**CAPSTONE PROJECT:**

**1. Introduction**

Traffic Collisions are a major source of deaths in all the Countries. Approximately 1.35 million people die each year as a result of road traffic crashes [1]. Not only death, Traffic Incidents are also a major source of injuries, property damage and a major concern for public health and traffic safety. Traffic Incidents are unplanned events, however, by understanding and reducing severity risk can have benefits in reduced Deaths, less injury and less economic impact of governments, health institutions and insurance companies.

**1.1 Problem**

As previously stated, Traffic Incidents are unplanned events, but Data can contribute to providing some insight for few conditions linked to severity of accidents. That conditions can be read, and high fatalities may be avoided if proper precaution is kept.

**1.2 Target Audience**

A lot of stakeholders can be helped from such an analysis such as:

i. Drivers- Take precautions by understanding possible risk factors

ii. Insurance Companies- Have a risk assessment, policy amount and client targeting by having a better understanding of different conditions

iii. Government Administration (would be able to better distribute resources such as police and health workers more efficiently depending on the areas of highest severity probability).

**2. Data Description**

Data used in this project is provided by Coursera in a CSV file named Collissions.csv. This database is published by SDOT Traffic Management Division, containing a total of 37 attributes related to severity of accidents, incident locations, road state and number of agents involved and others. Target variable in this dataset will be Severity.

**2.1 Solving problem with provided dataset**

As this dataset contains information about the history of severity of accidents and their conditions, this dataset can be used to create a model that will explain the severity of accidents associated to different conditions. After these features are determined, Stakeholders may use these insights for their individual advantages such as developing preventive measures, deploying resources and fast actions from health institutions.

[] World Health Organization. <https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries>