Project Design Phase-I Proposed Solution

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| Team | PNT2022TMID13652 |
| Project Name | Smart Waste Management System for  Metropolitan Cities |
| Maximum Mark | 2 Marks |

Proposed Solution:

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| **S.NO** | **Parameter** | **Description** |
| 1. | Problem Statement (Problem to  be solved) | * Smart Waste Management System for Metropolitan Cities * The problem is identified as lack of proper waste management system leads to various problems including unhygienic environment which leads to spread of many diseases. |
| 2. | Idea/Solution Description | * Creating smart dustbin by using IOT with help of sensors * The sensors embedded will help to find out the thrash level in the bin which help to make immediate intimation like alert message to the sanitary worker to collect the trash. * The sensor will help to identify the obstacles like human beings with the help of the actuators it will make lid of the bin open and close automatically. * GPS module to identify the location of the bin |
| 4. | Social Impact/Customer Satisfaction | * Reduces unhygienic environment and also environmental pollution because of proper waste management which improve street sanitization * With the help of the sensor, automation is possible which helps to reduce man power therefore less time consuming. * No overflow in bins because of proper alert intimation to the municipality. * Administrator can get real time data about the bin across the cities |
| 5. | Business Model (Revenue Model) | * This smart waste management system provided to the public which creates awareness about waste management to the public * It was cost effective * It ensures public health and environmental safety |
| 6. | Scalability of the Solution | * Access to reliable and real time data of various bins in different location of the cities about status of the bin * Keep the environment clean and fresh * Real time monitoring makes effiecient solution for waste management. |