

## **ABSTRACT**

*In a building that has a lot of doors where each room has a privacy interest, we need a monitoring system that can identify employees who can enter or exit the room. This door security system is made to be applied in a building that still use a manual system.*

*In this final assignment is designed and realized a system that consists of two main parts. The first part is on the door of the room, consist of identification verifier using the keypad as input, lcd as display function, RS232 serial interface for data communication, and solenoid as door lock. Those part are connected to the microcontroller AVR AT Mega8535. The second part is a part of the komputer-based in the control room. These part consist of MySQL database as a storage and data processing, web applications using PHP web programming language to process employee information who enter and exit the room, clock in and out, date, and event reports.*

*Keywords: security systems, microcontrollers, database*