Project Design Phase-I
Proposed Solution Template

Date	03 November 2022
Team ID	PNT2022TMID53515
Project Name	Project - Signs With Smart Connectivity For Better Road Safety
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	In present systems the road signs and the speed limits are static. But the road signs can be changed in some cases. We can consider some cases when there are some road diversions due to heavy traffic or due to accidents then we can change the road signs accordingly if they are digitalized. This project proposes a system which has digital sign boards on which the signs can be changed dynamically.
2.	Idea / Solution description	The main objective of the proposed system is to operate the vehicles in a safe speed at critical zones minimizing possible risk of unwitting accidents and casualities. This project paves a system to alert driver about speed limits in specific areas and reduce speed of vehicles in sensitive public zones without any interference of drivers. These systems can be used to overcome some problems such as overspeed, exact location of accident occurred and heavy trafiic congestion.
3.	Novelty / Uniqueness	The proposed system use node MCU's connected with IoT which controls and limits speed in some specific areas and GPS to get exact location where the accident may occur. In future we can enhance this system by implementing camera using raspberry pi, GSM module in case of network unavailability and low RAM module/zigbee module for long range communication.
4.	Social Impact / Customer Satisfaction	Using this project, drivers can receive information about their speed statues and information regarding the damaged roads due to which number of accidents can be reduced and improves circulation.
5.	Business Model (Revenue Model)	This project is not only for better road safety, Smart connectivity technology can be used in network through protocols that

		automatically identify what things are (Deep Learning Technology) and validate, Confirm and route transactions (Blockchain technology) within the network
6.	Scalability of the Solution	The main advantage of this project is it's IOT based features which are very crucial to driverless cars and wireless digital traffic sign post.