

Project Design Phase-I
Proposed Solution Template

Date	27 October 2022
Team ID	PNT2022TMID37849
Project Name	Efficient Water Quality Analysis And Prediction Using Machine Learning
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in the proposed solution template.

S. No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<ul style="list-style-type: none">Water is a necessity for life, and as such that necessity needs to be protected. Water testing will uncover any harmful substances in your water supply and may give insight into any health issues that you are experiencing.The quality of water is a major concern for people living in urban areas. Contaminated water and poor sanitation are linked to transmission of diseases such as cholera, diarrhoea, dysentery, hepatitis A, typhoid and polio.So this project aims at building a Machine Learning (ML) model to Predict Water Quality by considering all water quality standard indicators.
2.	Idea / Solution description	<ul style="list-style-type: none">By using Machine Learning algorithm a model is created to collect data about water and analyse the quality of the water and predict the quality percentage of it and based on which we can utilize it.
3.	Novelty / Uniqueness	<ul style="list-style-type: none">In the past they found water quality with the help of WQI and WQC. Now the solution is with the help of advanced artificial intelligence and it includes seven parameters.User Friendly and Eco friendly.
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none">Water quality has been threatened by various pollutants. Therefore, modelling and predicting water quality have become very important in controlling

		<p>water pollution. In this work, advanced artificial intelligence (AI) algorithms are developed to predict water quality index (WQI) and water quality classification (WQC). This is the impact of this statement.</p>
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> ● Affording a model would not cost much, thus it allows one to get hold of it easily. Hence it provides a better profit if marketed.
6.	Scalability of the Solution	<ul style="list-style-type: none"> ● Improves financial management. Secured and safe to use. Insights about money management. ● Scalability of this solution can handle any amount of data and perform many computations in a cost effective and timesaving way to instantly serve millions of users residing at global locations. ● Helps in getting all required aspects of water.