Intro to Object Oriented Programming

# Assignment 2 – Group assignment

**Due:** April 14, 2013 by midnight if your group requires feedback.

**UNDER NO CIRCUMSTANCES WILL ANY LATE SUBMISSIONS BE ACCEPTED AFTER April 19, 2013 9:00PM!**

**Task:** In your groups, write java code to implement the following design. You have been tasked to create a program that allow a user to complete a sale of products. The program must contain the following classes:

* A **Product class** to hold information about products in stock. Make sure to include ALL relevant data for a product.
* An **Inventory** **class** to maintain the inventory of all products available.
* A **SalesCounter class** that will allow for sales and returns of a product(s).
* A **Customer class** that holds all information about a customer. A customer should be searchable from the sales counter class. Also, any transactions for each customer should be tracked in some form for later use.
* A **Reports class** that can generate sales and inventory reports.

**Recommended functionality:**

* The inventory class should have a minimum stock quantity for each product that is in stock. When an item is below the minimum stock quantity, the sales agent should get a notification.

**The work must be divided equally among the group members.**

**Required:**

The list of requirements will change throughout the remainder of course as we tackle new concepts. The requirements below are just to get the groups started.

* Java documentation/comments (Internal as well as external)
* Random behavior
* Proper String implementation
* Class variables
* Constants
* Class coupling
* Class cohesion
* Proper class design
* Avoiding code duplication
* Responsibility-driven design
* Iterators
* ArrayLists
* Loops
* Anonymous objects
* Method chaining
* Class reference to other classes (Objects creating objects)
* Test Class to simulate user input
* Related Java concepts discussed in class

**Submission:**

One (1) member from each group will submit one (1) copy of the assignment. The submission format HAS to be in .zip format. All classes from a BlueJ project file must be included. All submission must be done through Blackboard.

**One major component of assignment 2 is collaboration. It is critical that students communicate with their groups and ensure to divide the work evenly. All members in the group will be assigned the same mark unless discussed with the instructor.**

**ALL STUDENTS HAVE TO SUBMIT THE EVALUATION FORM! STUDENTS FAILING TO SUBMIT THE EVALUATION SHEET WILL LOSE 25% OF THE ASSIGNMENT MARK!**

# Evaluation Sheet

**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Group Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Group Members:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

## Self Evaluation:

**Task(s) completed:**

**Overall workload performed (%):**

**Team evaluation:**

## Group Evaluation:

**Group name:\_\_\_\_\_\_\_\_\_\_\_\_**

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| --- | --- | --- | --- |
| **Group members:** | **Task assigned:** | **Workload/**  **Completion (%):** | **Overall mark (%)** |
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|  |  |  | **100%** |

**Comments:**