**Requirements**

For Project 3, you will work with your group to tell a story using data visualizations. Here are the specific requirements:

<https://www.kaggle.com/datasets/ibriiee/tesla-autonomous-deaths-data-updated-2023>

BRAIN STORMED IDEAS:

* Tesla has hired our group to help improve their software for driving
* Dataset includes information on type of accident, number of deaths, if the driver died, if an occupant had died etc.
* Description of accident are too descriptive so an array of key words will be made and used to search through description column
* Show all data on mapping however USA will be focus.
* Will use a dashboard page with multiple charts that update from the same data
* Research JS libraries
* Marker colours will be used on map
* Drop down menu can be filled with keys words that can be used to filter data to be shown on map
* One graph for columns G-L (pie chart) – dropdown menu?
* Graph two – bar chart that updates per country/state
* Split up description column (don’t include “Tesla”)
* Flask-API group countries
* Chorolpath/cluster map

TASKS:

1. Convert excel file to json and read in
2. Your visualization must include a Python Flask-powered API, HTML/CSS, JavaScript, and at least one database (SQL, MongoDB, SQLite, etc.).
3. Your project should fall into one of the following three tracks:
   * A combination of web scraping and Leaflet or Plotly
   * A dashboard page with multiple charts that update from the same data
   * A server that performs multiple manipulations on data in a database prior to visualization (**must be approved**)
4. Your project should include at least one JS library that we did not cover.
5. Your project must be powered by a dataset with at least 100 records.
6. Your project must include some level of user-driven interaction (e.g., menus, dropdowns, textboxes).
7. Your final visualization should ideally include at least three views.