

Tutorial 02: CO 328

Group work: 3 students

Deadline: 13th March 2020

Note: When producing project documentation, use case diagrams are rarely used on their own. They will generally be accompanied by a textual use case and if they're complex, may also have a supporting activity diagram to show what's going on "inside" the use case.

Question 1

The following should be textually analysed and a use case diagram created containing several use cases. Identify the actors, use cases and associations.

At the start of each semester a student can request a prospectus containing a course list. Information about a course is provided, such as the tutor, department and pre-requisites. The new system will allow students to create a schedule, then select four courses. Each student chooses two others in case their first choices become full or are cancelled. No course can have more than 10 students. No course can have less than 3 students or it will be cancelled. This will be the same functionality as available to other internal users of the system. When registration is complete, the registration system sends a message to the billing system to send out a bill to the student. Tutors use the system to find which classes they are teaching and who the students are. The registrar will administer the system. For a period at the beginning of the semester the student can change their schedule. Students must be allowed to access the system during this time to add or delete courses.

Note: Apart from use-case diagrams, we can also use "fully specified use case" descriptions to model the requirements of the system. Refer the document "How to use use cases" (Exercise 3).

Question 2

Refer the Exercise 3 of the document "How to use use cases". There the use case "Register for a course" is fully specified. Now draw the activity diagram for the fully specified use case of Exercise 3 of the document "How to use use cases".

Question 3

Explain Functional And Non Functional Requirements?