

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

Date	03 October 2022
Team ID	PNT2022TMID52890
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	Registration through Form
FR-2	User Confirmation	Confirmation via Email
FR-3	App Login	Username and password have to be known

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	The app created is user friendly and a customer can easily access the data regarding chemical constituents etc.
NFR-2	<b>Security</b>	The application cannot be used by any other user who hasn't registered.
NFR-3	<b>Reliability</b>	The real time of water quality monitoring is less reliable but it is more reliable for prior 5-10 minutes simulation results.
NFR-4	<b>Performance</b>	The performance is better since a virtual based software(cloud) is used and hence faster to integrate the data.
NFR-5	<b>Availability</b>	All open-source frameworks such as MIT App Inventor, Wowki is used
NFR-6	<b>Scalability</b>	The Application is more scalable since all data are integrated into cloud.