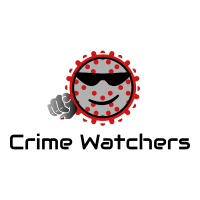
**Project Name: Crime Watchers**

**Team Members:**

|  |
| --- |
| **Name** |
| Nehemiah Dang |
| Kay Royo |
| Joseph Scott |
|  |
|  |

**Logo:** (You can use online free logo designer like <https://www.freelogodesign.org/>)



**Motivation & Summary Slide**

* Comparing the crime rate before the COVID-19 lockdown and during the lockdown in the United States
* We hypothesize that different types of crime will fluctuate
* Do crime rates drop overall during the lockdown, compared to before the outbreak?
  + Which of the top 3 hotspots have the most crime during the lockdown?
    - The hotspots are more chaotic compared to other states. With all the mayhem happening, will the crime rates, such as theft or burglary go up?
  + Which type of crime increases during the lockdown?
    - As more people are being locked indoors and losing their mental, will crimes, such as domestic violence, increase?
  + Which age groups are more daring to commit crimes at these times?
    - As we all know that COVID-19 has a higher mortality rate to older people, will older people still commit crimes or just a majority of the younger age groups?
  + Which gender is more likely to commit an act of crime?
    - Despite all the chaos, is there a difference between with gender is more likely to commit a felony?
* Describe whether you were able to answer these questions to your satisfaction, and briefly summarize your findings. (TBA)

**Questions & Data**

* Elaborate on the questions you asked, describing what kinds of data you needed to answer them, and where you found it (TBA)

**Board Screen Shot:**

* Screenshot of your workflow, data design, or Project Management Board that shows breakdown of tasks (TBA)

**Project Description (High Level):**

**Motivation (WHY you feel it’s valuable):**

* It’ll be good to know just how safe each of the states really are during this crisis. Rain or shine, will people not care about the shelter-in-place order and still do whatever they please for their own selfish needs, despite the severity of the situation?

**User Stories:**

As a data analyst, I want to be able to gather data during important times, so that I can tell a story and inform people what that’s going on in current events.

**API to be Used:**

* TBA

**DATA sets to be Used:**

* TBA

**Libraries to be Used:**

* Pandas
* Matplotlib
* Json
* Gmaps

**Goals:**

MVP (Minimum viable product) Goals:

* Fulfill 3 of the 4 questions asked

Stretch Goals:

* Fulliled all 4 questions asked and fully elaborate on it

**Breakdown of Tasks** (Ownership by Group Member)**:**

* Each individual member will be tasked with a state that’s considered a hotspot

**Schedule for Completion of Tasks:**

|  |  |  |
| --- | --- | --- |
| **Date** | **Task** | **Notes** |
| **4/7** | Project Work | Brainstormed idea |
| **4/9** | Project Work | Finalizing idea and creating logo |
| **4/11** | Project Work | Finish gathering data of each of the hotspots |
| **4/14** | Project Work | Answer 3 questions |
| **4/16** | Project Work & Mock Presentations | Final touches |
| **4/18** | PROJECT PRESENTATION | PRESENT! |

**Models & Columns:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Model Name** | **Model Attributes** | **Model validations** | **Model Associations** |
| TBA |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Associations(Has Many/Belongs To):**

* TBA

**Validations:**

**GET and POST API Routes(Restful Routes):**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Resource** | **URL** | **HTTP Verb** | **Action** | **Used For** |
| TBA |  |  |  |  |
| TBA |  |  |  |  |
| TBA |  |  |  |  |

**Migration Strategy (Seed File):**

**Git Workflow:**

**“Stuck Time” Agreement:**

**Retrospective Notes (Due DATE):**

**ALL Deployed & Repos Links (Due DATE):**

**Working Agreements:**

**Technical Requirements**

The technical requirements for Project 1 are as follows.

* Use Pandas to clean and format your data set(s)
* 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.

**Presentation Requirements**

The presentation requirements for Project 1 are as follows.

Your presentation must:

* Be at least 8-10 min. long
* Describe the core message or hypothesis for your project.
* Describe the questions you and your group found interesting, and what motivated you to answer them
* Summarize where and how you found the data you used to answer these questions
* Describe the data exploration and cleanup process (accompanied by your Jupyter Notebook)
* Describe the analysis process (accompanied by your Jupyter Notebook)
* Summarize your conclusions. This should include a numerical summary (i.e., what data did your analysis yield), as well as visualizations of that summary (plots of the final analysis data)
* Discuss the implications of your findings. This is where you get to have an open-ended discussion about what your findings "mean".
* Tell a good story! Storytelling through data analysis is no different than in literature. Find your narrative and use your analysis and visualization skills to highlight conflict and resolution in your data.

**Expectations:**

* Prepare a 15-minute data deep-dive or infrastructure walkthrough that shows what we’ve already learned.
* We expect you to put serious time and thought into this.
* We expect you to report problems you are facing along the way.
* We expect you to utilize some form of project management system.
* We expect you to dig deep into documentation and external resources to learn what you need.

**Example projects:**

* **Private Investigator:** Use aggregate crime data from different police precincts in a city to uncover patterns in
* **Uber Rides and Weather**: find out if people take Uber more during summer and winter, and if there are relationships between daily temperature and ride frequency.
* **Bullying and Crime Rates**: Bullying and violent crime seem like they should be related. Can we find a correlation between frequency of bullying and   
  rates of violent crime?

**Notes:**