

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

Date	03 November 2022
Team ID	PNT2022TMID48419
Project Name	SmartFarmer - IoT Enabled Smart Farming Application
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 Visibility	Sign Boards should be made of bright coloured LEDs capable of attracting driver's attention Not too distracting to cause accidents
FR-2	User Understanding	Should display information through means like images/illustrations with text so that the user can understand the signs correctly
FR-3	User Convenience	Display should be big enough to display all the signs correctly so that it is visible even to far away drivers

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	Should be able to dynamically update with respect to time
NFR-2	<b>Security</b>	Should be secure enough that only the intended messages are displayed in the display.
NFR-3	<b>Reliability</b>	Should convey the traffic information correctly.
NFR-4	<b>Performance</b>	Display should update dynamically whenever the weather or traffic values are updated
NFR-5	<b>Availability</b>	Should be on service 24/7
NFR-6	<b>Scalability</b>	Should be modular and hence able to scale on servers horizontally.