Pet Feeder

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ABSTRACT

There are many ways to implement a pet feeder: you can set it to fill up the bowl at a certain time, you can command it to fill up whenever it gets empty, or maybe to give your dog food after they follow a set of orders that you taught them.In this specific project, we set the feeder to start beeping from time to time. Once the dog comes closer to the device, the PIR sensor recognizes it and the servo is triggered. In addition, we also decided to add the option to control the pet feeder from our mobile phone, using a pre-defined dashboard made with Freeboard.

ESP8266 ESP-01

KEYWORDS

Pet Feeder, PIR sensor, recognize mobile phone, Freeboard

INTRODUCTION

Our team want to build a pet feeder with Internet of Things technology.We make the feeder to sound from computer or from Internet. Once the pet comes closer to the device, the PIR sensor recognizes it and the servo is triggered.

SparkFun Servo - Metal Gear

DESIGN

ArduinoUno

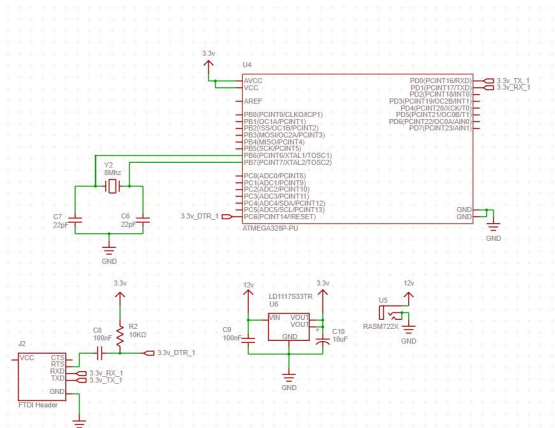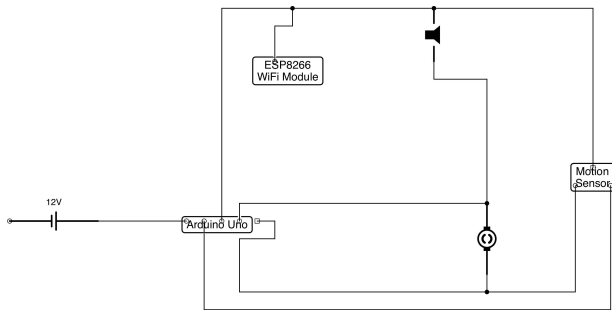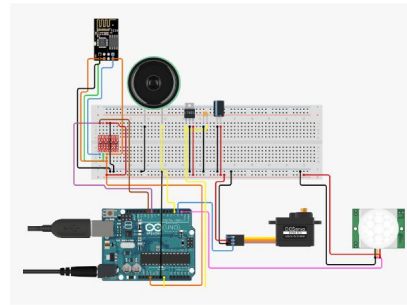Logic Level Converter - Bi-Directional

PIR Motion Sensor

Circuit

IMPLEMENTATION

According to the circuit, we wired all components in a correct way and build codes in Arduino IDE using C programming language. We split the program in several parts:

1. main frame.
2. WIFI module.
3. Server motor.
4. PIR sensor module.
5. Speaker part.

EVALUATION

We send signal from our mobile phone application and make speaker to sound and when the cat was coming the servo is motoring and food is served. For the demo, you can check our YouTube video. It's a huge success.

ACKNOWLEDGMENTS

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