

Tutorial 02

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

Actors

- Tutor
- Student
- Registrar
- Billing System

Use cases

Tutor

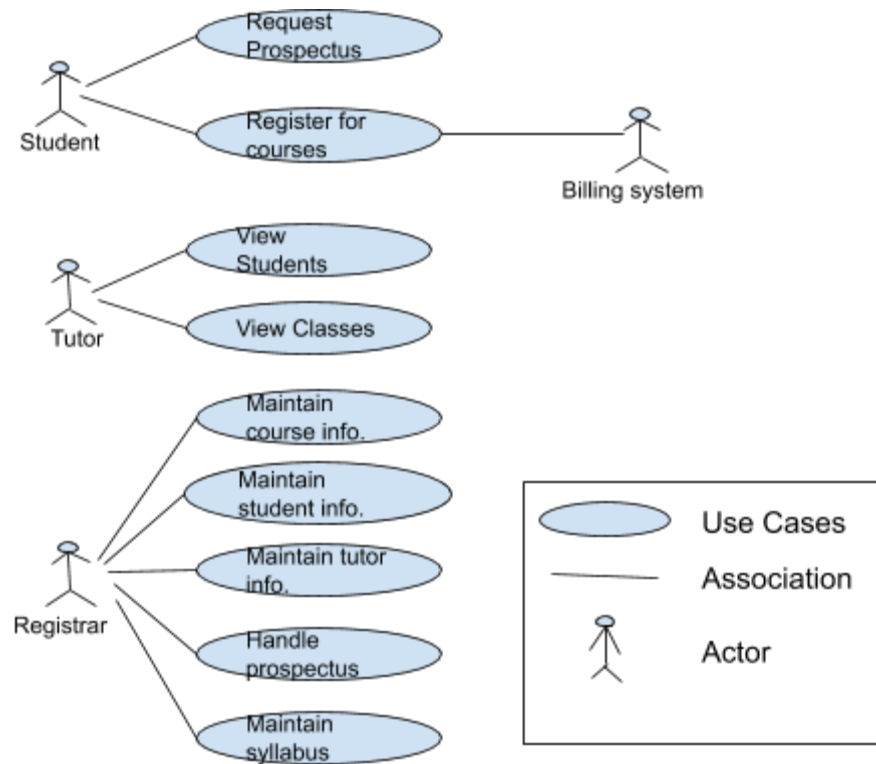
- View students
- View classes

Student

- Request prospectus
- Register for courses

Registrar

- Maintain student information
- Maintain tutor information
- Handle prospectus
- Maintain course information
- Maintain syllabus



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”.

3. Explain Functional And Nonfunctional Requirements?

Functional requirements are product features or functions that developers must implement to enable users to accomplish their tasks. They describe system behavior under specific conditions. Depend on the type of software, expected users and the type of system where the software is used. Functional system requirements should describe the system services in detail.

Non-functional requirements define system properties and constraints. For example reliability, response time and storage requirements. This type of requirements is also known as the system's quality attributes. These requirements may be more critical than functional requirements. Because if these are not met, the system may be useless. A single non-functional requirement may generate a number of related functional requirements. These requirements may affect the overall architecture of a system rather than individual components. For example, to ensure that performance requirements are met, you may have to organize the system to minimize communication between components.