**Homework09 ECE2310**

**Deliverables:**

1. **UML diagram**
2. **Zipped project folder and a word document of your code and screen shot.**

1. A grocery list is provided below:

**Item Unit price Quantity**

Milk $4.75 1

Bread $2.50 2

Eggs $4.00 3

Create three different classes named **Milk**, **Bread**, and **Eggs**, where each has the following members :

· **private** data member “unit\_price

· **private** data member “quantity”.

· Default and overloaded constructors

· Provide properties for the private data members

· public ***total\_price*** method which **returns** the total price (e.g., unit\_price × quantity)

· A ToString() method that returns the info of the object

Create a class named **Grocery**, which has the following members

· my\_milk of type **Milk**

· my\_bread of type **Bread**

· my\_eggs of type **Eggs**

· An overloaded constructor which takes all the items above as inputs

· An ***expense*** method which calculates the total price of all items. This function must call the individual

**total\_price** methods reside in the classes Milk, Bread, and Eggs

· A ToString() function

Develop a driver main function to demonstrate all of the above