

COMP 3111: Introduction to Software Engineering

A sample UML question

Objective

Draw UML diagrams based on the following problem description.

Problem description

The requirements of Simplified Student Information System (SIS):

For simplicity, constraints such as time conflicts, lectures/labs/tutorials, class quota and among other factors are not considered

At the beginning of each term, students may request a course catalogue containing a list of course offerings from SIS.

In each course, information such as course code, name of professor(s), course credits, offering department and pre-requisite(s) are included to help students plan for their study. However, some courses may not be offered in that term.

Each course offered must be taught by at least one professor and will only be offered by one department. No course offering will have more than 500 students or fewer than 10 students.

Students can login to the system using their own username and password. Students are allowed to add or drop courses during the add-drop period. Professors must be able to access the system to indicate which courses they will be teaching, and to see which students signed up for their course offerings.

Based on the above problem description, complete the following tasks:

Task 1: Draw a UML class diagram

Task 2: Draw a UML use-case diagram

Task 3: How should we change the diagram(s) to add the following extra requirements?

Staff members are hired to assist course registration. They are ineligible to teach any course. However, they can access the system and help students add or drop courses during the add-drop period. In addition, they have been granted a special privilege to change the course details offered in each term.