

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

Date	6 <sup>th</sup> november 2022
Project Name	Project- Signs with Smart Connectivity for Better Road Safety

**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	Sign Boards should be made with LED's which are bright colored and are placed in a position where it is attracted by the drivers but it should also not be too bright and distracting. The Board should not in a place which hides the part of road thus blinding cause it may lead to accidents.
FR-2	User Understanding	For better understanding of the driver, the signs should be repeated and it should in an order where the driver understands it properly. The sign should be in a symbol model thus the driver will understand without spending more time on it.
FR-3	User Convenience	The display should be big enough that it should even be visible from far distance clearly.

**Non-Functional Requirements:**

Following are the Non-Functional Requirements of the proposed solution

FR No.	Non-Functional Requirements	Description
NFR-1	<b>Usability</b>	It should be able to update in a time interval using the sensor and based on the data provided and it should be easily upgradable because of the technical advancement so it will be feasible for the interpreter to implement the changes easily.
NFR-2	<b>Security</b>	The sign Board should be highly secured ,no one should have a chance to access which may cause the sign board to give wrong signs .
NFR-3	<b>Reliability</b>	It should able to produce proper sign irrespective of the cause and sign board should not produce error.

NFR-4	<b>Performance</b>	It should be able to automatically update itself when certain weather or traffic problem occurs.
NFR-5	<b>Availability</b>	It should be available 24/7 so that it can be beneficial to the customer i.e the driver.
NFR-6	<b>Scalability</b>	It should be able to easily change and upgrade according to change and need in requirement.