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

Date	14 October 2022
Team ID	PNT2022TMID06179
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	Travelers Registration	Registration in the platform needs for communicating with customer through their mobile
FR-2	Transport Agency Registration	Register for getting approval to implement the smart sign boards for better road safety
FR-3	Weather Monitoring	Open weather API implemented to monitor weather reports and update in database
FR-4	Sensor implementation	Monitoring traffic density and road condition, pedestrian monitoring and controls traffic signals.
FR-5	Database Management	Updating information in the database to intimate the users about the abnormal situations
FR-6	Information Sharing	Once the situation detected the user get information via the digital display who travels along the road also it will update in the platform, so others plan accordingly

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Easy to follow instructions displays on the board. Understanding the signs should be clear.
NFR-2	**Security**	Provide better security, any other third party can't able to display information in the board, Users data are kept confidential.
NFR-3	**Reliability**	It can able to withstand in any weather condition and the hardware parts require periodic monitoring to avoid any damage. It is dynamic in nature and reduce traffic congestion.
NFR-4	**Performance**	The smart display improves the safety and it makes user tense free and keep them in a comfort zone. Also quality of service is improved.
NFR-5	**Availability**	The solution is available 24X7 and also withstand any climate changes.
NFR-6	**Scalability**	It can be implemented efficiently in anywhere and data execution will be faster. Provides better safety