Project Design Phase-I
Proposed Solution Template

Date	10 Oct 2022
Team ID	PNT2022TMID44536
Project Name	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)	The problems in these curve roads is that the drivers are not able to see the vehicle or obstacles coming from another end of the curve. If the vehicle is in great speed then it is difficult to control and there are chances of falling off a cliff. Hence there is a need of many road safety systems.
2.	Idea / Solution description	To avoid these problems in curve roads of mountain areas, Nevon projects has proposed this vehicle accident prevention system. This accident prevention system using sensors is powered by Arduino board, it consists of IR sensors, LED lights, and buzzer. When two cars pass from the opposite side of a mountain curve the IR sensor senses the car and LED colour changes to red and raises the buzzer giving signal of danger and then it changes one LED colour into green to allow the one car to pass and then the other LED colour turns green. In this way we can prevent the accidents of curved road.
3.	Novelty / Uniqueness	One or more of the fundamental data to guarantee road safety of the connected cars is the geolocation. The connected cars can communicate with each other, so that, depending on the speed and position of each vehicle, collisions are avoided, like maneuvers involving emergency braking.
4.	Social Impact / Customer Satisfaction	Ensuring safe driving experience with real-time assistance, navigation, and even monitoring driving patterns and any emergency situation. Additionally, along with the state of the traffic, IoT drivers can receive updated information on the state of the roads potholes, grade changes, black spots, etc..
5.	Business Model (Revenue Model)	We can introduce product-based approach to earn a good revenue . Adding precise, low-cost, always-connected IoT sensors and monitoring devices to the products that you sell and install enhances the types of services.

6.	Scalability of the Solution	The IOT applications must have the ability to support an increasing number of connected devices, users, application features, and analytics capabilities, without any degradation in the quality of service.