ABSTRACT

Bees are one type of social insect that inhabits colonies. Bees have benefits in human life, such as fertilizing plants and producing honey, which can be consumed because of its high nutritional value. In modern beekeeping, there are several things that need attention, one of which is the temperature and humidity, which can affect the life of the bees. Most of the bee farms are currently still conducting regular visits to monitor the condition of the bee house. Physical examination can affect the age of the bees, cause stress, and disrupt the productivity of the bees.

The research conducted in this final project created an IoT system consisting of two constituent parts: hardware with temperature, humidity, and geolocation sensor, and software with a web server that contains sensor reading data presented in the form of graphs to make it easier to read monitoring results, the location of the beehouse, and the status of temperature and humidity conditions in the beehouse.

This research was carried out by implementing fuzzy logic, so it is hoped that the success parameter will be the realization of a web application that is connected to hardware and can ease the activities of beekeeping farmers.

Kata Kunci: *IOT, Fuzzy Logic, DHT11, Bees, Temperature, Humidity, Noise.*