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

Date	15October 2022
Team ID	PNT2022TMID1104
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 LinkedIN
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Sensors	Ultrasonic-level sensor and gas sensor which automatically sense the hazardous gases and the maximum limit of waste.
FR-4	Notifies management	User sends a message to the management to collect the waste. Authority collects the waste after receiving on average number of receivers from a particular area.
FR-5	Waste Segregration	Segregrates the waste into biodegradable and non-biodegredable
FR-6	Location Tracker	Location is tracked using GPS location tracker enabled in the app

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	A distinctive number that identifies the location of each trash can is used to track them.
NFR-2	**Security**	The eccentric method easily contacts the appropriate authority and provides all information relating to the physical state of a specific bin.
NFR-3	**Reliability**	Environmental protection – from pollution or contamination. Money generation – companies may buy recyclable materials due to their value.
NFR-4	**Performance**	Used to detect the level of garbage in the bin and intimate it in case it is full.
NFR-5	**Availability**	In case if notification is not working then the user can send a message or call the authority using customer care number.

| NFR-6 | Scalability | Provide a robust and flexible regulatory system for waste disposal and management system. |