

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

Date	27 October 2022
Team ID	PNT2022TMID33916
Project Name	IOT Based Real-time River Water Quality Monitoring and Control System
Maximum Marks	04

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Login	Confirmation through verified password.
FR-2	View Water Details	View current water details in website View traditional water eligibility in website.
FR-3	Historical Data	The Data are stored in the cloud from the beginning stage till the Updation.
FR-4	User Authentication	The credentials is accessible only to the authorized users to access the model.
FR-5	Users Guidelines	There are some specific guidelines which has to be followed by the users.
FR-6	Logout	Logs out the user successfully.

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	Load time for user interface screens shall not be more than 2 seconds.
NFR-2	<b>Security</b>	User account is password protected and Account creation done only after email verification.
NFR-3	<b>Reliability</b>	Users can access their account 98% of the time without failure.
NFR-4	<b>Performance</b>	Load time for user interface screens shall not be more than 2 seconds. For that High quality sensors are used to ease the customer's work.
NFR-5	<b>Availability</b>	The model is designed in such a way that are available, usable and can be modified anytime. Maximum down time will be about 4 hours.
NFR-6	<b>Scalability</b>	System can handle about 1000 users at any given time. The final data should be easily understandable.