**Project Design Phase-I**

**Proposed Solution Template**

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| Date | 01 october 2022 |
| Team ID | PNT2022TMID48245 |
| Project Name | Signs with Smart Connectivity for Better Road Safety |
| Maximum Marks | 2 Marks |

**Proposed Solution Template:**

Project team shall fill the following information in proposed solution template.

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| **S.No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | * Traffic management is an essential part of modern mobility, and traffic signals help optimize the existing network in the best possible way. * It monitors and controls various modes of traffic in order to avoid congestion and to improve traffic flow. * People failure to understand signs and violation of rules. * Dynamic board shows the all the information while static boards are cannot. |
|  | Idea / Solution description | * Simple programming modes of traffic in order to avoid congestion and to improve traffic Smart programming and digitization can be used to control traffic light operations in both larger and small urban areas. * When traffic lights co-ordinate ideally and respond to demand in real-time, Road capacity can be maximized quickly. * Smart traffic lights can also be synced to the movement of larger vehicles or conditioned to respond appropriately to situations like gridlock or blockage. * All of this programming can be done with expert knowledge. |
|  | Novelty / Uniqueness | * Dynamic of sign board. * A display via smart phone is also possible. This improves convenience for drivers and leads to better traffic flow and less air pollution. * Gives more detailed information to the road drivers. |
|  | Social Impact / Customer Satisfaction | * Reduced accident rates. * Increae travel speeds. * Increase operational efficiency. * Real time information management. * Create a platform for sharing traffic to other systems. * environment friendly. |
|  | Business Model (Revenue Model) | * LED signal lamp which compiles the European standards EN12368 and IP65 grade with 5 years performance warranty. * Selling project to the highway departments. * It will provide service where the accidents avoid is play vital role in road. |
|  | Scalability of the Solution | * Adaptive traffic control system (ATCS) considers developing countries traffic scenarios, vehicular movements and responds in real time. * It uses downstream detection and provides user friendly interface to support day-to-day operation. * ATCS dynamically adapts to changing traffic conditions in real time. * ATCS uses machine learning algorithms to analyse real time traffic data from vehicle detectors to determine signal timings that are optimal for existing traffic conditions. |