

## Project Design Phase-II

### Solution Requirements (Functional & Non-functional)

Date	15 October 2022
Team ID	PNT2022TMI20020
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 with Gmail Create an account By the Follow the instructions
FR-2	User Confirmation	Confirmation via Alarm Confirmation via SMS
FR-3	Interface sensor	Interface sensor if contaminated water enter in the river it gives alarm.
FR-4	Accessing datasets	Datasets are retrieved from Cloudant DB
FR-5	Mobile application	Only can see water is contaminated or not. Had not using mobile application.

#### Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	The smart protection system defines that this project helps people to protect the drinking water and agriculture.
NFR-2	<b>Security</b>	We have designed this project to secure the water from contaminated water or chemical or sewage.
NFR-3	<b>Reliability</b>	This project will help people"s in protecting their water and save them from diseases.
NFR-4	<b>Performance</b>	IOT devices and sensors are used to alert the station control person by a message when contaminated water enter in river.
NFR-5	<b>Availability</b>	By developing and deploying resilient hardware and software we can protect the river from contamination chemicals,sewage etc....
NFR-6	<b>Scalability</b>	This project used to collect real time information in water and measure quality.