

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

Date	06 October 2022
Team ID	PNT2022TMID30307
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 interface	The information transmitted from a given sign is visible to the vehicle's infrared light. The sign alerts oncoming cars to slow down due to a change in the roadway.
FR-4	Features	It proposes a system which has digital sign boards on which the signs can be changed dynamically. If there is rainfall then the roads will be slippery and the speed limit would be decreased
FR-5	Function	Smart roadway indicators have the potential to increase cost-efficiency, which eases the burden on governments and taxpayers. They facilitate a smoother driving process for both human drivers and autonomous vehicles.

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	Users must be able to tap Find within few seconds of accessing the interface
NFR-2	<b>Security</b>	The Safe System approach to road safety emphasizes safety-by-design through ensuring safe vehicles, road networks, and road users.
NFR-3	<b>Reliability</b>	Highly reliable
NFR-4	<b>Performance</b>	<ol style="list-style-type: none"><li>1. Increased Cost Efficiency</li><li>2. Better Traffic Management and Safety</li><li>3. Preventing Wrong-way Crashes</li></ol>
NFR-5	<b>Availability</b>	Highly available resources
NFR-6	<b>Scalability</b>	scalable , it could be moved from a smaller to a larger operating system and the larger number of users that could be handled.