

USING A WIFI NETWORK WITH NOTIFICATIONS THROUGH TWITTER

Arya Dwi Rachmadi

Electrical Engineering Study Program, Faculty of Science and Technology

University of Technology Yogyakarta

Jl. Ringroad Utara Jombor Sleman Yogyakarta

E-mail : aryadwirachmadi@gmail.com

ABSTRACT

Indonesia has a tropical climate with high rainfall intensity. Where it can cause catastrophic flooding when heavy rains occur in some areas with low land and deforestation. Floods can occur due to overflowing of water either due to garbage or denuded forests, therefore early detection of water levels is needed when heavy rains occur. This study aims to monitor the water level online which is the initial information about the impending flood disaster. In supervision, using the NodeMCU ESP8266 microcontroller technology approach based on the Internet of Things (IoT) is intended to obtain water level information in real time. In this device the ultrasonic sensor HC-SR 04 is used as a water level reader and the NodeMCU ESP8266 as a processor and sends data wirelessly to the website and also through the ThingsSpeak application, the results of this study are a water level detection device system that can provide water level information on safe and dangerous stages and can provide the latest notifications on smartphone devices. Thus, this detection system will be easy to use as initial information on the possibility of a flood disaster.

Keywords: *Flood, Internet of Things (IoT), NodeMCU, ThingSpeak.*