

Project Design Phase 1:

Proposed Solution:

Date	20 October 2022
Team ID	PNT2022TMID20530
Project Name	Project - Smart Waste Management System For Metropolitan Cities
Maximum Marks	2 Marks

S.No	Parameter	Description
1.	Problem Statement	India faces major environmental challenges associated with waste generation and lacking waste collection, transport, treatment, and disposal. conventional systems in India can't manage the volumes of waste generated, and this impacts the surroundings and public health.
2.	Idea/Solution description	A Web application is built where the location of garbage bins, their weight, and the level of the waste collected are monitored. Sensors are fitted in the garbage bins and the required data is collected and acquired from them. The real-time monitoring system indicates when the bin is full and alerts the authorized person to empty the bin.
3.	Novelty/Uniqueness	This project introduces a way to sort out problems like missed pickups and overflowing garbage bins. This prevents the wastage of labor costs, fuel costs, and time.
4.	Social Impact / Customer Satisfaction	Provides healthy Environment Improves hygiene because of timely waste collection Clean cities can be achieved Control the level of pollution and gases
5.	Business Model (Revenue Model)	The software can be offered as a Service model to the Government. The revenue can be generated by charging the customers for the provision of services from waste management to safe disposal and recycling.
6.	Scalability of the Solution	The proposed solution uses sensors where the information about garbage bins can be collected in real-time. Communication technologies enable the authorized person to check data online.

