**COP 4331C- Fall 2013**

**Homework 1**

**Due: September 18, 2013**

* **No late submissions will be accepted**
* **Please submit the homework through Webcourses using the following format: COP4331C\_Fall13\_HW#\_LastName\_FirstName.pdf, where # will be 1, 2, or 3.**
* **This homework assignment is an INDIVIDUAL assignment, not a team effort!!!**

**Problem statement:**

You are a designer for the X-Bawks 720 system. Your task is to handle the development of the system that allows users to connect and interact with one another.

The following is the list of requirements of the system:

1. Each user should be able to log in to their X-Bawks 720 account.
2. Each user should be able to view their game library.
3. Each user should be able to play a game from their game library or physical disk.
4. Each user should be able to do #3 while offline (not logged in).
5. Each user should be able to view their friends list.
6. Each user should be able to add and remove from their friends list.
7. Each user should be able to view the game store.
8. Each user should be able to purchase games from the game store.
9. Each user should be able to browse the internet.
10. Each user should be able to fill out their X-Bawks 720 account information.

**Assignment:**

You are required to submit a digital copy of the following UML diagrams (no hand-drawn diagrams. Do not attempt to circumvent this by drawing your homework out on paper and scanning it). 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 in, browses the store library, buys a game, views their library, and then plays the game.

c) **Class Diagram** that includes the following classes: User, User\_Database, Game\_Store, Game\_Library.