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DSCI 510
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DSCI Final Project: Heat Index v. Tree Census

1. Name of the project and team members
    a. Name: Shade NYC
    b. Carlos Anguiano and Val Katritch

2. What problem are you trying to solve?
    a. Shade cover from trees has been said to cool down urban environments, so this project aims to analyze data from NYC to see if this is true by zip code. In addition, we will investigate environmental injustices by analyzing income by zip code to determine if wealth disparity affects the tree cover.

3. How will you collect data and from where?
    a. Data will be collected from New York City Open Data APIs (linked below) using numpy and beautiful soup packages.
    b. Heat Vulnerability Index
        i. https://data.cityofnewyork.us/Health/Heat-Vulnerability-Index-Rankings/4mhf-duep/about_data
    c. Tree Census Data
        i. https://data.cityofnewyork.us/Environment/2015-Street-Tree-Census-Tree-Data/uvpi-gqnh/about_data
    d. Income Distribution
        i. https://data.cityofnewyork.us/City-Government/Property-Valuation-and-Assessment-Data/yjxr-fw8i/about_data

4. What analysis will you do and what visualizations will you create?
    a. We will correlate the two factors separately to determine if there is a statistically significant relationship between them. We will visualize with a scatter plot, histogram, and a box plot. If possible, we will attempt to create a map to visualize further, but this will depend on the skills learned in class until then.