#include <Wire.h> // include the Wire library for I2C communication

#include <ESP8266WiFi.h> // include the ESP8266WiFi library for connecting to WiFi

#include <ThingSpeak.h> // include the ThingSpeak library for sending data to ThingSpeak

#include <Adafruit\_MPU6050.h>

#include <Adafruit\_Sensor.h>

const int MPU\_addr=0x68; // I2C address of gy521 sensor

int16\_t AcX,AcY,AcZ,Tmp,GyX,GyY,GyZ;

Adafruit\_MPU6050 mpu;

const char\* ssid = "VITTAL1804"; // your WiFi SSID

const char\* password = "12345678"; // your WiFi password

unsigned long myChannelNumber = 2075607;

const char \* myWriteAPIKey = "7F0P43M0TVTCZ0O6";

WiFiClient client;

void setup() {

Wire.begin();

Serial.begin(9600);

WiFi.begin(ssid, password);

ThingSpeak.begin(client); // initialize ThingSpeak communication

}

void loop() {

/\* Get new sensor events with the readings \*/

sensors\_event\_t a, g, temp;

mpu.getEvent(&a, &g, &temp);

/\* Print out the values \*/

Serial.print("Acceleration X: ");

Serial.print(a.acceleration.x);

Serial.print(", Y: ");

Serial.print(a.acceleration.y);

Serial.print(", Z: ");

Serial.print(a.acceleration.z);

Serial.println(" m/s^2");

Serial.print("Rotation X: ");

Serial.print(g.gyro.x);

Serial.print(", Y: ");

Serial.print(g.gyro.y);

Serial.print(", Z: ");

Serial.print(g.gyro.z);

Serial.println(" rad/s");

Serial.print("Temperature: ");

Serial.print(temp.temperature);

Serial.println(" degC");

Serial.println("");

ThingSpeak.setField(1, a.acceleration.x);

ThingSpeak.setField(2, a.acceleration.y);

ThingSpeak.setField(3, a.acceleration.z);

ThingSpeak.setField(4, g.gyro.x);

ThingSpeak.setField(5, g.gyro.y);

ThingSpeak.setField(6, g.gyro.z);

delay(500);

// Write to ThingSpeak. There are up to 8 fields in a channel, allowing you to store up to 8 different

// pieces of information in a channel. Here, we write to field 1.

int x = ThingSpeak.writeFields(myChannelNumber, myWriteAPIKey);

delay(500);

}



