

Project Design Phase-I
Proposed Solution

Date	19 September 2022
Team ID	40514-1660630528
Project Name	Project – Smart Waste Management System For Metropolitan Cities
Maximum Marks	2 Marks

sProposed Solution :

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	To manage the waste in metropolitan cities using smart technique
2.	Idea / Solution description	To implement a smart bin built on a microcontroller based platform Arduino Uno board which is interfaced with GSM modem and Ultrasonic sensor which can gives the status of the waste present in the dustbin to the municipal authority.
3.	Novelty / Uniqueness	<ul style="list-style-type: none"> • Immediate Transferring of data about each bin to the control room. • Accurate indication. • Weight of the trashes are indicated.
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> • It reduces the overflow of trashes in the bin. • It Reduces the pollution. • It provides vibrant environment • Reduces the Breeding of disease vectors (mosquito, Housefly, cockroach ,microbes, Etc.,) • Easy collection and discharging of waste by the concern authority at regular intervals.
5.	Business Model (Revenue Model)	The Waste are put in the bin by the public →The bins sense the level of trash→It provides the indication of each stage of the waste dumped by using the LED→Once the trash completely fills the bin →Information is provided to the control room→The trash is collected and the bin will be emptied by the corporation.
6.	Scalability of the Solution	<ul style="list-style-type: none"> • Well monitoring system with accurate indication. • Reduce the waste efficiently. • Easy maintenance. • Reasonable cost.