PROJECT DESIGN PHASE-I

PROPOSED SOLUTION

|  |  |
| --- | --- |
| Team ID | PNT2022TMID26064 |
| Project Name | Project - Smart waste management system for metropolitan cities |
| Maximum Marks | 2 Marks |

**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 * Rotting garbage is also known to produce harmful gases mix with the air and cause breathing problem in people. |
| 2 | Idea / Solution description | * To solve this problem of waste management for disposal using a smart refuse- bin built with technologies   like Sensors, Arduino Yun. |

|  |  |  |
| --- | --- | --- |
|  |  | * The Proposed system consists of main subsystems namely Smart Trash System(STS) and Smart Monitoring and Controlling Hut(SMCH). * AI Recycling Robots. |
| 3 | Novelty / Uniqueness | * Identify potential waste streams. * Create a waste   management-focused community outreach plane. |
| 4 | Social Impact / Customer Satisfaction | * Neighborhood of landfills to communities, breeding of pests and loss in property values. * 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, breeding of pests and loss in property values |
| 5 | Business Model (Revenue Model) | * It generates revenue through the provision of various waste management and disposal services. * Recycling solutions to residential, commercial,   industrial, and municipal clients |
| 6 | Scalability of the Solution | * Installing more bins fir collecting recyclables like paper, glass, plastic. * Following this approach, this paper presented an efficient IoT- based and real-time waste management model for improving the living environment in cities, focused on a citizen perspective   ❖ Recycling not only save energy but also prevent the material from going to landfills & Incineration and  provides raw materials for new products. |