

ABSTRACT

Model Parking System in Telkom Institute of Technology (IT Telkom) has already under gone some developments. It's started from using ticket until parking card in parking system. One of its reasons is for decreasing the effect of global-warming, by diminishing using single use media. But then, using that parking card in IT Telkom is still increase security factor on that parking system adversely. This case is caused by that parking card does not have information about user identity.

This final project is appeared for increasing security and convenience of user by using QR code for encoding important information about rider identity at IT Telkom. Then, that information is printed on an identity card. QR code is a kind of two dimension code that can include bigger information than other two dimension code.

In this research, has been done encoding identity number into QR code conversely. QR code that has been formed is print on parking card. This final project is tested drive of QR code decoder system. Testing drive is based on time, place, and the dirtiness of parking card conditions. The result of that test drive shows that the system has average accuracy 98% and average time computation 1.6 second. By excesses of QR code encoder and decoder system, this system will increase the parking system logging at IT Telkom.

Keywords: Parking system, QR code.