

ABSTRACT

Health is the main thing for humans. Especially when working health is a top priority to maintain productivity. Currently there are still many people who work with high portions and hours of eating that are not regular so less attention to health and daily diet. The development of information and communication technology is increasingly rapid, thus encouraging innovation and changes involving experiments in various fields, including the field of health that applies the use of technology in its activity or can be known as eHealth [17]. EHealth is a health technology that allows people to control their health, one that can be monitored by eHealth is the heartbeat and oxygen saturation (SpO_2) in the human body.

Therefore, in this final project, the development of human-based monitoring system based on Internet of Things. It's titled "Monitoring of Oxygen Saturation (SpO_2) And Heart Rate Based on Website. How it works on this system is the user will input commands via eHealth Sensor, then the command is processed by Module Oximeter which is connected with NodeMCU so that can be connected to the internet, website that can display the results of input that has been given by the user, this result is Real time heart rate and oxygen saturation data, heart rate charts and heart rate / oxygen saturation (Normal / Not Normal) conditions,

After experimenting the results obtained is the error rate for heart rate is ± 3.425 BPM and for oxygen saturation (SpO_2) is ± 1.375 , for the service condition of the heart rate / oxygen saturation function according to the conditions that have been determined, for data delay through MySQL of 3.1 seconds.

Keywords - *IoT, eHealth, Monitoring, SpO_2 , Heart Rate*