CS545 WAA – Second Exam (Technical)

You need to develop a part of React project that will manage class Sections and maintain the class roster. Exam Demo: WAA-Mar25.mp4

Based on the project from the following repositories:
https://github.com/muhyidean/SecondExam-Backend-Mar-25.git

You must build a Single-Page-Application by using **React Router (V6).** You are free **to build as many components** you need, but here are some required components for this exam:

1. Section 2. Sections 3. SectionDetails 4. Student 5. Students 6.App

1. Section: This component will display two fields of the Section object. (*Id* and *Name).* It should have a button that is associated with a link to display the Section details.

Clicking on the `Section Details` button will route to the **SectionDetails** (separate page) component that displays all fields of the Section object.

2. Sections: This component renders **Section** components

3. SectionDetails: This component will be in a separate page. It will display full information about a Section (*Id, Name, Term, Academic Year,* and a Roster (**Students**)). It should also contain the following:

i. `Remove Selected`

- There should be a button labeled "Remove Selected" which removes all selected students.

- Each student in the roster should have a corresponding checkbox. Users can select multiple students by checking these boxes and remove at once.

- When the " Remove Selected" button is clicked, all selected students should be removed from the current section.

ii. `Select a student & Add`

This will be a dropdown field that will fetch all the students in the system and display them when the user clicks on the dropdown box. When you select one and click on the "Add" button, it will add that user to the class. This action will update the backend, refer to the endpoints. It should not duplicate students to the same section

iii. `Back` *-> This will navigate back to the displayed Sections page*

4. Student: This component will display two fields of the Student object. (*Id* and *Name).*
When the checkbox in the student is clicked, you can maintain the student id in some array or anything in memory to provide it when the "Remove Selected" button is clicked.

5. Students: This component renders **Student** components – (Roster)

6. App: This component contains the **PageRoutes** component.
Note: The default route ('/') should render the **Sections** component

BackEnd Endpoints

- **GET** request to '**localhost:8080/api/v1/sections**' returns all the Sections with their students.
- **GET** request to '**localhost:8080/api/v1/sections /{id}**' returns all information for one specific Section.
- **GET** request to '**localhost:8080/api/v1/sections /{id}/students**' returns all students for a specific section.

- **GET** request to ‘**localhost:8080/api/v1/students**’ returns all students.

- **DELETE** request to ‘**localhost:8080/api/v1/sections /{sectionId} / students / {studentsId}**’ removes the **studentId** from the section that has the **sectionId**.
  Example: DELETE : localhost:8080/api/v1/sections/611/students/113 → remove (student 113) from (section 611)

- **PUT** request to ‘**localhost:8080/api/v1/sections /{sectionId} / students / {studentsId}**’ adds the **studentId** to the section that has the **sectionId**.
  Example: PUT : localhost:8080/api/v1/sections/611/students/113 → add (student 113) to (section 611)

Help from your professor:

* When navigating from one component to another, you can pass data via the navigate call.

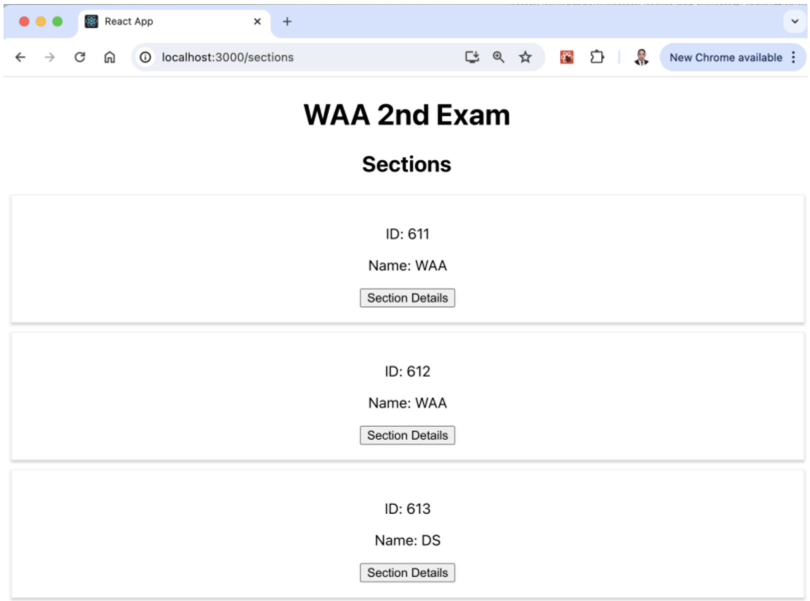
```
navigate("/example", {state:{id: params.id }})
```

Add you can retrieve the ‘id’ by adding this code in the other component.

```
const { state } = useLocation();
```

For more clarification, refer to the following screenshots. (You are NOT obliged to implement the same design!)

`localhost:3000/sections`



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Sections

ID: 611

Name: WAA

Section Details

ID: 612

Name: WAA

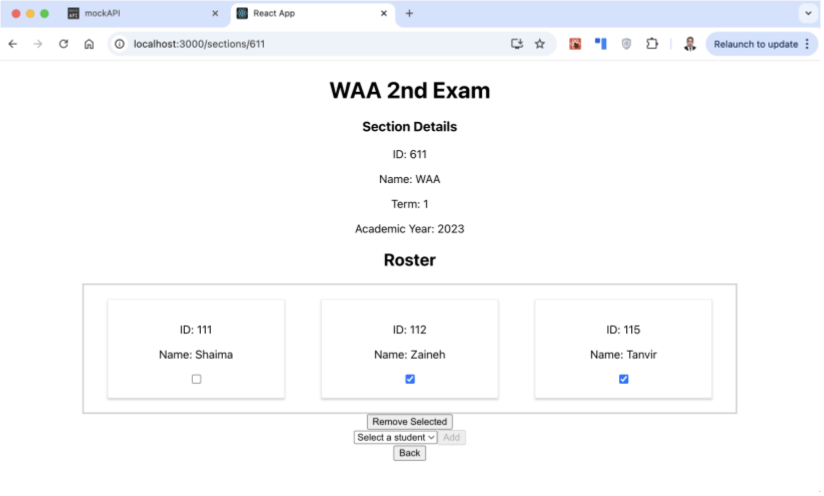
Section Details

ID: 613

Name: DS

Section Details

localhost:3000/sections/611



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Section Details

ID: 611

Name: WAA

Term: 1

Academic Year: 2023

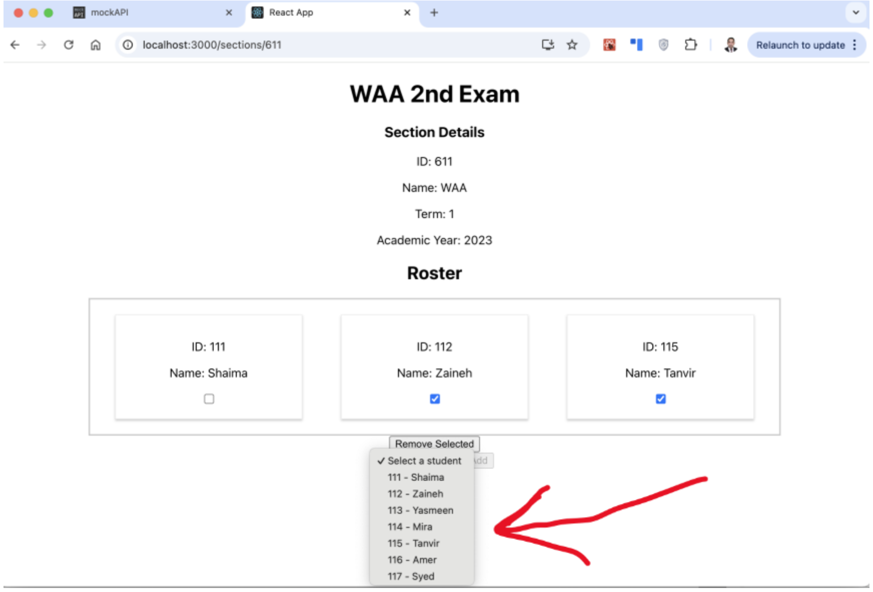
Roster

ID: 111
Name: Shaima
□

ID: 112
Name: Zaineh
☑

ID: 115
Name: Tanvir
☑

Example of showing all students



WAA 2nd Exam

Section Details

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Academic Year: 2023

Roster

ID: 111
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ID: 112
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