Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID19515
Project Name	Real Time river water quality Monitoring and Control System

Project Title : Real-Time River Water Quality Monitoring And Control

Faculty Mentor : Mohanapriya A

Team ID: PNT2022TMID19515

Team Members:

1. Harish V - Team Leader
2. Nirmalkumar V S - Team Member
3. Mohammed Adhil H - Team Member
4. Jaisherma J Team - Member

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The majority of river water is impacted by chemical- and medical-laden industrial waste, and when cars are cleansed, engine oil combines with river water, which causes the impurity of water.
2.	Idea / Solution description	* To measure various chemical and physical parameters of water like pH, temperature, turbidity, conductivity and dissolved oxygen of water using sensors. * By adopting IoT and machine learning algorithms has to considered to control and monitoring of water bodies.
3.	Novelty / Uniqueness	* If the acquired value exceeds the threshold value of the specific parameters, automated warning SMS will be sent to the respective departments. * Our suggested work is unique in that it aims to develop a water monitoring system with high accuracy, high frequency, high mobility and less power.

4.	Social Impact / Customer Satisfaction	* Humans and animals will consume pure water. * The risk of water-borne diseases can be reduced. * Good environment surrounding the river. * The good quality water will be rich in minerals. * The good quality river water can be very useful to farming
5.	Business Model (Revenue Model)	Since river water serves as the primary source of raw materials for the food and drinks industries, we can assess the water quality using this approach.
6.	Scalability of the Solution	* High geographical and temporal accuracy water quality data for thousands of lakes at once. * By monitoring changes in water quality and spotting dangerous growth of algae, it aids as in evaluation of environmental problems and related health risks.