ESP32 DHT22 IFTTT

Send DHT22 temperature and humidity values to a google sheet through ESP32 and Webhooks

Difficulté **Moyen** | Durée **1 heure(s)** | Catégories **Électronique** | Coût **0 USD ($)**

Sommaire

Introduction

ESP32 connected to **DHT22**, to read temperature and humidity. Use IFTTT to create a webhook applet and write the DHT22 measured values to a google sheets document

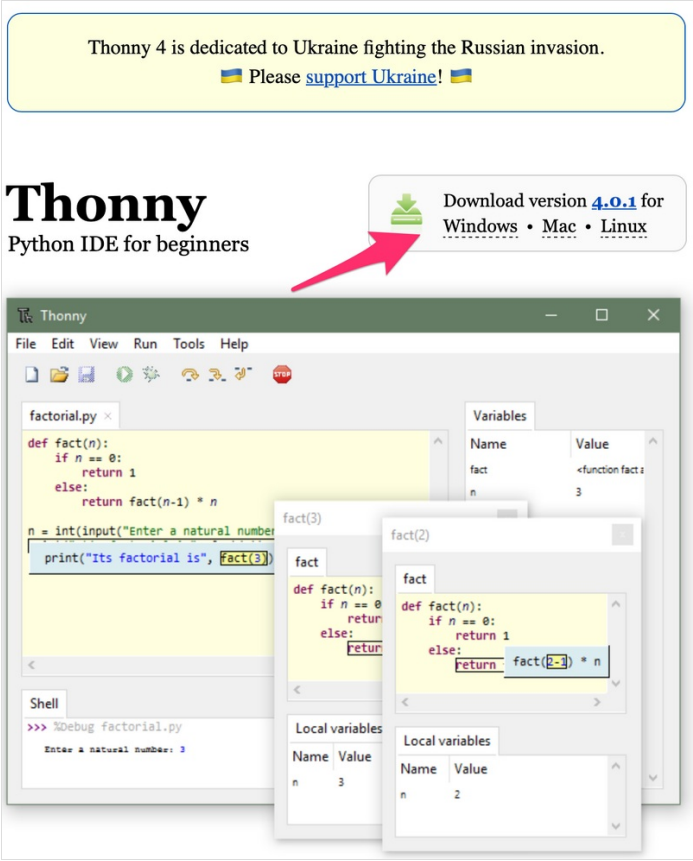
Matériaux

Outils

Étape 1 - Install Thonny or Other Python IDLE

You will need a Python IDE such as Thonny for this project. You can use any IDE, but for this project, we are using Thonny. To install and use Thonny:

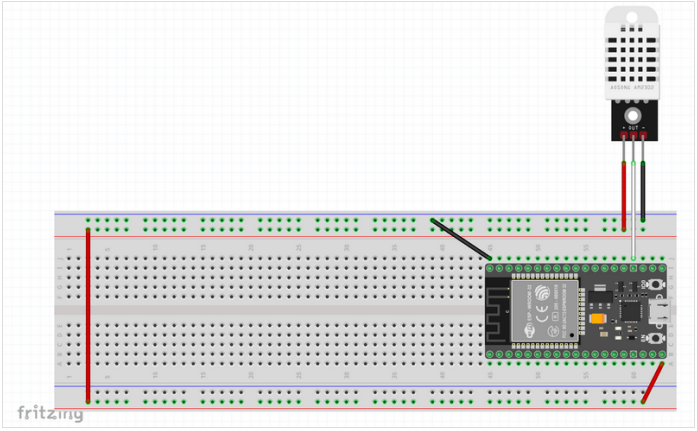
- Go to https://thonny.org/
- Download
- Install and then open

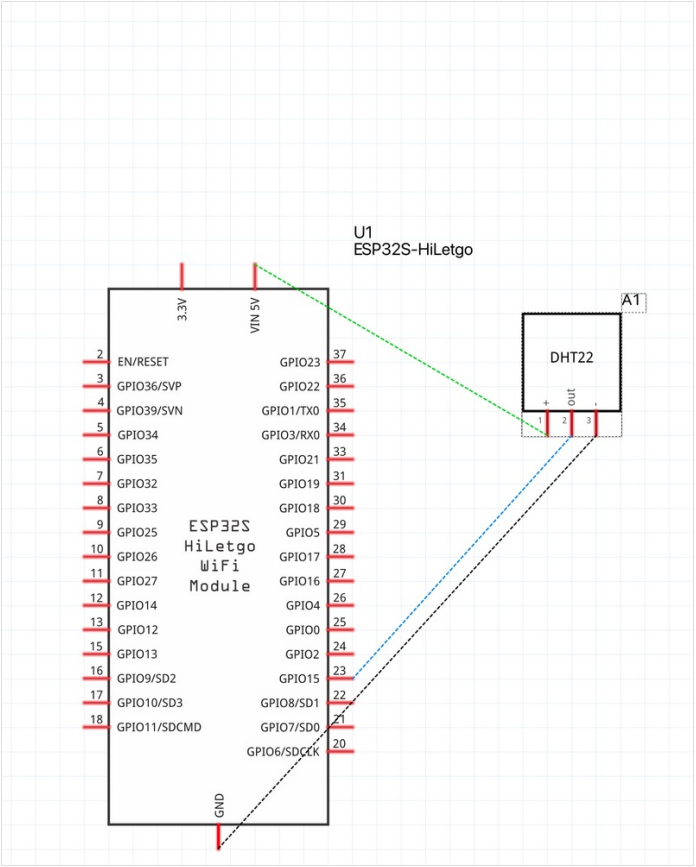


Étape 2 - Setup Circuit

This is how your circuit should look like. You will need the ESP32 microcontroller, DHT22 temp/humidity module, breadboard and jumper wires.

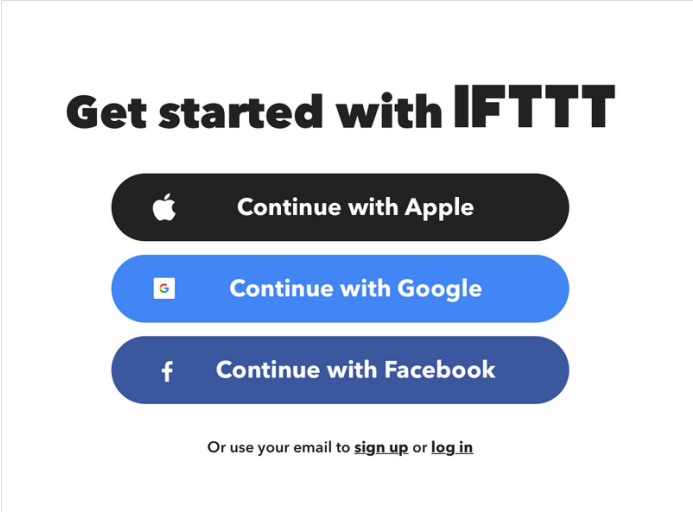
- + pin on DHT22 to VCC on ESP
- out pin on DHT22 to GPIO pin 15 on ESP(can change depending on code)
- - pin on DHT22 to GND on ESP





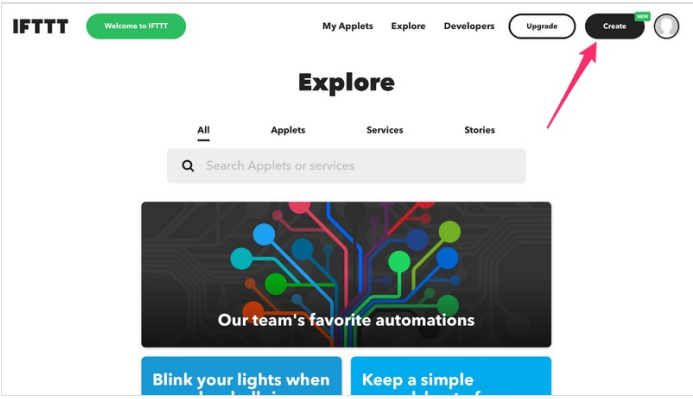
Étape 3 - Setup IFTTT

Go to https://ifttt.com/join
Sign up and create an account using the appropriate options



Étape 4 - Create a new applet

First, click **create** in the upper right hand corner

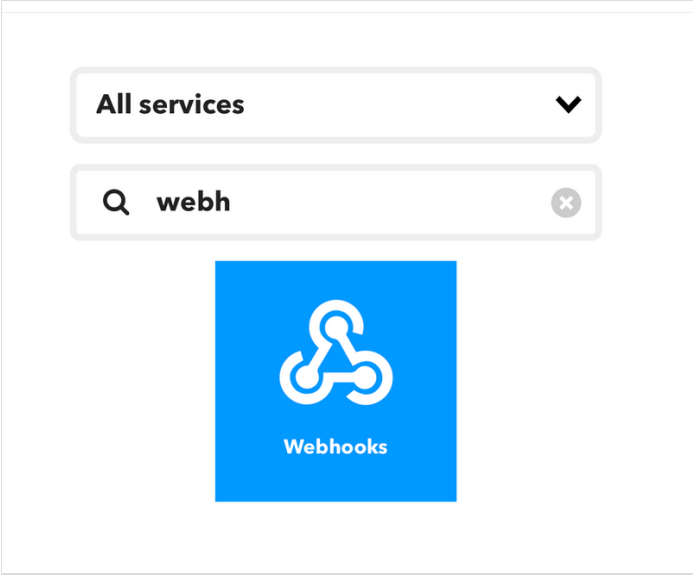


Étape 5 - Set up Applet

Then, hit **Add** next to **IF THIS**

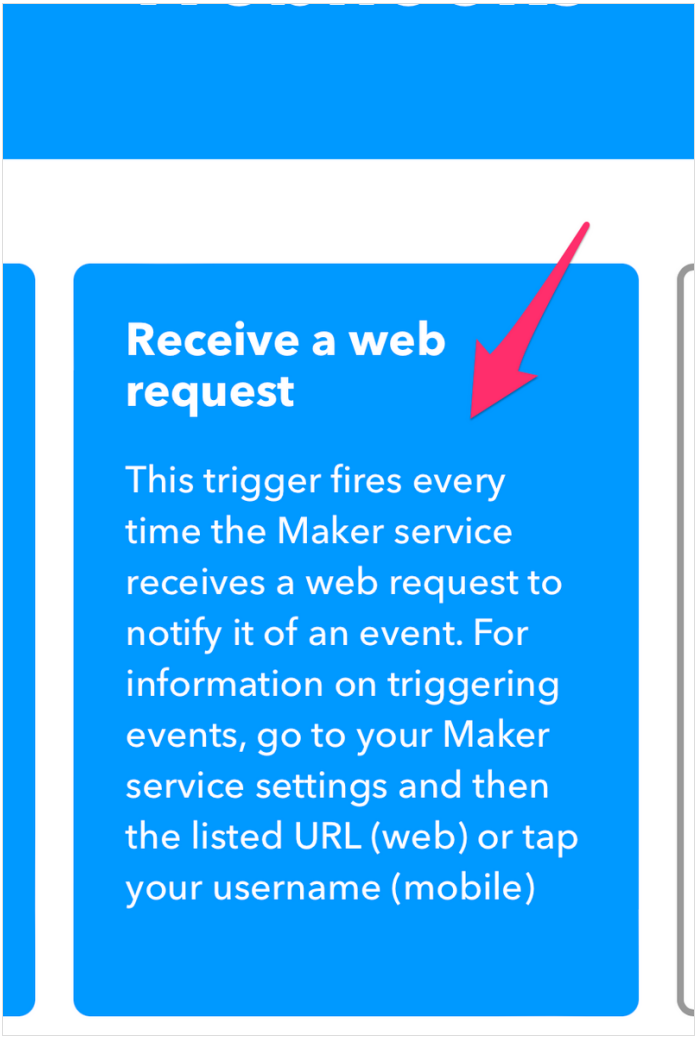
Étape 6 - Select webhooks

Once you are on "**choose a service**", type in **Webhooks** in the search bar and click **Webhooks**



Étape 7 - Select request type

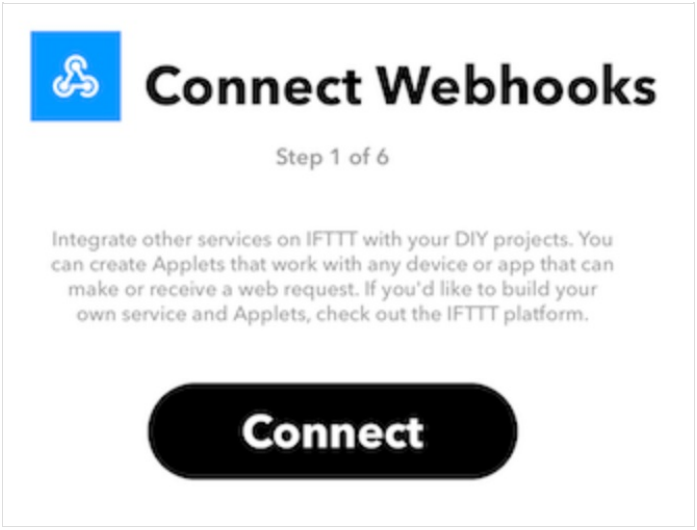
On webhooks, select **receive a web request**



Étape 8 - Set up Webhooks Account

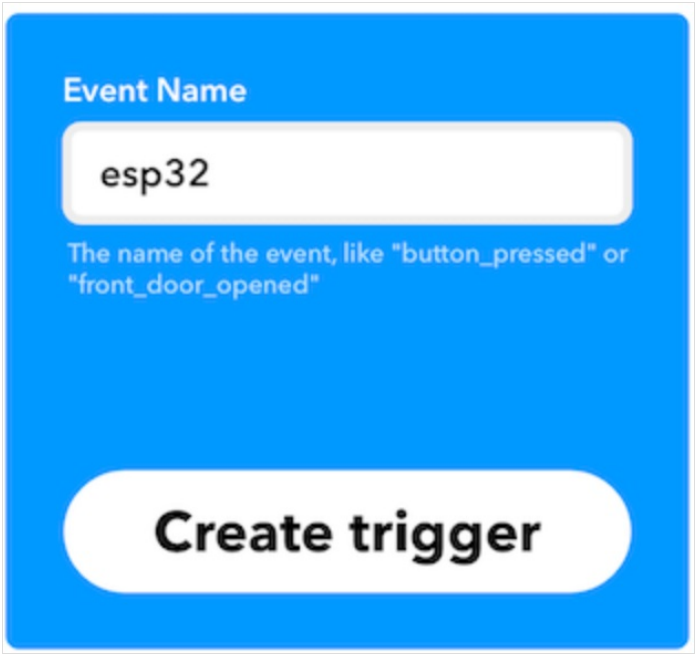
- If you already have a webhooks account, skip this step

Otherwise, click the **connect** button and follow the steps on their website to create a webhooks account



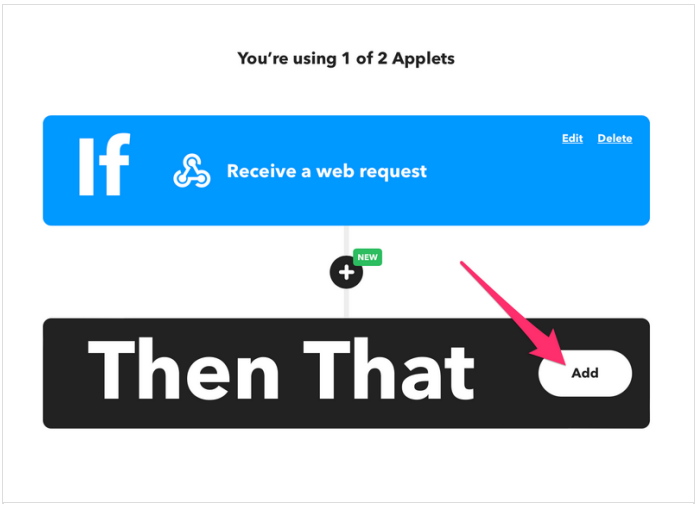
Étape 9 - Name event for trigger

Name the event for the trigger **esp32** (it is case sensitive so be careful)



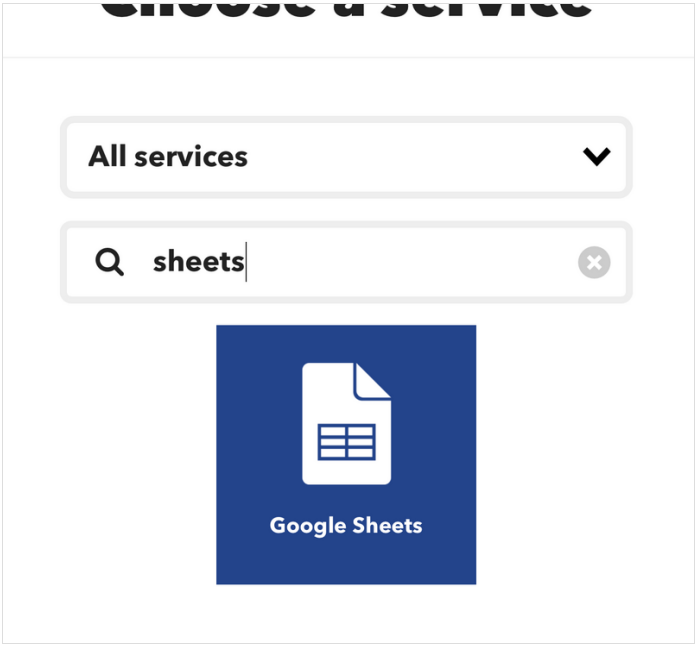
Étape 10 - Set up reaction

Once the trigger is set up, click **Add** next to **Then That**



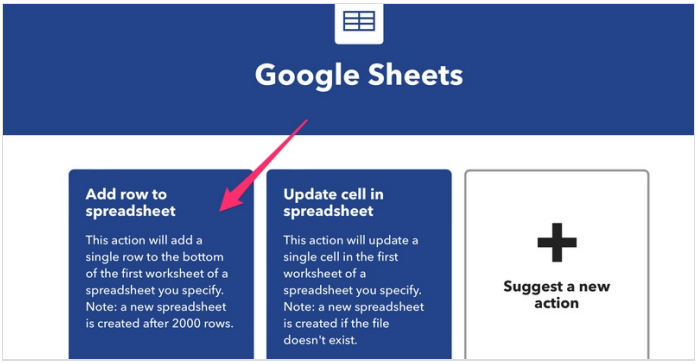
Étape 11 - Select google sheets

In the search bar, search **sheets** and click **google sheets**



Étape 12 - Set up sheets

Select **Add row to spreadsheet**

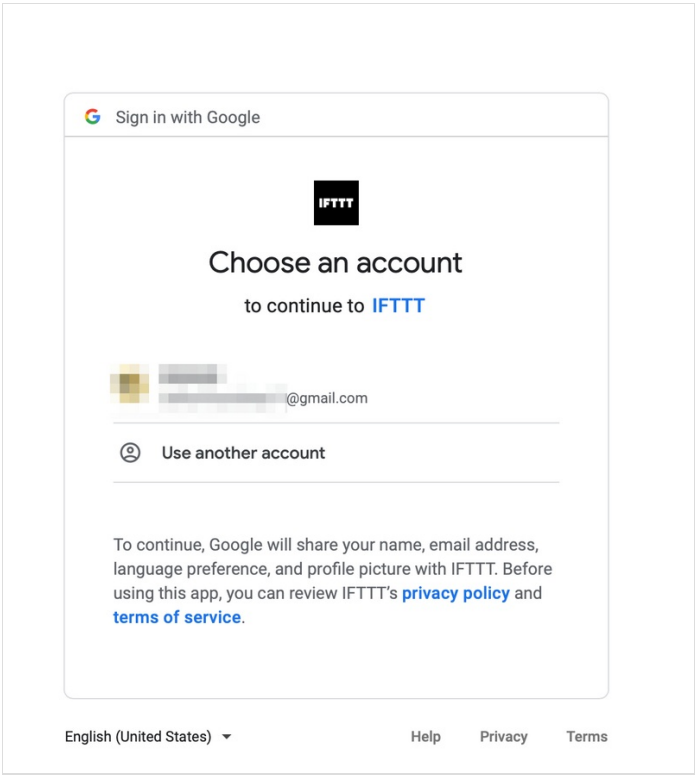


Étape 13 - Connect to sheets

Click the **Connect** button

Étape 14 - Sign in using gmail

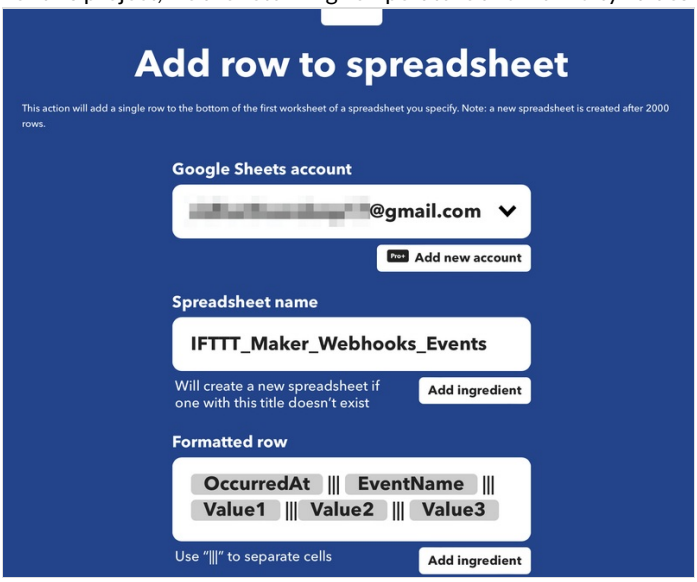
Use your gmail to sign in to sheets



Étape 15 - Configure spreadsheet

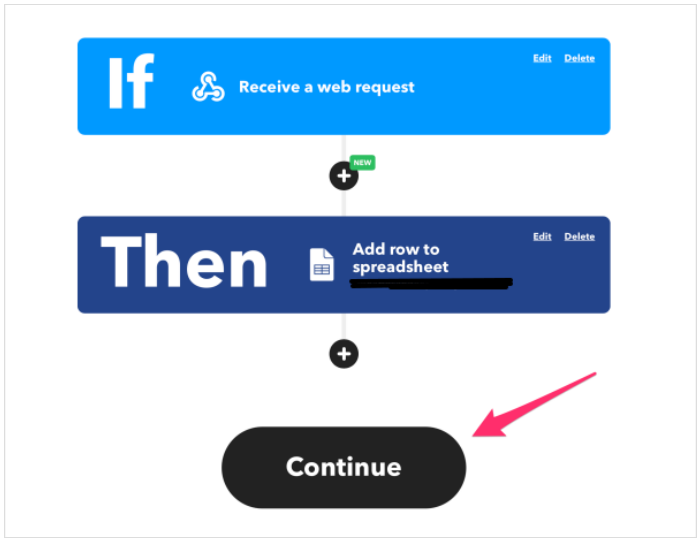
Select all the values you want returned to the spreadsheet, along with the path the sheet has to follow in your drive.

For this project, we are returning Temperature and Humidity values from the DHT22, so we will select **Value1** and **Value2**



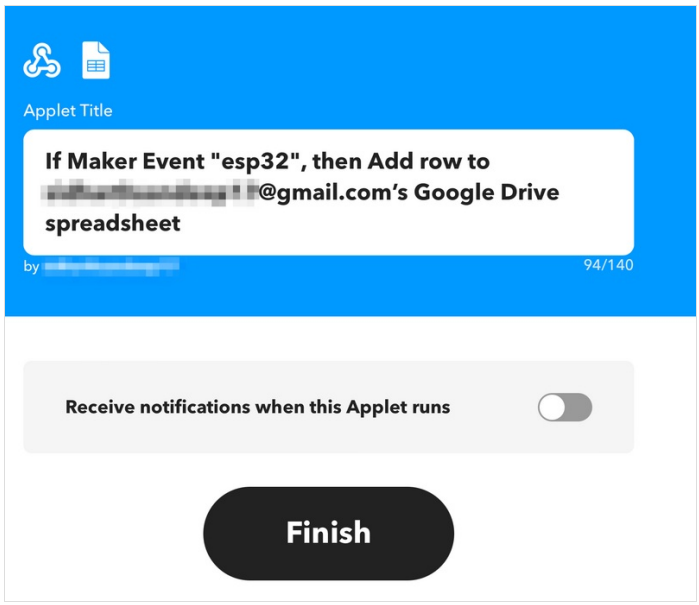
Étape 16 - Finish applet

Once you have finished all the previous steps, hit continue on the applet page



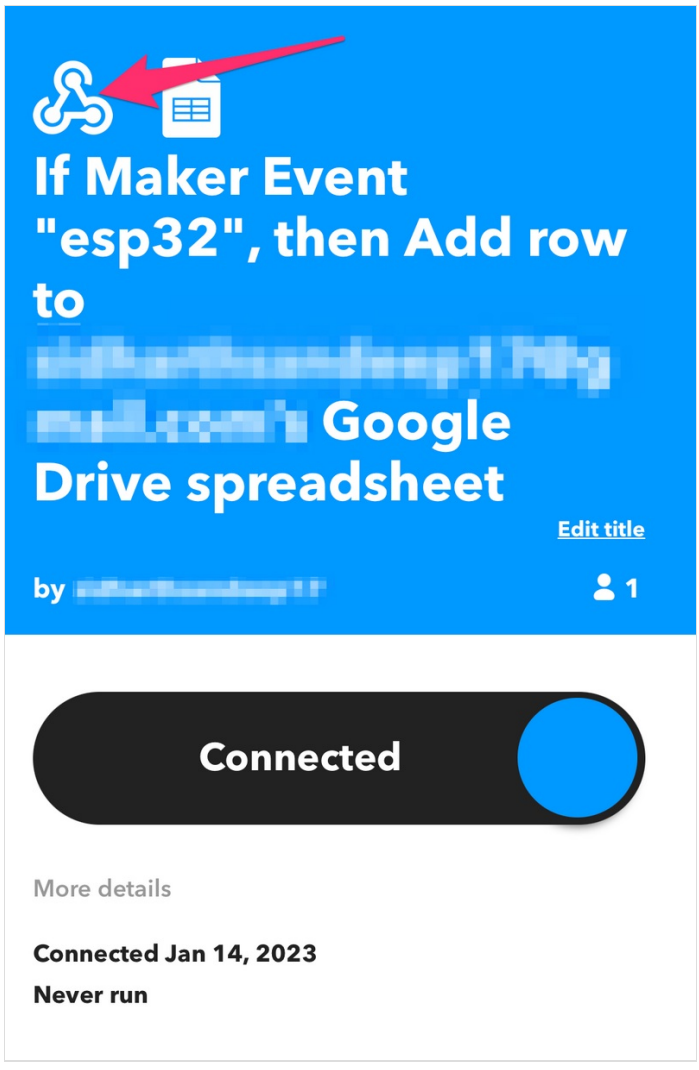
Étape 17 - Name applet

Rename the applet to an appropriate name



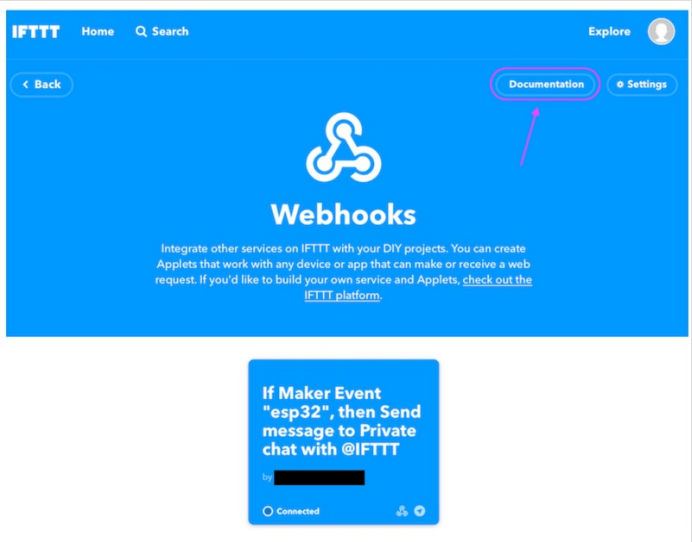
Étape 18 - Get API key

Select the **Webhooks** icon on the finished page



Étape 19 - Go to documentation

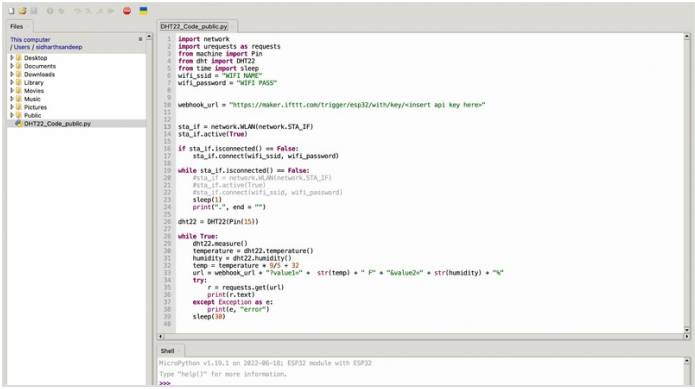
Click **documentation** on the webhooks page



Étape 20 - Copy API key

Once you get onto this page, copy the api key and URL to paste into the code in Thonny

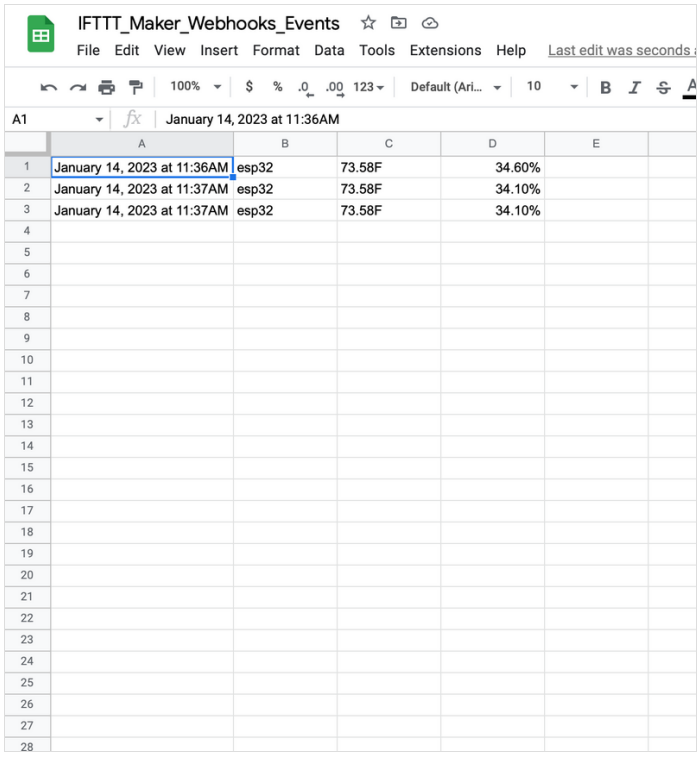
Étape 21 - Source Code for thonny (insert api key and URL from previous step)



```
import network
import urequests as requests
from machine import Pin
from dht import DHT22
from time import sleep
#Replace the values below with the correct WIFI SSID and Password
wifi_ssid = "WIFI NAME"
wifi_password = "WIFI PASS"

#This is the webhook URL with API Key from IFTTT

webhook_url = "https://maker.ifttt.com/trigger/esp32/with/key/<insert api
 key here>"


sta_if = network.WLAN(network.STA_IF)
sta_if.active(True)

if sta_if.isconnected() == False:
    sta_if.connect(wifi_ssid, wifi_password)

while sta_if.isconnected() == False:
    #sta_if = network.WLAN(network.STA_IF)
    #sta_if.active(True)
    #sta_if.connect(wifi_ssid, wifi_password)
    sleep(1)
    print(".", end = "")

dht22 = DHT22(Pin(15))

while True:
    dht22.measure()
    temperature = dht22.temperature()
    humidity = dht22.humidity()
    temp = temperature * 9/5 + 32
    url = webhook_url + "?value1=" +  str(temp) + " F" + "&value2=" + st
r(humidity) + "%"
    try:
        r = requests.get(url)
        print(r.text)
    except Exception as e:
        print(e, "error")
    sleep(30)
```

Étape 22 - View output in spreadsheet

Go to whichever path you set the spreadsheet to in your drive


IFTTT_Maker_Webhooks_Events
File Edit View Insert Format Data Tools Extensions Help
A1
January 14, 2023 at 11:36AM
January 14, 2023 at 11:36AM esp32 73.58F 34.60%
January 14, 2023 at 11:37AM esp32 73.58F 34.10%
January 14, 2023 at 11:37AM esp32 73.58F 34.10%