

# PROJECT DESIGN PHASE II

## SOLUTION ARCHITECTURE

Team ID : PNT2022TMID07790

Project Name Project : Real Time River Water Monitoring  
and Control system

**Solution Requirements (Functional & Non-functional) Date**

14 October 2022

Team ID

PNT2022TMID07790

Project Name

Project - lot 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.**

FR-1

### Functional Requirement (Epic)

#### User Requirements

### Sub Requirement (Story / Sub-Task)

River Water Protection  
pH,Turbidity ,Humidity and  
Temperature

FR-2

#### User Registration

Manual Registration  
Registration through webpage  
Registration through Form  
Registration through Gmail

FR-3

#### User Confirmation

Confirmation Via Email  
Confirmation Via OTP  
Confirmation Via Phone

FR-4

#### Payment Options

Cash on Delivery  
Net Banking/UPI  
Credit/Debit/ATM Card

FR-5

#### Product Delivery and Installation

Door Step delivery  
Free Installation

FR-6

#### Product Feedback

Through GoogleForms  
Through Phone calls  
Through Webpage

### Non-functional Requirements:

Following are the non-functional requirements of the proposed solution. **FR No.**

	<b>Non-Functional Requirement</b>	<b>Description</b>
NFR-1	<b>Usability</b>	Have a clear and self-explanatory manual. Easier to use Even an illiterate farmer have to use the product without any difficulties
NFR-2	<b>Security</b>	Application has to be secured with 2 step authorisation Passwords and passkeys will be assigned as per the users need.
NFR-3	<b>Reliability</b>	Hardware requires a regular checking and service Software may be updated periodically Immediate alert is provided in case of any system failure
NFR-4	<b>Performance</b>	The application must have a good user interface It should have a minimal energy requirement It has to save water and energy
NFR-5	<b>Availability</b>	All the features will be available when the user requires. It depends on the need of the farmer and the customization the user has done.
NFR-6	<b>Scalability</b>	The product has to cover all the space of land irrespective of the size or area of a farm field.