

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

Date	03 October 2022
Team ID	PNT2022TMID38206
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	Sign boards should be designed with LEDs that are brightly coloured and capable of grabbing the attention of vehicles, but they shouldn't be too distracting or blinding because it could cause accidents.
FR-2	User Need	To reduce user confusion when travelling, smart sign boards should be put more frequently where they are needed and less frequently where they are not.
FR-3	User Understanding	The signs should be big, clear, and legible to help the motorist understand them. They can also incorporate images to help the driver understand the instructions even better.
FR-4	User Convenience	The display should be sufficiently large to be readily visible even from a distance.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	When necessary, it should be able to upgrade and update.
NFR-2	Security	So that no one else can hack it and display their own directions, it needs to have a strong security mechanism.
NFR-3	Reliability	It ought to be able to present the data accurately and without any mistakes.
NFR-4	Performance	When specific weather or traffic issues arise, it need to be able to update itself automatically.
NFR-5	Availability	For the benefit of the user, the driver, it should be accessible around-the-clock.
NFR-6	Scalability	It need to have the flexibility to quickly adapt to changes in requirements and make upgrades as necessary.