**SYSTEM ANALYSIS & DESIGN**

**CST 2234-300**

**FINAL EXAM**

**GROUP EXAM - WINTER 2020 SEMESTER**

**Date: April 16, 2020 (Start Time: 3:30 PM)**

**Submission Due: April 20 till 3:30 PM**

**General Instructions:**

* This is going to be a group exam (same group members as in assignments & project).
* It is up to the team members that how they plan to divide the task among members.
* Each question will be evaluated out of 15 marks. Total marks of this final exam is 30.
* In body references and the citations are also required if you get information from different sources.
* Team members are allowed to contact each other and take assistance from different reliable and verifiable academic resources.
* One final word file/document will be uploaded by the Group/Team leader including the ‘**Participation Index Form**’.
* Your response should be able to answer the question(s). Size of answer does not matter but quality and the logical solution matters.
* Overall weightage of this exam is 30%. It is a big weightage, so please write the quality contents.
* The exam can be uploaded by the team/group leader exactly the way team leader upload assignments. There will be a folder with the name ‘Upload Final Exam’. The complete path is 20W CST2234-300->Activities-> Assignments-> Upload Final Exam.
* **Sunday April 19** is being given to the students as a relaxing day if they feel too much stress on brain. This one day can be taken off by all the teams and group members. This is why, one day has been added in due date ;)

**Specific Instructions: (read carefully)**

- There are two parts of this exam; PART A and PART B  
- Please do not forget to add **‘Participation Index Form’** with proper index/participation value

by the team leader in the same final exam solution file. You can also add comments if required.

-All of you are highly experienced in Analyzing and Designing the IT based systems, so the

solution of this exam will be based on your skills learned during the whole semester.

- Group members within a team are strongly recommended to discuss, plan and communicate

through online meetings.

**PART A**

You have all been through the registration process at Algonquin College, either to register in a Program of Studies (e.g. Computer Programmer) and to change your registration from one course to another course (e.g. To change from Video Games course to the Business Programming course) and to drop a course which is not related to your interest.

Your team must draft the following diagrams (with accompanying brief narratives explaining the purpose of each of the diagrams) covering the registration process.

The following diagrams are required:

1. **Use Case Diagram(s)** including sub-Use Cases if you feel logical.   
 2. **Class Diagram;** (make it by keeping in view objects of classes in Sequence Diagram(s)  
 3. **Detailed Sequence Diagram** with time/duration bar. For the Sequence Diagram

concentrate on the Business Domain Classes (processes) and also one of the Boundary

Class.

**PART B**

In most organizations, since the development of new system(s) is project based and therefore have a defined time period for completion, therefore, contracted staff members are hired to develop the system. Once the new system is developed, the contracted development staff are released. At that time, typically either programming staff or other skilled employees take over the system to maintain and support the system during its productive life span. Contracted staff may also be hired to provide maintenance and support if required. Consider that the skills involved in the development and production of a system may differ from maintaining a system.  
  
Your team should discuss in detail the following aspects that would:

1)  Ensure a smooth transition from the development team to the maintenance team. What factors

should be considered and how to make this transition smooth and unquestionable.

2)  What are the risk factors which may affect or create hurdles during this transition.

3)  What form(s) of testing should be done during the development phase to ensure successful

maintainability.

Cheers and Good Luck ;)