Projects Overview

1) **dotsboxes Project :** ODU cs 333( cs150 first month & cs250 remainder) online C++ classes

Eclispe/cywin/win7 ( ftp to ODU Linux, compile and test; then submit) (x86.exe provided by teacher)

dotsandboxes.cpp=main

**dotsboxes project submission** folder

tests folder= unit test files

design.pdf = top down design

testspec.pdf = test specification narrative

Semester project, is a game of dots where each player takes a turn connecting two dots to draw a line. A display needed to reflect the current score, when the game was over, and show each new move. My program does not meet 100% of the requirements. In class we practiced writing a narrative, stepwise design, ADT’s, and making elegant programs by writing pieces in Main.cpp and expanding toward methods and classes outside of Main.cpp.

2) **Lotto Project:**

MS Visual Studio / win 7/ several folders

I have an interest in the lottery and felt like seeing if there are any patterns and if I could recreate predictable data then compare the two. I wanted to make 3 main projects separately and combine them at the end.

A) **Lotto folder** Using text files to take the data online and reformat to just the data I needed. ( n1, n2,n3,n4,n5,pb represents number 1….. and pb represents Powerball) Use mega millions and Powerball history for the next step. Later, go onto the web to update the last 2 draws each week to the text file. Consider an update checker that can be launched manually.

B) **Lotto101** Evaluate patterns and number of occurrences. I hard coded each text file as needed, and need to allow the user to choose files .I used Powerball terminology, the program needs to recognize which file and display correctly. A person can check if numbers have already been drawn. At this point I began researching other websites to see what they were doing. I intend to add additional patterns to test regularly. All the code is currently in Main.cpp and needs to be in class/method form. As I see repetitions in the code I am making modifications.

C) Not started yet, but here is where I plan to use different methods to predict numbers and compare to real life data. For example, seed a random number generator with time clock, patterns between each week, and mathematical occurrences in nature.

Decisions to make, the data are currently expressed from lowest number to highest number by dates drawn, not as the numbers were actually picked. Does this have any bearing on my results? Consider acquiring text files with true representation.

3) **Project Movie** Following a tutorial on Lynda.com for C++

MS Visual Studio/win 7

Main.cpp met the solution requirements. The user can add 3 movies, the movie title the year and the rating. This shows basic class usage, I learned I could place the year validation right in the constructor, as opposed to calling a method. Instantly, I disliked the solution and wrote Main2.cpp.

Main2.cpp I used simple struct and cleaned up the code. Realizing the limitations I wanted to improve again. The next program needs to allow many movies to be entered, I would like the user to be able to set the number, sort, add, delete items, and display. Not done yet.

4) **Project \_3\_Mills**

MS Visual Studio with GUI files added/win7/manual

IT 310 introduction to GUIs and classes. I was able to make a form, by simple drag and drop, rename the text boxes and radio buttons to variable names. The program does a simple calculation and displays user input. We also used a display message and learned if someone was re-typing the information we could use “clear”. Read me manual with screen shots.

5) **Project 5**

Eclipse/ Linux(raspian OS)/

Use raspberry pi2 to create something. First, follow my Dad’s project (remotely turning on/off his out-of- state devices). Learn circuits, breadboards, chipset, pins and code to control the on/off process. So, far I have been able to do the initial setup, trouble shoot and test LED lights. The code was online for 1 light, and I was able to play around with getting 2 lights to work as well use the different chipset and pin placements. The code is in C++, Python and PHP. I am working toward a Christmas light show synced to music, but still have a long way to go. (Linux based)