

PERANCANGAN SISTEM KEAMANAN MENGGUNAKAN RFID PADA LOKER PENYIMPANAN BARANG BERBASIS ARDUINO UNO

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ABSTRACT

Goods storage locker is used to store personal items in an office, company, school, station, tourist spot, etc so that it can protect valuables safely. However, the researcher applied it to a company and the employee designated the locker. In this case, to anticipate cases of theft of valuables. In general, goods storage lockers currently lack an optimal security system using only standard keys for security. So, keys can be duplicated to commit theft and still have weaknesses because there is no notification or warning that the storage locker is open, closed or storage locker. Items being broken into by thieves. Based on these problems, security technology is needed for safe storage lockers for valuables, so the authors have the idea of creating a security system for storage lockers using RFID based Arduino Uno. It uses e-KTP to access the locker, equipped with a Buzzer used as notification sound and Solenoid Door as the locker key, thus creating an optimal security system. They are making goods storage lockers using RFID with the help of E-KTP tags. The E-KTP was scanned five times without errors to increase security and minimize crime rates from the test results. Testing using the confusion matrix can be found; the result is 100% accuracy or 0% error. Log activities that are read by the system will be displayed in the Arduino IDE application on the serial monitor tool.

Keywords: Locker, RFID, Arduino Uno, LCD, E-KTP