

## ABSTRACT

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*Abstract – The importance of maintaining health in human life influences daily activities. Heart rate and body temperature are health parameters that are often used in humans. The number of deaths due to heart disease is increasing, and lack of infrastructure and health services is a factor. Modern technology allows easy access to health information, including athletes monitoring heart rate and body temperature. This final project aims to design an integrated smartphone monitoring system. The system monitors heart rate using a pulse heart rate sensor and body temperature using a DS18B20 temperature sensor. The research results showed that the system can be used as a health telemonitoring with accuracy values for heart rate readings from the pulse heart sensor and body temperature readings on the DS18B20 temperature sensor. This research limits the design of a tool using the Nodemcu microcontroller, Pulse Sensor, and ds18b20 Sensor for measuring heart rate and body temperature on the fingers of the adult category.*

*Keywords: heart rate, pulse sensor, body temperature, DS18B20.*