Project Plan

CS 410: Explorations in Data Science

Objective:

Researching and visualizing the relationship between air pollution levels and COVID-19 cases around the world.

Approach:

We will begin by researching the connection between air pollution levels and COVID-19 cases and possible metrics for quantitative analysis. Once the metrics for analysis are identified, we will acquire and process the data. We will then analyze the data to determine the best possible way to visualize the connection between our topics. This visualization may be done using both Python and Tableau. In the end, we will evaluate the connection between air pollution levels and COVID-19 cases based on our analysis and visualizations.

Team Structure:

For each milestone our team will discuss how to split the work appropriately to match both team member's strengths and interests. For example, during the processing of data milestones we will have two distinct data sets (Air Pollution and COVID-19) so each team member will be responsible for cleaning one data set. For milestones without definitive demarcations, we will work together to complete the task.

Project Milestones:

- 1. Research and gather data
- 2. Process data for specific use case
- 3. Complete Midpoint Report
- 4. Analyze data
- 5. Visualize and model data
- 6. Assess validity of models/ results
- 7. Final project presentation