Car Accident Case Study

Introduction:

In the growing world, there is an ever-growing need for road safety with the increasing vehicular density and the poor condition of the existing roads. It is a challenging task to come up with a way to avoid the road hazards providing a safer means of road transport for everyone. Several algorithms and devices were built addressing the same concerns.

So, In an effort to reduce the frequency of car collisions in a community, this case study outcome is to predict the severity of an accident given the current weather, road and visibility conditions. When conditions are bad, this model will alert drivers to remind them to be more careful.

## Data Understanding:

Our predictor or target variable will be 'SEVERITYCODE' because it is used measure the severity of an accident from 0 to 5 within the dataset. Attributes used to weigh the severity of an accident are 'WEATHER', 'ROADCOND’, 'LIGHTCOND',’ The total number of people involved in the collision’ and’ The number of vehicles involved in the collision.

Severity codes are as follows:

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| --- | --- |
| 0 | Little to no Probability (Clear Conditions) |
| 1 | Very Low Probability - Chance or Property Damage |
| 2 | Low Probability - Chance of Injury |
| 3 | Mild Probability - Chance of Serious Injury |
| 4 | High Probability - Chance of Fatality |