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

Date	03 October 2022
Team ID	PNT2022TMID27339
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 Registration through Gmail Registration through LinkedIN
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Software requirements	IOT cloud platform , IBM IOT platform , IBM CLOUDANT DB, node - RED
FR-4	System requirements	RAM minimum 4GB Processor. Configuration OS-Windows.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	It is very important to monitor the water quality to ensure that it is safe to drink and by monitoring the water continuously we can also ensure the safety of sea animals and also we can reduce the water pollution.
NFR-2	**Security**	The networks used in this project are incredibily safe and the transmission speed is also high .
NFR-3	**Reliability**	In this project standardized software components are used so that the desired outputs can be obtained which makes the project more reliable.
NFR-4	**Performance**	The water quality will be monitored continuously and SMS alert will be sent to the specified customer if the water quality is poor.
NFR-5	**Availability**	This project is portable so that it can be taken to anywhere. It can be used at any time with accuracy.
NFR-6	**Scalability**	The main advantage of this project is its scalability. It is very compact in size such that it can be taken anywhere easily to measure the water quality.