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

Date	11 November 2022
Team ID	PNT2022TMID19640
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 Registration	Registration through Email or Gmail. Registration through Phone number.
FR-2	User Confirmation	Confirmation via Gmail. Confirmation via Code.
FR-3	User access	Accepting all the terms and conditions. Confirmation of re- captcha.
FR-4	User mode	Online
FR-5	User alert	Alert Message to the registered Phone number if the measuredvalue crosses the threshold value.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Easy to use. Effective, Efficient, Engaging, Error tolerant. Easy to learn.
NFR-2	**Security**	Accepting Terms and Conditions. Confirmation via Email and OTP. Confirmation via re- captcha. Strong cryptography skills. Software security architects also have experience with malware, intrusion detection andprevention and firewalls.
NFR-3	**Reliability**	Great user interface. Software operating without failure while in aspecified environment over a set duration of time.
NFR-4	**Performance**	Fast loading of the result time and high performance.
NFR-5	**Availability**	Easy installation.

NFR-6	**Scalability**	Optimizing SQL queries and implementing indexing strategies. By building articles and authors into a single query, we can dramatically reduce the volume of queries we're running.