

## IDEATION

1. The system is designed for monitoring water quality such as water temperature, water level, water pH, turbidity of water and Carbon dioxide on the surface of water by using WQM system consists of sensors, Field Programmable Gate Array (FPGA), Zigbee wireless communication protocol and personal computer.
2. GSM module is used to transfers wirelessly the data further from the microcontroller to the smart phone/PC. The system has proximity sensors to alert the officials by sending a message to them via the GSM module in case someone tries to pollute the water body. This system can keep a strict check on the pollution of the water resources and be able to provide an environment for safe drinking water.
3. 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. The paper proposes a cost effective and efficient IoT based smart water quality monitoring system which monitors the quality parameters uninterruptedly. The developed model is tested with three water samples and the parameters are transmitted to the cloud server for further action.