

Project design phase – II

Solution requirements (functional & non – functional)

Date	03 October 2022
Team ID	PNT2022TMID48312
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 requirements(Epic)	Sub Requirement (Story / Sub - task)
FR – 1	User identification	The user has to identify whether the water conditions are good or bad then take the sample water to identify the water quality.
FR – 2	User detection	The user has to detect the quality of the river water using different types of sensors and measure the PH value.



Non - Functional Requirements:

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

FR NO	Non – Functional Requirement	Description
NFR – 1	Usability	The sensors are used to monitor the quality of water for people and to drink the water in good condition.
NFR – 2	Security	Using a web application to immediately alert the user not to drink the water keeps them safe from health problems.
NFR – 3	Reliability	The system is more reliable. It is simple to detect the quality of various types of water and is helpful for people to drink good water.



NFR – 4	Performance	Sensors empower people to reach quickly and dynamically detect the quality of water. It is cost effective and efficient.
NFR – 5	Availability	The system is not hard to handle by people to detect the quality of water. So it is used by all countries with different countries.
NFR - 6	Scalability	The system gives output rapidly. It also predicts quickly when it gets so many inputs at a time. It predicts the PH level of water quality in different types.

