

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

Date	28 October 2022
Team ID	PNT2022TMID36338
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	Real time bin monitoring	In the dashboard itself display the level of bins which is monitor by sensor
FR-2	Distribution and bin adjust	Based on the areas, you can adjust bin capacity or location where necessary.
FR-3	Eliminate inefficient picks	The sensors recognize picks. Eliminate the collection of half empty bins. The data shows how full the bin was when picked. You immediately see any inefficient picks below 80% full.
FR-4	Planning the routes	In view of current Bin fill-levels furthermore, forecasts of arriving at full limit, you are prepared to collecting the waste assortment.

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	IoT gadget confirms that ease of use is an exceptional and significant point of view to break down client prerequisites, which can additionally work on the plan quality. In the plan cycle with client experience as the center, the examination of clients' item ease of use can without a doubt help originators better get it clients' expected requirements in squander the board, conduct What's more, insight.

NFR-2	<b>Security</b>	Utilize a reusable containers Utilize reusable staple sacks
NFR-3	<b>Reliability</b>	Smart waste management provides better working conditions for cleaners and drivers. Instead of driving the same collection routes and servicing empty bins, collectors will spend their time more efficiently, taking care of bins that need servicing .
NFR-4	<b>Performance</b>	Management Software System, a powerful cloud -based platform, for data driven daily operations, available also as a waste management app. Using a variety of IoT networks (NB -IoT,GPRS), the sensors send the data to Sensono's Smart Waste
NFR-5	<b>Availability</b>	By creating and deploying versatile equipment, we empower cities, businesses, and countries to manage waste smarter.
NFR-6	<b>Scalability</b>	It can be monitored at any time for more cost effect and scalability when we moves to smarter.