

**Project Design Phase-I**  
**Proposed Solution**

Date	19 September 2022
Team ID	PNT2022TMID52665
Project Name	Project -Efficient Water Quality Analysis and Prediction Using Machine Learning
Maximum Marks	2 Marks

**Proposed Solution Template:**

The project team shall fill in the following information in the proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Recently, water contamination has increased as a result of human activities and environmental conditions. So, drinking water is unsafe to consume. The software was designed to predict and analyze water quality to get better results.
2.	Idea / Solution description	The project's major objective is to develop a machine-learning model for analyzing and predicting water quality. Gather the data and enter it using the user interface. The integrated model analyses the data that has been entered. After input analysis by the model, the prediction is displayed on the user interface.
3.	Novelty / Uniqueness	It makes use of past historical data, the user receives information from the UI rapidly, and it also sends information on recycling methods used.
4.	Social Impact / Customer Satisfaction	Improve water quality predictions can promote the idea of a healthy country. It can able to determine the precise water level. Intake of clean water promotes a healthy lifestyle. Understand how to efficiently utilize water by reusing it.
5.	Business Model (Revenue Model)	Can collaborate with governments and companies to measure the water quality and enhance it. We can promote our project to an NGO to enhance the upgrading of urban water quality.
6.	Scalability of the Solution	In addition to learning more about the water's temperature, pH level, and salinity, we may also learn more about its physical, chemical, and biological features.