

IST 256  
Lab Week 13, Part 1 – April 13, 2009

**1. Working with a program with Record Structures**

Use the new process for opening a Visual Studio project:

- a. Go to the C: drive and make a folder at the top level with your name or userid, something like: C:\njmccrac
- b. Open Visual Studio and go to create a new project/solution. When this Dialog box opens,
  - i. name: pick a name for the project – something like StudentRecords
  - ii. Use **Save All** or **location to save the project in the folder on the C drive**
- c. In this first part, create the form for the program discussed in class.

Making the form: make four Buttons, three Labels and a TextBox on the form that looks something like:

```
      |__Read Student Records__|   Status (label)

      |__Number__|           Number of Females (label)   Number of Males (label)

      |__Find Oldest Student__| |_____| (textbox)

                                           |__Close__|
```

- d. Copy the data file “students.txt” from the web page and save it in the **C:\name\StudentRecords\bin\Debug** part of the project folder.

Click on the buttons to write the program. Use the program given in class, possibly renaming Labels or TextBoxes. This program contains code for all four of the buttons on the form. Be sure to check that the **label names** are in the code match yours on the form.

Test this program.

- f. Now we are going to add two things to the program.

First, we are going to add a field to the student record structure. For every student, we also want to have the grade point average. Open the data file, “students.txt” in Notepad, and on every line add a comma and a GPA number. For example, line 1 could be:

Alex, M, 20, 73, 3.06

In the program, find the declaration of the Structure called studentrec, add a field to the structure by adding a variable declaration. Specifically, after the other variables (name, gender, age, height), add a declaration something like

Dim gpa as Single

Then under Button1, add an Input statement to the while loop that will read the GPA variable for every student.

The second thing to add is to modify the button that displays the oldest student. Currently, it only displays the name of the student. Change the TextBox1.Text so that it also displays the GPA of the student.

Test your program.

\*\*\*\*\* **At the end of lab** \*\*\*\*\*

Go to the C: drive where you put your folder with your name. Copy and paste the entire StudentRecords folder to the H: drive under your IST256 projects.

\*\*\*\*\* **Don't forget to save your work!** \*\*\*\*\*

**Print out the program for this lab and hand it in with Wednesday's lab for Week 13.**