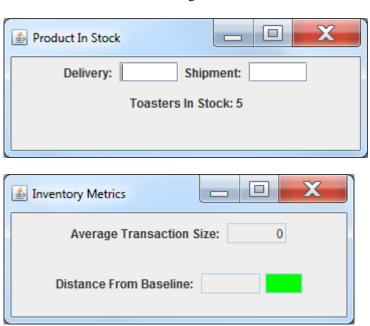
CS 532 Lab #1 Due 10/4/15

A simple Inventory GUI program was discussed in class. You will add **new functionality** to it – the **Inventory Metrics** window. The program will have two windows (JFrames). The original window and the new Inventory Metrics window.

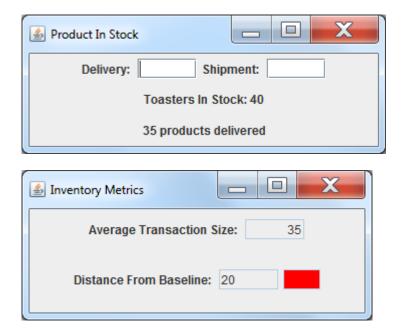
Operation of the Inventory Metrics window

This window displays two metrics for the Toaster product:

- 1. **Average Transaction Size**. One transaction is a shipment or a delivery. The size of each shipment or delivery should be added to a running average. When the program starts up the average will have a value of **0**. As new shipments and deliveries are made, this will change.
- 2. **Distance From Baseline.** Each product has a baseline data member. This is the inventory level that is considered ideal. If there is excess inventory or much lower inventory than this level, there is cause for concern. We'll set a difference of 25% (25% greater than or 25% less than) as the start of the red line area, at which point the baseline color should change from green to red. The distance is the actual distance (in number of units). The color (green or red) indicates if the distance is within 25% or is greater than 25%. For example, if the baseline for the product is **15** and the number of items in the inventory is **20**, then the distance from the base line is **5**, which is **33**% from the base line (5/15 = 33%). The base line color should be red since 33% is greater than 25%.



Lab#1



Code Provided:

Use the classes provided as part of **invMetrics.zip**. This file can be imported into Eclipse as an existing project (as demo'd in class). You'll need to complete the **InvMetricsPanel** and add any additional code needed to implement the required functionality. The best solution will be one that minimized changes to the existing code. Think about what the flow should be. When there is a user event (shipment or delivery entered), who will handle the event and what will happen next (step by step).

Writeup:

When you hand in your code, include a short description of the **existing code** you changed to get the new Inventory Metrics functionality. What classes were changed? What is the **risk** that existing customers that use the new program will see bugs in old features?

Submission:

Export your Eclipse project as a .zip file (this will be demonstrated in class). **Upload** this file and your short writeup to the **NPU Online Service Center** (OSC).

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