**Project Design Phase-I**

**Proposed Solution Template**

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| Date | 19 September 2022 |
| Team ID | PNT2022TMID08724 |
| Project Name | 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** |
| 1. | Problem Statement (Problem to be solved) | Waste management in metropolitan cities faces numerous challenges. The main problem faced by the metropolitan cities are detecting the garbage level weather it filled or not and also we need to measure the weight of the garbage bin. Then alerts the authorized person to empty the bin whenever the bins are full. We need to develop a web application to monitor the status of the bins remotely at anywhere. The application should provide the location of the every bin connected in the application with the help of global positioning system (GPS).The indication of the bins and the location of the every bin should be provided by web applications simultaneously. |
| 2. | Idea / Solution description | Smart waste management system is the idea proposed to clean up the waste in the ecosystem.  The basic idea of our project is to sense the level of waste stored in the garbage bin and transfer the data to the database or cloud with the help of API with this system we can able to monitor the level and can manage waste effectively. |
| 3. | Novelty / Uniqueness | A reduction in the number of waste collections needed by up to 80%, resulting in less manpower, emissions, fuel use and traffic congestion. |
| 4. | Social Impact / Customer Satisfaction | The social impact created by this system is that   * it makes environment waste free and clean * it brings cleanliness and hygiene to the environment * it also save up unnecessary pick up and fuel usage * it modernizes waste management system |
| 5. | Business Model (Revenue Model) | Revenue is generated by waste management and disposal services for residential, commercial, industrial, and municipal clients. The Company derives its revenue in the form of various fees associated with its maintenance charges and service offerings. |
| 6. | Scalability of the Solution | Our system with modernized technology allows the municipality to upgrade the hardware and software whenever they feel to raise the standard of the system even more |