TEAM ID	PNT2022TMID06787
PROJECT NAME	SIGNS WITH SMART CONNECTIVITY AND ROAD SAFETY
MAXIMUM MARKS	4 MARKS

LITERATURE SURVEY:

INTRODUCTION:

Various methodologies have been reviewed in numerous research articles. By consulting numerous articles from diverse domains, including those on road accidents and other topics, a thorough research is performed. An enormous rise in the quantity of physical items or cars on the road is caused by the population boom. As a result of extremely heavy traffic, the number of traffic accidents rises. This project involves reckless driving and traffic. Computer vision sensors are used to monitor violations, and images or sequences of images give drivers a better view of the road.

PROBLEM FORMULATION:

A phenomenon in transportation known as traffic congestion may involve large crowds, slowed vehicle speeds, and even longer vehicle lengths. When there is a high demand for traffic, the interaction of the moving cars slows down the flow of traffic, which eventually leads to congestion. Smart traffic management systems can be implemented in the current situation to address these issues, and we are now researching ways to create cities with no traffic. This system aids in traffic monitoring.

LITERATURE ESTIMATION:

For emerging nations that are overpopulated, road accidents have recently become a national calamity. The overspeed of vehicles ignoring the posted speed limit is one of the major causes of accidents in sensitive public areas like schools, colleges, hospitals, etc. and acute turning locations. By not reducing their vehicle speed in these delicate public areas, drivers put the lives of passengers, pedestrians, and other drivers at danger. The suggested system's primary goal is to run the vehicles at a safe speed in vital areas while reducing the potential danger of unintentional accidents and casualties. This project establishes a system to notify the driver of the speed limitations in particular regions and to automatically reduce the speed of cars in sensitive public zones.

ANALYSIS AND REVIEW

The speed limits and road signage in use today are static. However, under specific circumstances, the signs may be modified. If the road signs are digitalized, we may take into account situations when there are detours due to traffic congestion or accidents and adjust the signs accordingly. This proposal suggests a system that uses digital sign boards with constantly changing signs. Rainfall causes the roads to become slick, and the speed restriction is lowered. There is a web application that allows you to enter information about road detours, accident-prone regions, and informational sign boards.

Python IDLE is required software.

system needed

RAM: 4GB Minimum Processor: Configuration OS-Windows/Linux/MAC

Smart connected sign boards are used to replace static signboards.

These intelligent connected sign boards update automatically and obtain the speed restrictions from a web application utilising weather API.

The speed may rise or fall depending on weather changes.

The display of the diversion signs depends on the flow of traffic and potential fatalities.The appropriate guide, warning, and service signs are also posted at hospitals and restaurants.

With the use of buttons, many operating modes can be chosen.

This project will drastically change the poor road management into a better one, this will benefit the drivers, passengers and elderly people who are using roads to travel with ease and safety

LITERATURE SOURCES /REFERENCES

[1] European road assessment program (Euro RAP), "European Road Safety atlas

[2] World Health Organization, "Save LIVES - A road safety technical package,"2017.

[3] World Health Organization, "Global status report on road safety2015."