

## Java Basics Module Final Exercise

I want to make a system to track my university classes, teachers and students. Each Teacher has a name, and a salary calculated by the following rules:

- For the full time teachers: base salary (attribute) multiplied by 110% of its experience years.
- For part time teachers: base salary multiplied for its active hours per week.

The university includes a list of teachers, a list of students and a list of classes. Each class has a name, an assigned classroom, a list of students and a teacher. Every student has his name, id, and age.

### ***The program should:***

1. Initialize minimum 2 different teachers of each type (full time, part time).
2. Initialize minimum 6 different students
3. Initialize minimum 4 different classes including its teacher , students and other relevant data
4. Print a menú including the following options:
  - a. Print all the professors with its data
  - b. Print all the classes and a submenu to select a class in order to print the class data including its teacher and students
  - c. Create a new student and add it to an existing class
  - d. Create a new class and add an existing teacher, existing students and its relevant data
  - e. List all the classes in which a given student is included (hint: search by id)
  - f. Exit

### **Rules:**

- The project must be uploaded to a new public github repository, which should be public. The repository should include appropriate use of .gitignore, more than one branch, and multiple commits.
- The project repository link must be sent to the Java mentors (Silvana, Esteban) before the due date. The link must be specified on the following document: [Final Project Repo](#) The project is due on Monday May 21, 11:59PM.
- The project should include at least:
  - Design Diagram (Any format you want, UML recommended, may be any standard format, even a cellphone photo)
  - Access modifiers
  - Encapsulation
  - Inheritance
  - Polymorphism
  - Constructors
  - Static attributes/methods
  - Main class
  - Packages and layers with proper naming
  - Reading and printing (it's not necessary to do it from console, should not be on the data model)