

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

Date	03 October 2022
Team ID	PNT2022TMID28982
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">● Informations can be written in short form in the sign boards so that it can be very easily captured by drivers.● Place sign boards on popular places.● Symbols can be used so that drivers can save some amount of time in reading.● Static signs can be replaced by smart signs to reduce accidents.
FR-2	User convenience	<ul style="list-style-type: none">● Display should be larger which can be visible from far distance.
FR-3	User need	<ul style="list-style-type: none">● Awareness programmes should be conducted to bring awareness among the users about road safety.● Road safety education is essential for users.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	<ul style="list-style-type: none">● When crowd on accident occur it guides the travellers to choose best path.● Intimates the speed range depending upon roadway condition.● Ensure the vehicles are redirected to right path without causing much trouble for other drivers.● Easy to follow instructions based on given data on the digital board.
NFR-2	Security	<ul style="list-style-type: none">● Prediction of data gives them a fair and better road understanding about their upcoming of toad events.
NFR-3	Reliability	<ul style="list-style-type: none">● Helps to travellers behaviour towards awareness of travel.

NFR-4	Performance	<ul style="list-style-type: none"> ● Pre-functional record of voice record along with LED display provide in waiting time at traffic signs. ● There is a rain drop sensor which checks whether there is a rain, to transmit data over IOT helps to display on LED along with wifi connection of internet changing data dynamically with current reporting of event sensing flow of data
NFR-5	Availability	<ul style="list-style-type: none"> ● Monitors the road events even in low light on poor weather conditions. ● Record traffic offenses
NFR-6	Scalability	<ul style="list-style-type: none"> ● It is user friendly interface. ● Data accessibility is easy from source.