**Project Design Phase-I**

**Proposed Solution**

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| Date | 23/09/2022 |
| Team ID | PNT2022TMID05128 |
| Project Name | Project - Smart waste management system for metropolitan cities |
| Maximum Marks | 2 Marks |

**PROPOSED SOLUTION TEMPLATE :**

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| **S.NO.** | **PARAMETER** | **DESCRIPTION** |
| 1 | Problem Statement ( Problem to be solved) | ❖ Rubbish and waste can cause air and water pollution.  ❖ Rotting garbage is also known to produce harmful gases mix with the air and cause breathing problem in people.  ❖ Due to improper waste disposal, we may face several problems like unpleasant odor and health problems. |
| 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.  ❖ Garbage truck Weighing Mechanisms.  ❖ 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.  ❖ The IOT solution uses the data and selects optimum routes for waste collection trucks. |
| 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. ❖ Recycling not only save energy but also prevent the material from going to landfills & Incineration and provides raw materials for new products. |