**Project Design Phase-Il**

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

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| **Date** | 5 November 2022 |
| **Team ID** | PNT2022TMlD29155 |
| **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.

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| --- | --- | --- |
| **FR**  **No.** | **Functional Requirement (Epic)** | **Sub Requirement (Story / Sub-Task)** |
| **FR-I** | **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-I** | **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. |