ABSTRACT

As time passes, the population of raising pets is increasing. Technology is growing rapidly. As well as pet feeders are increasingly developed from various circles. Pet Feeder is an automatic machine that delivers food based on portion and time so that it can drop some food into the bowl. The project was created because the animal owner had trouble dividing the owner's activity time and feeding the pet. In addition, to makes it easier for the owner to set the specified feed. In fact, if the owner does not exist home, they can still feed their pets.

This project to increase human interaction with pets with technology Internet of Things. Pet Feeder also programmable system mainly controlled by the microcontroller (WEMOS D1 R1 UNO BASED ESP8266) and Android.

It consists of a Servo motor (SG90) to open or close cover bowl and turntable, ultrasonic sensor (HCSR04) As measure distance the feed in tank and measure distance feed on bowl, sensor will connect with servo 1 and lastly RFID MFRC522 as connection between pet with machine, RFID will read RFID tag and send connection to servo 2. Thus, cover bowl can open or close automatically. There are also manually, control dropped feed on pet into the bowl using android. Other than that, many advantages in application. Such as, to inform tank capacity, to inform the latest time.

This project, I created the pet feed machine based feed on Android. This project using internet connection. Thus, remotely for long distance. RFID recognize RFID tags/signals for open or close cover bowl and after that, Arduino sends data to Android.

Key Words*: Pet Feeder, Android, Wi-Fi ESP8266, WEMOS D1 R1 Uno Based ESP8266, HCSR04, RFID MFRC522, IOT, Servo Motor*