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#include <SoftwareSerial.h>
SoftwareSerial Bluetooth(10, 9);      // Tx , Rx

#include <SimpleDHT.h>
SimpleDHT11 dht11;

#define LM1 4
#define LM2 5
#define RM1 6
#define RM2 7

int echoPin = 12;
int trigPin = 11;

int pinDHT11 = A0;
int LDR_PIN = A1;
int LED = 13;

char data;
long duration, distance;
byte temperature = 00;
byte humidity = 00;
int LDR_data;

void setup() {
    Bluetooth.begin(9600);
    Serial.begin(9600);
    pinMode(LM1, OUTPUT);
    pinMode(LM2, OUTPUT);
    pinMode(RM1, OUTPUT);
    pinMode(RM2, OUTPUT);
    pinMode(trigPin, OUTPUT);
    pinMode(echoPin, INPUT);
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pinMode(pinDHT11, INPUT);
pinMode(LDR_PIN, INPUT);
pinMode(LED, OUTPUT);
}

void loop()
{
    digitalWrite(trigPin, LOW);
    delayMicroseconds(2);
    digitalWrite(trigPin, HIGH);
    delayMicroseconds(10);
    duration = pulseIn(echoPin, HIGH);
    distance = duration / 58.2;

    if (dht11.read(pinDHT11, &temperature, &humidity,
NULL) )
    {
        delay(100);
        return;
    }

    if (distance < 31)
    {
        Bluetooth.print(temperature);
        Bluetooth.print("|");
        Bluetooth.print(humidity);
        Bluetooth.print("|");
        Bluetooth.print("Obstacle_Detected");
        digitalWrite(LM1, LOW);
        digitalWrite(LM2, LOW);
        digitalWrite(RM1, LOW);
        digitalWrite(RM2, LOW);
    }
}

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else {
    Bluetooth.print(temperature);
    Bluetooth.print("|");
    Bluetooth.print(humidity);
    Bluetooth.print("|");
    Bluetooth.print("_");
}

/* ===== */

LDR_data = analogRead(LDR_PIN);
if (LDR_data < 120) {
    digitalWrite(LED, HIGH);
}
else {
    digitalWrite(LED, LOW);
}
if (Bluetooth.available() > 0)
{
    data = Bluetooth.read();
    if (data == '1')
    {
        digitalWrite(LM1, HIGH);
        digitalWrite(LM2, LOW);
        digitalWrite(RM1, HIGH);
        digitalWrite(RM2, LOW);
    }
    else if (data == '2')
    {
        digitalWrite(LM1, LOW);
        digitalWrite(LM2, HIGH);
        digitalWrite(RM1, LOW);
    }
}

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        digitalWrite(RM2, HIGH);
    }
    else if (data == '3')
    {
        digitalWrite(LM1, LOW);
        digitalWrite(LM2, LOW);
        digitalWrite(RM1, HIGH);
        digitalWrite(RM2, LOW);
    }
    else if (data == '4')
    {
        digitalWrite(LM1, HIGH);
        digitalWrite(LM2, LOW);
        digitalWrite(RM1, LOW);
        digitalWrite(RM2, LOW);
    }
    else if (data == '5')
    {
        digitalWrite(LM1, LOW);
        digitalWrite(LM2, LOW);
        digitalWrite(RM1, LOW);
        digitalWrite(RM2, LOW);
    }
}
}
```