

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

Date	07 October 2022
Team ID	PNT2022TMID52636
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	Transport Agency Registration	Register for getting approval to implement the smart sign boards for better road safety
FR-2	Sensor implementation	Monitoring traffic density and road condition, pedestrian monitoring and controls traffic signals.
FR-3	Weather Monitoring	Open weather API implemented to monitor weather reports and update in database
FR- 4	Web UI	Information on the smart boards will also be displayed in the web UI when the pedestrians travel in the road

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 be 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 withstand any climate changes
NFR-6	Scalability	It can be implemented efficiently in anywhere and data execution will be faster. Provides better safety