PROJECT TITLE: Real-Time River Water Quality Monitoring and Control System

TEAM ID: PNT2022TMID05726

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 mobile number
FR-2	User Confirmation	Confirmation via OTP Conformation via text message
FR-3	Temperature increase detection	Increase in temperature of river water can be detected by sensors and can send an alert message to user mobile
FR-4	Sample data	Real-time data sample information will be collected through software
FR-5	Web application	A mobile application will be developed and water quality details, analysis report can be viewed by user through smart phone

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Can be viewed through user interface screens which will be not more than 5 seconds
NFR-2	**Security**	User account can be password protected with two step authentication which can be verified through OTP
NFR-3	**Reliability**	the system can produce real time analysed data through mobile application
NFR-4	**Performance**	Log in information can be verified within 10 seconds and user can login, can get accurate data almost all the times
NFR-5	**Availability**	Maximum down time will be about 4 hours
NFR-6	**Scalability**	System can handle user traffic without crashing upto 1000 users