Project Title: Contributing Factors to Texas Car Accidents

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Project description:

The purpose of this project is to identify whether three factors have a correlation to the severity of a car accident in the state of Texas. The three variables we will be looking at are the weather conditions, the time of the day, and the type of terrain. Our primary objective is to utilize our dataset to confirm or deny our assumption with the selected model implemented for the analysis and present our results to the rest of the class.

Outline:

* Explain the topic of car accident severity, and the multitude of variables that can influence them.
* Discuss our assumptions, and current standing on the possible effects weather, time of day, and terrain have on car accidents.
* Show how the model implemented was chosen, and why it is the most appropriate to handle our objective.
* Present the findings in combination with visualizations to make the information approachable.
* Re-visit our initial assumptions, and state if our findings proved or disproved our beliefs.
* Finalize the discussion with a summary of the topics covered and reiterate the results.

Dataset to be used: US Accidents (4.2 million records) A Countrywide Traffic Accident Dataset (2016 - 2020) *Sourced from Kaggle.com*

Research Question to Answer: Are the weather conditions surrounding a car accident, the time of day a car accident occurs and the terrain that an accident occurs on the three most important factors that determine the severity of car accident in the state of Texas?

Rough Breakdown of Tasks:

* Identify research question to be answered.
* Locate an appropriate data set suited for our research.
* Clean the data set and reduce the number of observations to a manageable amount.
* Identify the appropriate model to be used for the analysis.
* Perform the analysis.
* Create visualizations to convey the findings of our data.
* Present our findings.