

ABSTRACT

Home is a safe place to gather and take shelter with family. The house has also become a basic need for human life. Inside the house there are various electronic devices that support daily activities such as lights, air conditioners and so on. usually to control electronic devices still use manual methods such as turning off or turning on lights and air conditioners.

In this final project, a Mobile Application is made on the Home Control Unit system that can control home devices such as manually control and automation control by studying the behavior of residents in turning on and off lights, air conditioners using the Naïve Bayes Algorithm, and monitoring room temperatures , lights and air condition on or off, and home security. The system of this tool uses a STM32F407VGT microcontroller.

By using the Mobile Application on the Home Control Unit system the user can send commands that will be forwarded to the cloud to be forwarded again to the microcontroller and the cloud will send the monitoring data back to the Mobile Application. So the Mobile Application can control and monitor. From the results of tests conducted known percentage of accuracy, precision, and recall on the system using the Naive Bayes method on the habit of turning on and off the AC accuracy of 91,7%, precision 93,8% and recall 86,5%. While the data on the habit of turning on and turning off lights is 44,7% accuracy, 86,5% Recall and 68,1% precision.

Keywords : Home Cntrol Unit System, Mobile Aplication , Naïve Bayes , Antares, App Inventor .