

ABSTRACT

The existing condition are still using manual system when to the job, monitoring and inspection. The dam officer must always control the water level at the dam and open-close dam's door manually to the dam site. Consequently, officer must monitor every period. Internet of things are a concept where an object has ability to send data over the network without requiring human-to-human or human-to-computer interaction. In the application of the use of the Internet of Things, built a system that can control water on the dam from a distance. The system is created by utilizing the Internet of Things (IoT) in order to see the water condition in soft real-time system(SRTS). The dam officer does not have to go straight to the dam site to monitor the water condition at the dam and control the gate of the water gate. The system was built with hardware components consisting of Ethernet Shield, Ultrasonic Sensor, buzzer, DC motor and IC L293D. Microcontroller with Arduino Uno and parts of software used to create Web applications and system programs include Arduino IDE, PHP, MySQL, XAMPP, and NOTEPAD ++.

Key Word : Internet of things, Dam Monitoring , WEB Application