ABSTRACT

The house is a family shelter from the heat of the sun and the cold of night. But not only that, the house is also a place to protec their property from those who want to act evil. Therefore the home equality system from the front door is very important. Unfortunately most door access used at home is still using a conventional key. Where its use is still vulnerable to hacking.

In this final project, this home door security system is able to be a solution to maintain the security of all aspects which are placed in the house. The door security system is RFID-based as an access to unlock the door. There is also an Internet of Things system so the door lock can be opened remotely. Instead of a conventional key, the system uses an RFID card which is a smartcard in which there is a tag of different unique code in each card. So the key can only be opened by a recognized card only. The system will notify the homeowner if there is someone unknown attempts to unlock.

Tests in this study yielded the smallest end-to-end delay data was 0.314s with throughput of 5116.35 Bytes / s. And also the average Availability system of 97.39% and Realiability system of 97.30%.