Project Design Phase – II

Solution Requirements (Functional & Non – functional)

Date	31 October 2022
Team ID	PNT2022TMID43114
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	Website	Visiting website to Taking sensor reading from the sensor circuit. Visiting website to check the locations of the Bin. Visiting website to check overflowing bin locations
FR – 2	Searching	The Administrator Should be able to access the system as an administrator, add bins, view the bin dashboard, view all the bins on the map, View the fill levels of bins in real time and their locations on the google map.
FR – 3	Notifying	It sends an Message Alert to the garbage collector on duty when a bin is full.

Non – functional Requirements:

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

FR NO.	Non – functional Requirement	Description
NFR - 1	Usability	The UI should be simple enough for everyone to understand
NFR - 2	Security	The website must be secure enough to trust by the users
NFR - 3	Reliability	The UI should be able to withstand any errors in the data
NFR - 4	Performance	The live map for the bin in specified areas are shown
NFR - 5	Availability	The UI should respond to the users within 2 seconds
NFR - 6	Scalability	Dijkstra's Algorithm is used to estimate the nearest path