Project Design Phase –

Proposed SolutionTemplate

Date	6 November2022
Team ID	PNT2022TMID20979
Project Name	Smart Waste Management System For Metropolitan Cities
Maximum Marks	2Marks

Proposed Solution Template:

Project teams hallfill the following information in proposed solution template.

S.No.	Parameter	Description
1.	ProblemStatement(Problemtob esolved)	The collection and disposal of garbage waste is in unordered, inefficient way which leads to overfilling of bins, rotting garbage smell and more fuel consumption of collecting trucks.
2.	Idea/Solutiondescription	•Using sensors, weighing machine; real time monitoring the level of waste in bins. •The information gets shared with appropriate authorities and fellow citizens through web application. • In the proposed system, the received signal indicates the waste bin status at monitoring control system.

3.	Novelty/Uniqueness	Citizens & industries behaviors during specific festival, events at different seasons are monitored and are predicted for garbage overflowing. Also, to find the shortest path to reach the destiny for trucks in basis of fuel and time consumption.
4.	SocialImpact/CustomerS atisfaction	•Informative, effective management of waste in big cities reduces waste impacts over environment pollution •From the public perception as worst impacts of present solid waste disposal practices are seen direct social impacts such as neighborhood of landfills to communities, breeding of pests and in property values.
5.	BusinessModel(Revenue Model)	• Eco-friendly. • Optimized route navigation system. • Reduce fuel consumption. • Alerts authority by real-time monitoring. • Promote 3R's (Reduce, Reuse, Recycle).
6.	ScalabilityoftheSolution	• The need-driven waste collection eliminates unnecessary traffic blockage. • Generate important statistical data for monitoring for waste collection. • Recycling is promoted between residents, results in clean & sustainable environment.