

Perancangan *Prototype* Sistem Keamanan Pada Kamar Kos Dengan Peringatan Notifikasi Dan Terintegrasi Pada *Smartphone Android*

Naldo Noviandi

*Program Studi Teknik Komputer, Fakultas Teknologi Informasi dan Elektro
Universitas Teknologi Yogyakarta*

Jl. Ringroad Utara Jombor Sleman Yogyakarta

E-mail: naldonoviandi97@gmail.com

ABSTRACT

The boarding house is an important place to live for students and female students because the increasing number of thefts in student boarding houses is caused by the lack of modern security systems, making them uncomfortable to live in boarding houses. Therefore, to reduce the problem, a tool functions as a security system is needed. The tool warns of danger using an android smartphone media by an alert notification and a camera module to monitor the boarding house condition. A security system that can provide warnings as described above was developed. This system uses the MFRC 522 sensor to be used as a medium for access to open the boarding house door, while the touchscreen is used to open the door from inside the boarding house. Active security system condition. The microcontroller will process signals from sensors and other components and send commands to the android smartphone to send data in the form of a warning image, according to the room that is in danger to the android smartphone. Information on the operational security of each room will be displayed on the android smartphone. The results of the sensor readings and the RFID and TouchScreen modules were tested four times, where the results had an accuracy level of 100%, and then the results of the interface testing on the software and hardware went well.

Keywords: Boarding Room, RFID, TouchScreen, NodeMCU, ESP32 CAM

Nama	Jabatan	Tanda Tangan	Tanggal
Ikrima Alfi, S.T.,M.Eng.	Ketua Program Studi Teknik Komputer		