

ABSTRACT

Data on the number of customers in a place of business is very necessary as material for recapitulation of customer data that comes every day. This is part of the store management to optimize customer data records. In the current pandemic, it is very important to pay attention to health protocols within yourself or in places that are the center of the crowd. One of the health protocols is body temperature measurement. So we need a device that is able to measure body temperature non-contact and able to count the number of customers.

Based on the facts above, the author has created a system for detecting the number of customers based on a WiFi connection and measuring body temperature based on the Internet of Things based on a case study at the mitama shop. The author uses esp8266 as a microcontroller and repeater to process input from sensors and calculate the number of visitors based on wifi access from esp8266. Non-contact temperature sensor MLX90614 as a body temperature measurement, ultrasonic as a trigger temperature readings based on distance. And an esp32-cam to take pictures of visitors who have a body temperature ($>37.2^{\circ}\text{C}$) and then send them to the telegram of the shop manager.

The test results of the system created by the author found that all components are able to work according to the required functions. The results of the measurement of the MLX90614 temperature sensor which were compared with the thermometer obtained the percentage error value of 1.48%. The accuracy value is obtained at the measuring distance between the end and the device as far as 20 cm. the number of visitors counting system can work well with the maximum number of devices that can be connected to the esp8266 and able to connect to the internet network through the esp8266 is 4 devices.

Keywords: WiFi, Website, MySQL, Internet Of Things, Mitama Store