ABSTRACT

COVID-19 (Coronavirus Disease 2019) is a new disease caused by the SarsCoV2 (Severe Acute Respiratory Syndrome Coronavirus 2) coronavirus group. In this case, both the world and the Indonesian government are taking precautions by giving an appeal so that there is no transmission of the virus. One of the government's appeals is to always wash your hands before starting any activity. This research is designing an automatic hand sanitizer tool system equipped with a body temperature sensor which will be carried out by testing the ultrasonic sensor where this ultrasonic will be tested by carrying out 10 tests with a distance of 1cm which will start from 1-10cm. The MLX90614 sensor conducts research by comparing it to a digital thermometer and taking average measurements at each temperature level. Conducting network strength research on RSSI (RECEIVED SIGNAL STRENGTH) collecting 20 data and conducting 5 experiments with a distance ratio of 1m. Based on the test results, this tool can work automatically, with an average HC-SR04 ultrasonic error of 7.99%, and the MLX90614 sensor can measure accurately, so that the average error obtained is 1.61%. In the RSSI network strength results obtained -60dBm to -70dBm at a distance of 1m, -64dBm to -69dBm at a distance of 2m, -78dBm to -83dBm at a distance of 3m, -77dBm to -85dBm at a distance of 4m, -76dBm to -88dBm at a distance of 5m .

Keyword : IOT, HCSR04, MLX90614, ESP826, Hand sanitizer, RSSI