# Problem statement

You are requested to create REST API for attendance management system. You should expose CRUD operations for Attendance and Student models (or tables). Also you should be able to log attendance for a particular student and return number of attendees on a particular day.

```
class Student{
        int student_id; //automatic unique sequence number (primary key)
        String name;
        String department;
}
```

```
class Attendance{
        int student_id; //user
        LocalDate attendance_date;
}
```

# The list of api operations required are,

| Api Path | Type | Description |
|---|---|---|
| /attendance/student/{id} | GET | Get student by id |
| /attendance/student/all | GET | Get all students from the table |
| /attendance/student/ {department}/all | GET | Get all students from the table by department |
| /attendance/student/{id} | PUT | Update student by id |
| /attendance/student/{id} | DELETE | Delete student by id |
| /attendance/student/ | POST | Create new student |
| /attendance/log/{student_id} | PUT | This operation should, <br> 1. select student from student table <br> 2. throw error message if student record does not exists <br> 3. throw error if an entry already exists with given student_id with current date as attendance date <br> 4. Else, Add an entry in Attendance table with the student_id and current date as attendance date |
| /attendance/log/count/{date} | GET | Number of students logged on the particular day |

**NOTE:**

1. You are required to use,
* Springboot

* Maven
* SpringREST
* Spring JPA
For this above application.

2. You can choose the same database which you have gone through during your tutorial. I believe it is mysql.

3. You are free to choose your own coding style and approach as long as it works

4. Below are the things which are good to have but you can ignore this if don't know what they are,
* Swagger for documentation
* Junit for unit test cases