ABSTRACT

The door is the main entrance to the place. Safety is the most important thing to pay attention to in everyday life. Likewise, door security systems play an important role in safeguarding key access.

Currently the door security system still uses manual locks. Using manual keys is still vulnerable and not very safe. As technology develops, technology plays an important role in improving people's daily lives.

In this final project, a smart door lock system based on ESP8266 will be designed that can monitor via the WhatsApp and Telegram applications and control via the Telegram application. It is hoped that by being able to monitor via WhatsApp and control via Telegram, it can reduce criminal acts in homes or other residential areas. So, with this system, access to the main door will be very practical with more efficient security.

Through this research, the smart lock door system designed produces satisfactory values. In ten experiments, the QoS value was 8680.9 bps and a fairly low delay of only 0.92047.4 ms. In addition, there was no packet loss in testing this system. Referring to the rules of ITU-T-G1010, the results of this experiment are still quite good and acceptable.

Keywords: ESP8266, Control, Monitoring, Access, Security