

Entrepreneur Research

Introduction/Background:

We would like to assist entrepreneurs identify potential locations for potential businesses by comparing the top five states' dataset based on individual case requirements. This is a high-level analysis, national and state level, which may lead them to conduct more granular level research, county and city level, before coming to a decision.

Re-Scope:

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

- What is the current U.S. population on national and state level?
- What is the demographic for all the states?
 - Gender
 - Race
 - Mean Household Income
 - Education
- What is the crime rate for all the states?
- What type of businesses are in each state?

Team Members: ☺☺

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

Resources:

- Potential Dataset:
 - <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/>
- Actual Dataset:
 - <https://catalog.data.gov>
 - <https://www.census.gov>
 - <https://www2.census.gov>
 - <https://factfinder.census.gov>

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

Project Summary:

- Actual Project Breakdown
 - 2 Weeks -> Research & Dataset Selection
 - 1 Week -> Data Cleaning
 - 1 Week -> Data Analysis & Presentation
- Over-estimated Scope -> Re-Scope
 - Research Finding
 - Huge Learning Curve
 - Team Dynamic
- Project Artifacts
 - Presentation: Entrepreneurs Research.pptx
 - Data Cleaning Code: Group_Data_Clean.ipynb
 - Data Analysis Code: Group_Data_Analysis.ipynb
- Lesson Learned
 - Flexible Team Player

Acceptance:

Approved by:

<Approvers Name>

<Approvers Title>Date:
