Project 5 Description

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Create a Java application (must run in Java SE 11) that simulates a shopper's purchases from a buyer's club (e.g., Sams, Costco, etc.). Use a collection of ArrayList (i.e., "Inventory") to store the grocery store's inventory (collection initialized by reading the data stored in a text file; productFile.txt). Use a collection of ArrayList ("CustomerPurchases") for purchases made by the customers. Each element is composed of 3 fields (first field is the memberID; second field is the productNumber; third field is "qty" [the quantity purchased]).

The product inventory file is a colon delimited text file (i.e., fields are separated by colons). The following are the fields in the product inventory file.

- Product_Code
- Quantity
- Product_Description
- Product_Price

The application must be menu driven and provide the following options.

1. Make Purchases
2. Display Product Inventory
3. Display Customer Purchases
4. Display All Purchases
5. Exit

 The "Make Purchases" option will prompt the user for their "memberId" and then use a sentinel terminated while loop to prompt for a "productNumber" and "qty" (loop will terminate with entries of "-1" for both). The inventory and purchase collections must be updated based on this customer's purchases.

The "Display Product Inventory" option will print the data stored in the inventory collection and the total value of all of the inventory (i.e., total price of all the products).

The "Display Customer Purchases" option will prompt the user for their "memberID" and then display all their purchases and the total cost of all of the products.

The "Display All Purchases" option will print the data stored in the customer purchases collection and the total cost of all of the purchases.

The "Exit" option will terminate the program.

Save & upload the application in a file Project 5.zip (i.e., contains the Java source code files)

Additional Resources:

ArrayList   **(https://docs.oracle.com/en/java/javase/11/docs/api/java.base/java/util/ArrayList.html)**