

### RECAP....

# HALO

**Intelligent** Home Assistant & Lifeline Observer

# RECAP....

## **iHALO Band**

#### **Hardware Requirements**

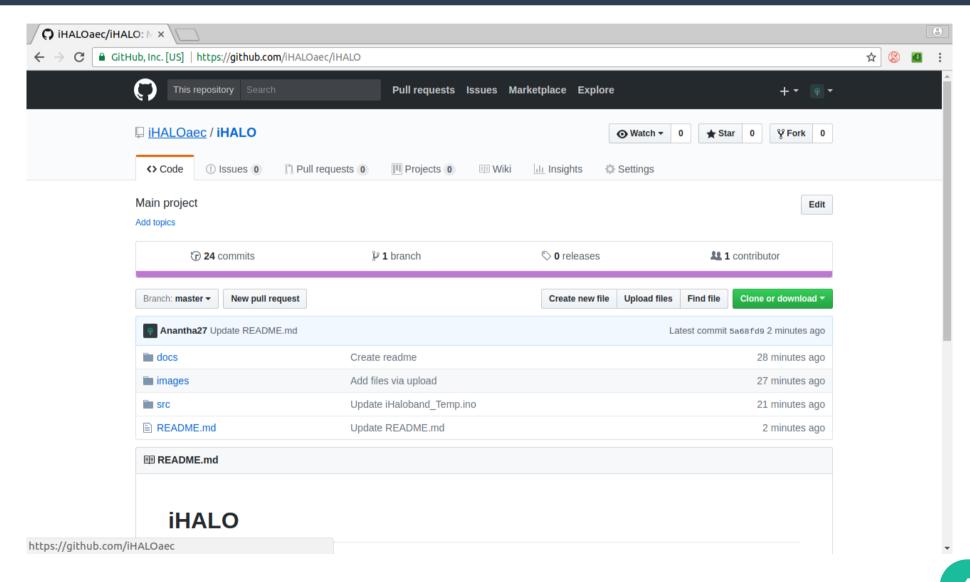
- 1.Infineon DPS310
- 2.Arduino Nano
- 3.ESP 8266
- 4. 4v LiPo Battery
- 5. Jumper Wires

#### **Software Requirements**

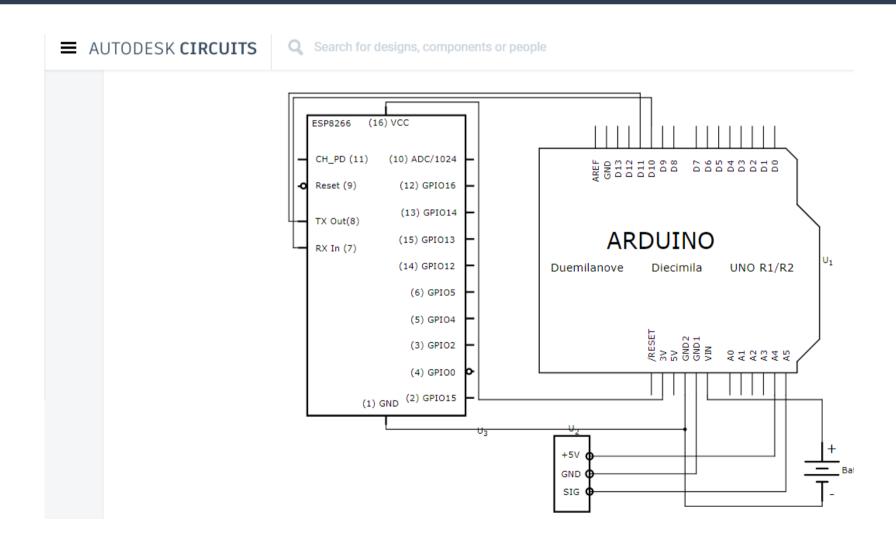
- 1.Arduino IDE
- 2.Blynk



#### **iHALO** in Github



# Circuit Diagram



## **Arduino C Code (Part 1)**

```
sketch_dec17a.ino
                          ReadMe.adoc
#define BLYNK PRINT Serial
#include <ESP8266 Lib.h>
#include <BlynkSimpleShieldEsp8266.h>
// You should get Auth Token in the Blynk App.
// Go to the Project Settings (nut icon).
char auth[] = "42cb83cde6354c6a905ca0c0d2d26d3b"; //get thi frm ur app
char ssid[] = "Starcable";// Your WiFi credentials.
char pass[] = "k03@d033":// Set password to "" for open networks.
BlynkTimer timer;
#include <SoftwareSerial.h>
SoftwareSerial EspSerial(2, 3); // RX, TX
#define ESP8266 BAUD 9600 // Your ESP8266 baud rate:
ESP8266 wifi(&EspSerial);
void sendSensor()
 int val = analogRead(A0);
  float mv = (val/1024.0)*5000; //mv stands for millivolts.
                      //10mv for per degree rise in temperature
  float cel = mv/10;
  float farh = (cel*9)/5 + 32:
  Blynk.virtualWrite(V5, farh); //V5 is the virtual pin
void setup()
Success: Done verifying sketch_dec17a
```

# **Arduino C Code (Part 2)**

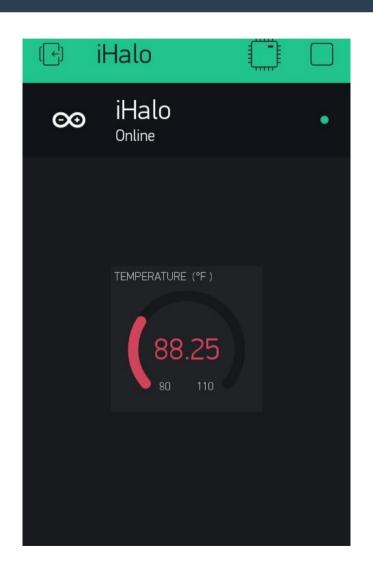
```
sketch_dec17a.ino
                           ReadMe.adoc
  TOOK TOTH - (CEC 2)/2 T JZ,
  Blynk.virtualWrite(V5, farh); //V5 is the virtual pin
void setup()
  pinMode(A0,INPUT);
  pinMode(5.OUTPUT);
  pinMode(6,OUTPUT);
  digitalWrite(5.HIGH):
  digitalWrite(6,LOW);
  Serial.begin(9600);
  delay(10):
  EspSerial.begin(ESP8266_BAUD); // Set ESP8266 baud rate
  delay(10):
  Blynk.begin(auth, wifi, ssid, pass);
  timer.setInterval(1000L, sendSensor);
void loop()
  Blynk.run();
  timer.run();
```

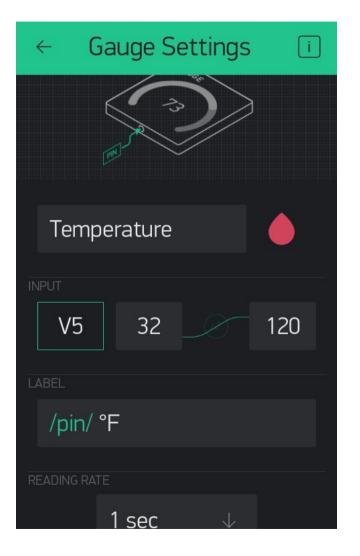
Success: Done verifying sketch\_dec17a

# Uploading.....

```
Board as Arduino Nano
                                                            SHARE
                               ReadMe.adoc
      sketch dec17a.ino
      TOOL TOTH - (CEC 2)/3 T JE,
20
21
       Blynk.virtualWrite(V5, farh); //V5 is the virtual pin
22
23
     void setup()
24 ▼ {
25
       pinMode(A0,INPUT);
26
       pinMode(5,OUTPUT);
27
      pinMode(6,OUTPUT);
28
       digitalWrite(5,HIGH);
29
       digitalWrite(6,LOW);
30
       Serial.begin(9600);
31
       delay(10);
32
       EspSerial.begin(ESP8266_BAUD); // Set ESP8266 baud rate
33
       delay(10):
34
       Blynk.begin(auth, wifi, ssid, pass);
       timer.setInterval(1000L, sendSensor);
35
36
37
38
     void loop()
39 ▼ {
      Blynk.run();
41
       timer.run();
42
43
    Success: Done uploading sketch_dec17a
```

# **Android Interface (iHalo Band)**





# THANK YOU