

Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	06 May 2023
Team ID	NM2023TMID11619
Project Name	Intelligent Garbage Classification using Deep learning

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through Gmail Registration through LinkedIn
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User authentication	The system must require users to provide valid credentials (such as user name and password) in order to access certain features or data.
FR-4	Data Input and validation	The system must allow users to input data in a specific format (image).
FR-5	Data storage and retrieval	The system must be able to store and predict the input data in a way that is efficient, secure and reliable.
FR-6	Reporting and output	The system must be able to identify the class of the input data (image).

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	A system that is easy to use and understand can encourage proper waste disposal practices and improve overall waste management outcomes.
NFR-2	Security	The security of the garbage classification system is important to protect the confidentiality, integrity and availability of sensitive information related to waste management activities.
NFR-3	Reliability	A reliable system that is well-maintained, has consistent collection schedules and has contingency plans in place can encourage positive waste disposal practices and contribute to more effective waste management outcomes.
NFR-4	Performance	A well-designed and well-managed system that is accurate, efficient, cost-effective can help to minimize environmental impact, promote

		sustainable waste management practices and improve overall waste management outcomes.
NFR-5	Availability	The availability of garbage classification systems is increasing worldwide as more and more people become aware of the environmental benefits of reducing waste and recycling.
NFR-6	Scalability	The scalability of garbage classification system will depend on various factors such as the population density, the available infrastructure and the resources allocated to the system.