

**COMP 3700**  
**Homework 4**  
**Due: Wednesday, February 20, 2013 by 5:00PM**  
**(Please submit using Canvas)**

This assignment is worth 100 points. Homework assignments are **INDIVIDUAL** assignments.

Each student is now assigned to a group project. Your task is to initiate the inception process and start exploring the **functional** requirements of your project by delivering the following. Visio, ArgoUML, or your choice of UML tool **should** be used to illustrate the use-case and class diagrams. Please submit your online copy as a single WORD or PDF file by embedding UML models into the file as pictures (e.g., JPEG, GIF, TIFF, PNG).

- 1- (25 pts) A one-page concept statement along with a conceptual domain model in terms of a UML class diagram that records the classes (problem domain concepts), relevant attributes, and associations.
- 2- (25 pts) A UML use-case diagram that depicts the boundary, actors, and 5 use cases for the system. You need to present the associations between the actors and the use cases, as well as (when applicable) the relations (i.e., includes, extends, uses) among the use-cases.
- 3- (25 pts) For each use-case develop a detailed text description in terms of sequence of actions that the system and actors perform to yield observable results of value to the actors involved in the use-case. Make sure that each section of the use-case is explicitly represented (i.e., name, list of participants, precondition, flow of events, postcondition).
- 4- (25 pts) For each use-case, develop one or more scenarios and corresponding System Sequence Diagrams to illustrate the sequence and order of events specified in the scenarios.