Lab Exercise - Friday September 10

Using the Backend for the Course Registration System (15 Marks)

Due Thursday September 16ᵗʰ before 11:59 PM

In this exercise you are asked to develop the front end for the Course Registration System that we have been working on during class. Your tasks are as follows:

Task 1 – Complete the back end such that it complies with the requirements/restrictions mentioned in the requirements from the slides:

- Student are supposed to be able to select their courses from course-catalogue and register for maximum 6 courses.
- Each course, maybe offered in 1 or more sections (offerings), must have a minimum of 8 students to run, and may have one or more prerequisite.

Task 2 - Implement a console-based menu to properly call the methods form the backend. The program should keep on running (i.e. should keep presenting the user with the menu) until the user quits.

To keep things simple, you can create few objects of types Course, Student, and Course Offering in main. (i.e. simulate having a file or database). Your menu should contain the following items:

1. Search catalogue courses
2. Add course to student courses
3. Remove course from student courses
4. View All courses in catalogue
5. View all courses taken by student
6. Quit

Important note 1: Your fronted implementation must only take place in the main method of class FrontEnd. You must NOT implement any of the functionality of the above menu in your frontend. i.e. Your frontend must only be used to call methods from the backend.

Important note 2: You must implement any missing functionality in your backend. For example, you must add code to implement remove course.

Javadoc is not required for this exercise.