## Project Design Phase-I Proposed Solution Template

Date	24 September 2022
Team ID	PNT2022TMID11512
Project Name	SMART WASTE MANAGEMENT FOR METROPOLITAN 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)	<ul> <li>The manual monitoring of wastes in waste bins is a cumbersome process and utilises more human effort, time and cost.</li> <li>Irregular disposal of wastes causing trouble to people.</li> <li>Foul smell around the place with uncollected wastes or garbage.</li> </ul>
2.	Idea / Solution description	<ul> <li>Creating an app, there by the corporation of a particular locality inside a metropolitan city can check the garbage bins whether they are filled or not.</li> <li>This process is achieved by using a ultrasonic sensor to know the levels of garbage bin through cloud connection.</li> </ul>
3.	Novelty / Uniqueness	<ul> <li>To reduce the human-effort and difficulty in monitoring the garbage bins.</li> <li>Unlike the conventional methods for collecting garbage bins, this method tells us to use the transport only in required places.</li> </ul>
4.	Social Impact / Customer Satisfaction	<ul> <li>People can experience a clean environment.</li> <li>Reduces the human effort involving in the garbage disposal process.</li> <li>This idea will be very much beneficial for a city corporation for monitoring the cleanliness of various parts of the city.</li> </ul>
5.	Business Model (Revenue Model)	<ul> <li>This project aims to support the municipal corporations.</li> <li>Provide a clean environment.</li> <li>This reduces a huge fuel cost to the city corporations by reducing the unwanted transport expenses to unnecessary places.</li> </ul>
6.	Scalability of the Solution	<ul> <li>There is no need of new establishment of things.</li> <li>Already present garbage bins are modified slightly.</li> <li>It can be updated to automated garbage collection through vehicles.</li> </ul>

A huge time is saved from frequent
monitoring of garbage bins through
human labours.