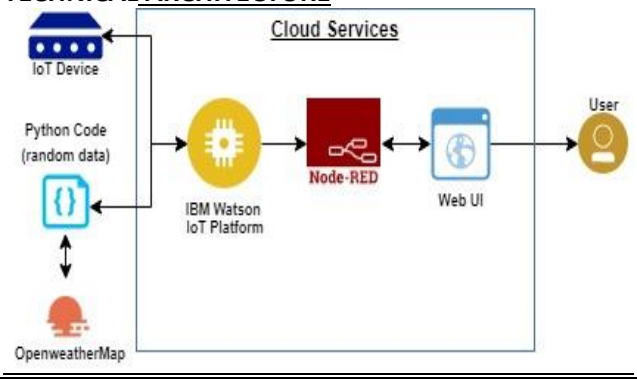
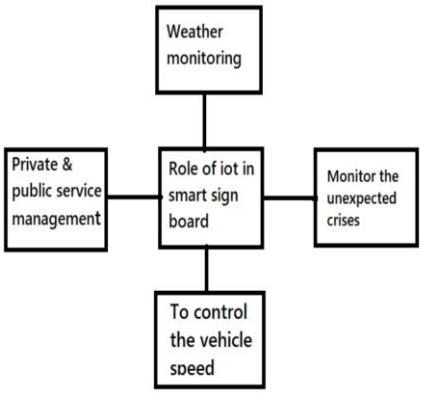
Project Design Phase-I
Proposed Solution Template

Date	29 September 2022
Team ID	PNT2022TMID45483
Project Name	Project - SIGNS WITH SMART CONNECTIVITY AND 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)	To replace the static signboards, smart connected sign boards are used. These smart connected sign boards get the speed limitations from a web app using weather API and update automatically. Based on the weather changes the speed may increase or decrease. Based on the traffic and fatal situations the diversion signs are displayed. Guide(Schools), Warning and Service(Hospitals, Restaurant) signs are also displayed accordingly. Different modes of operations can be selected with the help of buttons.
2.	Idea / Solution description	IOT is influencing our lifestyle from the way we react to the way we behave and it conceptualizes the idea of remotely connecting and monitoring the real-world objects through the internet. Road accident nowadays has become a national catastrophe for over populated developing countries.one of the main cause of accident in the sensitive public zones like school, college, hospitals etc. and the sharp turning points is the over speed of vehicles avoiding the speed limit indicated in the traffic sign board. Drivers endanger the lives of passengers, pedestrians and fellow drivers not limiting their vehicle speed in these sensitive public zones. The main objective of this project is to operate the vehicles in s safe speed at critical zones & bad weathers minimizing the possible risk of unwitting accidents, traffic and casualties. This project paves a system to alert the driver about the speed of the vehicle in sensitive public zones and if need any diversion at that place without any interference of the drivers. The system operates in such way that the accident information is passed to the vehicles entering the same zone to take diversion to avoid traffic congestion. This project is sub divided into three parts.

		These are weather monitoring display, warning and service alert display, diversion sign display. The controls are taken automatically by the use of a wireless local area network. Weather conditions can be monitored through open weather app. With the help of G-map we will indicate the sensitive zone. Let's analyze the diversion area with the help of AI camera. **TECHNICAL ARCHITECTURE** 
3.	Novelty / Uniqueness	• A signboard is a piece of wood which has been painted with pictures or words and which gives some information about a particular place, product, or event.. • Digital signs are much more visually impressive and imposing than static signs are. This is especially true for industries like retail, hospitality, marketing, and restaurants where showcasing promotions and attracting eyes are paramount to success.
4.	Social Impact / Customer Satisfaction	1.Can save many people live. 2.Can avoid unwanted expenses by avoiding vechicle clashes. 3.Peopwill be independent. 
5.	Business Model (Revenue Model)	The global digital signage market is worth $16.3 billion in 2021. Accordingly, it has attracted many players from across the

		world. The guide below will help you identify smart signage platforms to broadcast innovative content:
6.	Scalability of the Solution	Static signs offer limited flexibility since you need to print new ones to reflect changes. On the other hand, it is simple to make instant amends on digital screens. If you want a more dynamic solution, smart digital signage provides better convenience. Smart signage can change automatically based on inputs from other business applications and data sources. For instance, in-store smart signs can display real-time social media campaigns if you add your brand's accounts. Smart sign APIs linked to your firm's database trigger automatic updates that serve shoppers better. For example, restaurant managers can connect menu boards with Point of sale (POC) to acquire pricing and availability information..