Project Design Phase-I Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID18178
Project Name	Project - Smart Waste Management for Meteropolitan Cities
Maximum Marks	2 Marks

Proposed Solution Template:

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

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	 Metropolitan Waste Management remains a major problem in urban areas ,leading to serious health and environmental issues. Consequently ,trash bins are placed in many places to handle the waste ,but these bins can overflow spreading all around the area ,polluting the environment and causing inconvenience to public .
2.	Idea / Solution description	 By designing an IoT enabled system, we can monitor the levels of the bins. The data collected will be uploaded in the cloud. The trash collecter will collect the trash as soon as the smart bins are filled.
3.	Novelty / Uniqueness	 There will be Bio-degradable and Non-Biodegradable Smart Bins. The weight Sensor and Ultrasonic sensor is used to detect the level of the bins.
4.	Social Impact / Customer Satisfaction	 By implementing this system the environmental and health issues will be reduced. The people feel it very easy to dipose the waste.
5.	Business Model (Revenue Model)	 Through this smart system the cost spent in cleaning the city can be reduced. The Bio-degradable waste can be made as natural fertilizers for the agriculture. The Non Bio-degradable waste can be recycled instead of production.
6.	Scalability of the Solution	 From this solution the envirinment will be kept clean. As it is automated monitoring the time consumption will be minimized.