Abstract

Internet of Things (IoT) is said to be "The Next Big Things" in the world of information technology because of its ability to exchange information between the internet and objects around it. So that there is a lot of potential that can be developed through the Internet of Things (IoT). One of them is in the health sector. To find out the presence of lung disorders, people are currently required to go to the hospital and do a CT-Scan, but this method is considered less effective and time-consuming. The early detection system of lung abnormalities with Internet of Things technology is the best solution to overcome these problems. By utilizing the TCS3200 sensor, the MLX90614 sensor, the MAX 30100 sensor and the flex sensor, the public can determine the health of their lungs. In this study, a system for detecting the initial condition of lung abnormalities will be made using nail color indicators, body temperature, oxygen saturation and lung volume which will be connected directly to a mobile application. The method that will be used to obtain detection results is to use the Decision Tree method so that from the results it is hoped that prevention or further action can be taken.

Keywords: *Internet of Things*, Decision Tree, Lung health detection, Sensor TCS3200, Sensor MLX90614, Sensor MAX 30100, Sensor flex.