

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

Date	03 October 2022
Team ID	PNT2022TMID14966
Project Name	Project – 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 Registration	Registration through Form Registration through Gmail Registration through LinkedIn
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	USER APPROVAL	DONE BY MAILS DONE BY MESSAGES VIA SMS
FR-4	TESTING	TESTING IS DONE BY API AND UI
FR-6	END RESULT	PRODUCT FEATURES DECIDES THE END RESULT

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	1.ROAD CONDITIONS WILL NOT REMAIN THE SAME , SO CONTINUOUS SENSING IS DONE THROUGH SENSORS WHICH WILL SIMULTANEOUSLY CHANGE THE SIGNS ON THE SIGN BOARDS 2. DIVERSE LANGUAGES MUST BE USED IN SIGN BOARDS 3.NOTIFYING WARNINGS AND ALERTS THROUGH SIGN BOARDS

		4.CUSTOMERS MUST READ THE USER INSTRUCTIONS BEFORE USING THE MOBILE APP TO UNDERSTAND EVERYTHING EFFECTIVELY
NFR-2	<b>Security</b>	1.A ROBUST SECURITY SYSTEM MUST BE USED SO THAT NO HACKERS CAN ENTER WITH UNAUTHORIZATION INTO THE IOT BASED SYSTEM
NFR-3	<b>Reliability</b>	1.SIGNS DISPLAYED ON THE BOARDS MUST BE CLEAR AND FLEXIBLE SO THAT THE PEOPLE CAN TAKE BEST DECISIONS WITHOUT CONFUSION WHILE TRAVELLING ON THE ROAD. 2. CORRECT AND AUTHORIZED SIGNS HAS TO DISPLAYED FOR HIGH RELIABILITY
NFR-4	<b>Performance</b>	1.PERFORMANCE MUST HAVE TO BE HIGH WHEREAS ITS COST MUST BE INVERSELY PROPORTIONAL WITH IT 2.SIGN BOARDS WILL BE USED EFFICIENTLY ONLY IF IT IS CLEARLY VISIBLE TO THE DRIVERS AND THE PUBLIC ,WE HAVE TO ENSURE TO KEEP IT IN THE CORRECT PLACE. 3. WEB APPLICATION'S NOTIFICATION HAS TO BE STRICTLY TAKEN INTO CONSIDERATION
NFR-5	<b>Availability</b>	SIGNS BOARDS HAS TO WORK ALL THROUGH DAY AND NIGHT, SO PROPER POWER SUPPLYS OR BATTERY SHOULD BE GIVEN TO THE SIGN BOARDS
NFR-6	<b>Scalability</b>	SCALABILITY IS AN IMPORTANT FACTOR AS IT HAS TO BE USED TO COPE UP WITH THE HIGH POPULATED AREAS