ABSTRACT

Landslides are a frequent disasters in Indonesia so we need a preventive measures to minimize any losses incurred. This research was conducted to develop ground motion detection devices using the NodeMCU microcontroller and the Multi Node Accelerometer sensor MPU6050 so that the values read by the sensor can be validated so as not to cause warning errors. The Design and Creation method can be applied in this study. The test results using the blackbox method show that all program components have the expected outputs, so that all features can run well. Data published through a tool or client from each value obtained from each trial to a file or server storage is then displayed on the web with conditions of safe ground movement, alert and dangerous graphically, data on the application is valid data.

Keywords – accelerometer, landslide, microcontroller, multinode, validation