PROJECT DESIGN PHASE-I
PROPOSED SOLUTION
TEAM ID: PNT2022TMID21674

Proposed Solution :

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	An inefficient waste management may create serious environmental impacts like infectious diseases, land and water pollution, climate changes. In this design of smart waste management is used for proper disposal and efficiently collection of waste by using a mobile application.
2.	Idea / Solution description	To create a web application to monitor the status of any bin and view it's location. Once if the garbagebin is full. The alert message is send to the authorized person.
3.	Novelty / Uniqueness	Each waste bins have unique ID in app for identification. Use GSM to send the SMS to authorized person, If the bin is fill. LORAWAN is used to data can be transmitted for long range and consumes low power. Use solar cell for alternative power supply.
4.	Social Impact / Customer Satisfaction	The proper waste collection will eliminate this risk as well as improving air quality and minimizing CO2 emissions. By having a more convenient route garbage trucks spend less time on the road. This means that truck drivers and citizens are saving less time stuck in traffic jams.
5.	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.Published by Ian Tiseo, Jun 21, 2022. Waste Management Inc reported an operating revenue of 11.67 billion U.S. dollars from its collection services in 2021.
6.	Scalability of the Solution	Using of weight sensor to detect the level of garbage. This sensor gives more lifespan and reduce the damage of sensor. Use LORAWAN covers long range and consumes low power. The web app gives short route of truck to reduce the fuel cost. This design gives better efficiency.