Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	03 October 2022
Team ID	PNT2022TMID52810
Project Name	Signs with smart connectivity for better road safety
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User visibility	In order to catch driver's attention, sign boards should be created with LEDs that are brightly coloured and put in a prominent location. However, they shouldn't be over bright, distracting.
FR-2	User understanding	Repetition of the signs in an order that the driver can grasp them is necessary for improved comprehension. The sign is to be designed using symbols so that the driver may grasp it quickly.
FR-3	User convenience	The display should be sufficiently large to be readily visible even from a distance.
FR-4	User infotainment	Boards that specify infotainments can be initialized in order to deliver information and entertainment like weather updates, much more that where useful while waiting in the traffic signal.

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Due to technological advancements, it should be able to update in a timely manner using the sensor and depending on the data provided, and it should be simple to upgrade so that the interpreter can simply make modifications.
NFR-2	**Security**	The sign board needs to be very secure; nobody should be able to access it because it could lead to incorrect signs being displayed.
NFR-3	**Reliability**	It ought to capable of produce right signal no matter the reason and signal board ought to now no longer produce error.
NFR-4	**Performance**	It should be able to automatically update itself when certain weather, emergency situations and traffic problem occurs.
NFR-5	**Availability**	It should be available 24/7 since roadways are used both day and night every single day. So that it can be beneficial to the users
NFR-6	**Scalability**	It should be able to easily change and upgrade according to change and need in requirement.