#define trigPin1 3

#define echoPin1 2

#define trigPin2 6

#define echoPin2 7

#define sound A0

#include <Servo.h>

Servo myservo; // create servo object to control a servo

Servo myservo1;

// twelve servo objects can be created on most boards

bool gateOpen = true; // to keep track of gate state

int pos = 0; // variable to store the servo position

void setup() {

myservo.attach(9); // attaches the servo on pin 9 to the servo object

myservo1.attach(8);

Serial.begin (9600);

pinMode(trigPin1, OUTPUT);

pinMode(echoPin1, INPUT);

pinMode(trigPin2, OUTPUT);

pinMode(echoPin2, INPUT);

pinMode(13, OUTPUT);

}

void loop() {

long duration, distance;

digitalWrite(trigPin1, LOW);

delayMicroseconds(2);

digitalWrite(trigPin1, HIGH);

delayMicroseconds(10);

digitalWrite(trigPin1, LOW);

duration = pulseIn(echoPin1, HIGH);

distance = (duration/2) / 29.1;

long duration2, distance2;

digitalWrite(trigPin2, LOW);

delayMicroseconds(2);

digitalWrite(trigPin2, HIGH);

delayMicroseconds(10);

digitalWrite(trigPin2, LOW);

duration2 = pulseIn(echoPin2, HIGH);

distance2 = (duration2/2) / 29.1;

digitalWrite(13,0);

if (distance<7 || distance2<7) {

if (!gateOpen) {

gateOpen = true;

myservo1.write(135);

myservo.write(55);

digitalWrite(13,1);

delay(750);

} else {

gateOpen = false;

myservo1.write(55);

myservo.write(144);

digitalWrite(13,1);

delay(750);

}

}

}