

## Project Design Phase-II

### Solution Requirements (Functional & Non-functional)

Date	10 October 2022
TeamID	PNT2022TMID11855
ProjectName	Signs with Smart Connectivity for Better Road Safety
MaximumMarks	4Marks

#### Functional Requirements:

Following are the functional requirements of the proposed solution.

FRNo.	Functional Requirement(Epic)	Sub Requirement(Story/Sub-Task)
FR-1	User Registration	<ul style="list-style-type: none"><li>•Registration through Form</li><li>•Registration through Gmail</li><li>•Registration through LinkedIN</li></ul>
FR-2	User Confirmation	<ul style="list-style-type: none"><li>•Confirmation via Email</li><li>•Confirmation via OTP</li></ul>
FR-3	User Visibility	<ul style="list-style-type: none"><li>•Sign Boards should be made of bright coloured LEDs capable of attracting driver's attention.</li></ul>
FR-4	User Understanding	<ul style="list-style-type: none"><li>•Display should be big enough to display all the signs correctly so that it is understandable even to far away drivers.</li></ul>
FR-5	Information delivering time	<ul style="list-style-type: none"><li>•The accident information should be delivered before certain distance then only the driver can change the route of destination.</li></ul>

#### Non-functional Requirements:

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

FRNo.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	<ul style="list-style-type: none"><li>•Product that is simple to use. It can be used and understandable by all people without any predefined training.</li></ul>
NFR-2	<b>Security</b>	<ul style="list-style-type: none"><li>•A robust security system must be used so that no hackers can enter with authorization into the IoT based system.</li></ul>
NFR-3	<b>Reliability</b>	<ul style="list-style-type: none"><li>•For high reliability correct and authorized signs should be displayed.</li></ul>

NFR-4	<b>Performance</b>	<ul style="list-style-type: none"><li>•Automatic updation should be done incase of sudden accidents and weather changes.</li></ul>
NFR-5	<b>Availability</b>	<ul style="list-style-type: none"><li>•Signs boards mustwork 24/7, so proper power supply or battery should be given to the sign boards.</li></ul>
NFR-6	<b>Scalability</b>	<ul style="list-style-type: none"><li>•It should be implemented through the entire highway system.</li></ul>