

IST 256

Lab Week 8, Day 2, Wednesday, October 21, 2009

1. New Process for Starting and Saving Visual Studio Projects

So far, you have been saving your Visual Studio projects on the drive where you can store all your work. It has a long name, so for purposes of discussion, I am going to call it the H: drive. (H: is in parentheses at the end of the drive name.)

In this section of the course, we are going to use Visual Studio to read and write data to files, and the network security does not allow us to do that to the H: drive. It will only allow it to the C: drive.

So for every project, you will put the project in a folder on the C: drive and work with it during the lab. At the end of lab, you must copy or save the project to the H: drive, so that it will be saved.

When you want to work on a project again, you must first copy it from the H: drive to the C: drive, work on it, and then copy it back to the H: drive at the end.

2. Writing a program that reads data from a file

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 Candy

ii. **location:** browse to the folder that you just made on the C: drive

OR, if your Dialog box doesn't have a location box, just make the new Candy project as usual, and then do

Save All – and save the project to your new folder on the C: drive.

c. Write an application that reads candy preferences from a file.

Make two Labels and two Buttons on the form that looks something like:

Candy Preferences

|__Read Preference From File__|

Display Preferences: (label)

|_Close_|

Leave lots of room for the Display Preferences label, so that you can put several lines of text there from the file.

d. Prepare a data file using Notepad, or other text editor that doesn't add extra formatting. Do not use Microsoft Word!

On each line of the file, type the name of a person, just the first name is fine, followed by a comma, followed by the name of the candy bar that they prefer. Type in 5 or 6 lines of data. Here is an example:

```
Fanaz, Snickers  
Huron, Kit Kat  
Hassan, Reese's Cup  
Jamilla, Snickers  
Traquan, Milky Way  
Xzavier, Snickers
```

Do NOT type Enter at the end of your last line, because Visual Basic won't like having an extra blank line.

Notepad will automatically put in an <End of Line> character when you type Enter to get the next line. And Notepad will put an <End of File> character at the end of the file.

Save this file and name it something like Candy.txt. It should be saved in your FileCandy project folder on the C: drive under subfolder named "bin\Debug". The entire path will look something like:

```
C:\njmccrac\FileCandy\bin\Debug\Candy.txt
```

c. Write the program that will read the data file and display results. Use the temperature averaging program as an example, and write a button procedure for the main button.

Change the FileOpen command to open the file named "Candy.txt" (you don't have to ask the user for a filename).

Instead of reading one number from every line in the file, you must read two strings. Declare two string variables, called something like *studentname* and *candy* at the top of the program.

Use a similar while loop as in the temperature program. Every iteration of this loop will read one line of data from the file. During the body of the while loop, put two Input commands, one to read studentname and one to read candy, something like:

```
Input(1, studentname)  
Input(1, candy)
```

To display the data, declare two more string variables, called something like message and outputtext. Initialize outputtext to be the empty string before the loop:

```
outputtext = ""
```

During the body of the loop, use the variable message to prepare a line of text with the data that you just read. For example:

```
message = studentname & " prefers " & candy & vbCrLf
```

Also during the body of the loop, add this message line to the entire outputtext:

```
outputtext = outputtext & message
```

Finally, **after the loop**, assign the outputtext to the text of the label that will display it.

The last thing in the button procedure should be to close the data file.

Test your program.

Before you leave the lab, go to the C: drive (using Explorer) and in the folder that you made, copy the entire Candy folder and paste it in your IST256 projects on the H: drive.

To complete the lab, print the program that you wrote and hand it in with Monday's lab sheet.