

IST 256
Lab Week 1 – January 14, 2009

Your name: _____

Lab Exercise 1. Writing your first program

1. Login to lab computers

Check your directory (folder) structure and go to your H: drive on your SU space. Create a folder to hold all of your class projects; name it something like IST256Projects.

2. Open Visual Studio 2008

Go to the Program menu and find Visual Studio 2008. The **first time that you start Visual Studio**, it may ask you to choose default environment settings. Select **Visual Basic Development Settings** and click the button Start Visual Studio. Now there may be a wait while it configures your settings.

- **Start a new project:**
 - Under the File menu, select **New -> Project**, and a new project window will pop up. Make sure that the Project Type is **Visual Basic** (under Other Languages).
 - Visual Studio installed templates is **Windows Application**
 - Change the Name field to be **Hello**.
- **Visual Studio should open windows** for you to work on:
 - In the middle is the space that shows forms and programs. Initially there will be a **Form1.vb[design]** tab.
 - On the right should be the **Solution Explorer** and the **Properties** windows
 - On the left should be the **Toolbox**
 - If any of these are not open, go to the View menus and select them
- **Save this project on the H: drive**
 - Go to the **File menu** and do a **Save All**. Select that projects folder that you made earlier on the H: drive as the place to save your project.
- **Work on the initial form called Form1**. Change the size and shape of the form by dragging the corner with the mouse.
 - Under Properties, change the **Text** property (at the bottom of the list) to be the label on the top bar of the form. Instead of Form1, it should be called something related to the project, such as “Hello” or “MyFirstProgram”. After you hit “Enter”, the text should appear in the bar. (You can also change the Name property of the form, but for this class, we can leave it to be Form1.)
- **Add a label and a button to the form** by dragging the objects from the Toolbox. To change the properties of each object, use your mouse to select the object and its properties will appear in the Properties box. Change their Text properties.

Play around with sizes, and change colors if you want to. Change the Font typeface and size (use the + to open and close the Font properties menu.)

- **To add a program to be executed** when the user clicks the button, double click on the button on your form. Note that a new tabbed window pops up to hold the programs for this form. (In the tabs, the form is called Form1.vb[Design] and its programs are in Form1.vb.) In the blank space between the line starting “Private Sub” and the line “End “sub”, type the text:

MsgBox(“Welcome to my first Visual Basic program!”)

When this program is executed, MsgBox is a built-in function that will create a popup box with the message inside the quotes. (You can make this message be whatever you like.)

- **Execute this program** by going under the Debug menu and selecting **Start Without Debugging**. If your menu doesn’t have this, use **Start With Debugging**. When the program executes, it should bring up the user interface form, and if you click on the button, the message box should appear. When you are done admiring your first program, be sure to close both these windows.
- At any time, if you leave Visual Studio, **use Save All** to save your project. When you start Visual Studio again, the name of the project should appear on the recently used list, and you can click on it if you want to continue working on the project.

Lab Exercise 2 – Writing your second program

This program will contain variables and arithmetic, which will be the topic of the next class.

- 1. Start a new project:** under the project menu, start a new project as you did in the first exercise, and call it something like “Counting”. This time, the windows should remain configured for you, as long as you are in one of the Form Design tabs.
- 2. Add one Button to the Form.** Change the Text property of the Form (e.g. “Count Program”) and also the Text property of the Button (e.g. “Count Numbers”) and make whatever other changes to Fonts and Colors of the Button that you like.
- 3. Write the Button Program.** Double click on the Button on the Form to get the Form1.vb program window to appear.

First, after the top line that starts with Public Class ... , add a line that says

Dim count as Integer = 0

This is a variable that will hold numbers to count and will start with the value 0.

Now in-between the lines that start with Sub and End Sub, add the following two lines. You can either type them in, or you can go to the on-line instructions in the iLMS system and copy and paste these lines.

```
count = count + 1  
MsgBox("You have clicked the button " & count & " times")
```

This will add 1 to the count number each time the button is clicked and pop up the message.

4. Run the program by going under the Debug menu and click on Start With (or Without) Debugging.

5. Write down the results of the program.

Click on the button several times. What happens? After you have clicked several times, write the message here:

Now you are done with your second program!

6. To complete the lab, you must PRINT your second program. This will be just the Form1.vb tab that contains the code.

Staple the program page to this lab sheet and either hand it in before you leave lab, or put it in Prof. McCracken's mailbox by noon on Friday.

When you are done, be sure to save your project to your folder on the H: drive.