

Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	6 November 2022
Team ID	PNT2022TMID03950
Project Name	Project –Smart waste management for metropolitan cities
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 Form Registration through Gmail
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Bin level analysing	Acquire the levels of Waste bins in a regular interval of time.
FR-4	Transport Router	To make a efficient route for the collection of garbages around the area.
FR-5	GPS access	GPS access to know the location.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	A clever method has been put forth to simplify and accurately sort waste while also enhancing user satisfaction, usability, and experience.
NFR-2	Security	Users' information will be extremely secure because Gmail has confirmed their accounts. The GPS-driven sensor sends out an alarm if the products are lost.
NFR-3	Reliability	operates without issue in a predetermined environment, reducing fuel emissions and traffic congestion.
NFR-4	Performance	The system will produce accurate reports, boosting system efficiency.

NFR-5	Availability	Convention centres, skyscrapers, stadiums, and transit facilities all include smart trash cans that collect high-quality waste data and alert employees when they are full..
NFR-6	Scalability	These smart waste bins are used so that great improvements can be made. Wastes can be quickly managed.