Project Design Phase-I
Proposed Solution Template

Date	18 May 2023
Team ID	NM2023TMID17565
Project Name	Project - Intelligent Garbage Classification Using Deep Learning

Proposed Solution Template:

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

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Intelligent Garbage Classification Using Deep Learning
2.	Idea / Solution description	The system is developed for the separation of the accumulated waste is based on the combination of Convolutional Neural Network
3.	Novelty / Uniqueness	The novelty and uniqueness in an intelligent garbage classification system using deep learning lie in its ability to accurately and autonomously identify and classify different types of waste materials. Reduction in Human Error: By automating the classification process, the system reduces the potential for human error in waste sorting. It eliminates inconsistencies, biases, and variations that can occur with manual sorting. The reliability and precision of the deep learning-based system minimize the chances of misclassification, resulting in more accurate waste sorting and recycling.
4.	Social Impact / Customer Satisfaction	Intelligent garbage classification using deep learning can have several positive social impacts as follows: 1.Environmental Preservation 2.Efficient Resource Allocation 3.Sustainable Development Goals 4.Health and Sanitation
5.	Business Model (Revenue Model)	Implementing intelligent garbage classification using deep learning can provide various revenue opportunities. 1.Sales or Licensing of Intelligent Garbage Classification Systems: Companies can develop and sell intelligent garbage

		classification systems to waste management facilities, municipalities, or organizations responsible for waste disposal. Revenue can be generated through the sale of hardware components, software licenses, and ongoing maintenance services. 2. Service Contracts and Subscriptions: Businesses can offer service contracts or subscriptions to maintain and support the intelligent garbage classification systems. This can include regular system updates, technical support, and data analysis to optimize waste management processes. Service contracts can be structured based on the size and needs of the customer, providing recurring revenue streams.
6.	Scalability of the Solution	If more number of data sets are provided then the accuracy can be increased further and better results can be obtained