

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

Date	16 October 2022
Team ID	PNT2022TMID32979
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	<ul style="list-style-type: none">➤ visibility refers to a motorist's capacity to clearly see the traffic and environmental surroundings on the road while maintaining the ability for other drivers to perceive the driver in question.➤ In transport, driver visibility is the maximum distance at which the driver of a vehicle can see and identify prominent objects around the vehicle.
FR-2	User need	<ul style="list-style-type: none">➤ Road safety education is as essential as any other basic skills of survival.➤ our aim is to provide road safety information for road users to encourage safer road user behaviour among current and prospective road users and reduce the number of people killed and injured on our roads every year.
FR-3	User understanding	<ul style="list-style-type: none">➤ Road traffic safety refers to the methods and measures used to prevent road users from being killed or seriously injured.➤ Anyone who uses a road, such as a pedestrian, cyclist or motorist.
FR-4	User convenience	<ul style="list-style-type: none">➤ Passive traffic safety measures sought to avoid influencing the behavior of drivers while giving automobiles maximum convenience.
FR-5	Database	<ul style="list-style-type: none">➤ Updating information in the database to intimate the users about the abnormal situations.

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.