

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

Date	16 October 2022
Team ID	PNT2022TMID51674
Project Name	Smart Water Management System For Metropolitan Cities
Maximum Marks	4 Marks

Functional Requirements:

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Smart City technology evolved together with the developments in wireless sensor networks (WSN) and the Internet of Things (IoT). Smart cities essentially combine the use of ICT to provide services for better living conditions inside cities.
NFR-2	Security	The model predicts the correct and accurate result. It is protected to avoid the large amount of waste which is filled in trash bins
NFR-3	Reliability	This model is predicts the amount of wastes ,notify when the trash is fill,differentiate the types of waste in the trash.

NFR-4	Performance	It measures the full trashbins completely .Production of reports shall take less than minutes.
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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	User Authentication	Authentication with OTP via SMS/email Authentication via social networks
FR-4	User Authorization	Role-Based Access Controls(RBAC) OpenID Authorization
FR-5	External Interfaces	Interaction logic between user and software Software interfaces like frontend, backend, etc. Buttons, functions on the model
FR-6	Reporting	SMS notification for reports/alerts Email notification for reports/alerts

Non-functional Requirements:

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

NFR-5	Availability	Before the man have to check the trash bins.But now this model will all the things through the application via mobilephones or other devices.
NFR-6	Scalability	This model can reduce the man power.