Design

Program being designed: Grocery List program

Files needed: List, Item, and Main

Classes needed: Item; List

**Item class:** needs item name, unit (i.e. cans or ponds), number to buy, and the price of the item

Must validate user input so that it will not accept characters or strings for the unit or number

**List Class:** needs an array to store Item objects in your List. When an item is added an Item object must be created with the information and added to the list object.

Item class:

* getItemName (string)
  + used to get the ItemName
* setItemName (void)
  + used to set the name of the item
* getItemUnit (double)
  + used to get the unit of the item
* setItemUnit (void)
  + used to set the unit of the item
* getItemQuantity (int)
  + used to get the item quantity
* setItemQuantity (void)
  + used to set the quantity of the item
* getItemPrice (double restricted to 2 decimal places)
  + used to get the price of the item per unit
* setItemPrice (void)
  + used to set the price of the item per unit
* Item(string name, double unit, int amount, double price)

List class

* addItem(Item \*)
* removeItem
* getList
  + Display the contents of the array
* totalCost
  + Total cost of everything in the shopping cart

Begin testing with static array and then convert to dynamic array when everything is working properly.

How do I deal with repeat Items?

Validate the values entered