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

Date	11 November 2022
Team ID	PNT2022TMID53817
Project Name	Smart Waste Management system 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 Registration through website
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User login	Login through username and password Login through Gmail Login through website
FR-4	Administration work	Check the dustbin conditions and dispose the waste

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	A reduction in the number of waste bins needed. Analytics data to manage collection routes and placement of bins more effectively.
NFR-2	**Security**	The system should allow a secured communication between server, admin and users.
NFR-3	**Reliability**	The system should be reliable and must not degrade the performance of the existing system and should not lead to the hanging of the system.
NFR-4	**Performance**	Smart waste sensors can also alert crews when bins develop unpleasant smells which can then be treated to eliminate odors.
NFR-5	**Availability**	Smart city waste management technology allows crews to empty bins before they become overflowing with trash or recycling, and before infestation becomes an issue
NFR-6	**Scalability**	Reduce the use of paper bags also. Segregate the waste in the house – keep two garbage bins and see to it that the biodegradable and the non-biodegradable is put into separate bins and disposed off separately.