A.M.O.K

Project Scope

Saturday, March 23, 2019

# Crime Rates vs. Demographics

## Amy Reynolds, Mariam Hassan, Oleg Mironov, Kundyz Smith

# Overview

## Project Background and Description

|  |  |
| --- | --- |
|  | The scope of the project is to review census data and crime data to determine any correlation between the data sets in a chosen location for a chosen time period. Location and time period to be decided later depending on data obtained. |

How have hurricanes effected economy (data.gov), average income (census), crime rates (crime), etc. in Houston

Alicia in 1983 – 1982 - 1984

Katrina in 2005 – 2004 – 2006

Ike in 2008 – 2007 - 2009

## Research Questions

|  |  |
| --- | --- |
|  | The questions this project will attempt to answer are: |

* Where are the highest crime rates?
  + What types of crimes are relevant?
    - Robbery
* What is the average income per zip code where high crime rates?
* Did weather impact any of the datasets?
* Does legislature changes impact the datasets?

## Datasets to be used

|  |  |
| --- | --- |
|  | Data sources and API request examples |

* Source for crime data:
  + <https://crime-data-explorer.fr.cloud.gov/api>
  + Sample API request:
    - <https://developer.nrel.gov/api/alt-fuel-stations/v1/nearest.json?api_key=cUxFfW9JvEqPiKZonnynl1B1SXaJOc0hpyvjtjkq&location=Houston+TX>
* Source for demographic data:
  + <https://api.census.gov>
  + Sample API requests:
  + [https://api.census.gov/data/2017/acs/acsse?get=K200001\_001E,NAME&for=state:\*&key=YOUR\_KEY\_GOES\_HERE](https://api.census.gov/data/2017/acs/acsse?get=K200001_001E,NAME&for=state:*&key=YOUR_KEY_GOES_HERE)
  + <https://api.census.gov/data/2017/acs/acsse?get=K200001_001E,NAME&for=state:01&key=YOUR_KEY_GOES_HERE>

## Tasks

* Obtain Census data
* Obtain Crime data
* Create Jupyter Notebook for data exploration and cleanup
* Create Jupyter Notebook for final data analysis
* Create Matplotlib for 6-8 graphical representations to reflect the data
* Create PNG images of those graphs
* Create summary document
* Create presentation
* Practice presentation
* Present to class

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |
| Approved By |  |  | Date |  | Approved By |  |  | Date |