Bookline

Bookline Backend Development Assignment

Problem Statement:
MySchool is a software solution for Private schools to maintain their records of students and teachers. The application provides them with features to create, read, update and delete records of students, teachers and other staff members. Along with that, It also provides features to add the score of each student in different subjects. You have been hired by the company to develop their Database Structure and APIs for various functionalities. For the scope of this assignment, you'll have to complete the following tasks:

- Create an API which stores the user ID and password, along with an expiry date for that password as 30 days from the date of creation. Passwords should be encrypted one way, i.e. they cannot be decrypted.
- Create an API to store Student details - ID, Name and Date of birth
- Create an API to store the details of a class.(***Find complete example for this at the end of the sheet)***
- Create an API to get the score of all students in a class for a particular subject. Ex. Given **subject=Physics** and **class=Class5**, then fetch all students who took physics and their marks in it

(***Create proper schema for Student's details and Class Details in MongoDB)***

Technology to use:
- Node.js and Express.js
- MongoDB
- Any method of encryption which you find suitable for the assignment

Sharing the Project:
- Once done with this activity, You can upload the source code to Github and share the link with us. Kindly ensure that the project is public, so that It can be accessed by us.

Example:

```
"Class5": {
        "Year":2020,
        "Class_teacher": "Mr. ABC",
        "Subject_list": ["Physics", "Maths", "Chemistry", "PT", "Computer", "English"],
        "Students": {
                "Roll1": {
                        "Student_id": "stu_1",
                        "Marks": {
                                "Physics": 55,
                                "Chemistry": 75
                        }
                },
                "Roll2": {
                        "Student_id": "stu_2",
                        "Marks": {
                                "Physics":75,
                                "Maths":90,
                                "PT": 55,
                                "Chemistry": 90
                        }
                }
        }
}
```

(*There is **no maximum cap** to the number of available subjects and roll numbers. Any student has to pick **at least 1** and a **maximum of 6** subjects from the list*)