

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

Date	03 October 2022
Team ID	PNT2022TMID37209
Project Name	Project - Smart Waste Management in Metropolitan Cities Using IOT
Maximum Marks	4 Marks

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 Gmail
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Log in to system	Check Credentials Check Roles of Access.
FR-4	Manage Modules	Manage sensor data Manage Garbage bins location data Control Full System
FR-5	Log out	Exit

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Usability includes easy learn ability, efficiency in use, remember ability, lack of errors in operation and subjective pleasure.
NFR-2	Security	Sensitive and private data must be protected from their production until the decision-making and storage stages.
NFR-3	Reliability	The shared protection achieves a better trade-off between costs and reliability. The model uses dedicated and shared protection schemes to avoid workers service outages.
NFR-4	Performance	The idea of implementing integrated sensors on the top of the Garbage bin detects the status of the Garbage bin and trigger the message to Corporation.

NFR-5	Availability	Automatic checking of the Garbage level in the garbage bin reduced work energy, time and efficiency of the workers.
NFR-6	Scalability	Scalability is a major concern for IoT platforms. It has shown that different architectural choices of IoT platforms affect system scalability and that automatic real time decision-making is feasible in an environment composed of dozens of thousand.