MIS 216
FALL 2020
PROJECT 2

Continue to learn new basic coding skills

PART A:

1. Your will build additional features to your Project1.

2. Find your folder on your desktop (or copy from miscapstone in the GRADED folder to your desktop)
    a. Click on the .sln file and Visual Studio should open

3. Check Entropy for any comments on Project 1 and make any corrections to the IceCreamCost Form.
    a. Point values are doubled if you fail to correct prior errors.

4. You should complete Tutorial 3 on pages 41 to 47, basically most of the steps 3.1 to 3.8 ***(read carefully the following to assist you)***

5. Replace Step 3-1 with the following commands
    a. Once your project is open (Number 2 above), right click in your Solution Explorer on the bolded yourInitialsMIS216 line
    b. Then ADD, add NEW ITEM
    c. Make sure C# is selected in the left window,
    d. Windows Forms in the middle window
    e. Name the form (bottom of pop up box) : **IceCreamTotal**

6. Complete Step 3-2.
    a. Follow Step 3-2 (the double click command shown)
    b. Ignore Figure 1-25 (on page 42) for now as the following steps will help you build the code shown in Figure 1-25, but it is better to read each of the remaining steps to help you understand their implementation.

7. **We will practice a better method to identify the variable names and the variable types then shown in the book. We will use prefixes to identify the variable type when you declare the name.**
    a. In Step 3-3, create the code in Figure 1-26 in the C# coding area you created above in Step 3-2.
    b. Replace the code shown and instead of int scoops, please type your code to be **int intScoops**
    c. The next line should be **double dblUnitPrice, dblSubTotal, dblSalesTax, dblTotalCost.**
    d. There is an error in Figure 1-26, on the const double TAX Rate =… , please make sure you put a _ between TAX and RATE as in TAX_RATE = …
    e. In figure 1-27, make sure you use your new variable names with the prefixes you established in #7.c above as in:

dblUnitPrice = double.Parse…..

8. In Step 3-4 you will add a List Box to your form (find the list box in the ToolBox)..do not type any code at this point.

9. Complete Step 3-5 and now your code should look like Figure 1-25, (except for better variable names)

10. Replace Step 3-6 with the following as we desire to move from the form created in Project 1 to Project 2.

    a. Open your IceCreamCost Form
    b. Add a button to the bottom right of your 1st form, name this button: **btnProject2Show**, with a text property of: Show Project 2
    c. The code under the button (double click on the button) should be:

    ```
    IceCreamTotal newProject2 = new IceCreamTotal();
    newProject2.Show();
    ```

    d. Save your work and hit RUN, and the Project 1 form should appear, click on the Project 2 button, your new second form should appear.

11. Back on your second form, double click Clear Button. Complete instructions in Figure 1-30 to clear the list box and be ready new entries.

12. The code under the Exit button should be:
    ```
    Application.Exit();
    ```

13. Save your work and test!

PART B:

14. Add a 3rd form to the same project (use prior instructions to help you build the 2nd form)
    a. Name this 3rd form MaterialLabor
    b. Change the text property of the form to be: Total Cost with List Box – your last name.

15. We will replace the button to move from form to form with a menu bar at the top of the page.

    a. On the IceCreamCost form, find the Menu Strip from the toolbox and add to the form, create 4 entries: Ice Cream Cost, Ice Cream Total, Material and Labor, Exit
    b. Here is the code to place under the 2nd Button:
    ```
    IceCreamTotal newProject2 = new IceCreamTotal();
                newProject2.Show();
    ```
    c. The code for the 3rd Button:
    ```
    MaterialLabor newProject3 = new MaterialLabor();
                newProject3.Show();
    ```

d. The code for the 4th Button

```
Application.Exit();
```

e. There is no code under the first button as we are already on that page

16. Copy your menu strip from form1 to forms 2 and 3

17. Likewise you can copy the code for all the menu strip items, but add the appropriate code to take you back to the first form under the first menu item.

18. Review the instructions on Exercise 1-3 to determine how the new form should appear.
    a. You do not need a try/catch for this exercise
    b. Please make sure you create proper object (txt, lbl, btn and variable names as in int, dbl, str…)
    c. Follow the four steps of good coding practice under the btnComputeCost button as in:
        i. Declare variables
        ii. Grab values from the text boxes and convert where necessary
        iii. Calculate and store as variable
        iv. Output the result and format as necessary

19. Once the new form has been created, test all forms.

20. Once you complete and test

    a. Close Visual Studio (Visual Studio must be closed to copy the folders)
    b. Copy your entire folder from your desktop to your \\miscapstone\mis216\F20Folder
    c. DO NOT PLACE IN THE GRADED FOLDER

21. Items to be graded:
    a. Any errors on Project 1 corrected
    b. Appearance of Form2
    c. Use of List Box
    d. Calculate, Clear and Exit Buttons
    e. Name of objects (txt.., lbl,, btn, lst)
    f. Name of variables that reflect their type
    g. Use of the 4 basic steps for coding (declare variables, grab values, calculate, output and format
    h. Does it calculate properly and display results in the list box