

CIS 501      Fall, 2015

## Project 3

### Stock Control System (SCS)

Due: 8:00am on 11/10/2015 (Tuesday)

#### Phase 1 (Design)

The boundary classes are (1) Computer (1 object) and (2) Till (1 object)

- You do not need to identify individual dialog boxes. Computer and Till are subsystems that represent the main forms and collections of dialog boxes. **Do not draw individual dialog boxes in your object/class diagrams.**

**Step 1:** From the use-case descriptions, identify necessary fields and then entity classes that manage these fields

- Consider the output that the program generates. Based on this information, think about what kind of data (fields) should be maintained and in what form (class structure)

**Step 2:** Develop an object diagram as you develop use-case realizations.

**Step 3:** Develop a class diagram from your object diagram

If you have any portions in your design that you do not know how to implement, write short test programs to implement them and/or ask your TA at the individual meeting.

You will be given relatively short time in Phase 2 (implementation). So clarify all unknown in this phase.

**How to submit your work:**

1. Make a directory after your LastName\_FirstName (Mizuno\_Masaaki in my case) and put in the directory:
  - (1) your object diagram (Use a drawing tool. We accept only ppt(x), jpg, or pdf file format), and
  - (2) your class diagram (in a StarUML file).
2. Make a zip file of your directory (other formats, such as rar, are not acceptable) and submit it in KSOL

**Notes:**

1. You do not use database systems
  - You must represent relations among objects (records) using links (not by primary-foreign keys)
1. You must use at least one List<T> to represent a collection which requires search operations
  - To search an object in the list, you must use lambda expressions in the implementation phase
2. You may not be able to pick up all the methods you would use in this phase (unless you work out very details). However, you must pick up all necessary fields in your class diagram.
3. You do not need to write or submit your flow-of-event descriptions. You TA will ask you to describe your use-case realization at the individual meeting.
4. This is strictly an individual project. You cannot discuss the design with other people, except for me or Vijay. Read "AccademicHonesty.html" in the "Syllabus etc" directory on KSOL.