

ABSTRACT

Security is the absolute first thing that must be considered in terms of comfort and security in a home. But the security of the house is also important in addition to the security of its own occupants, where security is needed to protect the property of the owner's occupants inside the house from the threat of bad people. But the door access with conventional keys used today is still vulnerable to burglary.

In this study to overcome the problem as above, a system for the security of door access to the security of the house itself was created. This door access security system based on the QR Code is used as access to the home to open the door which is supported by using the *Internet of Things* system to make it easier for residents to remotely unlock. The use of the QR Code will replace the conventional key, so that the door will only be opened if the QR Code can be identified. If there is a burglary or open the lock forcibly the system will give a notification to the occupants of the house through the application.

Tests in this study yielded the smallest end-to-end delay data was 0,294 s with throughput of 7414,5 Bytes / s. And also the average Availability system of 98.55% and Reliability system of 98.50%.

Keywords : *Internet Of Things, QR Code, Raspberry Pi, Remote*