## CS 2255 LAB03 (Continuation of Lab02) (Read all instructions)

Feel free to download the LAB3.EXE and/or the "Lab2Names.txt" input file <u>and Lab3Names.txt output</u> file from the syllabus page (under the notes section). For security purposes, you will need to save both the example executable and the input text file in a common directory (on your computer) in order to run the example.

Constructs: File\_IO, Class (in its simpliest form), loops (I used a while loop and later a for loop), a vector, and a function which independently (in its scope) receives and processes a loaded vector of people. The function's purpose is to format the vector of people as it writes out the data to the Lab3Names.txt file (properly formatted – see example output file below). Lab03 should incorporate Lab02 (continue to process steps 1, 2, 3, 4, and 5 below:

1. Input File (Names Lab2Names.txt) contains:

```
Start File

$Tommy$Gunn$22 Winchester Drive$Calamar$AL$38880

$Bobby$Smither$117 Drover Drive$Budville$NC$28711

$William$Hammet$45 East West Street$Springfield$NC$28881

$Shenna$North$10 Tenth Street$Canopener$AL$31110

$Robert$Stillskin$300 Square Circle$Picklestown$NC$27887

$Walter$Mellon$99 Main Street$Blueville$AL$33990
```

- 2. Each record that is read from or retrieved from the file will be read into a struct-like "Class" named C\_People.
- 3. Each of the C\_People objects, once they have been created and populated with data will be stored in a vector of C\_People.
- 4. Using the populated vector of C\_People, output the data to a Console Window. Your output should look like the following (note the statement just before the "Press any key ..."):

```
X
C:\Users\Mike\Documents\Visual Studio 2010\Projects\Troy\Lab03\Debug\Lab03.exe
Gunn, Tommy
22 Winchester Drive
                                                                                                                       Calamar, AL 38880
Smither, Bobby
117 Drover Drive
Budville, NC 28711
Hammet, William
45 East West Street
Springfield, NC 28881
North, Shenna
10 Tenth Street
Canopener, AL 31110
Stillskin, Robert
300 Square Circle
Picklestown, NC 27887
Mellon, Walter
99 Main Street
Blueville, AL 33990
File was successfully Saved
Press any key to continue . . . _
```

5. In order to keep your program from closing too soon in release mode, add the statement:

```
system("PAUSE");
```

just before the return 0; statement in Main.

## 6. Create a Function that outputs the following text file:

Tommy Gunn 22 Winchester Drive Calamar, AL 38880 Bobby Smither 117 Drover Drive Budville, NC 28711 William Hammet 45 East West Street Springfield, NC 28881 Shenna North 10 Tenth Street Canopener, AL 31110 Robert Stillskin 300 Square Circle Picklestown, NC 27887 Walter Mellon 99 Main Street Blueville, AL 33990

VERY IMPORTANT NOTE: For Lab03, create a "Data" directory on your C: drive and copy the input file (Lab2Names.txt) to that location. Make sure your file stream variables for input and for output use this directory:

```
fstream dataFile("C:/Data/Lab2Names.txt", ios::in); // example for input
```

Also note that the output stream statement can be VERY similar.