ABSTRACT

The classroom is one of the places that is quite vulnerable to the spread of Covid-19 considering that many students come from various cities in Indonesia. The application of a non-contact presence system with the Internet of Things (IoT) system is one of the efforts to avoid this. So it is hoped that the spread of Covid-19 can be prevented in the classroom. To conduct research on this matter, a temperature monitoring tool and presence was designed in an IoT-based classroom. The tool is designed using a webcam and QR Code to detect the user, the MLX90614 temperature sensor to detect the user's temperature, and the Raspberry pi as the main control system. The system is connected to the IoT cloud by utilizing a MySQL database. The research data shows that the QR Code can be used properly to detect users based on variations in angle and distance testing. The MLX90614 sensor test is quite good with an average reading error rate of 1.19%. The IoT system was successfully implemented with an average delay of sending data to the MySQL database for 1.4 seconds.

Keywords: MLX90614, Webcam, IoT, Presence system.