#define trigPin1 9

#define echoPin1 8

#define buzzer1 2

#define trigPin2 10

#define echoPin2 11

#define buzzer2 4

long duration, distance, UltraSensor1, UltraSensor2;

char data;

String SerialData="";

void setup()

{

Serial.begin (9600);

pinMode(trigPin1, OUTPUT);

pinMode(echoPin1, INPUT);

pinMode(buzzer1, OUTPUT);

pinMode(trigPin2, OUTPUT);

pinMode(echoPin2, INPUT);

pinMode(buzzer2, OUTPUT);

digitalWrite(buzzer1,LOW);

digitalWrite(buzzer2,LOW);

}

void loop()

{

SonarSensor(trigPin1, echoPin1);

UltraSensor1 = distance;

SonarSensor(trigPin2,echoPin2);

UltraSensor2 = distance;

while(Serial.available())

{

delay(10);

data=Serial.read();

SerialData+=data;

}

if(SerialData=="display distance")

{

Serial.print("distance measured by the first sensor: ");

Serial.print(UltraSensor1);

Serial.println(" cm");

Serial.print("distance measured by the second sensor: ");

Serial.print(UltraSensor2);

Serial.println(" cm");

Serial.println("---------------------------------------------------------------------------------------------------------");

}

SerialData="";

if(UltraSensor1 <=10)

{

digitalWrite(buzzer1,HIGH);

}

else

{

digitalWrite(buzzer1,LOW);

}

if(UltraSensor2 <=10)

{

digitalWrite(buzzer2,HIGH);

}

else

{

digitalWrite(buzzer2,LOW);

}

}

void SonarSensor(int trigPinSensor,int echoPinSensor)

{

digitalWrite(trigPinSensor, LOW);

delayMicroseconds(2);

digitalWrite(trigPinSensor, HIGH);

delayMicroseconds(10);

digitalWrite(trigPinSensor, LOW);

duration = pulseIn(echoPinSensor, HIGH);

distance= (duration/2) / 29.1;

}

A close up of a camera

Description automatically generatedA picture containing circuit

Description automatically generatedA close up of a speaker

Description automatically generatedA close up of a speaker

Description automatically generated