

ABSTRACT

Technology-based security tools have been created by many companies, however the price of the device is still relatively expensive. These problems can be overcome with QR Code technology. With the advantages of current QR Code has can be used as a medium for accessing door openers in apartments. On the other hand, to reduce the cost of increasing security systems to be cheaper, can use the Android-based platform as a QR Code reader. Therefore, in this study an application was made to access the door of apartment room using the Android-based QR Code, the application name is My Door.

As an alternative apartment security system by utilizing QR Code technology, by changing the access of the apartment door from a conventional lock to a QR Code key. Media access security on the apartment door will be made using the Android platform as an apartment entrance access application. In addition to utilizing this QR Code technology, the My Door application can also be used as an informational media on the history of apartment entrance access. Each apartment owner has a unique ID or token number on each QR Code so that no one else can access the door of the apartment owner. This system can improve the security system in apartments without the need for large costs and the quality of security is still fulfilled.

In this study there are three testing methods that are conducted including functionality test (sub-system), QR performance test on the field and testing the Mean Opinion Scores (MOS). This application has a delay from the QR Code to the servo on average 3,68 seconds and a 1,35 seconds delay from the push button to the servo. Overall, the application is suitable for use in the apartment and according to the purpose of being able to create an Android application to open the access apartment room door by utilizing the QR Code as a media to open the door access for each apartment room through Android.

Keywords: Security, QR Code, Android.