Assignment #3

Due: 9am, Thursday, March 7th

Goals:

Collect population data in an area of interest and expose some metrics. Make a visual map of one of the given types about your chosen population and metric. Try to tell a story through your use of color, choice of site, and layers of data. Ask a question. Try to expose something. Be creative and think about the human element of your chosen location.

Background:

Now that you understand how to bring and visualize spatial data in Processing, it is time to bring in more people centric data. Before we can build models around “smart” or not so “smart” cities, we need to build a base population of the people who live in them.

Minimum Requirements:

1. Carefully chosen area because of *something*. For example, don’t chose NYC Times Square if you have no interest in it. International sites are welcome and we encourage geographic diversity — your home town, a place you read about in the news, etc!

2. You don’t have to draw a map! But all other requirements still apply and you must use geolocated data.

3. Good graphic practice (lines, colors, etc) tell your story. Think about making clear, readable, and enjoyable experiences for your viewer.

4. You must have at least **2 population metrics** (number of people can be one of them, so really you just need 1 additional)**.**

5. You must include a statistical test and score about your population metric. We're flexible with whatever one you chose. Feel free to use an online or different statistics tool. **You must report your statistics test in the text file provided. T**his will not be graded on correctness, so don't stress if you do the wrong test, etc. It's so you can learn and we can give you guidance.

6. You must draw some info with text so the viewer can understand your visualization. This info should include: **Where, Who, What**

7. You must use open source data. It can be internationally located.

8. Frame rate: please be at least in the 40s.

Submission Directions:

Locally In your GitHub repository folder (i.e. cusw- spr19-lastName), create a folder called "*Assignment_3*". Save your Processing script to this folder. For example, if I created a Processing script called **Apples** and I saved it to this folder, the folder structure would look like this:

Github/*cusw-spr19-winder/Assignment_3/Apples/Apples.pde* To submit your code online, use the Github Desktop app:

(1) Navigate to your repository, you should see changes summarized

(2) Make sure to grab "Stats_Test.txt" from the Assignment 3 folder on Github and edit it with your stats test and other questions.

(3) **Commit** your changes

(4) **Sync** or **Push** your commits to github.com

Some relevant resources, etc

Statistics
http://www.statstutor.ac.uk/resources/uploaded/tutorsquickguidetostatistics.pdf
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3116565/
https://cyfar.org/types-statistical-tests
https://imotions.com/blog/statistical-tools/

Population Data
TIGER Files: https://www.census.gov/geo/maps-data/data/tiger.html

GIS Software we recommend: QGIS, ArcGIS,

Follow the documents in the Assignment #3 folder!