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

Date	14 October 2022
Team ID	PNT2022TMID37013
Project Name	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 Requirements	Monitoring river water quality, water flow, humidity, and temperature to control the algal bloom
FR-2	User Registration	Manual Sign-Up using a Website or Gmail
FR-3	User Confirmation	OTP authentication through phone, email, and confirmation
FR-4	Payments options	Bank transfers, credit cards, debit cards, and ATMs with UPI
FR-5	Product Delivery and installation	Take away Free Installation and 1 year Warranty
FR-6	Product Feedback	Through a website, a 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**	Have self-explanatory products that are easy to use and have clear product instructions. and Have an easy-to understand guidebook. simpler to use
NFR-2	**Security**	Application security requires two-step authorization. The user's needs will determine how passwords and passkeys are assigned. The network must contain cloud data, condensing it to be Avoid real-time avoidance, and keep an eye on the board at all times.
NFR-3	**Reliability**	Hardware needs to be checked and maintained regularly. Periodic software updates are possible. Any system breakdown will result in an immediate alarm.
NFR-4	**Performance**	The Application must give accurate results, have a user-friendly interface, and improve the user experience.
NFR-5	**Availability**	Depending on the requirements of the user, all required functions will be offered. When a user requests a feature or makes a tweak, all features will be made available.
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.