**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

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**Acceptance:**

Approved by:

Date:

<Approvers Name>

<Approvers Title>