

Ideation Phase

Empathy Map

Date	5 September 2022
Team ID	PNT2022TMID25646
Project Name	EFFICIENT WATER QUALITY PREDICTION USING MACHINE LEARNING
Maximum Marks	4 Marks

Empathy Map Canvas:

Water makes up about 70% of the earth's surface and is one of the most important sources vital to sustaining life. Rapid urbanization and industrialization have led to a deterioration of water quality at an alarming rate, resulting in harrowing diseases.

Water quality has been conventionally estimated through expensive and time consuming lab and statistical analyses, which render the contemporary notion of real-time monitoring moot. The alarming consequences of poor water quality necessitate an alternative method, which is quicker and inexpensive. With this motivation, this research explores a series of supervised machine learning algorithms to estimate the water quality index (WQI), which is a singular index to describe the general quality of water, and the water quality class (WQC), which is a distinctive class defined on the basis of the WQI. The proposed methodology employs four input parameters, namely, temperature, turbidity, pH and total dissolved solids

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