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

Date	03 October 2022
Team ID	PNT2022TMID47455
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 Registration	1.Registration through Gmail. 2.Registration through mobile number.
FR-2	User Confirmation	1.Confirmation via Email. 2.Confirmation via OTP.
FR-3	User access	1.Accepting all the terms and conditions. 2.Confirmation of recaptcha.
FR-4	User mode	Online
FR-5	User alert	Alert sms to the registered mobile number if the measured value 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**	1.Easy to use. 3.Effective, Efficient, Engaging, Error tolerant. 4.Easy to learn.
NFR-2	**Security**	1.Accepting Terms and Conditions. 2.Confirmation via Email and OTP. 3.Confirmation via recaptcha. 4.Strong cryptography skills. 5.Software security architects also have experience with malware, intrusion detection and prevention and firewalls.
NFR-3	**Reliability**	1.Great user interface. 2.Software operating without failure while in a specified 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**	1.Optimizing SQL queries and implementing indexing strategies. 2.By building articles and authors into a single query, we can dramatically reduce the volume of queries we're running.