

PROJECT OBJECTIVES

Project Name	Real-Time River Water Quality Monitoring and Control System.
Team ID	PNT2022TMID50000
Date	12 November 2022
Maximum Marks	2 Marks

Objectives:

The objective of water quality monitoring is to measure various chemical and physical properties of water like pH, temperature and particle density of water using sensors.

Current water quality monitoring system is a manual system with a

monotonous process and is very time-consuming. This paper proposes a sensor-based water quality monitoring system. The main components of Wireless Sensor Network (WSN) include a microcontroller for processing the system, communication system for inter and intra node communication and several sensors. Real-time data access can be done by using remote monitoring and Internet of Things (IoT) technology. Data collected at the apart site can be displayed in a visual format on a server PC with the help of Spark streaming analysis through Spark MLlib, Deep learning neural network models, Belief Rule Based (BRB) system and is also compared with standard values.

If the acquired value is above the threshold value automated warning SMS alert will be sent to the agent. The uniqueness of our proposed paper is to obtain the water monitoring system with high frequency, high mobility, and low powered. Therefore, our proposed system will immensely help Bangladeshi populations to become conscious against contaminated water as well as to stop polluting the water.