

ABSTRACT

Routine use of medicines is very important for patients, so it is very important to pay attention to the advice on when to use the medicine and the right dose. But for some people this is difficult to do because everyone has different activities and memory so that interfering with the time of using this medicine can potentially lead to health problems. The role of the closest family is certainly very necessary in order to prevent errors in taking medication. Based on this problem, the author made a Smart Medicine Box that serves as a reminder of the medication schedule. The system serves as a reminder for patients to take medication at the right time. This technology has several functions such as an alarm that sounds according to the set time, Light Emitting Diode (LED) which will flash on the box and Light Emitting Diode (LCD) which will display the amount of medicine and time in real time. send notifications to smartphones via Short Message Service (SMS) and Telegram.

Based on the results of testing, measurement, and analysis of the smart medicine box system that has been designed, all the functions of the smart medicine box have been running well and the android-based smart medicine box application can also display the remaining amount of medicine in each box without any errors. In the QoS test, the best network performance quality occurred during the first test, namely at a distance of 5 meters without any obstacles with a throughput value of 2616 bit/s, packet loss 0%, delay 1.108 s, and jitter 1.115 s.

Keywords: Smart Box Medicine, Medicine, SMS