

ABSTRACT

Some of the Indonesian people are very fond of raising birds. Many of them have a hobby to maintain ornamental birds, for the maintenance of her does not require a large area and not difficult. The problem for bird keepers is when they want to travel for a long period of time. Currently, the process of feeding birds is still done manually. Based on these problems, a system that can monitor the availability of bird feed and drink is needed and can schedule the feed and drink equipment for birds automatically.

In this study, design a feeder birds IOT based automated using an application Thinkable connected to the Module WIFI Node MCUESP8266 appliance. In this designed system, the feeding process can be done automatically which is entirely controlled via a smartphone via the application. The system consists of an ultrasonic sensor, infrared sensor, MCUESP8266 node, and a servo motor. The results of the overall testing of this final project are the tools can be controlled via a smartphone via application by feeding and drinking when the feed in the small container has a height of less than 2 cm then the feed and drinking valve will be closed and if the feed in the small container has a height of 2 cm then the feed and drink valve will open. to calculate the height of the feed that goes into storage containers provided with percentage average accuracy resulting from the whole process of testing is 91.03%, and to average error overall produced was 0.092% of the value of the percentage of accuracy and error is generated, the tool can work well. With this tool, the hope is that people can provide food and drink to birds from a distance when they want to travel long enough.

Keywords : Bird, Thinkable, WIFI Node Module MCUESP8266, Ultrasonic, Internet of Things.