Car Accident Severity Estimtator

COURSERA CAPSTONE PROJECT

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Introduction

- Road accidents are the most unwanted thing to happen to a person and family, still it happens very frequently.
- Nearly 1.3 million people lose life due to car accidents every year all over the globe. Drivers are aware of traffic rules and conditions still accidents do happen and result in loss of life and property.
- Data related to such incidents are available in public domain which can be used to analyze the scenario, conditions and severity accident.
- Thus, enabling the governments and concerned authority to make roads safer and make people aware of situations which can lead to accidents.

Business Problem

A car accident results in huge cost, according to US government data shows each road accident result in loss of $60K approximately.

This cost can be attributed to the damage to property, injuries treatment, loss of workday, emergency response, insurance claims.

Thus, avoiding a car accident can save lot of money and life, resulting in positive impact on the economy. As car accidents and it severity is dependent on many factors, taking into consideration factors like weather condition, speed of the car, state of the road, traffic.

Using these factors to predict the severity of the outcome of the accident can help the city administration take necessary measures and impose restriction to minimize loss, in terms of man, material and money. Thus, a model able to predict any such outcome can be very desirable.

Data

To design any such model which can predict the severity of the road accidents, we will be using Data-Collisions data set provided in the course of this module. This data set provides the details like., data/time, junction type, road condition, weather, light condition, speeding, under influence, and severity. Thus, this can help in predicting the severity in case we know the other factors.

	ADDRTYPE	WEATHER	LIGHTCOND	ROADCOND	INCDATE	SEVERITYCODE
0	Intersection	Overcast	Daylight	Wet	2013/03/27 00:00:00+00	2
1	Block	Raining	Dark - Street Lights On	Wet	2006/12/20 00:00:00+00	1
2	Block	Overcast	Daylight	Dry	2004/11/18 00:00:00+00	1
3	Block	Clear	Daylight	Dry	2013/03/29 00:00:00+00	1
4	Intersection	Raining	Daylight	Wet	2004/01/28 00:00:00+00	2