

ABSTRACT

Public facilities in nowadays has become needs for every civil to ease their daily activities. Meanwhile the population in Indonesia are many, therefore we need public facilities which fast and secure. To accomplish that, the technology to identify based on a Radio Frequency Identification (RFID) has been made. RFID is a compact wireless technology which has a big potency for the developement of commerce. This technology using RFID tag that can be detected in certain range by RFID reader.

RFID tag that used, will be integrated with microcontroller ATmega128. Microcontroller ATmega128 is using as master to take the input from the keypad and display it to the LCD. Beside that, it also has a function to cut the deposit with the price of locker, to know the locker condition, we can give command to open the locker that will be continue to the Microcontroller ATmega128 which has been set as a slave, it will give an indicator to show if the locker is used and to control the delay so that the door can be locked automatically. Mikrokontroler ATmega128 is also used to top-up the deposit and setting the locker price.

The testing result of this automation locker system is, the RFID can be used as key lockers. The RFID tag can be detected by RFID reader with the maximum range of 5cm and the slant of 0° . The success rate of the RFID tag is detected and read its data was by 90%.