ABSTRACT

Medical Check Up is a comprehensive health examination, through this examination it is expected that a disease or health disorder can be detected early. For checking whether the body's condition is healthy or not, patients are required to go to the nearest hospital or puskesmas. For villagers who are sufficient to not need to go to the hospital according to a considerable distance.

In this final project the makes a tool and application on the telehealth system that can check *body temperature*, *heart rate*, and *blood pressure* without having to meet directly with a doctor or a person who can read a medical recap because the results will immediately come out,

The tool is designed in such a way as to make it easier for patients to check up because the device is connected directly to a mobile device with an Android operating system by taking data output from the *cloud server*.

The success parameters that will be tested are the performance of all sensors and the accuracy of all sensors on the device designed and can be displayed in the connected application as the output receiver of the sensor.

In this final project testing, it can be concluded that the identification of the results from the sensor output used is in accordance with the parameters of conventional medical devices so that it guarantees the results of a measurement because this is related to the health and safety of the patient.

Keywords: Internet of Things (IoT), telehealth system, body temperature, heart rate, blood pressure