

## Student Enrollment System - Backend Developer Task

Your task is to build a backend API that will allow enrollment of students into the system. The system should capture at least the following for each student:

- First name
- Last name
- Other names
- Gender
- Date of birth
- Department (A Department should have at least the following attributes: ID and name)
- Matric number - see item 3 for the format.

1. The API service should allow Adding, Updating, Retrieving & Deleting of students.
2. The service should provide an API for searching students using any of the following fields.  
First Name, Last Name, Other Name, Full Name (a combination of First Name, Last Name, and OtherNames), Gender(M or F), Department's Name, Created By, Created Date range i.e A date range in which a student is created, for example, 2020-02-01 12:00:00 to 2020-03-01 23:00:00.
3. The service should generate a matriculation number at the point of creating a student using the following format: ***FLEXISAF/serial-number*** where the serial number is a unique number to be allocated on a first come first serve basis. For example, the first student to be created will have a serial number of 001, the next student will have 002. So the matric number will be FLEXISAF/001, FLEXISAF/002 respectively.
4. The service should ensure that a student must be at least 18 years and not older than 25

5. The service should send a Happy Birthday message to students on their birthdays.

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**Notes:**

- Feel free to use any Java Framework to build the service.
- Make your application **Production-Ready**. (That is:
  - It compiles / runs
  - Has decent unit test coverage for all business logic code and integration test where necessary
  - Its design was well thought out
  - It's stable
  - It's maintainable
  - It's scalable
  - It's documented)

Finally, push the code to a private repository (E.g Github, Bitbucket, or Gitlab) and share the link with us.

**Happy coding!!!**