

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

Date	03 October 2022
Team ID	PNT2022TMID44989
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 Form Registration through Gmail Registration through LinkedIn
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	PH sensor	PH sensor are used to detect the PH value of the water
FR-4	Turbidity sensor	Turbidity sensors are used to detect the turbidity value of the water.
FR-5	Thermistors or Thermocouples	Thermistors or Thermocouples are used to detect the temperature of the water.
FR-6	Ultrasonic signal generator	Ultrasonic signal generator generates ultrasonic signal to destroy the algae present in the water.
FR-7	Mobile Application	To give the alerts to the corporation and the local authorities.

Non-functional Requirements:

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

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	It is good and efficient to use.
NFR-2	Security	It has high security.
NFR-3	Reliability	Quality assurance, quality control and quality assessment procedures have been implemented.
NFR-4	Performance	The performance of the system good and efficient.
NFR-5	Scalability	The ability of the system is highly scalable.