**A Simple Point-of-Sale (POS) System**

**1. OBJECTIVE**

The objective of this assignment is to get you familiar with all (mostly) Java basics and some advance concepts, which include the syntax, Java input/output, arrays, lists, classes, objects, inheritance and interfaces utilizing polymorphism. After performing this assignment, you should be able to master these Java concepts. You need to use Eclipse for this assignment.

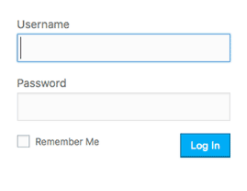
**2. TASK**

In this assignment, the overall task is to develop an application that records sales and

handle payments in a retail store.  Study the **POS Project Requirements** below. You are recommended to use a GUI for your application.

A cashier will be asked to log in the system using his/her user id and password. (There are no limits on the maximum tries of incorrect passwords or users). The system logs in the cashier if proper credentials are provided otherwise a message is displayed to reenter the credentials. (If the user id or password is wrong, the cashier will be asked to re-enter as follows).

Welcome to the Point-Of-Sale Registration System



Please enter your user name: alinaqvi

Please enter your password: thisismypassword

**POS Project Requirements**

Point of Sale Support System is developed to support supermarket-type store operations. In particular software shall:

* 1. Your system should allow the cashier to start a new sale and add/remove items to a new sale.
  2. Once all items are added to the sale the cashier can request for cash for finishing up the sale.
  3. Keep track of the amount of sales ($) at each register for each log on/off cycle. The register record of each such cycle shall identify the register, the user, the dates and times of log on/off, and the amount of sales.
  4. Keep track of the "drawer" for each cashier on duty.    The "drawer" keeps track of the total amount of sales made by a single cashier during the entire shift.
  5. Support cancellation of the entire sale as well as return of an individual item.
  6. Keep track of the inventory, including quantity, price, supplier, and outstanding orders.
  7. Keep track of orders for a period of one year and the suppliers for a period of one year from the time of the last order.
  8. Support inventory management (add/remove item to/from inventory, setting threshold for re-ordering.)
  9. Support report generation:
* Inventory report (listing off al inventory items with name, quantity, threshold, supplier, and quantity of items in pending orders.)
* Cashier report (listing of all assignment records, all register records, all discrepancy records.)
* Register report (listing of all register records, all assignment records.)

1) First design the system and use UML.

2) Then divide up the work between team members

3) Then Start coding.