Assignment # 2
Online Grocery Store

(Date Assigned: Dec 4, 2020)
(Due Date: Dec 14, 2020 Time: 11:59 PM)

Hello Everyone! The main aims of your second assignment are to:

1) Familiarize you with basic WPF controls.
2) To offer as helpful practice for using Database.
3) To apply design pattern (MVVM).
4) And yes, to help us judge how much you have learnt in the past weeks.

Assignment Statement

In this assignment, you are required to create a simple online grocery system. There are two types of users: admin and customer. Admin can add, delete product in inventory. Customer can buy a product.

Content / Requirement

When your program starts, it should be displaying a screen with following options.

Admin Menu

Admin will be able to do the following things:

```
1----Add Product
2----Delete Product
3----View Products
4----Logout
```

1----Add Product

Admin can add product by specifying its quantity, product id, product name and price.

2----Delete Product

Admin can delete product by specifying its product id.

3----View Product

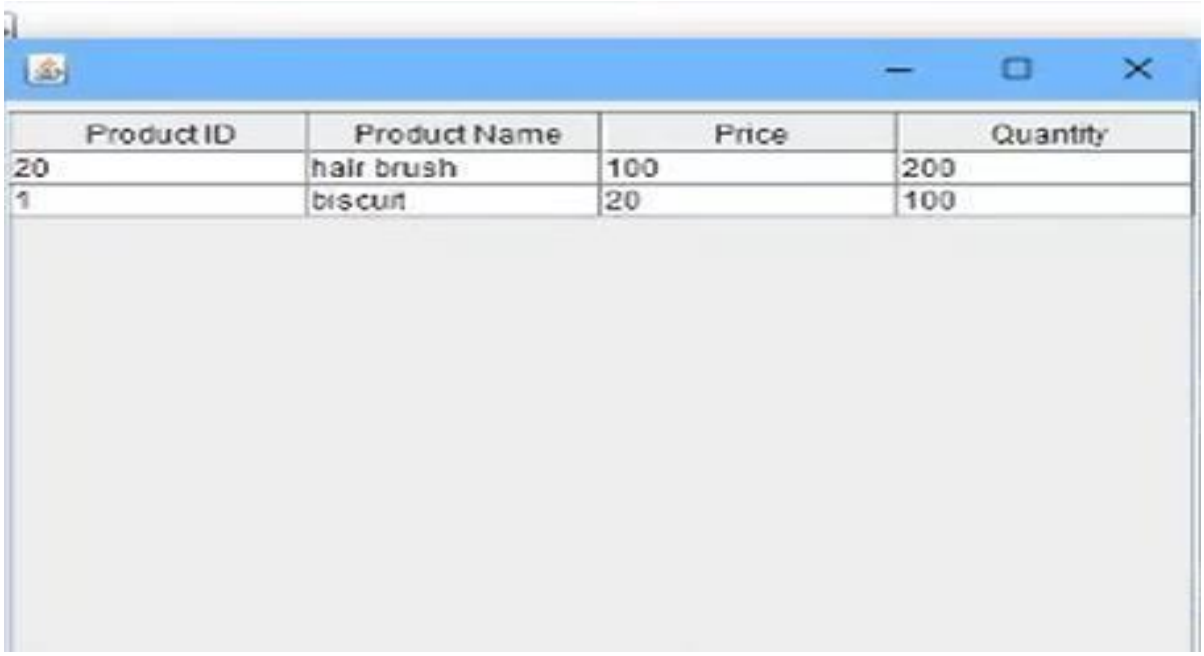
Admin can view all products available in the store.

4----Logout

When Admin clicks on logout, he will be redirected to the starting page.

Refer to the images given below for better understanding:

By clicking on Products button, he will be redirected to this page:



Product ID	Product Name	Price	Quantity
20	hair brush	100	200
1	biscuit	20	100

Customer Menu

```
1----Sign Up.
2----Log In.
3----Add to cart.
4----Finish Sale
5----Print Receipt
```

1----Sign Up

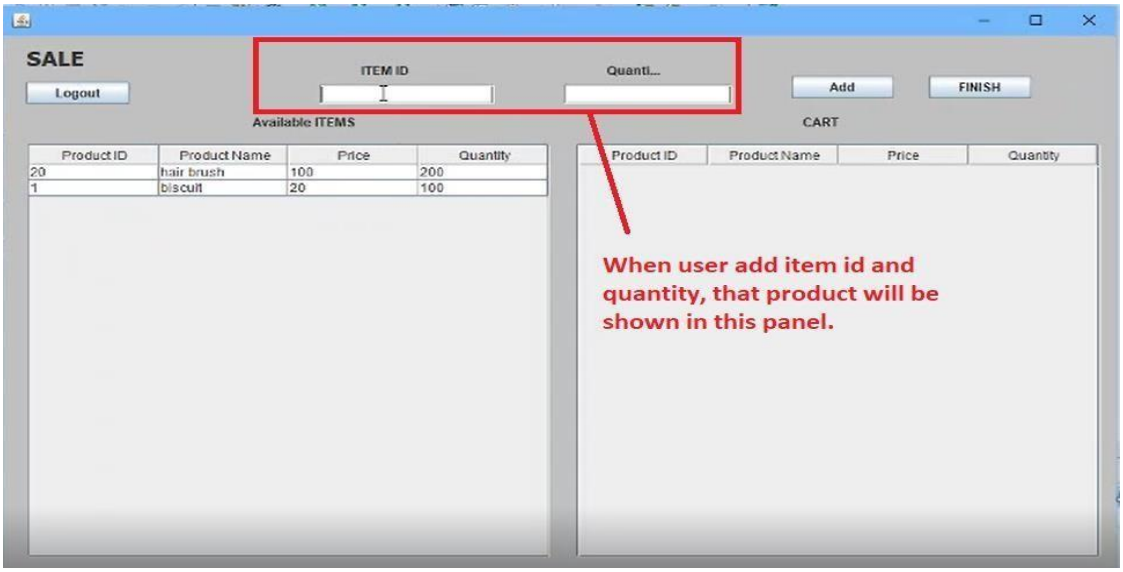
Customer can make a new account if he don't already exist.

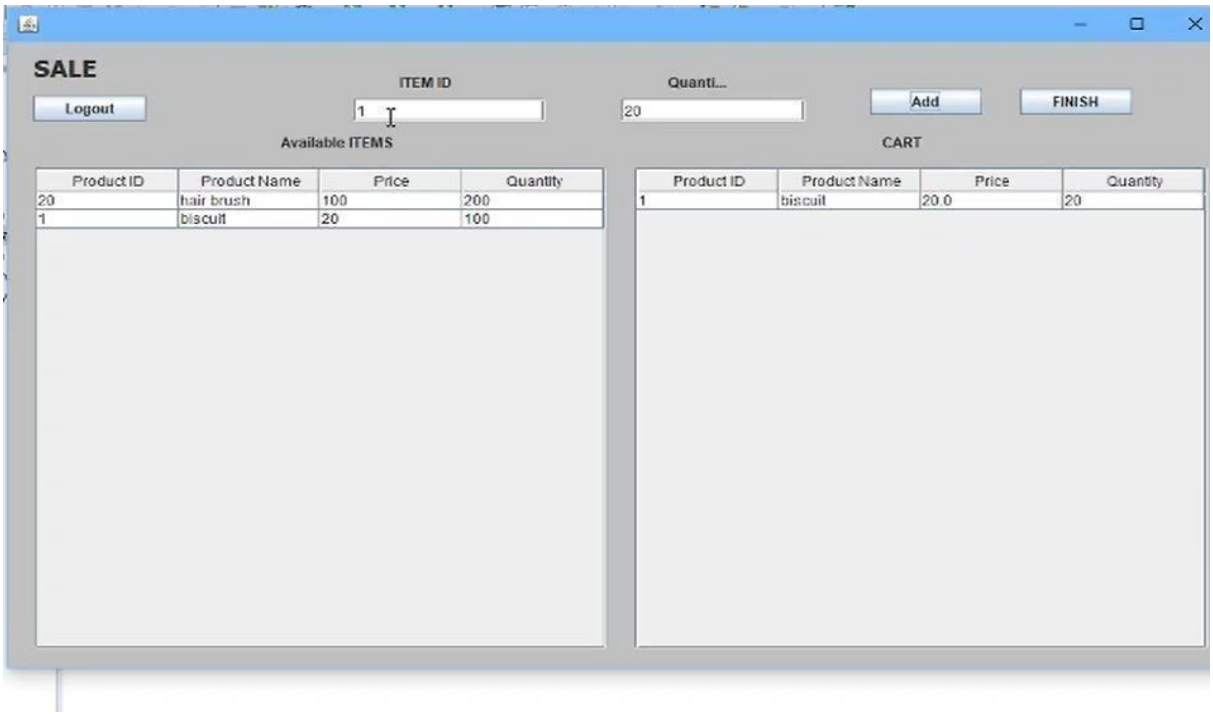
2---- Log In

To buy something, user has to be logged in.

3---Add to Cart

Customer can add item in his cart by specifying the product id and quantity. If product id is right and quantity is available that product will be added in the cart.





4---Finish/Checkout

When customer clicks on finish, he will be able to finish his sale.

5---- Print Receipt

If user clicks on finish sale in the above picture, a popup will be shown with product name, price, quantity and total mentioned in the end. There should be a button for logout too which will redirect him to the main page.

Design Cues and Requirements

- Use Database to store all data.
- Code intelligently (Think about when should be the product updated, deleted etc.)
- Exception handling should be done, if any.
- **MVVM pattern should not be violated at any cost.**
- Use commands if necessary.
- Use layouts depending on the need.
- All data entry points should have proper error checks and error messages.
- You can change interface designs, above pictures are added only for reference.
- There must be proper commenting throughout your code.

- **We expect that your system should be very robust, so apply intelligent checks; in no case should your program crash or produce undesirable results.**
- Use Function and Variable names intelligently. The harder your code is to check, the higher are the chances of you getting lower marks. If your program crashes for some reason during checking, I will be just scrolling through your code and give you marks on the quality of the code. So, it's purely in your interest to use nice functions and variables names.

Marking Scheme

Item	Marks
Correct Interface (error checking of extreme values)	10%
Comments	5%
Proper Sign Up and Login	10%
Database Structure	5%
MVVM Pattern not violated	10%
Print Reciept	5%
Admin Side	25%
Customer Side	25%
Proper layouts used	5%

"As you start to walk out on the way, the way appears.

~Rumi

Good Luck ☺