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

Team ID	PNT2022TMID27681
Project Name	SIGNS WITH SMART CONNECTIVITY FOR BETTER ROAD SAFETY
Maximum Marks	4 Marks

Functional Requirements:

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	• When crowd on accident occur it guides the travellers to choose best path. • Intimates the speed range depending upon roadway condition. • Ensure the vehicles are redirected to right path without causing much trouble for other drivers. • Easy to follow instructions based on given data on the digital board.
NFR-2	**Security**	• Prediction of data gives them a fair and better road understanding about their upcoming of toad events.
NFR-3	**Reliability**	• Helps to travellers behaviour towards awareness of travel.

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User visibility	• Informations can be written in short form in the sign boards so that it can be very easily captured by drivers. • Place sign boards on popular places. • Symbols can be used so that drivers can save some amount of time in reading. • Static signs can be replaced by smart signs to reduce accidents.
FR-2	User convenience	• Display should be larger which can be visible from far distance.
FR-3	User need	• Awareness programmes should be conducted to bring awareness among the users about road safety. • Road safety education is essential for users.

Non-functional Requirements:

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

NFR-4	**Performance**	- Pre-functional record of voice record along with LED display provide in waiting time at traffic signs. - There is a rain drop sensor which checks whether there is a rain, to transmit data over IOT helps to display on LED along with wifi connection of internet changing data dynamically with current reporting of event sensing flow of data
NFR-5	**Availability**	- Monitors the road events even in low light on poor weather conditions. - Record traffic offenses
NFR-6	**Scalability**	- It is user friendly interface. - Data accessibility is easy from source.