Project Design Phase-I
Proposed Solution

Date	19 September 2022
Team ID	PNT2022TMID21280
Project Name	Project - Efficient Water Quality Analysis & Prediction using Machine Learning.
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)	Access to safe drinking-water is essential to health, a basic human right and a component of effective policy for health protection. This is important as a health and development issue at a national, regional and local level. In some regions, it has been shown that investments in water supply and sanitation can yield a net economic benefit, since the reductions in adverse health effects and health care costs outweigh the costs of undertaking the interventions.
2.	Idea / Solution description	To provide the better analysis of water quality, we use some prediction algorithms. The predicted value will determine the quality.
3.	Novelty / Uniqueness	Water Quality Analysis holds crucial value as one of the sustaining factors of public health and sustenance. There have been numerous researches conducted in this premise, all evaluating upon selective parameters that promise to determine water quality. Feature engineering techniques like scaling and smote analysis can be done to elevate the quality so as to improve the final results.
4.	Social Impact / Customer Satisfaction	Increased expenditure on recreational fishing, increased revenue from commercial fishing, reduced water treatment costs, average increase in property prices, tourism growth (with associated revenue and employment opportunities) and benefits of improved environmental and biodiversity protection.
5.	Business Model (Revenue Model)	This solution will have a major impact on the financial. Since, there is no better software to do water quality analysis, everything done

		physically which costs more. Definitely, our solution will show the reduction the costs.
6.	Scalability of the Solution	The solution will be provided as a Software as a Service model which will be more scalable to use.