ABSTRACT

Business success is determined by the health of farm animals kept. The selling price of healthy cows will certainly be more expensive than cow degan unhealthy. One way to maintain the health of livestock by controlling the health of farm animals, including a physical examination of the body of livestock and livestock inspection physiological conditions. Physiological conditions are used to determine an indication of healthy livestock is body temperature and heart rate. In this thesis built a system that functions to monitor the physiological condition of cows, so farmers can determine body temperature and heart rate of cows. The components used are microcontroller, DS18B20 temperature sensor and heart rate sensors. As an additional feature on the web is entered manually, the identity of the cows, feeding cattle, cow age, and weight. In this system is also used as a controller Arduino Uno electronic circuits. In addition ESP8266 wifi module built as a means of connecting to the web. System has been built successfully monitor body temperature and heart rate automatically cows with the comparison of the difference in heart rate sensor is 1.78 and the comparison of the difference in temperature sensor DS18B20 is 0.5. In this system include Buzzer to provide information such as sound if the cow was ill with a temperature <20 ° C or> 41 ° C and a heart rate <15 or> 125 per second.

Keyword: Temperature, heart rate, Microcontroller, Web