**Development Requirements**

* Use Pandas to clean and format your data set(s)
* Create a Jupyter Notebook describing the **\*\*data exploration and cleanup\*\*** process
* Create a Jupyter Notebook illustrating the **\*\*final data analysis\*\***
* Use Matplotlib to create a total of 6-8 visualizations of your data (ideally, at least 2 per "question" you ask of your data)
* Save PNG images of your visualizations to distribute to the class and instructional team, and for inclusion in your presentation
* Optionally, use at least one API, if you can find an API with data pertinent to your primary research questions
* Create a write-up summarizing your major findings. This should include a heading for each "question" you asked of your data, and under each heading, a short description of what you found and any relevant plots.

**Presentation Requirements**

* **You will also be responsible for preparing a 10 minute presentation.**
* **This will be a formal presentation.**
* **One in which you explain in detail:**
  + The questions you and your group found interesting, and what motivated you to answer them
  + Where and how you found the data you used to answer these questions
  + The data exploration and cleanup process (accompanied by your Jupyter Notebook)
  + The analysis process (accompanied by your Jupyter Notebook)
  + Your conclusions. This should include a numerical summary as well as visualizations of that summary
  + Discuss the implications of your findings. This is where you get to have an open-ended discussion about what your findings "mean".

By the End of Today

* **Brainstorm possible ideas**
* **Begin Data Research**
* **Write a description of the scope of your research**
* **Create a short 1 page proposal listing out each of the following:**
  + **Project Title**
  + **Team Members**
  + **Project Description/Outline**
  + **Research Questions to Answer**
  + **Data Sets to be Used**
  + **Rough Breakdown of Tasks**