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

Date	03 October 2022
Team ID	PNT2022TMID41673
Project Name	Project - Real-Time River Water Monitoring And Control Systems
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 Registration through product mobile UI
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Ph level detection	Ph sensor is used to detect and signals send to Arudino. This sends SMS to mobile UI.
FR-4	Turbidity detection	Turbidity sensor is used to detect and signals send to Arudino. This sends SMS via mobile UI.
FR-5	Ultrasonic generator	Waves generated at regular interval times to clear algae 25% ,50%, 100%

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Efficient to use and has simple monitoring system.
NFR-2	**Security**	Mobile application is secured with firewalls protection.
NFR-3	**Reliability**	Real time sensor output values with future predicted data storage.98% efficient monitoring output and 100% clearance of algae production. Assurance for aquaculture safety
NFR-4	**Performance**	Greater performance and environmental safe model.
NFR-5	**Availability**	In form of mobile UI 24 x 7 monitoring system.
NFR-6	**Scalability**	Highly Scalable. It is capable to produce a best final output.