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

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| Date | 06 November 2022 |
| Team ID | PNT2022TMID23936 |
| 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 Requirement (Story / Sub-Task) |
|--------|-------------------------------|---|
| FR-1 | User Visibility | Implementing crystal clear display boards Showing warning signs on the display Blinking light system to attract driver's attention Traffic light signal countdown on display |
| FR-2 | User Interaction | Alert notification systemManual crossing buttonManual information display system |
| FR-3 | Traffic Detection | Implementing traffic detection systemCrossing based on traffic detection |
| FR-4 | Communication | Weather alert based on locationTraffic diversion based on detection |

Non-functional Requirements:

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

| FR No. | Non-Functional Requirement | Description |
|--------|----------------------------|--|
| NFR-1 | Usability | It should convey the right message to user and to save the customer's travel time. |
| NFR-2 | Security | The manual information button should be secured with a key to prevent misinformation. |
| NFR-3 | Reliability | It should convey the updated message on time and to build with service quality. |
| NFR-4 | Performance | Display should be dynamically updated over cloud communication. |
| NFR-5 | Availability | It should available 24/7 service with risk management measures. |
| NFR-6 | Scalability | It should consume server space based on the usage and extend server space based on demand. |