

Tạo một project dạng sau:

Tên Project: <MASV>\_Lab03

Nén bài làm lại với tên: submit.zip

Sau đó submit bài làm (submit.zip) vào mục **Assignment/Lab03** trên EduNext.

**Lưu ý các yêu cầu (tham khảo tiêu chí đánh giá các bài lab/assignment):**

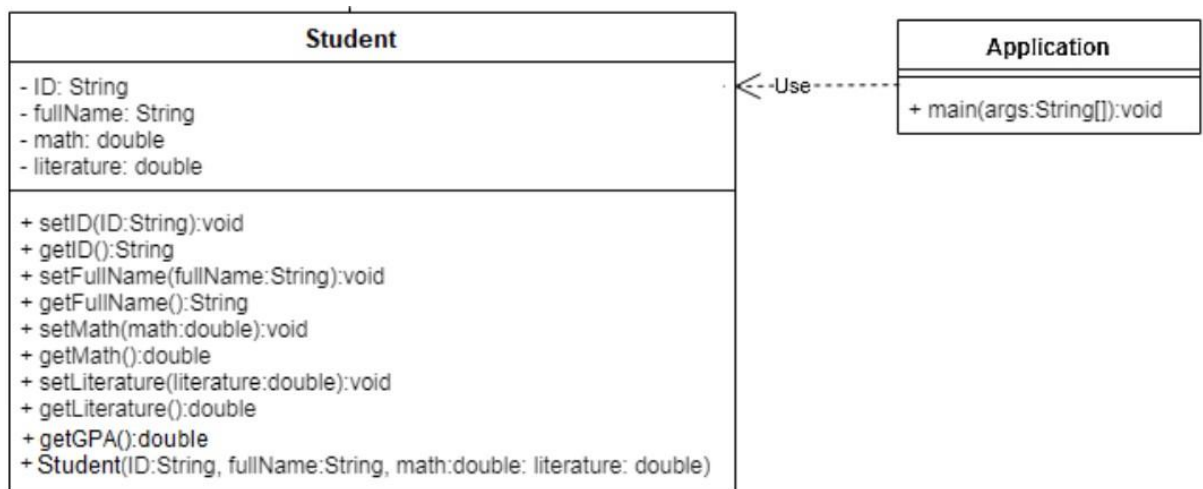
- Comment giải thuật đầy đủ,
- Format code,
- Thông tin phần author,
- .jar file,
- Output format.

**Deadline: 30/09/2024, 23:59**

### Technical Requirements:

1. Using Object-Oriented programming style.
2. Using ArrayList to store data

**Create 2 classes as below: (3.5 marks)**



Write a student management program with the following functions:

Create menu for this program as below (0.5 marks):

----- STUDENT MANAGEMENT V1.0 -----

1. Adds new student.
2. Shows all students.
3. Quit.

Please select a function:

**Function 1. (2 marks)** When user selected the first function, the application will receive student information and append this student into a list.

Student information is entered as a string in the following format:

ID@Name@MathScore@LiteratureScore

example:

```
----STUDENT MANAGEMENT V1.0 [ADD NEW STUDENT]----
```

```
Please enter Student Infomation: 00001@Nguyen Thi Tu Anh@8@7
```

```
-->Student created and added to list of student successful!
```

**Note: Your program must validate the inputs:**

- The input string cannot be empty. If empty, re-enter input.
- The Student ID must be of the length of 5 characters. If not, re-enter input.
- The marks are not negatives. If invalid, re-enter input.

```
----STUDENT MANAGEMENT V1.0 [ADD NEW STUDENT]----
```

```
Please enter Student Infomation:
```

```
-->You must enter data!
```

```
----STUDENT MANAGEMENT V1.0 [ADD NEW STUDENT]----
```

```
Please enter Student Infomation: 00001@Nguyen Thi Tu Anh@8@7
```

```
-->Student created and added to list of student successful!
```

**Function 2. (3 marks)** When user selected the second function, the list of students will be shown:

```

----- STUDENT MANAGEMENT V1.0 [List of student] -----
| No. | ID   | Student name       | Math | Lit | GPA |
+-----+-----+-----+-----+-----+-----+
|  1  | 00001 | Nguyen Thi Tu Anh  | 8.0  | 7.0 | 7.5 |
+-----+-----+-----+-----+-----+-----+
|  2  | 00002 | Pham Van Cuong     | 2.0  | 5.0 | 3.5 |
+-----+-----+-----+-----+-----+-----+
|  3  | 00003 | Tranh Van Hung     | 8.0  | 5.0 | 6.5 |
+-----+-----+-----+-----+-----+-----+
|  4  | 00004 | Huynh Thanh Tu     | 6.0  | 8.0 | 7.0 |
+-----+-----+-----+-----+-----+-----+
|  5  | 00005 | Dang Van Lam        | 8.5  | 6.5 | 7.5 |
+-----+-----+-----+-----+-----+-----+
The best student of this class is/are:
1. Nguyen Thi Tu Anh (GPA: 7.5)
2. Dang Van Lam (GPA: 7.5)

```

**Function 3. (0.5 mark)** When user selected the last function, the application will be stopped and shown some message as below:

THANK FOR USING OUR APPLICATION!

SEE YOU AGAIN!

**Function 4. (0.5 mark)** When user selected invalid function, the application will be shown the warning message “The function of application must be from 1 to 3!”

--- THE END ---