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

Date	15 October 2022
Team ID	PNT2022TMID10977
Project Name	Project – IOT Based 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 Requirement	River Water Protection Turbidity and Temperature
FR-2	User Registration	Registration through Form Registration through Gmail Registration through LinkedIN
FR-3	User Confirmation	Confirmation Via Email Confirmation Via OTP Confirmation Via Mobile
FR-4	Payment Options	UPI Credit/ATM Card/Debit Cash on Delivery
FR-5	Product Delivery And Installation	Door Step Delivery
FR-6	Product Feedback	Through Google form Through phone call

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	The IoT (Internet of things) based smart water quality monitoring (SWQM) system that aids in continuous measurement of water condition based on physical parameters.
NFR-2	**Security**	It is secure to analyse the river water for drinking.
NFR-3	**Reliability**	Real-time monitoring of water quality by using IoT integrated Big Data Analytics will immensely help people to become conscious against using contaminated water as well as to stop polluting the water.
NFR-4	**Performance**	Used to detect the quality of water at frequent times.

NFR-5	**Availability**	When the notification option is not working then the customer can send call or message to customer care number.
NFR-6	**Scalability**	An IoT-based water-level monitoring solution is an advanced and well-equipped system highly scalable to monitor the realtime volume of water-filled tanks