**PROJECT:** 2020 NYC Motor Vehicle Crash

**Project Description/Outline**

An overview of the 2020 Motor Vehicle Crashes in NYC. The dashboard will host 3 visualizations of data – a map with crash markers (colorized by boroughs), a summary table that is determined by user selection of borough, and a stacked line chart that totals monthly the crashes per type (motor, bike, pedestrian, etc)

**Libraries/Languages**

* JavaScript (VS Code)
  + JQuery
  + D3
  + Chart.js/AMCharts
* HTML (VS Code)
* Python/Pandas (Juptyer Notebook)
* PostGresQL/MySQL

**Datasets to be used**

* [NYC Open Data - Motor Vehicle Crashes](https://data.cityofnewyork.us/Public-Safety/Motor-Vehicle-Collisions-Crashes/h9gi-nx95/data)
  + Use an API call with JQuery
  + Supplied CSV file [here](../../Downloads/Motor_Vehicle_Collisions_-_Crashes-2.csv) to check data used quickly
* GeoJSON File of NYC borough boundaries
  + <https://data.cityofnewyork.us/City-Government/Borough-Boundaries/tqmj-j8zm>
  + Using boundaries to create borough specific colors and customization for map

**Outline:**

1. Preprocessing data – Create API pull for crashes 2020
2. Extract/Transform – Use Python to clean crash data
3. Use PostGresQL as database to hold tables
4. Use VS Code to create HTML and Javascript Files for Dashboard
5. Host via Gitlab Pages or Heroku

**Dashboard Output:**

1. Drop Down Menu for User Selection of Borough
2. Map with all 5 boroughs that zooms in when selected
3. Summarization Table for borough crash information
4. Stacked Area Chart via Amcharts with crash type per month