REAL TIME RIVER WATER QUALITY MONITORING AND CONTROL SYSTEM

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Abstract :

Pollution of water is one of the main threats in recent times as drinking water is getting contaminated and polluted. The polluted water can cause various diseases to humans and animals, which in turn affects the lifecycle of the ecosystem. If water pollution is detected in an early stage, suitable measures can be taken and critical situations can be avoided. To make certain the supply of pure water, the quality of the water should be examined in real-time. Smart solutions for monitoring of water pollution are getting more and more significant these days with innovation in sensors, communication, and Internet of Things (IOT) technology

Problem Statement :

- Due to the fast growing urbanization supply of safe drinking water is a challenge for the every city authority. Water can be polluted any time.
- So the water we reserved in the water tank at our roof top or basement in our society or apartment may not be safe. Still in India most of the people use simple water purifier that is not enough to get surety of pure water. The traditional water quality monitoring system has certain drawbacks.
- Sometimes the water has dangerous particles or chemical mixed and general purpose water purifier cannot purify that. It relies on collecting of water samples, testing and analyses in laboratories and it's impossible to check the quality of water manually in every time.
- It results in more cost, more man power and more time. Also, it lacks capability for real-time data collections. So an automatic real-time monitoring system is required to monitor the health of the water reserved in our water tank of the society or apartment. So it can warn us automatically if there is any problem with the reserved water. And we can check the quality of the water anytime and from anywhere. By keeping this mind we designed this system especially for residential areas.

ADVANTAGE:
This system is used to collect the data and can displayed in visual format on the sever Pc with help of spark streaming analysis through Spark MLib

DRAWBACK:
In these requires more data. Sometimes acquires network problem