

Project: University management

We want to manage a university. For this, we have the following information:

- The university is structured into departments, each of which brings together specific teachers. Among these teachers, one of them is responsible for the department.
- A teacher is defined by his surname, first name, phone, email, date of taking office and his index.
- Each teacher teaches **only one** subject.
- Students take several subjects and receive a mark for each one.
- For each student, we want to manage his surname, first name, phone, email, as well as his year of entry to university.
- Each student has to pay the fees.
- A subject can be taught by several teachers but always takes place in the same classroom.
- Each classroom has a determined number of places.
- An amphitheater is a classroom where we can organize seminars, conferences and events.
- Each student and teacher can search, lend or return books from the library, they should pay the fine in case of exceeding the deadlines to return a book.

- We want to be able to calculate the average by subject as well as by department
 - We also want to calculate the general average of a student and be able to display the subjects in which he has not been marked
 - We must be able to display the information of Staff , Teachers or Students.
 - There is a canteen in the university where students and teachers can display the different dishes and the menu of the day.
 - To simplify the task, we will limit the diagram to a single year of study.
1. Implement the different entities using Java.