Project Design Phase-I
Proposed Solution Template

Date	15 October 2022
Team ID	PNT2022TMID37191
Project Name	Project – Efficient Water Quality Analysis & Prediction Using Machine Learning
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	• Water quality prediction using linear regression in machine learning techniques. In this technique, our model predicts that the water contaminants or using some parameters like Ph value, conductivity, hardness, etc,.
2.	Idea / Solution description	• Water Quality Index (WQI) assessment is required for the purpose of public health. • An effective linear regression model is developed to predict the WQI based on the parameters like temperature, dissolved oxygen, pH value, Turbidity, Nitrates and faecal coliform.
3.	Novelty / Uniqueness	• In this prediction,the main uniqueness is that using linear regression

4.	Social Impact / Customer Satisfaction	• One of the important factors leading to poverty is shortage of water resource. • The shortage of water resource can lead to poor land productivity, low production level and low income level, and can also lead to drinking water shortage and poor life quality.
5.	Business Model (Revenue Model)	• For Analysing the metrics of each water resource a charge will be collected.
6.	Scalability of the Solution	• The result gives more accuracy of the water quality analysis by using linear regression.