Project Design Phase-I
Proposed Solution Template

Team ID	PNT2022TMID24735
Project Name	Smart waste management system for metropolitan cities

Proposed Solution Template:

S.No	Parameter	Description
1	Problem Statement (Problem to besolved)	Detecting the level of garbage and informing the garbage collectors through a proper communication channel about the garbage level and alerts them to collect it at a specified time efficiently.
2	Idea / Solution description	By using fill level sensors we can detect the garbage level. Improving the communication channel using proper technology like WiMAX. Using GPS for tracking the location of bin and sorting out the short routes. Using cloud service for the storage purpose.
3	Novelty / Uniqueness	By using IoT, GPS and GSM like technologies which if properly used in the establishment of this project helps to detect the garbage level and intimating about it to the authority and initiating them to collect the garbage on time.
4	Social Impact / Customer Satisfaction	It keeps our surroundings clean and green and free from bad odour of wastes, emphasizes on healthy environment. Reduces air pollution.
5	Business Model (Revenue Model)	Smart waste management system is an innovative and effective step to analyze the production of waste annually and it helps to find the ways to reduce the factors which increases the waste produced.
6	Scalability of the Solution	Smart waste management can attain its scalability by still more advancement in IoT and using many sensors to detect its accurate level accurately. Its implementation can be enhanced by using 5G type of technology for faster communication. AI recycling robots can be used in the nearer future.