# **Assignment 03**

# **Objective:**

Practice use cases, and UML design class and sequence diagrams.

## **Description:**

This assignment is a continuation of Assignments 01 and 02. Here, you are to write use cases, create UML design class and sequence diagrams of the same software system (i.e., online bookstore).

#### Tasks:

You are required to do the following:

- ⇒ Identify and write at least five use cases (in the casual style). You may use user stories as your guideline.
- → UML design class diagram for the initial object-oriented design.
- → Sequence diagrams of at least the main scenarios of the five use cases you developed. Furthermore, include at least one sequence diagram for a scenario that you think that needs diagramming to develop further understanding (e.g., from the prospective of design options/decisions, lack of clarity, and complexity).
- → Divide and perform the above tasks in multiple increments (for example, in the first step you may only indentify the classes, and then build on and refine specific relationships in the later steps). This should be documented.
- → Give the snapshots of the artifacts at the end of each increment.

### **Submission**:

- → All the text and diagrams must be electronically produced.
- → Your name and page number should appear on each page.
- → The entire assignment must be in a single PDF file.
- → The PDF file name must be in the format designmodel-[LASTNAME]-[FIRSTNAME].pdf. For example, designmodel-kagdi-huzefa.pdf.
- ⇒ Submit your PDF file via Digital Dropbox on <u>Blackboard</u> by 03/06/09 (Friday), 11:59 PM. If you have trouble accessing, email it to <u>kagdih@mst.edu</u> and <u>smbmcb@mst.edu</u> with the subject line assignment03 or drop off a printed copy in the instructor's mailbox in the CS department by the deadline. No late submission will be accepted and/or graded.