

COP 2930 - Individual Programming Assignment #12

Due date: Please consult WebCourses for your due date/time

Objectives

1. Practice coming up with an idea for a computer program.
2. Incorporate ideas from the whole semester to implement the idea.

Program: Your Own Program

You have learned quite a lot this semester. But, programming really only becomes powerful when you can use it to solve problems YOU are interested in, not just toy problems created by professors!

Come up with your own problem to solve or program that does something fun or useful.

Then, implement it.

Of course, some ideas are much easier to implement than others, so there will be some minimum requirements that are listed below.

Project Requirements

Your program must be at least 100 lines of code long without comments or white space. (So aim for about 150 lines with comments and white space.)

Your program must use loops, lists and functions.

Your program must have at least five non-trivial functions other than main.

Though optional, it would be nice to see files used in your program.

Deliverables

Please turn in at least two files via Webcourses:

1. **Directions.docx/Directions.txt**- This should be a document where you explain to the grader (either Alec or I) what your program does and how to use your program. If we can't read what you've written here and easily run your program, then you may lose communication points for this document, even if your program is perfect.
2. **Your Python Source File**- This should have your program in it. You may name it whatever you like. You are allowed to have more than one source file, but since I haven't taught how to do that, you'll have to figure out how to make programs with more than one file work and include clear directions for the grader as well.

Optionally, if your program uses input files, please submit reasonable test input files for us to grade with. (Don't make these files too simple, make them big enough that their use in your project is interesting.)

Restrictions

Please IDLE 3.6 (or higher) to develop your programs.

Your program should include a header comment with the following information: your name, course number, assignment title, and date. Also, make sure you include comments throughout your code describing the major portions of your program.

Grading Details

Your programs will be graded upon the following criteria:

- 1) The clarity of your description file.
- 2) The complexity of your program.
- 3) Whether or not your program does what the description file claims it does.
- 4) Your programming style and use of white space. Even if you have a plan and your program works perfectly, if your programming style is poor or your use of white space is poor, you could get 10% or 15% deducted from your grade.
- 5) Compatibility to IDLE.