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

Date	16 October 2022
Team ID	PNT2022TMID38365
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	Notification System	The higher authorities will get the notification when the impurities found in the water.
FR-2	User Control	The user should control the entire system and maintain the system.
FR-3	LED Display	In the LED display all the informations is displayed into it.
FR-4	Buzzer	Buzzer is placed to alert the local peoples when the impurities found in the water.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	All the sensors are connected into the series of element to the Raspberry Pi and the signal is passes to user by the GSM module.
NFR-2	**Security**	The message is passed via GSM module only for authorised users.
NFR-3	**Reliability**	The entire is more reliable to the user and user friendly.
NFR-4	**Performance**	The project application gives the real time condition of the water in anytime and anywhere.
NFR-5	**Availability**	All the conditions of the water like temperature, pH and turbidity is get noted in the application.
NFR-6	**Scalability**	The datas are stored in the system for the future use.We can make analyse the data for the future use.