## **ABSTRACT**

Community Health Center is one of the many public health facilities visited by the public, because the cost to go to the hospital is quite expensive. Unfortunately because of the calling line number is still a manual and still use human labor, sometimes there are some patients who are missing. The few public facilities that have used the system with computer-based caller queue. As Custommer service bank, queuing system that uses a computer includes the calling number display queue and the queue number. However, if you use the computer only to callers queuing system that came out a lot of costs for operations and maintenance.

In this final project is realized the caller's queue-based system tool microcontroller. This device consists of a microcontroller, sound module, MMC, seven segment LCD and speaker. In the microcontroller circuit has provided a push botton, which is where if one push botton is pressed there will be information provided to the microcontroller. After processing the data from the push botton on the microcontroller, the microcontroller will send a request to the voice sound module, in accordance with the order. Sound - the sound has been stored on the MMC is inserted in sound module. If you have been corresponding with the queue number will be displayed on the LCD seven segment numeric, and the voice on the speaker serial number queue.

In this final project there are 99 sequence number queue, that numbers 1-99 numbers to queue 1 and number 1-99 queue number for room 2. And after testing 99 times on seven segment display and speaker sound issued on compliance, which is when the queue number 1 on the seven segment will be listed number 01 and the speaker will sound out the caller's queue and the next one. If the serial number queue queue has reached the maximum number of 99, the tool will automatically calculate from the beginning.