Project Design Phase-II

Solution Requirements (Functional & Non-functional)

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| 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.

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| **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.

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