Entrepreneur Potential Business & Location Research

Introduction/Background:

We would like to help entrepreneurs scout out a location for potential business startup by comparing with a list of 3 cities' dataset. This is a high-level analysis which may lead them to conduct more granular level research before coming to a decision.

Scope of Work:

We will analyze datasets within the past 5-10 years to answer questions below:

- What is the population density and demographic for this city?
- What is the average household income in this city?
- What is the average education level in this city?
- What is the average consumer spending by item category in this city?
- What type of businesses are in this city?
- What are the businesses turnover rates by category?
- What is the crime rate in this city?
- What is the housing cost in this city?

Resources:

- Potential Data Sets to be Used:
  - https://www.yelp.com/dataset/download
  - https://www.census.gov/data/developers/data-sets.html
  - https://data.world/rickyhennessy/startup-names-and-descriptions
  - https://www.data.gov/developers/
  - https://developers.google.com/

Team Members: 😊

entr_researchers = ('jane_wallace', 'tanique_adams', 'menard_tchatchou', 'charleen_carr')

Period of Performance:

- **Start Date:** Saturday, December 15, 2018 1:00 PM Local
- **Due Date:** Saturday, January 19, 2019 10:59 PM Local

Place of Performance:

- ½ of work -> classroom on T/Th/S
- ¼ of work -> a group meeting on zoom
- ¼ of work -> individual assigned tasks

Work Requirements:

- Create a Jupyter Notebook describing the ****data exploration and cleanup**** process
- Create a Jupyter Notebook illustrating the ****final data analysis****
- Use Matplotlib to create a total of 6-8 visualizations of your data (ideally, at least 2 per "question" you ask of your data)
- Save PNG images of your visualizations to distribute to the class and instructional team, and for inclusion in your presentation

- Optionally, use at least one API, if you can find an API with data pertinent to your primary research questions
- Create a write-up summarizing your major findings. This should include a heading for each "question" you asked of your data, and under each heading, a short description of what you found and any relevant plots.

Schedule/Milestones:

Classroom Time		Private Time	
1st Week (DEC, 18-22)		**1st Week (DEC, 23-31)**	
	Hardcore Development		Team meeting in zoom
2nd Week (JAN, 8-12)			Individual work
	(T): Hardcore Development	**2nd Week (JAN, 1-7)**	
	(Th): Hardcore Development		Team meeting in zoom
	Presentation Prep		Individual work
	(S): Presentation		

Acceptance Criteria:

- A 10-minute, formal presentation
- Detail Explanation:
  - The questions you and your group found interesting, and what motivated you to answer them
  - Where and how you found the data that you used to answer these questions
  - The data exploration and cleanup process (accompanied by your Jupyter Notebook)
  - The analysis process (accompanied by your Jupyter Notebook)
  - Your conclusions. This should include a numerical summary as well as visualizations of that summary
  - Discuss the implications of your findings. This is where you get to have an open-ended discussion about what your findings "mean".

Other Requirements:

- May need to get API Keys from certain resources
- May need to pay for certain dataset

Acceptance:

Approved by:

_____ Date: _____

<Approvers Name>

<Approvers Title>