ABSTRACT

Coronavirus is a collection of viruses that can infect the respiratory system. In most cases, this virus causes only mild respiratory infections, such as the flu. However, this virus can also cause severe respiratory infections, such as lung infections (pneumonia). Efforts are being made to prevent the spread of the corona virus, including measuring body temperature for people entering an area and spraying disinfectants to sterilize the clothes worn, but increasing prevention efforts are still not optimal. Because in measuring and spraying disinfectants, it is still done separately and manually by officers. In addition, spraying is carried out continuously whether or not people enter a room, thus making the disinfectant liquid wasted.

Therefore, to overcome this problem, an automatic disinfectant spraying device with a non-contact temperature detector was designed. The MLX 90164 sensor is used to measure the body temperature of objects and the HC-SR04 Ultrasonic Sensor is used to detect objects that are about to enter an area. Then the sensors are connected to the Arduino Uno ATmega328p as a microcontroller that will give orders to carry out the task, then the measurement data will be displayed on the website using the ESP32 Wi-fi Module which is used as communication between the sensors and the website and performs real- time storage.

The test results of the automatic disinfectant spraying system with body temperature detection showed that this tool was able to have an accuracy of 94% by testing 10 times. With this percentage, it can be obtained that the measurement tool can be used and functions properly, as evidenced by the level of accuracy of temperature measurement and the response of the automatic door.

Keywords: *Coronavirus, Ultrasonik, MLX 90164, Website, Realtime*.