

Project Design Phase-I
Proposed Solution

Date	23 September 2022
Team ID	PNT2022TMID29821
Project Name	Real-Time River Water Quality Monitoring and Control System
Maximum Marks	2 Marks

Proposed Solution:

S. No	Parameter	Description
1.	Problem Statement (Problem to be solved)	Pollution control. Water quality enhancement.
2.	Idea / Solution description	<p>The device comprises of a micro controller interfaced with pH and turbidity sensors for measuring the pH and turbidity level of the water.</p> <p>The device is connected with the GSM module which notifies the water quality parameters as message to the board members.</p> <p>A Cloud storage is available for storing the collected data.</p> <p>A web application is created that is connected with cloud storage. Users can access the web application to check the water status of an area.</p>
3.	Novelty / Uniqueness	The proposed solution comprises of a GSM module to notify the water quality parameters as message, which is the unique feature of the proposed solution.
4.	Social Impact / Customer Satisfaction	<p>River pollution can impact all living organisms.</p> <p>Better monitoring and controlling measures can impact vegetation, health.</p>

5.	Business Model (Revenue Model)	<p>Revenue can be generated by selling the whole kit or they can sell the individual components as a replacement of damaged products.</p> <p>The revenue can also be obtained by the monitoring system as service where they can inspect the system, for that service they can charge the customers.</p>
6.	Scalability of the Solution	<p>Whatever may be the water quality either good or bad the device does not fail to give the result correctly</p>