CS 1400 Lab 5: Creating and Using TextBoxes

Objectives:

The objective of this lab is to write a Graphical User Interface program that uses Text Boxes to get input from the user and to display output to the user. It is important to note that the Text Property of a TextBox is a Reference-Type of String.

The Interface

The best way to start this lab is to make a copy of the complete project folder that you created for Lab #4. Name this new project folder Lab05. Do not change any of the file names inside of your new folder.

Changing the Interface

1. Double click on the .sln file in this new folder to open up the project.
2. From the the Toolbox, drag two TextBoxes, two Labels, and a Button onto the Client Area of the form. Your interface should look something like figure 1 below:

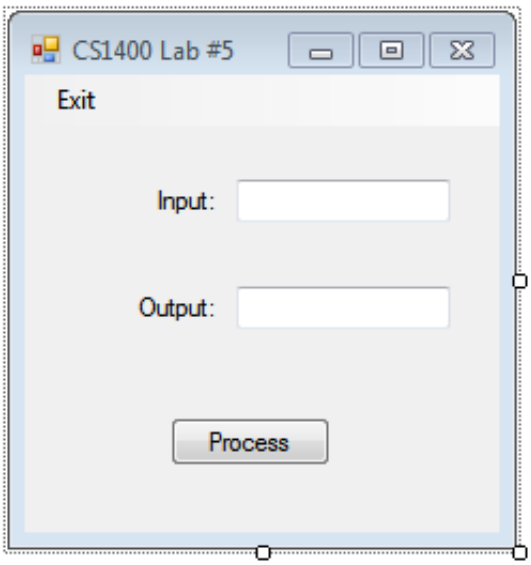

Figure 1: Lab 5 Form and Controls

Creating Event Handlers

The objective of this program is to have the user type an integer into the top TextBox. When you press the Button, your program will read the number from the top TextBox and display the value back in the second TextBox. To create the event handler that will do this

1. Double click on the Button.
2. This will open up the code editor window and create a method to handle the event that will get generated when a user clicks on the button. You will add the code below. This code below will
    - Get the string that the user typed into the first TextBox.
    - Convert it into an integer (int).
    - Convert the integer back into a string.
    - Display the string in the second TextBox.

All of this is required because the data that is shown in a TextBox is always a **string** and when we do arithmetic, we need to use a number. I have named my TextBoxes `inTxtBox` and `outTxtBox`.

```
// The computeBtn_Click Method
// Purpose: Get a value from the user and display it
back again
// Parameters: The sending object, and the event
arguments
// Returns: none
private void computeBtn_Click(object sender, EventArgs
e)
{
    int num = int.Parse(inTxtBox.Text);
    string outStr = string.Format("{0:D}", num);
    outTxtBox.Text = outStr;
}
```

Now build and test your code.

Submitting Your Assignment

Place your complete project folder into a zip file and name the zip file lab_05_your-initials_V1.0.zip. For example, I would name my file lab_05_RKD_V1.0.zip. Submit this assignment as Lab #5 on Canvas.

Grading Guidelines

Description	Points possible
Assignment meets grading guidelines: o Source code files contain a declaration that you did not copy any code, except that provided. o Assignment has been properly submitted to Canvas o Code meets style guidelines	2

Your user interface looks like the example, and works as directed.	3
Total	5