**Project Design Phase-I**

**Proposed Solution Template**

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| Date | 24 September 2022 |
| Team ID | PNT2022TMID47456 |
| Project Name | Project – Smart Waste Management system for Metropolitan Cities |
| 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)** | The collection and disposal of garbage waste is in unordered, inefficient way which leads to overfilling of bins, rotting garbage smell and more fuel consumption of collecting trucks. |
|  | **Idea / Solution description** | Using sensors, weighing machine; real time monitoring the level of waste in bins.  The information get shared with appropriate authorities and fellow citizens through web application. |
|  | **Novelty / Uniqueness** | Citizens & industries behaviour during specific festival, events at different seasons are monitored and are predicted for garbage overflowing. Also to find the shortest path to reach the destiny for trucks in basis of fuel and time consumption. |
|  | **Social Impact / Customer Satisfaction** | Informative, effective management of waste in big cities reduces waste impacts over environment pollution. |
|  | **Business Model (Revenue Model)** | * Eco-friendly. * Optimized route navigation system. * Reduce fuel consumption. * Alerts authority by real-time monitoring. * Promote 3R’s (Reduse,Reuse,Recycle). |
|  | **Scalability of the Solution** | * The need-driven waste collection eliminates unnecessary traffic blockage. * Generate important statistical data for monitoring for waste collection. * Recycling is promoted between residents, results in clean & sustainable environment. |