

Date	09-10-2022
Team ID	PNT2022TMID37949
Project name	Smart Waste Management
Maximum marks	4

#### FUNCTIONAL REQUIREMENT:

FR NO.	FUNCTIONAL REQUIREMENT(Epic)	SUB REQUIREMENT (Sub-task)
1.	Real time monitoring bins	<p>*The Dashboard displays real-time data on fill-levels of bins monitored by smart sensors. In addition to the % of fill-level, based on the historical data, the tool predicts when the bin will become full, one of the functionalities that are not included even in the best waste management software.</p> <p>*Sensors recognize picks and can check when the bin was last collected. With real-time data and predictions, we can eliminate the overflowing bins.</p>
2.	Adjust bin distribution	<p>*Ensure the most optimal distribution of bins. Identify areas with either dense or sparse bin distribution.</p> <p>* Make sure all trash types are represented within a stand.</p>
3.	Eliminate inefficient picks	<p>*Eliminate the collection of half-empty bins. The sensors recognize picks.</p> <p>* The report shows how full the bin was when picked. You immediately see any inefficient picks below 80% full.</p>
4.	Plan waste collection routes	<p>*The tool semi-automates waste collection route planning.</p> <p>*Based on current bin fill-levels and predictions of reaching full capacity, we are ready to respond and schedule waste collection.</p>

#### NON-FUNCTIONAL REQUIREMENT:

NFR NO.	NON-FUNCTIONAL REQUIREMENT	DESCRIPTION
1.	Availability	*By developing & deploying resilient hardware and beautiful software we empower cities, businesses, and countries to manage waste smarter.
2.	Scalability	*Using smart waste bins reduce the number of bins inside town , cities coz we able to monitor the garbage 24/7 more cost effect and scalability when we moves to smarter
3.	Reliability	*Smart waste management is also about creating better working conditions for waste collectors and drivers. *Instead of driving the same collection routes and servicing empty bins, waste collectors will spend their time more efficiently, taking care of bins that need servicing.
4.	Security	*Use a reusable bottles. *Use reusable grocery bags.