

LAB 2

INTRODUCTION

The aim of this lab is to implement part of the University management application that we designed in Seminar 2.

We have different types of classes, for example:

- Enrollment, Assignment and Lecture are association classes whose purpose is to store data that is generated as part of a relation between two other classes.
- Student, Teacher, Classroom, Course, are classes that belong to the main class, University.
- The University class is the access point to the application and contains lists of the different types of entities at the university.

- Assignment class

```
public class Assignment
{
    //atributes
    private LinkedList<String> groups;
    private Teacher teacher;
    private Course course;
```

For the assignment class we have defined the attributes (private).

In the constructors of this class we have established the groups (with linked lists), the teacher, the course and the name of the course.

- Classroom class

```
public class Classroom
{
    private String code;
    private LinkedList<Lecture> lecture;
```

For this class we have set the code, we add the lecture and we return the code on a string.

- Course class

```
public class Course
{
    private String name;
    private LinkedList<Enrollment> enrollment;
    private LinkedList<Assignment> assignment;
    private LinkedList<Lecture> lecture;
```

For this class we have set the name of the course and we have returned it. The we have created the linked lists for the attributes (enrollment, assignment and lecture) and we have added them.

- Enrollment class

In this class we have established the seminar group, the student and the course.

- Lecture class

```
public class Lecture
{
    private String group;
    private int timeSlot;
    private int type;
    private Classroom classroom;
    private Course course;
}
```

We have used this class to set up the groups, the timeslot, the type, the classroom and the course of each lecture.

- Student class

```
public class Student
{
    private String name;
    private int nia;
    private LinkedList<Enrollment> enrollment;
}
```

- Teacher class

```
public class Teacher
{
    //atributes
    private String name;
    private LinkedList<Assignment> assignment;
}
```

- Test class

It is necessary to run the code.

- University class

This one is the main class that links everything to make it work.

CONCLUSION

To conclude, all the test of the practice, works well, the worst part of the lab, was understand the relations between classes, and the part of the xml's files, but once we have understood correctly these two things, we could manage the practice. The classes works well, the test worked well, we think that we have done a good practice.