an immersive hands-on workshop designed to introduce participants to the fundamentals of building dynamic web applications using React.js, a popular JavaScript library for building user interfaces. This lab provides an interactive learning environment where participants can gain practical experience working with React.js through a series of guided exercises and projects.

#### Lab objectives:

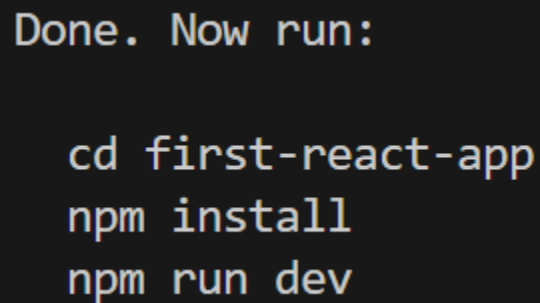
1. Understand the basics of React.js, including its component-based architecture and virtual DOM.
2. Learn how to set up a local development environment with Node.js and npm to build React applications.

#### Create a react app:

1. On **VSCode**, open the **terminal** and type **npm create vite@latest** and **press enter**.
2. Ensure that the following values are used:

```
✓ Project name: ... first-react-app
✓ Select a framework: » React
✓ Select a variant: » JavaScript
```

3. You should see something similar to the image below and execute the commands listed to build and run the app.



```
Done. Now run:

cd first-react-app
npm install
npm run dev
```

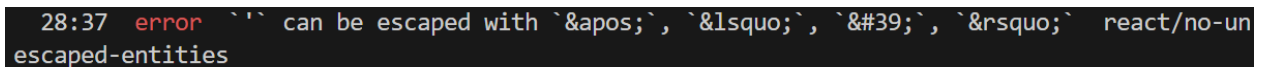
4. Open your browser to: <http://localhost:5173/> and take a screenshot of this and name it: **react-app.png**.
5. Edit App.jsx and update the code from:

```
Edit <code>src/App.jsx</code> and save to test HMR
```

6. Update it to:

```
<p>YourFirstname YourLastname's first react app.</p>
```

7. Update **YourFirstname YourLastname** to your **first** and **last names**.
8. Save the changes, the changes should reflect immediately on the browser, take a screenshot of this and name it **react-app-modified01.png**.
9. Open a new **terminal** window and type: **npm run lint** and press **enter**. This should result in an error and points out that the **'** character can be escaped.



```
28:37 error  `` can be escaped with `&apos;`, `&lsquo;`, `&#39;`, `&rsquo;`  react/no-unescaped-entities
```

10. Edit **App.jsx** and update the **'** character to **&apos;**.
11. Go back to the **terminal** and type: **npm run lint** and press **enter**. The changes you made on **step 10** should clear the previous error. Take a screenshot of this and name it **react-app-eslint.png**.

**Submission:**

1. Use the html template: **index.html** and **write HTML codes for each screenshot:**
  - a. Write a title and short description.
  - b. Display the screenshot.

***Note: Feel free to use any component from a CSS framework of your choice.***

2. Create a new folder named **html** and copy all the **HTML**, **CSS** and **PNG** files used in the previous step.
3. Create a **zip file** of the **html folder**.
4. Submit the **zip file** to **GBC - D2L**.