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

Date	13 October 2022
Team ID	PNT2022TMID11080
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 Requirements**	River water Protection Monitors PH, Salinity,Turbidity,Conductivity and dissolve solvents and to analyze the quality of river water.
FR-2	**User Registration**	Manual Registration Registration through Form Registration through webpage Registration through Gmail
FR-3	**User Confirmation**	Confirmation via Phone Confirmation via mail Confirmation via OTP
FR-4	**Payment Options**	Cash on Delivery NetBanking UPI Credit/Debit/ATM Card
FR-5	**Product Delivery and Installation**	Door Step delivery Take away Free Installation and 1 year Warranty
FR-6	**Product Feedback**	Through Webpages Through Phone calls Through Googleforms

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Have a clear and self-explanatory manual. Easier to use Even an illiterate user have to use the product without any difficulties.
NFR-2	**Security**	Application has to be secured with 2 step authorization. Passwords and passkeys will be assigned as per the users need.
NFR-3	**Reliability**	Hardware requires a regular checking and service. Software may be updated periodically. Immediate alert is provided in case of any system failure.
NFR-4	**Performance**	The application must have a good user interface . It should have a minimal energy requirement. It has to save water and energy.
NFR-5	**Availability**	All the features will be available when the user requires. It depends on the need of the User and the customization the user has done.
NFR-6	**Scalability**	The product has to cover all the space of water body irrespective of the quantity of river water.