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

Date	15 October 2022
Team ID	PNT2022TMID08054
Project Name	Project -Real Time River Water Quality Monitoring and Control System.
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 Requirement**	Monitoring water quality, water flow and temperature to control water pollution and algal bloom.
FR-2	**User Registration**	Manual Sign-Up using a website or Gmail.
FR-3	**User Confirmation**	OTP authentication through phone messages, email, notices, paper and confirmation.
FR-4	**Product Implementation**	Installing the product to monitor water quality for checking the confirmation by using websites.
FR-5	**Payment option**	Bank transfer,Debit cards,UPI Method.
FR-6	**Product Feedback**	Through the websites,phone conversation,and Gmail.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	This application is used to describe the product and easy to access the product by the guidelines.
NFR-2	**Security**	This application security ensures the website by building a firewall and two step verification. Only can access by authorization person by given user id and password or otp verification.
NFR-3	**Reliability**	To maintain the product conditions and update the version of the product is up-to-date. System update and software update are possible to increase various features and durability.
NFR-4	**Performance**	This application collects the data of river water to provide accurate value. Using this method, we can alert the locality right on time. This application is user friendly and can be accessed by both end-users and management.
NFR-5	**Availability**	Depending on the requirement of the user, all required functions will be offered. when the user requests a feature or makes a message, all features made available in places where users like to know about it.
NFR-6	**Scalability**	Regardless of size, the product must fill the entire river's space.The product is based on monitoring water quality, flow, humidity, and temperature as well as controlling algal blooms.