

Project Design Phase-I

Proposed Solution Template

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

S. No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	As the population is growing, the garbage is also increasing. This huge unmanaged accumulation of garbage is polluting the environment, spoiling the beauty of the area and also leading to the health hazard to overcome these, smart waste management for metropolitan cities are introduced.
2.	Idea / Solution description	<p>Garbage level detection in bins.</p> <p>Getting the weight of the garbage in the bin.</p> <p>Alerts the authorized person to empty the bin whenever the bins are full.</p> <p>Garbage level of the bins can be monitored through a web App.</p> <p>We can view the location of bins in the web application by sending GPS location from the device.</p>
3.	Novelty / Uniqueness	A system that detects the level of garbage in the dustbins with the help of sensor systems and send this information to the authorized control room. Weight sensor determines the weight of the garbage in the dustbin and Infrared (IR) sensor is used to detect the waste level in the dustbins.
4.	Social Impact / Customer Satisfaction	Municipality authority is the customer whose work will get easy and they get satisfied if they know to use this system the garbage collector can complete their work within the time without leaving any place. The workload for the garbage collector and authority may get reduced 75%
5.	Business Model (Revenue Model)	The cost for the truck fuel get reduced, man power reduced so, wages for them reduced but the process is cost efficient for implementation and everyone should get training for better performance.
6.	Scalability of the Solution	The process can also denote the climate change in the area, what is the average time the bin takes to fill, denoting the weight of liquid and solid separately, percentage of biodegradable and non-biodegradable waste.