**COP 4331C- Spring 2013**

**Homework 1**

**Due: January 29, 2013**

* **No late submissions will be accepted**
* **Please submit the homework through Webcourses using the following format: COP4331C\_Spr13\_HW1\_LastName\_FirstName.pdf**

**Problem statement:**

Webcourses is a great tool for increasing a student's success in a class. However, one particular problem with Webcourses is that it is rather impersonal when it comes to student to student communication. Let’s say you decide to develop an add-in to Webcourses which will bring students enrolled in the same class closer together.

The following is the list of requirements of the system:

1. Each user should be able to log in through Webcourses and choose to use this add-in
2. Each user should be able to modify their personal profiles
3. Each user should be able to fill out their current classes
4. Each user should be able to set their account security
5. Each user should be able to send friend requests
6. Each user should be able to accept or decline friend requests
7. Each user should be able to find students enrolled in the same classes
8. Each user should be able to create study groups and invite students to them
9. Each user should be able to accept or decline study group invitations
10. Each user should be able to message other users
11. Each user should be able to block messages from other users

**Assignment:**

You are required to submit a digital copy of the following UML diagrams (no hand-drawn diagrams, please). There are both open-source and proprietary UML tools (you can check Wikipedia for available UML tools: <http://en.wikipedia.org/wiki/List_of_Unified_Modeling_Language_tools>). Additionally, you are required to follow UML notations. Please submit your homework as a PDF based on the format provided above.

a) **Use Case Diagram** of the specified system

b) **Sequence Diagram** of the following scenario: A user logs into their account, adds a friend, declines a friend, then logs out.

c) **Class Diagram** that includes the following classes: User, User\_Database, Study\_Group, Class, Photo, JPEG, Bitmap