**Project Design Phase-I**

**Proposed Solution Template**

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| Date | 24 September 2022 |
| Team ID | PNT2022TMID42272 |
| Project Name | SMART WASTE MANAGEMENT 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 manual monitoring of wastes in waste bins is a cumbersome process and utilises more human effort, time and cost. * Irregular disposal of wastes causing trouble to people. * Foul smell around the place with uncollected wastes or garbage. |
|  | Idea / Solution description | * Creating an app, there by the corporation of a particular locality inside a metropolitan city can check the garbage bins whether they are filled or not. * This process is achieved by using a ultrasonic sensor to know the levels of garbage bin through cloud connection. |
|  | Novelty / Uniqueness | * To reduce the human-effort and difficulty in monitoring the garbage bins. * Unlike the conventional methods for collecting garbage bins, this method tells us to use the transport only in required places. |
|  | Social Impact / Customer Satisfaction | * People can experience a clean environment. * Reduces the human effort involving in the garbage disposal process. * This idea will be very much beneficial for a city corporation for monitoring the cleanliness of various parts of the city. |
|  | Business Model (Revenue Model) | * This project aims to support the municipal corporations. * Provide a clean environment. * This reduces a huge fuel cost to the city corporations by reducing the unwanted transport expenses to unnecessary places. |
|  | Scalability of the Solution | * There is no need of new establishment of things. * Already present garbage bins are modified slightly. * It can be updated to automated garbage collection through vehicles. * A huge time is saved from frequent monitoring of garbage bins through human labours. |