#include<DHT.h>

#include <DHT\_U.h>

#include<SoftwareSerial.h>

#include <Ultrasonic.h>

SoftwareSerial mySerial(9,10);//RX,TX

#define DHTPIN 3

#define DHTTYPE DHT11

#define echopin 11 //echo pin

#define trigpin 10//Trigger pin

Ultrasonic ultrasonic(trigpin, echopin);

DHT\_Unified dht(DHTPIN, DHTTYPE);

const int MOISTURE = 0;

const int THRESHHOLD = 750;

int maximumRange = 55;

double duration, distance;

void setup()

{

mySerial.begin(9600);

Serial.begin(9600);

dht.begin();

pinMode(13,OUTPUT);

pinMode(7,OUTPUT);

pinMode(echopin,INPUT);

}

void LedState(int state)

{

digitalWrite(13,state);

}

void loop()

{

distance = ultrasonic.distanceRead();

delay(20);

Serial.println("Distance from the brim");

Serial.println(distance);

//int chk=dht.read11(DHT11\_PIN);

sensors\_event\_t event;

dht.temperature().getEvent(&event);

if (isnan(event.temperature)) {

Serial.println("Error reading temperature!");

}

else {

Serial.print("Temperature: ");

Serial.print(event.temperature);

Serial.println(" \*C");

}

// Get humidity event and print its value.

dht.humidity().getEvent(&event);

if (isnan(event.relative\_humidity)) {

Serial.println("Error reading humidity!");

}

else {

Serial.print("Humidity: ");

Serial.print(event.relative\_humidity);

Serial.println("%");

}

int moisture = analogRead(MOISTURE);

Serial.print("Moisture = ");

Serial.println(moisture);

if(moisture>THRESHHOLD)

{

digitalWrite(7,HIGH);

// SendMessage1();

}

else

{

digitalWrite(7,LOW);

}

if(distance>=25)

{

Serial.println("Going to be empty");

LedState(HIGH);

//SendMessage2();

}

else if(distance <=10)

{

Serial.println("More than half filled");

LedState(LOW);

}

delay(2000);

}