ABSTRACT

Excessive computer use is a usual thing for computer users, due to excessive use it can cause an increase temperature and CPU Usage on the processor. The habit of using computers at high temperatures can cause problems such as slower computer response, to hardware problems. To be able to anticipate this possibility, a monitoring system that can provide notifications and can remotely control the computer is needed. The monitoring system is made by utilizing a system from Windows Management Instrumentation to get temperature and CPU usage from the computer, where the data will be given to the Blynk application via NodeMCU ESP8266. In the Blynk application there is a system that can notify users when the temperature or CPU Usage exceeds normal limits and can automatically turn on additional fans, and also control the computer to sleep, shutdown, or restart via a smartphone. Based on the test results, the smallest error rate is 1,56% at temperature and 4,35% on CPU Usage when compared to other monitoring software, for the delay get a value of 0,50 ms at 9,8Mbps internet speed and 0,28 ms at 20Mbps internet speed.

Keywords: blynk, windows management instrumentation, cpu temperature, cpu usage