A.M.O.K

Project Scope

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# How natural disasters affect Crime Rates

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# Overview

## Project Background and Description

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|  | 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 did Hurricane Ike in Galveston, Texas and the 2011 earthquake in Louisa County, Virginia effected crime rates.

**Louisa County, VA Earthquake:** August 23, 2011

**Galveston, TX Hurricane Ike:** September 1, 2008 – September 15, 2008

## Research Questions

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

* Do people act similarly in other parts of the country in face of natural disasters
* Are there any other factors that influence crime, i.e. weather?
* How many police departments are there and which ones provide data via API?

## Datasets to be used

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

* Source for crime data:
  + <https://crime-data-explorer.fr.cloud.gov/api>
* Source for demographic data:
  + <https://api.census.gov>
* Source for heatmap
  + Google maps API

## 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. Line graphs
  + 2007
  + 2008
  + 2009
  + 2007 - 2009
  + 2010
  + 2011
  + 2012
  + 2010 - 2012
* Create heat map to show all ORI locations in U.S.
* Create PNG images of those graphs
* Create summary document
* Create presentation
* Practice presentation
* Present to class

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