

Project Design Phase-I
Proposed Solution Template

Date	01 NOVEMBER 2022
Team ID	PNT2022TMID17727
Project Name	Project – Real-Time River Water Quality Monitoring and Control System
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	It is difficult to collect the water samples from all the area of the water body. The lab testing and analysis takes some time and hence the lab result does not reflect real time water quality measurement due to delay in measurement.
2.	Idea / Solution description	This project proposes a IOT Based Water Quality alarm system. Using Python,IOT Cloud Platform ,IBM Cloud,Node- RED,IBM IoT Platform,IBM Nodered,IBM Cloudant DB,Mobile App it will alert the authority either by sending E-mail/SMS alert or by triggering some alarm.
3.	Novelty / Uniqueness	The uniqueness of our proposed project is that the authorities need not have to monitor the water continuously .They need only to pass the message to the locals when an SMS alert is triggered. The alert can be sent to the authorities if the water quality is not good so that they can go and announce the localities not to drink that water. A notification will be sent to them through email or message inside the system.
4.	Social Impact / Customer Satisfaction	Using this project, it will immensely help people to become conscious against using contaminated water
5.	Business Model (Revenue Model)	This project not only for water quality monitoring, also useful for detecting contaminants and to simulate and evaluate quality parameters for quality control
6.	Scalability of the Solution	The main advantage of this project is Cloud storage platform helps in storing the sensor data immediately and wirelessly to the robust servers.