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

Date	19 October 2022
Team ID	PNT2022TMID12734
Project Name	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 monitor the water quality and the signals are send to Arduino.
FR-4	Turbidity detection	Turbidity sensor TS-300B measures the turbidity in the water and the signals are send to Arduino.
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 firewall protection
NFR-3	**Reliability**	Real time sensor output values with future predicted data storage.98% efficient monitoring output. It has assurance for aquaculture safety
NFR-4	**Performance**	Greater performance and environmentally 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 finaloutput.