

Problem statement

You are requested to create REST API for course enrollment system. You should expose CRUD operations for Course, Enrollment and Student models (or tables). Also you should be able to enroll a particular student for a course and return number of students enrolled for a particular course.

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

```
class Course{
    int course_id;
    String course_name;
}
```

```
class Enroll {
    int course_id;
    int student_id;
}
```

The list of api operations required are,

Api Path	Type	Description
/course/student/{id}	GET	Get student by id
/course/student/all	GET	Get all students from the table
/course/student/{id}	PUT	Update student by id
/course/student/{id}	DELETE	Delete student by id
/course/student/	POST	Create new student
/course/enroll/{student_id}/ {course_id}	PUT	This operation should, 1. select student from student table and course from course table 2. throw error message if student/course record does not exists 3. throw error if an entry already exists with given student_id, course_id in Enroll table 4. Else, Add an entry in Enroll table with the student_id and course_id
/course/enroll/count/ {course_id}	GET	Number of students enrolled on the particular course

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