

# QUESTION

## FullStack

**Technologies:** ExpressJs, NodeJs, ReactJs, MySql, Git

Implement a web application with the following features.

### Classes

A class created should be able to add students.

Multiple students should be able to be added to a class.

While viewing a class record, we should be able to see the class information, total number of students that belong to that class and the list of students in the class.

Class records should be able to be updated.

Class records should be able to be deleted.

Please see the description below.

- View Classes
  - Name (e.g primary 1)
- Create Class
- Update Class
- Delete Class

### Students

A student created should be able to be added to a class.

Multiple courses should be able to be added to a student record.

While viewing a student record, we should be able to see the Student information, total number of courses enrolled for, the class the student belongs to and the list of all the courses the student takes.

Student records should be able to be updated.

Student records should be able to be deleted.

Please see the description below.

- View Students and show full details on click
  - Name
  - Age
  - Class
  - Courses the student takes.
- Create Students
  - Add Name

- Age.
- Class (only one class can be assigned from the available classes)
- Courses (Multiple Courses can be chosen from the Courses available)
- Update Students (All the informations added should be able to be updated)
- Delete Students

## **Courses**

A Course created should be able to add students to it.

Multiple students should be able to be added to a course.

While viewing a course record, we should be able to see the course information, total number of students enrolled, and the list of all the students enrolled.

Course records should be able to be updated.

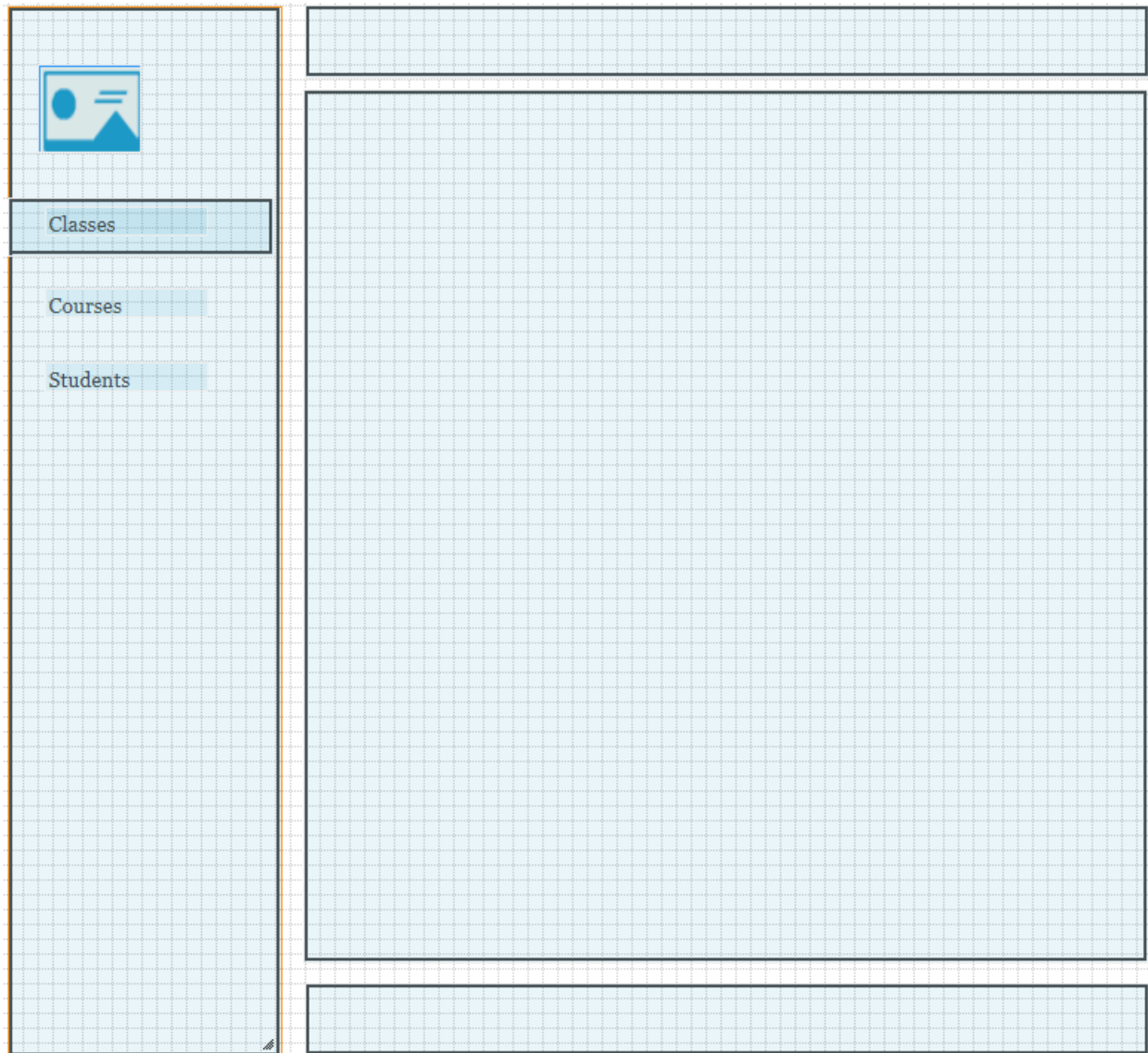
Course records should be able to be deleted.

Please see the description below.

- View Courses (Courses details should be shown in another page on Click)
  - Name
  - List of students taking the course
- Create Course
  - Name
  - Add Students to course
- Update Course (All the informations added should be able to be updated)
- Delete Course

Below is a skeletal mockup of the output expected

You are expected to have an appealing UI and not just make a replica of the exact skeletal



**Note:**

- Attention to details is very important.
- Writing unit tests for the backend would be an advantage.
- Not completing the test within the given time will not reduce your score, what matters is the architecture and your approach to the project.
- Your final work should be pushed to a repository on github and only the link is to be shared as a submission.
- No css library(e.g bootstrap, material UI) should be used . sass, less , emotionjs and styled components are exceptions and can be used.