

Smart Pet Feeder

Abstract:

In Many Cases We Come Across Situations Like We Have to Go Out of Station but There Is No One To Feed Our Pets Like Fishes and Birds When We Aren't Present.

Many Of My Friends and I Personally Face Thus Problem Hence to Solve Up This Problem We Came Up with A Solution Called "Smart Pet Feeder" Which Feeds Our Birds Automatically with Just One Click of Our Mobile and Also Using Good Assistant from Anywhere.

Components Used:

1. Esp32 Microcontroller
2. Servo Motor

Software Used:

1. Arduino IDE
2. Ifttt – If This Then That
3. Thingspeak Cloud Server

Program

```
#include<WiFi.h>
#include <ESP32Servo.h>
#include <ThingSpeak.h>

char ssid[] = "your wifi network name"; // your network SSID (name)
char pass[] = "password";

WiFiClient client;

unsigned long myChannelNumber = XXXXXXXX;
const char * myReadAPIKey = "your read API key goes here";

#define SERVO_PIN 13 // ESP32 pin 13connected to servo motor

Servo servoMotor;
int a;

void setup() {
  WiFi.mode(WIFI_STA);
  Serial.begin(115200);
  ThingSpeak.begin(client);
  servoMotor.attach(SERVO_PIN); // attaches the servo on ESP32 pin
}

void loop() {

  if(WiFi.status() != WL_CONNECTED){
    Serial.print("Attempting to connect to SSID: ");
  }

  while(WiFi.status() != WL_CONNECTED){
    WiFi.begin(ssid, pass); // Connect to WPA/WPA2 network. Change this line if using open or WEP network
    Serial.print(".");
    delay(5000);
  }

  Serial.println("\n\nConnected.");

  int a = ThingSpeak.readIntField(myChannelNumber, 1, myReadAPIKey); //READ THE VALUE FROM FIELD AND STORE IN A VARIABLE (a)
```

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```
Serial.println("Door State");
Serial.print(a);
delay(1000);

servoMotor.write(90);

if (a==0){
  servoMotor.write(180);
}

else{
  servoMotor.write(90);
}

}

//END OF PROGRAM
```

Circuit Diagram

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