Program Design Methods and Intro to Programming
Term Project

Overview

Your final project should provide a sufficient challenge for you. The project should extend your comfort level BEYOND WHAT WAS TAUGHT IN CLASS. It is intended as a measure of how prepared you are to continue studying Python programming on your own. Your final project should be a comprehensive application that solves a problem.

The goal of the Term Project is to apply all that you have learned about the Python Programming language and problem solving to solve a relatively small but interesting problem. Your project can take a number of paths. It should be heavily focused on any or all of the topics we have covered in class. You may even look beyond the topics covered in class (and are encouraged to do so). The key is that you use the problem-solving skills we have been focusing on to learn new concepts.

Functional Requirements

Specifically, the final project application MUST include examples of the following AT A MINIMUM:

- Use of primitive data
- Use of instance variables and objects
- Use of imported modules, packages and functions
- Use of custom-built classes & methods
- Detailed Code Commenting

Non – Functional Requirements

Creating a working implementation is far from sufficient to achieve full marks!

- Stick strictly to the above specifications
- Don't forget to add helpful comments
- Use (long) meaningful identifiers
- Use ample white space and a consistent indentation scheme
- Make code easy to read by keeping it simple
- Avoid duplicating similar code
- Ensure that all domain classes are modeled properly
- Don't use magic numbers
- Use a proper access control to variables and methods

Grading

- The final project comprises 40% of your grade, which is further broken down into:
  - Program Demo which counts toward 30% of the Final Project Grade
  - Program which counts toward 70% of the Final Project Grade

Grading Criteria

A	An A project will go well beyond the expectations stated above. Earning an A requires original work that goes beyond what has been covered in class.
B	A good project that does all that is asked above and moves a little beyond what we did in class, works properly, succeeds in solving the problem and shows some imagination will earn a B.
C	A C project is a project that meets the minimum requirements or is missing one or two of them.
D	A D project is a project that does not meet the minimum requirements but has some redeeming quality that deserves minimal merit.
F	The project was unfinished, completely unoriginal or completely inadequate. The project may meet *certain* minimal criteria, but fails to meet the majority of the criteria.

If the project was a work of plagiarism, the project will receive a zero mark and will result in disciplinary proceedings and a failing grade in the class for the semester. Any evidence of work that is not your own will be dealt with severely.

Submission and Deadline

The following items are required to be submitted for grading:

- Project Report [PDF]
  - Project Specification
  - Solution Design
  - A discussion of what was implemented and how it works (i.e., an explanation of your algorithms, solution scheme, data structure used, etc.);
  - Evidence of Working Program, including screen shots
- Project Program Files

Presentation period will be on 11-13th November, 2019 from 9.00 – 12.00, room will be announced soon.

NOTE: All data files and source code must be saved in your Github repository. Please email the link to

Jude Martinez : edujzenitram@gmail.com

Best of luck!