Tools for Data Analysis
Term Project [30 points TOTAL]

The semester project is intended to allow you to practice learning about how to code in new contexts, which is one of the most important skills you can have as a programmer/data analyst. You and your group will find a task that you would like to conduct that we have not discussed in any of our lectures in class. Your job is to find a Python library that will allow you to perform that task, and present this information to your classmates on the final day of class.

What should I Choose for a Project?

- Pick a task that **you and your group** find interesting
- It should involve some form of data analysis (don't pick something that is unrelated to data analysis!)
- You should be able to describe how the task and library that you select will improve your ability to conduct data analysis

Steps to Project Completion:

1. Project Proposal (5 pts)
    - What task/activity will you learn about?
    - What library will you use to complete this task?
    - What kind of analysis can you do with this task/library that you couldn't before?

2. The Project (25 pts)

    - Conduct research based on your proposal to find a library that will help you to complete the task your group has chosen
    - Write a short paper describing your task, the library, and a brief example of its use (about 3 pages, single spaced, 12pt font, Times New Roman)
    - Present a 25-30 minute description of what you have learned (task, library, and example) to your classmates

NOTE: Your example should not be the example on the website for the library! I will check and will mark your group down if this is the case. Make your example original!

What to Turn In:

1. Project proposal (in Word or PDF format) – turned in during the proposal phase
2. Code for example implementation (may be in multiple files, but each should be of the .py format)
3. Project write-up (in Word or PDF format)
4. Slides (if any) from presentation