PROJECT REPORT

LOCK SYSTEM USING SMARTPHONE AND CARD

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Soegijapranata Catholic University
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APPROVAL AND RATIFICATION PAGE

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ABSTRACT

The current door lock system still uses conventional keys, making it less efficient for your home or room, besides conventional locks are easily opened by thieves. Therefore we need a lock that is more practical and safe, from these problems the author has the idea to produce a safe and practical door security device based on RFID by using a card as an RFID tag as a door security. door of the house or room. Not only that, this lock also has double security so it can't be opened easily, that is, we need to first activate the lock system via a smartphone using Tasmota.

Tasmota is an open source firmware alternative for esp8266 chip-based products that can be customized according to our wishes. By using this firmware we can change the address/pointing of the destination server so that it can be connected to our own application. The author also adds an ESP32-CAM camera, ESP32-CAM is a microcontroller that has additional facilities such as bluetooth, wifi, camera, and even a microSD slot. The relay module functions as a switch to run the solenoid. Press the button to open from inside the house or room.

Keyword: RFID reader, Solenoid, Nodemcu, Smartphone, Door Lock.

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