

1. Dataset and reason
  - a. Car Crash Dataset for Monroe County, Indiana
  - b. It's a large dataset that includes latitude and longitude so we can make maps. It will also help us better understand the type of injuries coming from crashes and which months have the most crashes
  - c. <https://www.kaggle.com/datasets/jacksondivakarr/car-crash-dataset>
2. Research Questions:
  - a. Q1: What days of the week are people more likely to get into accidents? Does this change based on month?
  - b. Q2: What type of injuries are most likely to occur? Are more severe injuries likely to occur in one car accidents or multi-car accidents?
  - c. Q3: What time of day are people most likely to get into accidents?
3. Inspiration:
  - a. <https://www.kaggle.com/code/alhsan/car-crash-exploratory-data-analysis>
4. Potential Visualizations:
  - a. Q1: What days of the week are people more likely to get into accidents? Does this change based on month?
    - i. Leaderboard
    - ii. Bar Chart
  - b. Q2: What is the most common primary factor leading to accidents?
    - i. Leaderboard
    - ii. Bar Chart
  - c. Q3: What time of day are people most likely to get into accidents?
    - i. Line Chart
      1. Time of day per day of week (7 traces)
  - d. Map: Random sample of accident locations (grab around 500 locations) to show where accidents are most likely to occur
    - i. hvplot map
5. Regression
  - a. Time of day v. day of week
  - b. Looking at correlation between time of accidents vs. day of the week
  - c. (maybe) Can also do with type of accident
    - i. Car v. other (i.e. pedestrian, bus, cyclist etc.)
    - ii. V. 1+ cars
    - iii. Multi linear regression plot
  - d. If done early, can do a T-test or ANOVA between accidents per day of the week
    - i. Will probably need to do a summary table to get this--maybe
6. Color Palette
  - a. Greens and Blues
  - b.

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## 7. Role & Responsibilities

- a. Everyone: Clean data
  - b. Marta
    - i. Map
    - ii. Regression
  - c. Kenny
    - i. Q1 and Q2
    - ii. Leaderboards
  - d. Ivan
    - i. Lead on slides
  - e. Zach
    - i. Q3
8. Github link: <https://github.com/martabaker/ds-project-1-group-11>