ABSTRACT

Information technology that continues to develop has provided various benefits for people's lives in various fields. One area that has benefited from this technological development is store security systems. This research aims to implement an Internet of Things (IoT)-based cashier drawer that uses a fingerprint recognition system to facilitate transactions for buyers and reduce the risk of theft. In this study, fingerprint biometric recognition technology will replace the use of manual cashier drawer locks. In this system, the cashier drawer can only be accessed through an fpm10a-based fingerprint sensor that will scan the fingerprints of registered users, so only people who have access can open the cashier drawer. In addition, this study also used the neo6mv2 gps module sensor as a location determinant by comparing data from gps sensors with gps on smartphones. The results of testing on the gps sensor with gps on a smartphone showed that the average difference in location obtained was as far as 8.49 meters. Furthermore, delay testing is carried out on this system to determine the lag time needed in the process of sending and receiving data. The test results showed that the total delay obtained was 94.92222 seconds, with an average delay of 3.164074 seconds, this system will be monitored using the telegram application.

Keyword*s: Fingerprint, cashier drawer, fpm10A sensor, neo6mv2 gpm sensor, delay, telegram*