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

Date	03 October 2022
Team ID	PNT2022TMID08566
Project Name	Efficient Water quality analysis and Prediction using Machine learning
Maximum Marks	4 Marks

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 Follow the instruction
FR-2	User Confirmation	Confirmation via Email and it is predicted by water level sensor.
FR-3	interface sensor	Interface sensor and Water level sensor produces the detection of clean drinking water.
FR-4	Accessing datasets	Datasets are collected by data pre-processing method.
FR-5	Mobile application	The efficient of water quality is analysed, the mobile application is not used.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	This project is useful for all human being by predicting a purified water.
NFR-2	**Security**	We have designed this project to secure the people from drinking the impurity water.
NFR-3	**Reliability**	This project will help everyone in protecting their health. Accurate water quality prediction is the basis of water environment management and is of great significance for water environment protection.
NFR-4	**Performance**	This system uses different sensors for monitoring the water quality by determine pH, Turbidity, conductivity, and temperature. The data Pre - processing access the dataset. With the use of this we predict the quality water.
NFR-5	**Availability**	By developing and deploying resilient hardware and software we can analyse the drinking water.
NFR-6	**Scalability**	This project used to measure and determine the quality of water. This provides pollution free and purified water.