**THE MATRIX**

**TOPIC : MoRTH ANALYSIS**

**SYNOPSIS**

The MoRTH dataset given in the problem statement gives the details of the accidents that the authority has investigated. The goal of our solution is to figure out the most influencing factors that might have led to the misfortune. These factors if communicated in time to the driver may increase the chances of avoiding the accident. The report can be used in order to determine the leading causes of the accident in different locations considering various parameters. Sufficient and relevant dataset is available in OGD and MoRTH websites. Efficient data mining is done to reduce accident rates.

**DATASET**

The dataset will be taken from Open Government Data Platform India which is the most authentic source available publicly. Data is classified according to Educational Qualifications of Drivers, Nature of Potholes, location, occurrence time, Weather Condition, vehicles, road condition etc. Data contains information like total Number of Road Accidents, number of Persons Killed and Injured. Our tool will continuously update the data using real-time user feedback which are relevant to get better prediction.

**List of technologies used:**

1. Seaborn

<https://seaborn.pydata.org/introduction.html>

Version - 0.9.0 (open-source)

1. Keras

<https://keras.io/>

Version - 2.2 (open-source)

1. Matplotlib

<https://matplotlib.org/>

Version - 3.11 (open-source)

1. OpenWeatherMapAPI

<https://openweathermap.org/api>

(commercial)

1. TensorFlow

<https://www.tensorflow.org/>

Version – 2.0 (open-source)

1. Tkinter

<https://tkdocs.com/>

Version – 8.6 (open-source)