

Project Design Phase-I
Proposed Solution Template

Date	15 October 2022
Team ID	PNT2022TMID11410
Project Name	Real- Time River Water Quality Monitoring And Control System
Maximum Marks	2 Marks

Proposed Solution Template:

S.N o.	Parameter	Description
1.	Problem Statement (Problem to be solved)	River water is a finite resource that is necessary for agriculture, industry and the survival of all living things on the planet, including humans. Sometimes the dangerous particles or chemicals are mixed in the river water and general purpose water purifier cannot purify that. And it's impossible to check the quality of river water manually in every time. Bathing in contaminated river waters causes skin diseases, allergies, and other such ailments. So an automatic real-time river water quality monitoring and control system is required to monitor the water reserved in our river water. And we can check the quality of water anytime and from anywhere.
2.	Idea / Solution description	<ul style="list-style-type: none">• River water quality can be monitored by the web application.• It can be able to know if there are any dust particles in the river water.• The PH level of the river water can be monitored.• Water temperature can be monitored.• Alerting the authorities if the water quality is not good so that they can go and announce the localities not to drink that river water.
3.	Novelty / Uniqueness	<p>The objective of our project is to continuously monitor the river water quality, by looking after parameters such as Temperature ,pH, dust in the water body by using many sensors. and after detection of any unwanted qualities in water, the direct SoS SMS is pushed to the Authorities in charge.</p> <p>The water quality from the rivers has a considerable importance for the reason that these water resources are generally used for multiple matters such as: drinking domestic and residential water supplies, agriculture (irrigation), hydroelectric, power plants, transportation and infrastructure, tourism, recreation, and other human or economic ways to use water.</p> <p>The uniqueness of river water monitoring and control system is to obtain the pure water from the river and get a pollutant free water from the riverfor agriculture field</p>

4.	Social Impact / Customer Satisfaction	<p>Clean Water for Future Generations</p> <p>Nearly 60% of water projects in India fail, often within the first year. This is caused by a variety of circumstances, but these two stand out as the leading factors:</p> <p>Increasing innovation and productivity.</p> <p>Gain a high field for farmer, common man and fisher man.</p>
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5.	Business Model (Revenue Model)	<p>Extreme weather events, such as periods of high temperature, heavy storms, or droughts, can severely disrupt crop production.</p>
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