Introduction/Business Plan:

The purpose of this project is to create a machine learning model that predicts the occurrence of road collisions based on the road conditions and weather.

Very often, collisions are caused due to bad weather and road conditions. If it were possible to predict the safety of travelling based on historical data, then a lot of collisions could be prevented.

Data:

The data that will be used is from the traffic collisions that have occurred between 2015-2018 within Montgomery County, as collected by the Automated Crash Reporting System (ACRS) of the Maryland State Police, and reported by the Montgomery County Police, Gaithersburg Police, Rockville Police, or the Maryland-National Capital Park Police.

The attributes are as follows:

eport\_number

local\_case\_number

agency\_name

acrs\_report\_type

crash\_date\_time

route\_type

road\_name

cross\_street\_type

cross\_street\_name

off\_road\_description

municipality

related\_non\_motorist

at\_fault

collision\_type

weather

surface\_condition

light

traffic\_control

driver\_substance\_abuse

non\_motorist\_substance\_abuse

first\_harmful\_event

second\_harmful\_event

fixed\_oject\_struck

junction

intersection\_type

road\_alignment

road\_condition

road\_division

latitude

longitude

location\_2

location

