

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

Date	03 October 2022
Team ID	PNT2022TMID22305
Project Name	Sign 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 Understanding	The signs should be large, clear, and readable in order for the driver to understand them. They can also include illustrations to help the driver understand them. The methods and measures used to prevent road users from being killed or seriously injured are referred to as road traffic safety.
FR-2	User convenience	Passive traffic safety measures sought to avoid influencing driver behaviour while providing maximum comfort to vehicles. The display should be large enough to show all of the signs correctly, even from a distance.
FR-3	User Guidance	Provides complete information about the system's processes to the user. Defines the product's features and functions. Focus on user requirements, which includes explaining the significance of selecting our product. A user manual is included. Tour of the client application
FR-4	User need	Road safety education is just as important as any other learnable skill. Our goal is to provide road safety information to drivers in order to encourage safer driving habits among current and future drivers and to reduce the number of people killed and injured on our roads each year.
FR-5	User visibility	Visibility refers to a driver's ability to see traffic and environmental surroundings on the road while also allowing other drivers to understand the driver in question.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The user should read the provided user manual and guide to fully utilise all of the features. The software should be understood, used, and learned by its intended users.

NFR-2	Security	It should have a good security system so that nobody else is able to hack into it and display their own directions.
NFR-3	Reliability	The system that collects information from the surrounding environment and processes it in real time so that drivers can be comfortable that the signs are providing the best results possible.
NFR-4	Performance	A performance review looks at the current state of road safety, helping the government in trying to identify a most important security aspects and suggesting actions to be taken.
NFR-5	Availability	It should be available 24 hours a day, seven days a week to benefit the customer.
NFR-6	Scalability	More features, such as alarms, and many more sensors for the preacquisition of vehicles and death situations, can be added in the future.