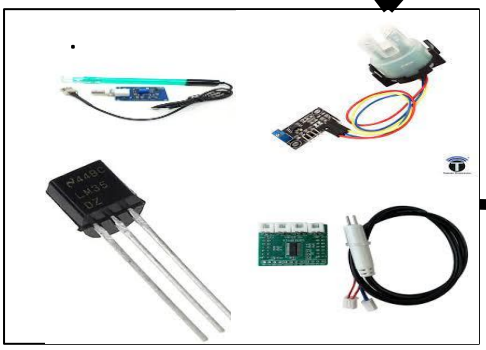
Project Design Phase-I
Solution Architecture

Date	30 September 2022
Team ID	PNT2022TMID32705
Project Name	Real time River Water Quality Monitoring And Control System
Maximum Marks	4 Marks

Solution Architecture:

Our Aim is to develop a system for continous monitoring of river water quality at remote places using WSN with low cost and more accuracy.

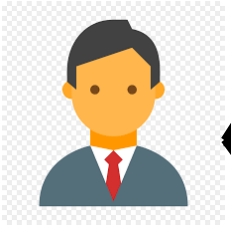
1. To measure the parameters such as PH,Turbidity,Total dissolved solid and temperature using sensor.
2. Assemble the data from all the sensor and send it to base station using ESP32.
3. Integrate all the data from software then give it to MPC Buoy(mobile app)and measure the quality of water.
4. Send SMS to an authorized person when water quality detected not match the preset standards.
5. The Data aggregator can retrieve the analysis result and transfer to app running on laptops,mobile phones in IOT cloud.



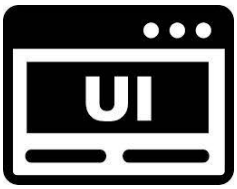
Sensors

ESP32

MPC Buoy



Authority



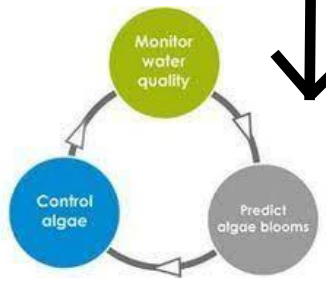
Web UI

Node RED

IOT

Platform

CLOUD



Monitor & control algae

Alert

Display