PROJECT PHASE – I

PROPOSED SOLUTION

TEAM ID	PNT2022TMID22571
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PROJECT NAME	REAL TIME RIVER WATER QUALITY MONITORING AND CONTROL SYSTEM

S.NO	PARAMETERS	DESCRIPTION
1	Problem Statement	Water is a finite resource that is necessary for agriculture, industry and the survival of all living things on the planet, including humans. Many people are unaware of the need of drinking adequate amounts of water on a daily basis. Many unregulated methods waste more water. Poor water allocation, inefficient consumption, lack of competent and integrated water management are all factors that contribute to this problem. Therefore, efficient use and water monitoring are potential constraint for home or office water management system
2	Idea/solution description	In our project we implemented several sensors such as temperature sensor, pH sensor, turbidity sensor etc., that are used to determine the contamination of water and the results were produced. Here we use machine learning algorithm to overcome the input variation in the sensor data and it provides high efficiency and accuracy with low cost compared to others.
3	Novelty / Uniqueness	• The uniqueness of our proposed paper is to obtain the water monitoring system with high frequency, high mobility, and low powered. • Therefore, our proposed system will immensely help populations to become conscious against contaminated water as well as to stop polluting the water.
4	Social Impact / Customer Satisfaction	• The system uses machine learning algorithm which used to compare the sensor data with the training data(standard data) which overcomes the input variation in the sensors. • The system is designed for monitoring the pH of water, which is one of the main parameters that affect the quality of water.

		• Water quality refers to the chemical, biological, radiological, and biological parameters of the water For example, for aquariums, it is necessary to maintain the temperature, pH level, dissolved oxygen level, turbidity, and the level of the water in a certain normal range in order to ensure the safety • In our system the ultrasonic sensor is used when the river flow rate(depth) crosses the threshold value it send the alarm or alert to resident people near river it also includes the flood detection .
5	Business Model (Revenue Model)	Business -To-Business Model (B2B) The section presents the system deployment strategy and focuses on the sensor probes, the calibration process, and the cloud-based web portal design used for reporting and analysing the data obtained from the deployment environment
6	Scalability of the solution	Well monitoring system with accurate indication , easy maintenance ,reasonable cost. Most of the river are polluted by people. They were undetected .It must be pre-detected ,So that, the river water monitoring and control system is needed. The purpose of this system is to detect the quality of the water river and prevent the polluting of the water.