ABSTRACT

Microcontroller is a functional computer system on a chip. Microcontroller has a processor core, memory and input and output devices. In other words, the microcontroller is a digital electronic device that has inputs and outputs as well as control with programs written and erased in a typical way. The use of the microcontroller itself has been developed and many functions such as for example for the electronics industry, automotive, factories and other fields. Microcontroller used in this time is the Raspberry pi , this microcontroller can be used as a specific tool.

In making this final task will be made remote design that will communicate with each other. Communication itself is to send data and receive a notification. The case study this time is that there will be a queue of students who wish to enter room lecturer. Remote Door Lock system will be designed in each table lecturers that will serve to change the status and receiving notifications contained in the front panel door. Lecturer status itself is AVAILABLE or NOT AVAILABLE in the room, while the notification itself is receiving or not living in the outdoors. Notifications itself will be shown with a text that will appear on the LCD at the faculty table. The system can also keep it from unauthorized persons into the room. Remote communications base is using wireless and by using the Internet Protocol contained in Raspberry pi.

The result of this final project user can type from the web server and display the word to LCD with time according to the length of the text to be inserted. Enable server with an average of less than 4 seconds.

Key words : Raspberry Pi,Remote Lock Door,Internet Protokol