

Project Design Phase-I
Proposed Solution.

Date	15 October 2022
Team ID	PNT2022TMID12777
Project Name	Project - Realtime River Water Quality Monitoring and Control System
Maximum Marks	2 Marks

Proposed Solution:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	To ensure potable water for people, continuous monitoring of water quality is inevitable but, continuous monitoring requires real time data which further demands high cost and large labour force.
2.	Idea / Solution description	The problem of retrieving real time data is solved by using respective sensors to collect data and streaming them in real time to the corresponding person thereby establishing the publish – subscribe model.
3.	Novelty / Uniqueness	Since we handle data from various entities it is difficult for the user to track from which entity the data is coming so, we establish Publish – Subscriber model to ensure the person view data from the entity he desires.
4.	Social Impact / Customer Satisfaction	The person will be able to achieve self-reliant as well as he / she can overcome cost constraints.
5.	Business Model (Revenue Model)	The designed model can be provided not only to Quality officers but also a small-scale version of the model can be given to residents to ensure water quality in their households.
6.	Scalability of the Solution	The designed model can measure up to a certain area but the area range can be scaled up / down depending upon who the customer.