**Project Design Phase-I**

**Proposed Solution Template**

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| Team ID | PNT2022TMID20896 |
| 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) | This project deals with the waste management of the cities where there is no proper way of disposal. This enables the proper collection of trash. This can also be used to create awareness among citizens and collectors on the proper way of disposal and the safe way to dispose. |
|  | Idea / Solution description | The proposed system would be able to automate the solid waste monitoring process and management of the overall collection process using IOT (Internet of Things).  Collectors would be able to know when the bin is full, by placing the circuit at the waste bin, which alerts them about the bin being full.  The user will also be able to know the location of the bin. |
|  | Novelty / Uniqueness | When the bin is full, the system would send an alert though message that a particular bin is full and to collect it. We can also use a solar cell for alternate power supply. |
|  | Social Impact / Customer Satisfaction | By having a proper way of disposal of garbage, this will reduce the risk of diseases, the safety of children playing around, and would also improve the quality of air. This would also keep the neighbourhood clean and would also keep the animals safe. |
|  | Business Model (Revenue Model) | Waste Management generates revenue through the provision of various waste management and disposal services and recycling solutions to residential, commercial, industrial, and municipal clients. |
|  | Scalability of the Solution | The proposed system uses sensor and communication technologies where waste data is collected from the smart bin, in real-time, and then transmitted to an online platform where citizens and collectors can access and check the availability of the compartments scattered around a city. |