Final Project Update

By Jace Henderson, Braden Swenson, and Jack Yelden

The issue

- Poverty is a significant issue affecting people all across America
- Homelessness, hunger, a lack of education are just a few of the elements we commonly associate with poverty
- Policymakers, charitable organizations, and other groups are always looking for the best way to allocate resources in order to bring the most people out of poverty.
- This poses a question
    - Which of these elements have the greatest effect on poverty and deserve the most attention?

Our focus

- For this project we have decided to focus on homeownership rates
- Owning a home would imply that a person has enough money for other basics in life
- Additionally owning a home provides greater security and ease of mind
- Right now we predict that these amounts will most likely be negatively correlated (as homeownership goes up poverty goes down) the question is how strong is this correlation
- If the correlation is strongly negative it would imply that the best way to raise people out of poverty would be through policies such as affordable housing, mortgage assistance programs, and micro-lending programs

The Data

- The data sets we will be using are from diversitykids.com
- One data set focuses on poverty rates while the other focus on homeownership rates
- Both contain rates relating to each of the fifty states, across nine years, and across 12 different races and ethnicities (plus an overall column)
- Some values are missing from the data sets, possibly because that state in particular lacks a noticeable population of a given ethnicity or there is no data.
- The nice thing is that diversitykids structures a lot of their data in similar ways meaning you could potentially input another dataset into the program to get these results
    - Even if homeownership is correlated to poverty rates, it would still be prudent to look at other factors to determine if a stronger correlation exists

Tasks: Braden

- Most of what I do will be in excel
- I will prepare, clean, and analyze the data
  - One of the specific things that I need to do is find the minimum amount of cells in a column with data points
- I will also make all the charts, graphs, and any other necessary infographics

Tasks: Jace

- Having studied four years at the business college I have experience with data gathering and using analytical tools to look for useful information
- While most of our work will be done through Python I can still use my knowledge on Excel to check our work and make sure the program is running correctly.
- Additionally I will be able to help out extensively in the writing of the report (particularly the analysis and visualization portion) as I have written many reports that require conveying information in a way that won't be confusing to readers

Tasks: Jack

- I will take the data that has been cleaned in Excel and transform it into the Python program. Along with this, I will develop the functions to try and figure out the statistics that we are trying to solve.
- Along with this, I can work a little on the write-up since I have experience writing in both a professional setting and a journalistic setting. I can also work on the visualization part since I have experience with graphic design.