

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

Date	15 October 2022
Team ID	PNT2022TMID49522
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	DETECTOR	We are using different types of detectors. It is used to Identify the device location and to detect the water level.
FR-2	SOLAR PANEL	The solar panel is used to the power requirement.
FR-3	SENSOR(PH,TDS)	Identify the PH level of the water.
FR-4	RASPERRY Pi	All the components are placed in the Rasperry pi

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	By using the device, we can identify the water quality easily.
NFR-2	Security	Protect sensitive data stored on devices. Prevent Unauthorized uses from mobile devices to access
NFR-3	Reliability	The device will perform satisfactorily for a specified period of time.
NFR-4	Performance	It is a continuous process in which the data and PH values can be analysed easily.
NFR-5	Availability	By using the sensor we can identify the ph level of river water.
NFR-6	Scalability	The measure of a system ability to increase or decrease in performance.