**Display the light intensity, Temperature, Humidity values on the OLED display.**

#include "DHT.h"

#define DHTPIN 4

#define DHTTYPE DHT11

#include <Wire.h>

#include <Adafruit\_GFX.h>

#include <Adafruit\_SSD1306.h>

#define SCREEN\_WIDTH 128

#define SCREEN\_HEIGHT 64

Adafruit\_SSD1306 display(SCREEN\_WIDTH, SCREEN\_HEIGHT, &Wire, -1);

DHT dht(DHTPIN, DHTTYPE);

void setup() {

Serial.begin(115200);

dht.begin();

if(!display.begin(SSD1306\_SWITCHCAPVCC, 0x3C))

{

Serial.println("SSD1306 allocation failed");

for(;;);

}

delay(2000);

display.clearDisplay();

display.setTextColor(WHITE);

}

void loop() {

delay(2000);

float h = dht.readHumidity();

float t = dht.readTemperature();

float f = dht.readTemperature(true);

if (isnan(h) || isnan(t) || isnan(f)) {

Serial.println(F("Failed to read from DHT sensor!"));

return;

}

float hif = dht.computeHeatIndex(f, h);

float hic = dht.computeHeatIndex(t, h, false);

display.clearDisplay();

display.setTextSize(1);

display.setCursor(0,0);

display.print(F("Humidity: "));

display.setTextSize(1);

display.setCursor(0,10);

display.print(h);

display.setTextSize(1);

display.setCursor(0,20);

display.println("% Temperature:");

display.setTextSize(1);

display.setCursor(0,30);

display.print(t);

display.print(" °C- ");

display.print(f);

display.setTextSize(1);

display.setCursor(0,40);

display.println(F("°F Heat index: "));

display.print(hic);

display.print("°C ");

display.print(hif);

display.print("°F");

display.display();

}

