Project Design Phase-I

Proposed Solution Template

| Team ID | [IBM-Project-35271-1660283093](https://github.com/IBM-EPBL/IBM-Project-35271-1660283093) |
| --- | --- |
| Project Name | Smart Waste Management System 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) | This project deals with the problem of waste management in smart cities, where the garbage collection system is not optimized. This project enables the organizations to meet their needs of smart garbage management systems. This system allows the authorised person to know the fill level of each garbage bin in a locality or city at all times, to give a cost-effective and time-saving route to the truck drivers. |
| 2. | Idea / Solution description | The key research objectives are as follows: • The proposed system would be able to automate the solid waste monitoring process and management of the overall collection process using IOT (Internet of Things). • The Proposed system consists of main subsystems namely Smart Trash System(STS) and Smart Monitoring and Controlling Hut(SMCH). • In the proposed system, whenever the waste bin gets filled this is acknowledged by placing the circuit at the waste bin, which transmits it to the receiver at the desired place in the area or spot. • In the proposed system, the received signal indicates the waste bin status at the monitoring and controlling system. |
| 3. | Novelty / Uniqueness | We are going to establish HICET in our college but the real hard thing is that janitor don’t know to operate these thing practically so here our team planned to build a wrist band to them, that indicate via light blinking when the dustbin fill and this is Uniqueness we made here beside from project constrain. |
| 4. | Social Impact / Customer Satisfaction | From the public perception as worst impacts of present solid waste disposal practices are seen direct social impacts such as neighbourhood of landfills to communities |
| 5. | Business Model (Revenue Model) | Reduce the volume of the solid waste stream through the implementation of waste reduction and recycling programs. Maintain a balanced SWM system which benefits the community while following regulatory requirements. |
| 6. | Scalability of the Solution | Reducing waste will not only protect the environment but will also save on costs or reduce expenses for disposal. In the same way, recycling and/or reusing the waste that is produced benefits the environment by lessening the need to extract resources and lowers the potential for contamination. |