

DOORLOCK SYSTEM DESIGN USING IOT-BASED E-KTP, FINGERPRINT AND PASSWORD PINS

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ABSTRACT

Currently the security system is important for everyone, such as the door security system. There are many problems that often occur to everyone, such as forgetting to lock the door and losing the door key. There are still many cases of lost door keys that occur. So in this study we will develop a prototype door lock system or door lock using RFID, fingerprint and pin password. This system uses the NodeMCU ESP32S microcontroller to manage the RFID, fingerprint and pin password sensors. The microcontroller is connected to Android so that the system can monitor and control door access. Based on the results of the tests carried out, the reading distance of the RFID obtained the level of reading ability in the range of 0 – 2 cm. And the results of testing to open the door using RFID obtained a success rate of 100%, while the success rate of the fingerprint sensor is 100% and the pin password success rate is 100%.

Keywords : Doorlock, RFID, Fingerprint, keypad, IOT.