ABSTRACT

A system of counting the number of visitors in the room has been conducted which aims to calculate the condition of the room of people entering and leaving the room. Initially, many cases caused people to faint due to overload in the room due to an imbalance between the capacity of the room and the number of visitors who entered. But the problem has begun to be overcome, it is because the technology used in calculating the number of visitors has grown. With a variety of sensors that can be used, a tool to detect and find out when someone enters a room has been widely applied. But here, the author wants to design a tool that is a differentiator with a visitor counter that has been built before. With reference to existing journals, the author focuses the design on the room monitoring sector in order to improve the benefit aspect. In the HC-SR04 ultrasonic sensor used as an object reader, there is a distance and angle test. In distance testing it can be concluded that the value average error is 4.48%. And on testing the sensor angle is only able to read objects with a range angle up to 15°. From the throughput experiment, the average throughput is 24.5 bit / s and the average delay is 16 seconds.

Keywords: number of visitors, mikrokontroller, HC-SR04 ultrasonic sensor.