SENG 300 W2020 – Introduction to Software Engineering
Assignment #1

Due Date: Friday, February 07, 11:30 pm

Overview:

This assignment focuses on identifying, eliciting and modeling the requirements for a given system description in a specific context, in order to explain these to another person and to demonstrate that you have understood them.

System Description:

Emerging university is a newly established university situated in sub-urban area of Edmonton. The computer science department at Alpha University is highly interested in adopting the latest technologies and wants to develop a web-base Student Information System for course management. The portal shall provide facility to department head so that he/she can add/edit new sessions, sections and courses. Each course is taught by two people; Instructor who can add/edit the course plan and TA that should upload the material. TA cannot change the course plan. Department head should add and assign instructors to courses; one course should have only one lead instructor. Every course must have an instructor. Instructor should define weekly course plan; each weekly plan should contain lecture notes, helping material and assignments that student can view/download. Department head also wants an easy and attractive interface. A Student registers himself to the courses and can view/download the material. Students should also be able to submit the assignments through the system. TAs evaluate the assignments. Students can review their assignments and then resubmit if require. Students should also view their assignment marks. Students should not be allowed to see each other assignments for security and privacy reason. System should provide backup and security plan.

Note:

You can make your own valid assumptions to clarify the requirements, if necessary. However, you should mention those assumptions in your submission document.

Submission:

You are required to submit your solution as a single PDF document in D2L DropBox folder before the due date/time and a cover page with your name, student number and tutorial number. Your solution PDF file should contain the following:

1. Functional and Non-Functional Requirements
2. Use case diagram (or model)
3. Descriptions of any FIVE use cases
    a. Identify any write the description of any FIVE use cases

Grading:

The grade would be assign as follows:

- Functional and non-function requirements (3.5 marks)
- Use case model (4 marks)
- Use case description (2.5 marks)

Following considerations will be kept in mind while we assign you grade:

- Do you understand and model the requirements, and the differences between requirements and design/implementation?
- Can we understand what you are telling us from the specification?
- Have you struck a reasonable balance between abstraction and detail, in order to achieve the goal?
- The quality of your work.
    - For example, use of a tool to create use case diagram instead of making it by hand on paper or in MS Word.

Individual Work:

All assignments in this course are individual work. Individual Assignments are to be performed strictly individually. The point is to demonstrate that you have acquired the individual skills. Questions can be asked on the D2L Discussion Forum. Students may not discuss details of their solutions, nor share details of their solutions. Students are required to specify all sources of information that they use, whether verbal, written, or online. In any case of uncertainty, students must discuss the details with the course instructor prior to utilizing the source of information. Students are also advised to read the guidelines for avoiding plagiarism mentioned in the course outline and university website.

Failure to follow these rules may result in charges of academic misconduct, leading to an F on the assignment, an F in the course, suspension, or even expulsion. Academic misconduct is a serious offence, so the consequences are also serious.

Late Penalty:

Late submissions will not be accepted.