

ABSTRACT

Health is very important and needs to be maintained by every human being to avoid the seeds of disease. But in reality health is less attention especially among students who reside in the boardinghouse. This is due to the busy activity of the students and the lack of knowledge of the health level in the boardroom. Therefore the need for a tool designed to measure the level of health in the boardroom.

In the design design of the detection tool of the health level of the boarding room by using the fuzzy logic method. The system is designed using 3 sensors, the DHT22 sensor to detect temperature and humidity, MQ-2 sensors to detect air quality and TSL2561 sensors to detect light situations. This tool uses the regulatory standards of the Minister of Health of the Republic of Indonesia number 107 of 2011. In making this final project there are 2 parts workmanship system, the microcontroller and web interface.

IoT-based room-based health detection equipment is proven to help with the monitoring process of the room, so the room owner can know the three conditions when his room is healthy, unhealthy and unhealthy. In this tool has a mean delay of 0.6 seconds for the process of sending tools in the database so that ultimately provides real-time monitoring services and data transmission to the database is running well. Therefore it will be a solution for students.

Keywords: Health, Indekos, Sensor, Temperature, Humidity, Light, Air