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

Functional Requirements:

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
FR-2	Update native language	The preferred language of the user will be change by the user.
FR-3	Water details collection	Water details are collected through the Excel sheet
FR-4	Water prediction	The kind of water and its properties will be predicted and quality of water will be recommended
FR-5	Recommendation	Both organic and inorganic water under proper guidance will be recommended to the user.
FR-6	Email notification	The kind of Water and its further prevention will be sent to the user through email.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Identify a number of missing metadata elements in the Water Quality Portal data that limited the usability of half the available nutrient water monitoring records.
NFR-2	**Security**	Water security is a term that refers to a society's capacity to have enough water of sufficient quality for survival and to carry out different productive activities. Therefore, a society with water security is in a position to reduce poverty and improve living standards.
NFR-3	**Reliability**	The reliability of a water analysis system can be considered under three types of failure: mechanical, hydraulic and water quality failure. Mechanical failures, also termed component failures, may, for example, be pipe breakage, pump failure, power outages, or control valve failure.
NFR-4	**Performance**	The performance evaluation is crucial for sustainability, where performance assessment is defined as 'any method that allows for the estimation of the competence or the effectiveness of a process or activity through the production of performance measures. Performance assessment is presently a common practice in the water utility sector

		Currently, the Performance Indicators (PI) system developed by IWA is recognized as a well-known industry standard.
NFR-5	**Availability**	Water availability is a broad topic, encompassing the biophysical supply of water, the demand for water, and access to water. Water cycles through the earth system, precipitating from the atmosphere and becoming available as surface water and groundwater.
NFR-6	**Scalability**	Access to safe drinking water and sanitation remains a significant challenge, whilst other sectors including ecosystems, industry, energy and agriculture are also experiencing increasing pressure. Thus, it is increasingly important to use available resources more intelligently, make the most of the massive potential for wastewater reuse, and balance the water quality requirements between different uses. Our current state of knowledge regarding global water quality remains poor.