

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

Date	15 October 2022
Team ID	PNT2022TMID02365
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	Traffic Detection	The traffic data is necessary for diverting the route. The traffic data is obtained from the camera.
FR-2	Dynamic Display	The display is automatically updated based on the traffic data and weather conditions to reduce the manual updating of display.
FR-3	Weather Monitoring	Speed limit is set based on the weather conditions
FR-4	Manual updation	Buttons are used to navigate across various processes in the smart sign board.
FR-5	Website and Cloud	All the data is collected and processed on the cloud and the web application provides the user interface.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The usage of the web application must be simple and user friendly.
NFR-2	Security	The cloud access and other services are restricted to the government officials and all the updation can be done from the remote location. The username and key should be confidential.
NFR-3	Reliability	The information sent by the sensors should be accurate. The hardware components used for the system and the code should be written in such a way that the time taken to send the data is minimum.
NFR-4	Performance	Traffic and weather condition values should be updated frequently.
NFR-5	Availability	The product must be easily available to the customer.
NFR-6	Scalability	The project must have the ability to increase or decrease in performance and cost in response to changes in application and system processing demands.

