

COMPX322-23A:

Assignment Four

Due Date:

Friday June 9th, 5pm

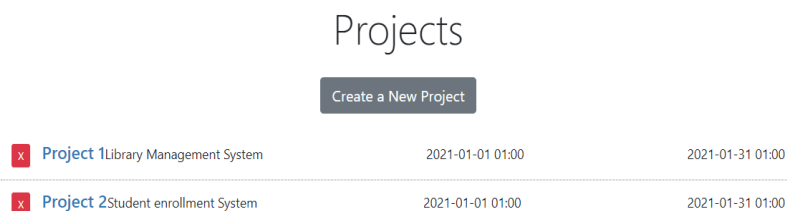
Libraries and Frameworks: Project Management Application



For this coursework you are required to build a project management application which allows users to manage their projects. You will use:

- React to build the front-end user interface.
- HTML
- Cascading Style Sheets (CSS)
- JavaScript
- Bootstrap for designing [Optional]
- jQuery [Optional]

Application Description

- This is a simple application for managing projects. Users can see all the available projects, add more projects, delete projects and sort projects.
- The application lists all the projects from a file as shown in the screenshot. Note: this is just an example. You have to write your own CSS to display the projects in an aesthetically pleasing manner.



Projects		
<button>Create a New Project</button>		
 Project 1	Library Management System	2021-01-01 01:00 2021-01-31 01:00
 Project 2	Student enrollment System	2021-01-01 01:00 2021-01-31 01:00

- User can also delete the project by clicking on the “X” button as shown in the above screenshot.
- When a user clicks on the “Create a New Project” button, a form should appear for adding a new project, as shown in the screenshot.
- The form consists of a text boxes for Project Name, Project ID, Project Description, Start Date, End Date and a Submit Button as shown in the screenshot below (Note: aspects of the design may vary depending upon the forms of interactivity you develop, based on your own creativity).

Create Project

Project Name

Project ID

Project Description

Start Date

dd/mm/yyyy

End Date

dd/mm/yyyy

Submit

- On clicking the submit button, a new project should appear in the list of projects displayed.
- The user can also search and sort the projects. Projects can be sorted in ascending or descending order by project name and start date.

Sort by: ▾

ProjectName

Start Date

Asc

Desc

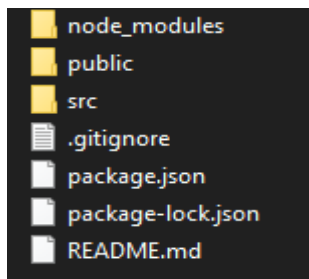
Implementation

Node.js and *npm* are installed on the R-block Linux lab machines.

Set up the project using '*Create React App*' in a terminal:

```
npx create-react-app react-assn4
```

You should see the following files and directories in your *react-assn4* folder.



Change directory to *react-assn4* in your terminal using the following command:

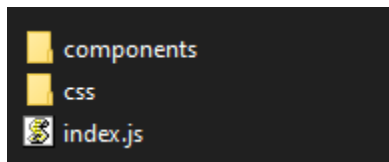
```
cd react-assn4
```

The most frequent command you'll be using is *npm start*. That's going to start a development server that will live preview as you code. You will also likely want to

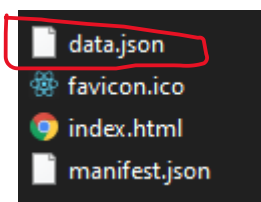
install some extra dependencies using *npm install* command. **Remember to include --save, so your *package.json* file is updated appropriately.**

You will also benefit from installing the React developer tools extension in your web browser, which gives you some additional abilities to inspect elements with respect to the React framework.

Directory structure is really important. You need to create a *components* folder and *css* folder inside the *src* folder. All your JavaScript files should be in the *components* folder and CSS files in the *css* folder.



In Moodle you have been provided with the *data.json* file which contains some sample examples of projects. Download this file from Moodle and copy it in the *public* folder of your application. Your *public* folder will contain the following files:



What to submit and how

All pertinent material you have developed for this assignment must be submitted electronically using Moodle. The submitted files must be sufficient to recreate your app by running *npm install* followed by *npm start*. **Do not include your *node_modules* directory, as this can run to hundreds of MBs, and is not needed to reconstitute your project using *npm install*.**

You may choose between submitting a ZIP file or a 'tar-ball' (.tar.gz). For the former, use the name *react-assn4.zip* and *react-assn4.tar.gz* for the latter. **Marks will be deducted for submitted assignments that do not meet these requirements.**

In the COMPX322 Moodle site, you will see an *Assignment 4* hyperlink to the submission page. This link allows you to upload your *tar.gz/zip* file. You can do this as many times as you want up to the submission deadline for the assignment.

When you submit a file, Moodle will ask you to confirm that what you have submitted is your own work, and will provide you with a 'receipt' that establishes that you have indeed submitted something. No other mechanism for submission will be accepted.

How your work will be assessed

The assignment will be marked out of 50 as follows:

Application meets minimum functional requirements, designing and coding for the components.	15 marks
Display list of projects	5 marks
Delete function to delete the project from the list	5 marks
Processing the form to add projects	10 marks
Sorting the projects in ascending or descending order by Project Name and Start Date	5 marks
Appropriate folder structure and code is clearly formatted and commented	5 marks
Lab Demonstration (mandatory)	5 marks

The deduction for incorrectly submitted files is capped at 2 marks.