**Commands**

For MUI

npm install @mui/material @emotion/react @emotion/styled

**For MUI-X data grid**

npm install @mui/x-data-grid

npm install @mui/material @emotion/react @emotion/styled

npm install @mui/icons-material

**For AGGrid**

**npm** **install** ag-grid-react

npm i bootstrap jquery popper.js

1. Dashboard
2. Class
   1. Manage class : it will add/map class and teacher
   2. Manage section : each class contains section, it will add or delete section in particular class
3. Subject

* Subject list: It will show class, section and its associated teacher.
* Add Subject: It will add various subjects and associated teacher to a particular class.

1. Class routine

* Class Routine list: it will show timetable of all the classes.
* Add Class Routine: here we can add routine to specific class

1. Parent

* It contains contacts of all parents

1. Student section
   1. Academic section
   2. Admit student: here we can add students details. It’s a form to add student details like name, parent name, class section dob gender, address, phone
   3. Admit bulk student
   4. Student information: it contains list of all students based on selection of a section.
   5. Student mark sheet: it contains the table which will show student name and option to download a mark sheet. Here we need to select class and it will show list of all student along with their mark sheet.
2. Teacher section: contains all details of teacher with info like name, age, contact, subject expert
3. Daily attendance: here we need to manage the attendance of each student based on class selection.
4. Exam section
   1. Exam section
   2. Exam list
   3. Exam grades
   4. Manage grades
5. Payment and invoice: here we will show table which contains the info of each student who has paid fees. Table shows student name, title(monthly fees or annual fees), total fees, paid fees, status (paid/unpaid), date, option
6. Account section
7. Library

**Modules list:**

**UI**

1. Admin Module
2. Dashboard
3. Creation Module
4. List Module
5. Public Search
6. Excel exporter

**Backend services/API/Module**

API List:

1. Getting all teachers, subject wise teachers
2. Getting students class wise, any student
3. Getting employee

**Entity details:**

1. **Class Details**: uniqueID, classUNID, studUNID, sectUNID, standard, year, status,
2. **SectionDetails**: uniqueID, sectionName, sectUNID
3. **StudentDetails**: uniqueID, studUNID, name, dob, city, age, contact

Class Details *onetomany* with students

Class Details *onetoone* with section

***One to Many Unidirectional***

* We can delete child entity of existed parent entity.

***One to One Unidirectional***

* we cannot delete child entity without reassigning another child entity to existed parent entity.

**Attendance Functionality**

1. Class attendance
   1. All class attendance
   2. Particular class attendance
2. Student Attendance
   1. Specific student attendance
   2. All Student attendance by class/year/section

* Upload attendance by excel
* Show table with fix and dynamic columns using react
* Implement pagination at both sides