Final Project Submission

Your final project submission will be a single Jupyter Notebook file. This notebook must be in your COGS108 Project Repository by the due date, and should be self-contained, so that we can evaluate your entire project from the notebook alone.

This notebook should include all the code you used in your project for all components of the project (cleaning, visualization, analysis) that you wrote and used in your project. We will not be running the code in your notebook - make sure your notebook as uploaded to Github has the code evaluated and outputs present that we can read the notebook as is.

Your project will be graded based on the rubric below - make sure you address each section in the notebook - in an organized manner using cell Markdowns for textual descriptions.

Submitting Instructions

Your final project notebook must be present in your project groups Github repository, as of the due date - 11:59 pm Tuesday, June 13th. Your group repo will be frozen at this time so no further changes will be allowed.

This file must have the filename:

FinalProject.ipynb

Grading Rubric

The grading rubric for the Final Project is as follows:

Category	Percentage of Project Grade
Introduction and Background	**10%**
Data Description	**15%**
Data Cleaning/Pre-processing	**15%**
Data Visualization	**15%**
Data Analysis and Results	**25%**
Conclusions/Discussion	**20%**

Example Project Notebooks

Use these notebooks as examples to follow regarding how to incorporate code, analysis, and text in a unified workflow.

- Example project - well switching and arsenic levels in Bangladesh:
  - **http://nbviewer.jupyter.org/github/carljv/Will_it_Python/blob/master/ARM/ch5/arsenic_wells_switching.ipynb**
- Example text-mining project - how does the Times write about men & women:
  - **http://nbviewer.jupyter.org/gist/nealcaren/5105037**
- Example - Exploratory statistical analysis of FIFA 2014 Final
  - **http://nbviewer.jupyter.org/github/rjtavares/football-crunching/blob/master/notebooks/an%20exploratory%20data%20analysis%20of%20the%20world%20cup%20final.ipynb**
- Example - Predicting NYC Subway Use:
  - **http://nbviewer.jupyter.org/url/www.asimihsan.com/articles/Intro%20to%20Data%20Science%20-%20Final%20Project.ipynb**
- Example - Earthquake Prediction
  - **http://nbviewer.jupyter.org/github/cossatot/lanf_earthquake_likelihood/blob/master/notebooks/lanf_manuscript_notebook.ipynb**
  - Note: This is a full research article published in a Geophysics journal (and so is much more than you need) but serves as an example of what can be done with notebook projects.

Hackathon (Due date: 11:59 pm, Monday, June 5th)

This OPTIONAL submission, to be considered for the hackathon on June 10th, should follow the same outline and rubric as above. You must have preliminary results, but it can be be a work-in-progress (for example, discussion section and conclusions need not necessarily be fleshed out).

One member from your team must submit this notebook on TritonED, with filename format (filled in with your group number):

'Pr_0XX_HackathonSubmission.ipynb'