**ARDUINO CODE**

#include <Adafruit\_MLX90614.h>

#include <Wire.h>

#include <LiquidCrystal\_I2C.h>

#define I2C\_ADDR 0x27 //I2C adress, you should use the code to scan the adress first (0x27) here

#define BACKLIGHT\_PIN 3

#define En\_pin 2

#define Rw\_pin 1

#define Rs\_pin 0

#define D4\_pin 4

#define D5\_pin 5

#define D6\_pin 6

#define D7\_pin 7

LiquidCrystal\_I2C lcd(0x27, 16, 2);

Adafruit\_MLX90614 mlx = Adafruit\_MLX90614();

-

int buzzer=11;

int sensorpin = 0;

int val = 0;

void setup() {

lcd.begin();

lcd.backlight();

lcd.print("Hi im here");

Serial.begin(9600);

Serial.println("Adafruit MLX90614 test");

if (!mlx.begin()) {

Serial.println("Error connecting to MLX sensor. Check wiring.");

while (1);

};

}

void loop() {

lcd.clear();

int t=0;

float tem=0;

val = analogRead(sensorpin); // reads the value of the sharp sensor

// Serial.print("distance: ");

// Serial.println(val); // prints the value of the sensor to the serial monitor

// delay(400); // wait for this much time before printing next value

if(val<400&&val>200){

tem=mlx.readObjectTempC();

if(tem<32){

Serial.print(mlx.readObjectTempC()); Serial.println("'C");

Serial.print(mlx.readObjectTempF()); Serial.println("'F");

Serial.println();

lcd.clear();

lcd.print(mlx.readObjectTempC()); lcd.println("'C ");

lcd.setCursor(2,1);

lcd.println(" You may Enter ");

delay(1000);

//lcd.print(mlx.readObjectTempF()); lcd.println("'F");

// tone(buzzer,450);

// delay(1000);

// nonTone(buzzer);

// delay(1000);

int i=0;

do{

i++;

tone(buzzer,450);

delay(200);

noTone(buzzer);

delay(3000);

}while(i<1);

delay(1000);

}

if(tem>32){

Serial.print(mlx.readObjectTempC()); Serial.println("'C");

Serial.print(mlx.readObjectTempF()); Serial.println("'F");

Serial.println();

delay(2500);

lcd.clear();

lcd.print(mlx.readObjectTempC()); lcd.println("'C ");

lcd.setCursor(2,1);

lcd.println(" please wait ");

delay(1000);

//lcd.print(mlx.readObjectTempF()); lcd.println("'F");

// tone(buzzer,450);

// delay(1000);

// noTone(buzzer);

// delay(5000);

int i=0;

do{

i++;

tone(buzzer,450);

delay(200);

noTone(buzzer);

delay(200);

}while(i<3);

delay(1000);

}

}

else {

//delay(1000);

Serial.print("distance: ");

Serial.println(val);

lcd.clear();

lcd.print("stand at the ");

lcd.setCursor(2,1);

lcd.println(" specified box ");

delay(1500);

}

}

***NODEMCU CODE***

#include <Wire.h>

#include <Adafruit\_MLX90614.h>

#include <Adafruit\_GFX.h>

//#include <Adafruit\_SSD1306.h>

#define BLYNK\_PRINT Serial

#include <Blynk.h>

#include <ESP8266WiFi.h>

#include <BlynkSimpleEsp8266.h>

#define SCREEN\_WIDTH 128 // OLED display width, in pixels

#define SCREEN\_HEIGHT 64 // OLED display height, in pixels

#define OLED\_RESET -1 // Reset pin # (or -1 if sharing Arduino reset pin)

//Adafruit\_SSD1306 display(SCREEN\_WIDTH, SCREEN\_HEIGHT, &Wire, OLED\_RESET);

Adafruit\_MLX90614 mlx = Adafruit\_MLX90614();

double temp\_amb;

double temp\_obj;

double calibration = 2.36;

char auth[] = "699aYXHY30AhIXm2gpGHG1UTk8yib-rf"; // You should get Auth Token in the Blynk App.

char ssid[] = "Dialog 4G 444"; // Your WiFi credentials.

char pass[] = "52c800e1";

void setup()

{

Serial.begin(9600);

mlx.begin(); //Initialize MLX90614

// display.begin(SSD1306\_SWITCHCAPVCC, 0x3C); //initialize with the I2C addr 0x3C (128x64)

Blynk.begin(auth, ssid, pass);

Serial.println("Temperature Sensor MLX90614");

// display.clearDisplay();

// display.setCursor(25,15);

// display.setTextSize(1);

// display.setTextColor(WHITE);

// display.println(" Thermometer");

// display.setCursor(25,35);

// display.setTextSize(1);

// display.print("Initializing");

// display.display();

// delay(2500);

}

void loop()

{

//Reading room temperature and object temp

//for reading Fahrenheit values, use

// mlx.readAmbientTempF() , mlx.readObjectTempF() )

Blynk.run();

temp\_amb = mlx.readAmbientTempC();

temp\_obj = mlx.readObjectTempC();

// Serial Monitor

Serial.print("Room Temp = ");

Serial.println(temp\_amb);

Serial.print("Object temp = ");

Serial.println(temp\_obj);

//

// display.clearDisplay();

// display.setCursor(25,0);

// display.setTextSize(1);

// display.setTextColor(WHITE);

// display.println(" Temperature");

//

// display.setCursor(10,20);

// display.setTextSize(1);

// display.print("Ambient: ");

// display.print(temp\_amb);

// display.print((char)247);

// display.print("C");

//

// display.setCursor(10,40);

// display.setTextSize(1);

// display.print("Object: ");

// display.print(temp\_obj + calibration);

// display.print((char)247);

// display.print("C");

//

// display.display();

Blynk.virtualWrite(V1, temp\_amb);

Blynk.virtualWrite(V2, (temp\_obj + calibration));

delay(1000);

}