

ABSTRACT

Niko Juwono (08320030013)

Integrated Identification System and Room Security

(xiv+95 pages: 52 figures; 3 tables; 9 appendixes)

The use of modern technology in security tools has many benefits because it can authenticate and also can give the authorization. Therefore it can be a part of integrated identification system. An integrated identification system and room security must have the ability to detect the authorized person and monitor the authorized person's behaviour in the room by using microcontroller. The microcontroller used in this final project is programmed to pass the data entered by user to the PC and then compared with the data in the database to differentiate the authorized and unauthorized person. PC stores userID entered by user with date and time in on the database, but PC can't stores time out when user leave the room.

Microcontroller-based control system that can differentiate authorized and unauthorized person is the basic concept in this final project. This final project discuss how to compare userID and password between the data stored in the database and the data entered by user, and how to integrate all equipments just in one room. To solve all the problems, an integrated identification system and room security is built. User must first enter userID and password before enter the room from the keypad. If userID and password are match with the database then the microcontroller will ask the electric key to open and will ask the camera to record within 20 seconds.

With integrated identification system and room security, only authorized person can access the room. The successfull rate in identifying the authorized person by comparing the userID and password entered by user is 100%. For further research, integrated identification system and room security can be enhance with finger print scanner or eye-retina scanner.

Reference: 1995-2006