CODE EXCERSIZE 09

Instructions:

For today's lab you will be creating a store inventory management system.  Your program will have to have the following elements. It should allow any number of customers to shop at the store using names to identify each one.  The user should be able to select which one is the current customer. The system must contain a list of at least 50 items (repeats are allowed) that can be purchased by the customers.

For a customer to make a purchase they must transfer the items they wish to buy to their own shopping cart. (A Shopping cart list should be maintained for each customer).   The user should be able to switch between customers without losing the contents of each customer's cart. The user can select complete purchase and will be presented with a total for that user’s purchases.  Customers should be able to remove items from their cart and return them to the stores inventory. . A customer’s cart should be removed after her/his purchase is complete.

**NOTE:** The code structure and guidelines are light because this exercise is designed to test your critical thinking skills and see how you apply the skills you’ve learned throughout the duration of this class.

Use the following guidelines to complete this application:

**Classes**

* Classes should be used to represent
  + Inventory Items
  + Customers

**List(s)**

* Lists should be used to represent
  + The stores inventory
  + Customers shopping carts

**Dictionary**

* A Dictionary should be used to
  + Track all of the customers - identified by their name

**User Options**

* The user should have the following options
  + Select current shopper - list of all shoppers and option to create another shopper
  + View store inventory - list everything the store is selling
  + View cart - list of everything in the current Customers cart
  + Add item to cart - allow the user to select an item to add to the current Customer’s cart and remove it from the store’s inventory. (Can be combined with the View store option if you wish)
  + Remove item from cart - allow the user to select an item to add to the stores inventory and remove it from the current Customer’s cart. (can be combined with the View cart option if you wish)
  + Complete purchase - Total up the cost of all of the items in the user’s cart and display that value.  Remove the customer from the dictionary of customers
  + Exit - Exit the program

**Input**

* All input should be validated and limited to the options presented to the user
* The user should not be able to crash the program
* Program should continue to run until the user chooses to exit