Project Design Phase II

Solution Requirements (Functional & Non-functional)

Date	**03 October 2022**
Team ID	PNT2022TMID26599
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 Requirements	Sub Requirement (Story/Sub-Task)
FR-1	User registration	Registration through form Registration through Gmail Registration through LindkedIn
FR-2	User confirmation	Confirmation via email Confirmation via OTP
FR-3	Web application	Node-Red -Service
FR-4	Configure to Device	IBM Watson IOT Platform
FR-5	Database	Detailed database of bins and stands
FR-6	Python Script	IBM IOT Platform

Non Functional Requirements

Following are the non-functional requirements of the proposed solution

FR.NO	Non-Functional Requirement	Description
NFR-1	**Usability**	The reduction of waste
NFR-2	**Security**	Prediction in bin fulness
NFR-3	**Reliability**	Effective waste disposal
NFR-4	**Performance**	Optimize source allocation, reduce running costs and increase sustainability of waste services
NFR-5	**Availability**	Available for the allocated time by the municipality or the private companies
NFR-6	**Scalability**	This is very effective in managing waste in big city. Here priority system is used to clean the city all the time without any overflowing dumpsters