Capstone Project Proposal

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### Problem

Maryland law enforcement made 550 DUI(driving under the influence of intoxicants) arrests in 2015, compared to 450 DUI arrests in 2014. Maryland Department of Transportation reported 513 total traffic accident deaths in Maryland in 2015 - up from 442 deaths in 2014. Drunk driving accidents accounted for more than one-third of traffic crash fatalities in 2015.Is is possible to identify when there is increase in crash i.e do accidents increases during holidays or long weekends, percentage of young drivers , repeated offenders, more accident prone areas ,crash or death invoving drugs or alochol ?

## Client

Maryland Department of Transportaion(MDOT) is trying to analyze how much motor vehicle accident deaths or crash are increasing - including passenger vehicles, large trucks, and both male and female drivers in day and night time. MDOT needs to identify what contributes to these crashes e.g.drinking alcohol while driving create a recipe for disaster , not wearing seat belts is a factor in a great percentage of deadly automobile crashes or a holiday week as **"Every life lost is an avoidable tragedy,"**

## Data

The dataset contains traffic violation information from all electronic traffic violations issued in Maryland.Data is available in multiple format for download [here](https://data.montgomerycountymd.gov/Public-Safety/Traffic-Violations/4mse-ku6q).It contains 35 columns and is refreshed daily.Detailed description of data and attributes is avaialble [here](https://data.montgomerycountymd.gov/Public-Safety/Traffic-Violations/4mse-ku6q)

## Approach

Below are some points on the approach that will be used to answer the questions

1. First thing will to check if there is an increase in creash during weekends or holiday season so that monitoring of traffic and accident prone areas can be increased.This can be achieved by taking into consideration date of stop and matching check if it falls on any holiday.
2. If any crash involves death , then did it involved DUI.Attributes like accident,fatal and alochol can help it achieving this.
3. How much people from outside state were involved in crash or traffic violations.It can help find trends of people who travels long distance and can be involved in dissy driving.

## Deliverables

The deliverables for this project will all be loaded onto github. These will include the code used to manipulate and analyse data. In addition, there will be a report including key findings, graphs, and final conclusions.