Abstract

Feeding on a regular basis is a mandatory thing that must be done every fish farmer in Indonesia. Therefore, action is needed in the form of fish feeding and maintenance of the pond itself. The owner of the pond must be able to monitor the condition of the pond and its feeding time at all times, so the fish need a regular feeding schedule. Especially when entering the holidays, where employees and business owners are often not in place to monitor and control these activities, the feeding and maintenance of ponds is also not monitored. Therefore this research is intended to open up great opportunities for effective and efficient improvement from the previous process, by utilizing the IoT (Internet of Things) technology that is designed for automatic fish feed activities. Based on Performance Analysis of Fuzzy Logic Method on Automatic Feeding of Koi Fish Based on Temperature Sensor and Ph Sensor to Prevent Over Feeding and Under Feeding, it consists of a series of ESP8266 NodeMCU microcontrollers as the main controller for all components, servo motor as an open and close motor for fish feed output, brushless for fish feed throwers, water Ph sensors to measure water pH, temperature sensors etc.18b20 for measuring water temperature in ponds, and Load Cell sensors for measuring the weight of fish food stored in fish feed containers. As a way of communication between the microcontroller and smartphone is through the internet network media and the Blynk application as a display interface for water, temperature, and control of feed output on the smartphone.

Keywords: internet of things, ESP8266 NodeMCU, servo motor, brushless, water Ph sensor, temperature sensor ds18b20, Load Cell sensor, smartphone, Blynk