Project Design Phase-II

Solution Requirements (Functional & Non-functional)

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| Date | 03 October 2022 |
| TeamID | PNT2022TMID39010 |
| ProjectName | Signs with Smart Connectivity for Better Road Safety |
| MaximumMarks | 4Marks |

# Functional Requirements:

Following are the functional requirements of the proposed solution.

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| **FRNo.** | **Functional Requirement(Epic)** | **Sub Requirement(Story/Sub-Task)** |
| FR-1 | User Registration | * Registration through Form * Registration through Gmail * Registration through LinkedIN |
| FR-2 | User Confirmation | * Confirmation via Email * Confirmation via OTP |
| FR-3 | User Visibility | * Sign Boards should be made of bright coloured LEDs capable of attracting driver's attention. |
| FR-4 | User Understanding | * Display should be big enough to display all the signs correctly so that it is understand able even to far away drivers. |
| FR-5 | Information delivering time | * The accident information should be delivered before certain distance then only the driver can change the route of destination. |

# Non-functional Requirements:

Followingarethenon-functionalrequirementsoftheproposedsolution.

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| **FRNo.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | **Usability** | * Product that is simple to use.It can be used and understandable by all people without any predefined training. |
| NFR-2 | **Security** | * A robust security system must be used so that no hackers can enter with authorization into the IoT based system. |
| NFR-3 | **Reliability** | * For high reliability correct and authorized signs should be displayed. |

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| NFR-4 | **Performance** | * Automatic updation should be done incase of sudden accidents and weather changes. |
| NFR-5 | **Availability** | * Signs boards mustwork 24/7, so proper power supply or battery should be given to the sign boards. |
| NFR-6 | **Scalability** | * It should be implemented through the entire highway system. |