

## ABSTRACT

People's questions about the need for beef and cow calves are on the rise and many people are starting to look. But knowledge of cow health remains the main basis in raising cattle. Physiological conditions that allow to know the types of healthy cows are temperature, heartbeat frequency, and ruminant.

This final project is the design and implementation of prototypes that have the ability to conduct checks on cow health. These monitoring systems can be sensors that can be used by eye sensors, respiration sensors, temperature sensors, pulse sensors. In this Final Project will be implemented implementing monitoring system for beef cow health based on IoT. NodeMCU as the main component that is able to provide commands so that sensors enable and can provide information accurately. Web to display parameters for cow health.

This Final Project monitoring system has been implemented and testing has already had almost the same level of accuracy. Temperature sensor DS18B20 has an error of 0.675%, the heart rate sensor has an error of 2.55% and the ruminant has an average difference of 3 movements.

**Keyword:** *Monitoring System, temperature sensor, pulse sensor, rumination sensor, Cattle Healthcare*