


Group 05 Proposal: Members: Joy Weishan, Samantha Schutz, Paris Lee, and Kevin Carney

1. What is your dataset and why?
 - a. <https://www.nhtsa.gov/laws-regulations/standing-general-order-crash-reporting#overview>

SGO-2021-01_Incident_Reports_ADS.csv
 - b.
 - c. Why? Automobiles are an everyday part of our lives, as such a crash is always a possible danger. Understanding the recent data that shows what the factors were that caused various accidents of differing levels of severity are of interest to us since three of us work in or adjacent to the medical field, and one of us works for General Motors.
2. Research Questions:
 - a. Predicting via Machine Learning whether certain conditions will cause accidents to result in injuries or not
 - b. Will different vehicle conditions impact the results of an accident?
 - c. What time of day or month do most accidents occur?
3. Inspiration:
 - a. US Accidents (2016 – 2023) - <https://www.kaggle.com/datasets/sobhanmoosavi/us-accidents>
 - b. <https://www.urbansdk.com/blog/predicting-car-accidents-machine-learning>
 - c. <https://datascience.virginia.edu/projects/can-you-predict-motor-vehicle-accidents>
4. Visualizations – Tableau
 - a. Map – Showing where accidents occur
 - b. Possible user input – bubble chart showing various vehicle conditions
 - c. Describe the Scene? - Pin in this – (if time permits)
 - d. Visualization (type – tbd) that specifically looks at model year and resulting injuries
 - e. Monthly or Time of Day see to month - Line Chart
 - f. Pie chart on weather conditions
 - g. Passengers belted vs injuries – scatterplot and regression
5. Visualizations – Other (Tied to app)
 - a. Home – Car Accident image? w/ readme
 - b. Tableau Dashboard 1 – Visualizations first set
 - c. Tableau Dashboard 2 - Visualizations second set
 - d. Machine Learning – Generic computer image?
 - e. About Us – Our headshots
 - f. Works Cited – no image needed
 - g. Report (if time) – report

6. Colors Palette:



7. Roles and Responsibilities:

- a. Data Cleaning – Kevin / Samantha
- b. Machine Learning - Kevin
- c. Flask:
 - i. Home / About Us / Work Cited / Report – Joy
 - ii. Machine Learning - Kevin
- d. Tableau – Samantha / Paris
- e. Visualizations – Samantha / Paris
- f. Powerpoint – Kevin
- g. Write up – Kevin

8. Formatting and Filetypes:

- a. Slides in Powerpoint
- b. PDF that has the writeup
- c. Jupyter Notebook for cleaning / visualizations
- d. Tableau in Tableau
- e. Github Link: <https://github.com/KevinPCarney/Project-04-Group-TBD>