

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

Date	18 October 2022
Team ID	PNT2022TMID21781
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 Registration	<ul style="list-style-type: none">Registration through FormRegistration through GmailRegistration through LinkedIn
FR-2	User Confirmation	<ul style="list-style-type: none">Confirmation via EmailConfirmation via OTP
FR-3	User Visibility	<ul style="list-style-type: none">Sign Boards should be made of bright coloured LEDs capable of attracting driver's attention.
FR-4	User Understanding	<ul style="list-style-type: none">Display should be big enough to display all the signs correctly so that it is understandable even to far away drivers.
FR-5	Information delivering time	<ul style="list-style-type: none">The accident information should be delivered before certain distance then only the driver can change the route of destination.

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">Product that is simple to use. It can be used and understandable by all people without any predefined training.
NFR-2	Security	<ul style="list-style-type: none">A robust security system must be used so that no hackers can enter with authorization into the IoT based system.
NFR-3	Reliability	<ul style="list-style-type: none">For high reliability correct and authorized signs should be displayed.
NFR-4	Performance	<ul style="list-style-type: none">Automatic updation should be done in case of sudden accidents and weather changes.
NFR-5	Availability	<ul style="list-style-type: none">Signs boards must work 24/7, so proper power supply or battery should be given to the sign boards.
NFR-6	Scalability	<ul style="list-style-type: none">It should be implemented through the entire highway system.

