SI 206 Final Project Plan

a. What is your group's name?

Seniors

- b. Who are the people in the group (first name, last name, umich email)?
 - Nikola Bogoevich, <u>nikobogo@umich.edu</u>
 - Stephen Liu, sliliu@umich.edu
- c. What APIs/websites will you be gathering data from? The base URLs for the APIs/websites must be different for them to count as different APIs.

College Football API: https://collegefootballdata.com/

Weather API:

https://weatherstack.com/?utm_source=Github&utm_medium=Referral&utm_campaign=Publicapis-repo-Best-sellers

d. What data will you collect from each API/website and store in a database? Be specific.

Weather: temperature, total snow, wind chill, wind speed

Football: Michigan: total points per game, QB's and RB's see their percentage of running and passing, completion percentage

- e. What data will you be calculating from the data in the database? Be specific.
 - 1) QB's percentage of throwing and RB's percentage of running based on wind speed
 - 2) Total points based on temperature
 - 3) Completion percentage based on the amount of snow
 - 4) Throwing completion percentage based on wind chill
- f. What visualization package will you be using (Matplotlib, Plotly, Seaborn, etc)?

Matplotlib

- g. What graphs/charts will you be creating?
 - 1) Scatter Plot with trend lines or Bar Chart
 - 2) Box Plot
 - 3) Line Plot
 - 4) Box Plot

h. Who is responsible for what? Please note that all team members should do an equal amount of programming and total work.

Niko: Collecting College Football API data

Stephen: Collecting Weather API data Together: Do the statistical analysis