

Project design phase-II

Solution requirements (functional & non-functional)

Date	12 October 2022
Team id	PNT2022TMID44448
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 requirements(story/sub-task)
Fr 1	<u>User visibility</u>	Sign boards should be made with LED's which are bright colored and are capable of attracting the drivers attention but it should also not be too distracting or blinding cause it may lead to accidents.
Fr 2	<u>User need</u>	The smart sign boards should be placed frequently in places it is needed and less in places where it is not needed much to avoid confusion for the user during travel.
Fr 3	<u>User understanding</u>	For better understanding of the driver the signs should be big, clear and legible and it can also include illustrations which will make it easily understandable to the driver.
Fr 4	<u>User convenience</u>	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	<u>Usability</u>	It should be able to upgrade and update when there is a need for it.
NFR-2	<u>Security</u>	It should have good security system so that no other person is able to hack and display their own direction.
NFR-3	<u>Reliability</u>	It should be able to display to information correctly and error-free.
NFR-4	<u>Performance</u>	It should be able to automatically update itself when certain weather or traffic problem occurs.
NRF-5	<u>Availability</u>	It should be available 24/7 so that it can be beneficial to the customer i.e the driver.
NRF-6	<u>Scalability</u>	It should be able to easily change and upgrade according to change and need in requirement.