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

Date	06 May 2023
Team ID	NM2023TMID10894
Project Name	Assessing the safety of municipal drinking water

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Water Quality Testing	contaminants, including bacteria, viruses, parasites, heavy metals
FR-2	Monitoring and Surveillance	Install appropriate sensors, meters, and data logging systems to collect and analyze
FR-3	Infrastructure and Treatment	water treatment plants, distribution networks, and storage facilities
FR-4	Emergency Preparedness and Response	authorities, stakeholders, and the public
FR-5	Public Education and Outreach	test results, water treatment processes
FR-6	Compliance and Reporting	water quality tests, monitoring data, maintenance activities

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	technical and non-technical personnel involved in assessing the safety
NFR-2	**Security**	confidentiality, integrity, and availability of the information.
NFR-3	**Reliability**	detect and handle errors, ensuring minimal downtime
NFR-4	**Performance**	quick responses to queries and generate reports within acceptable timeframes
NFR-5	**Availability**	assess the safety of municipal drinking water
NFR-6	**Scalability**	easy expansion and resource allocation, ensuring optimal performance