

ABSTRACT

According to data from the Indonesian Central Statistics Agency the crime rate in Indonesia is still quite high. Especially in criminal cases with weights or theft. House theft and burglary are included in the types of criminal cases with weights which are at the highest rate compared to other criminal cases. A tight and effective security system is needed so that the residence can always be maintained and safe. The use of CCTV for security has been widely used by homeowners. But still, the criminals dare to steal by breaking into the door of the house. Therefore, a strict and effective system is needed so that the door to the house can be protected from the burglary. The system that will be created will use the internet as the system's connection.

This final project focuses on implementing an Internet of Things (IoT) based security system by creating a prototype for a home door security system. The making of this system relies on face verification for house owner and family members. House owner and family members who want to enter the house must verify face to be able to unlock the door. The face verification process uses the house owner and family members face capture that has been stored in the database. The results of the camera detection will be entered to then be verified by capture faces that have been stored in the database. Magnetic sensors are used to detect whether the door has been closed again. This system uses Raspberry Pi 3 as the brain of the system.

Keywords: Internet of Things, Database, Magnetic Sensor, Raspberry Pi 3