Project Design Phase-I

Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID53722
Project Name	Smart Waste Management System For Metropolitan Cities
Maximum Marks	2 Marks

Proposed Solution Template:

S.No	Parameter	Description
1.	Problem Statement (Problem to be solved)	The process in current city setting solves the waste problem partially while it creates other problems like • Some trash bins are overfilled while others are under-filled by the trash collection time, • Overfilled trash bins create unhygienic problems, • All collected trash is combined which complicates sorting for recycling the waste.
2.	Idea / Solution description	A sensor attached to the trash bin that measures fill level and a communication system that transfers this data to Cloud. Data is processed in the Cloud.
3.	Novelty / Uniqueness	The trash is sorted as recyclable and non-recyclable before it is put in the trashcan by the person. The recyclable wastes are processed and recycled.
4.	Social Impact / Customer Satisfaction	Since there are sensors to intimate the municipality once the trashcan is full. There would be no hygienic problem. Since the trashcan will not be full when the user puts the trash there would be no confusion to search for a different trashcan.
5.	Business Model (Revenue Model)	There are sensors for making the process easier for the user, so it would be useful to have a smart trashcan at an affordable rate.
6.	Scalability of the Solution	There would be trucks to collect the trash. If we optimize the routes for the trucks, it would save fuel and reduce traffic.