ABSTRACT

In its development the internet can be used to communicate objects around us through internet network. This concept is called Internet of Things (IoT). This IoT concept can be applied to learning at school or campus. D3 Telecommunication Engineering adds courses and lab workshop of Internet of Things as learning media for students. Since IoT Lab Workshop is one of the new subjects in D3 of Telecommunication Engineering, there is still a lack of supporting facilities in IoT Lab Workshop.

To resolve the above problems, then made an android application in implementation IoT web server as a medium of learning on the lab workshop of internet of things. This android application is used to display or to monitor data sent by the sensor through oracle database. In addition to monitoring the sensor, the android application can control a relay or LED.

This final project produces an application control and monitoring of electronic devices that are integrated with Iot Web Server which in testing functionality and implementation of android application obtained the results of the application is running as expected. Then based on qualitative testing (questionnaire) found that the qualitative calculation has an average value of 4.01. It can be concluded that according to the score of questionnaires the application of controlling and monitoring is quite good.

Keywords: Internet of Things, Web Server, mobile application.