CIS1280 C# /.NET I

Store Order Class with Get and Set Methods

Objective: Write a simple user-defined class and test it

# Training Objectives:

1. Demonstrate use of basic and intermediate language features and data structures within the language.
2. Demonstrate how to design, and implement user defined classes.

# Turn in requirements:

1. Please name your Program LastnameP1, such as NelsonP1.
2. Check your code into source control.

# Program Requirements:

1. **3 pts** Write your name, email address and file name at the top of your source code in a comment.
2. **5 pts.** Use Console.WriteLine statements to write your name, program title, and program objective to the screen so that it is the first thing I see when your program runs. This is your header.
3. **5 pts** Use good C# programming style and formatting for your program.
4. **5 pts** Use appropriate comments to explain what you are doing.

Welcome to the C# Office Supply Store! We sell stuff. For this assignment we are going to implement the following user story:

“As a store owner I would like to be able to add and remove Catalog items in the application so that I can maintain a list of current items I sell.”

## CatalogItem class:

Write a class named CatalogItem. It will reside the file named CatalogItem.cs.

Include these private data fields:

* A string called “sku”, the Stock Keeping Unit number
* A string called “title”, the short title for the object in the Catalog
* A string called “description”, a longer description of the item
* A decimal called “price”, the price for one item

Declare all fields as private!

For each data field write a Get and Set method.

Get methods must be declared public, the same type as the field they are getting and take no parameters.

Set methods must be declared public, void return type and take one parameter that is the same type as the field they are setting.

Don’t overcomplicate it, just follow the format.

## ToString() Method

Add a ToString() method. Declare it as public override string with no parameters. It should return title, description, price and sku concatenated together in a nicely formatted string.

## Program.cs

In Main do the following:

1. Present your header.
2. Create an array of CatalogItems called CatalogItems (lowercase the first letter)
3. Start a do-while or while loop for ordering items that does the following:
   1. Display current items in Catalog (this will start our empty)
   2. Display a menu of choices to add items, remove items or quite.
   3. If the user selects add:
      1. Instantiate a new CatalogItem.
      2. Ask the user to input values for each field in the class.
      3. Set those values using the class set methods.
      4. Add the CatalogItem to the CatalogItems array.
   4. If the user selects remove:
      1. Ask the user which item.
      2. Remove that item from the array.
   5. If the user selects quite exit the while loop.

Adding and removing items from an array can be complex so create methods to do this. See post at <http://stackoverflow.com/questions/9570944/adding-elements-to-a-c-sharp-array> for ideas on how to do this. Note the example shows how to add and remove items from a string array. Your add and remove items methods should return CatalogItems arrays. You can place these methods in Program.cs, just declare them as static so that you can call them from Main.

When done, display a good-bye message.