**Project Design Phase-I**

**Proposed Solution**

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| **Date** | 20 September 2022 |
| **Team ID** | PNT2022TMID41909 |
| **Project Name** | Signs with Smart Connectivity for Better Road Safety |
| **Maximum Marks** | 2 Marks |

**Proposed Solution :**

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| **S.No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | * Need to replacement a static sign board to smart digital boards and to notify the drivers ahead in case of any accidents. |
|  | Idea / Solution description | * Requiring drivers to obey the speed limit, yield to pedestrians and cyclists, wear seatbelts, avoid drunk driving, and use child restraints can have a powerful impact on changing road user behaviour. * In this system can be implemented by extracting weather data from open weather map using API’S. * Through the extracted data from the web app the sign boards get the speed limitations and update automatically * This can be done by either the web application or by the buttons that are predefined with separate symbols. * Conventional traffic lights are replaced with smart sign boards as well as web application is used to send warnings , notification about the road conditions with the help of sensors |
|  | Novelty / Uniqueness | * The uniqueness of IOT based smart connectivity for better road safety is its flexibility to the present and current situations of the roads. * Always Overtake from the right side. When being overtaken by another vehicle, never increase your speed to prevent the other driver from overtaking you. Be extra careful on intersections. Also, when passing through them, ensure your vehicle doesn't cause inconvenience to other road users |
|  | Social Impact / Customer Satisfaction | * We can obey the traffic rules and speed limited, it will save file. * Many lives can be saved due to this idea so the customer is statisfied |
|  | Business Model (Revenue Model) | * This product is aimed to be free of cost to the public, but the revenue will be generated by selling this product to the government at a low cost, * so there will be less accidents and the public will be aware of the discrepancies or accidents in the particular road. |
|  | Scalability of the Solution | * Slight modification in the programming of the existing product and website application has to be updated with the additional functionality for further are updating. |