CIS 314 Midterm

Summary:

The midterm is an open-ended project which constitutes 30% of a learner's final grade. Open-ended means that you are permitted to select the type of system you design and build, making it as complex or simple as you feel is appropriate. The goal of the project is to tie together the skills and topics learned for the first half of the semester. This includes, but is not limited to:

- Variables and their usage
- Custom and built-in modules
- Data Structures
- Looping and Sorting
- Random Number Generation
- File Handling
- Data Processing Regular Expressions

The project does **not** need to utilize all of the topics but should incorporate as many are necessary to achieve your goal.

Each project is evaluated individually. This means that just because a project is more complex than another, that does not mean that the more-complex project will score higher. However, each project should demonstrate the learner's knowledge and mastery of the topics discussed during the first half of the course.

Project code is expected to successfully run without meaningful modification. If the project requires certain conditions, such as a folder of files, such conditions should be documented in the comments. *De minimus* alterations, such as specifying the directory of files or the exact name of an image file do not fall within the bounds of modification.

Requirements and Parameters:

- Project Organization:
 - o Group or Solo:
 - Groups: A group leader must be selected and group members identified before project work begins
 - o Project Title
 - Project Summary
 - o Project Goals
- Technical Requirements:
 - Python as primary language
 - o Call at least 1 custom module for each developer
 - Minimal usage of community modules/packages
 - Upload code to GitHub
- In-Class Demonstration

- Short explanation of project
- o Demonstration of code
- o Lessons learned / Difficulties encountered
- o (optional) Next Steps / Future Enhancements
- Post-Project Report
 - o Did the project achieve its goals?
 - o Did the goals shift during development?

Assessment:

Projects will be evaluated on their ability to fulfill their stated goals and adhere to the requirements set forth above. The following grading rubric will be used:

Topic	Points
Project Organization	10
Solo/Group Notification	
Project Title	
Project Summary	
Project Goals/Objectives	
Technical Requirements	10
Upload to GitHub	
Code executes without error	
Project Contents/Code	50
Utilizing topics from semester	
Proper commenting	
Importing module for each author	
Demonstration	20
Concise explanation of project	
Demonstration of code	
Reflection on lessons/difficulties	
(Optional) Next steps / Version 2.0	
Post-Project Report	10
Total	100