

Steps to debug

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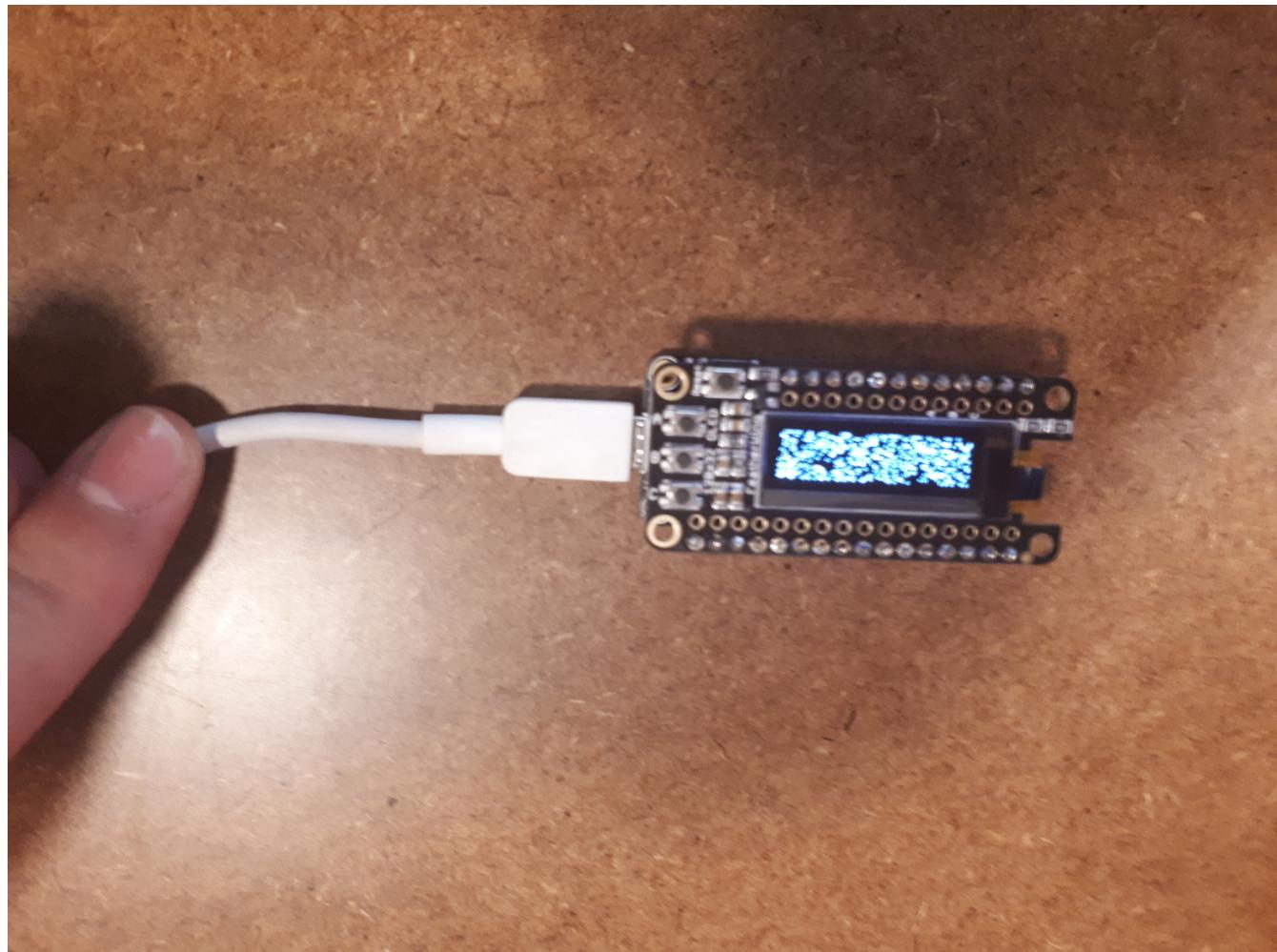
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Initial state: the screen shows white particle



Steps to debug

1. Press the reset button and retry download

The reset button is situated on the screen. Press it for 5 seconds at least.

2. Open the blink sketch and download it to the Arduino

This sketch can be found in Files → Examples → Basics → blink

If it works, you should see a tiny red led blinking at one second interval on your device. This helps testing the fact that the Arduino is not broken.

3. Check the soldering of the screen visually

Solder material on pins should not touch each other.

4. Try connecting to a different wifi shared connection

The name of the wifi (the "ssid" should not include special characters or space)

5. Check the soldering of the screen visually

Solder material on pins should not touch each other.

6. Make sure your token for the AQI website works

Enter this link on a browser. Replace the value for the token by the token you got from the website:

<http://api.waqi.info/search/?token=ce3c07596e818c0ef99c070ab4464b7abc2f228d&keyword=Saint-Etienne>

(so in the line above, replace `ce3c07596e818c0ef99c070ab4464b7abc2f228d` by your own token)

If you

Explanation: your sketch was not loaded to the object yet.

Solution: make sure you got the sketch to load to your object.

You know it has loaded successfully when the red line in the Arduino goes to "100%"

2. "DynamicJsonBuffer not declared in this scope"

This error appears when you compile the sketch, you can not download the sketch to the board.

Solution: you installed a version of the library ArduinoJson which is **too recent and not stable**

- close your Arduino IDE.

- Uninstall the ArduinoJson library by [following these steps](#).
- Install the correct version of the ArduinoJson library, which should be annotated as **stable**. As of September 2018, the latest stable version is **5.13.2**. To find this version, go to Sketch → Include Library → Manage Libraries. Type "ArduinoJson" in the search bar. Before installing it, make sure to select version **5.13.2** in the drop down menu!
- Relaunch the Arduino IDE to make sure the changes take effect.

3. "fatal error: Adafruit_SSD1306.h: No such file or directory"

Solution:

1. install the library from Sketch → Include Library → Manage Libraries: type SSD1306 in the search bar and find it.



In the list of SSD1306 Libraries, make sure you install the one by **Adafruit**, not Acrobotic.

2. Import this library in your sketch via Sketch → Include Libraries → find it in the list!!

4. "cannot access COM1 / espcomm_open failed"

Solution:

if you are on a Mac:

- a. New / recent Mac only: make sure you installed this:

<https://www.silabs.com/products/development-tools/software/usb-to-uart-bridge-vcp-drivers>

- b. Older Mac (Mac OS 10.12.6 or older): make sure you installed this instead:

<http://community.silabs.com/t5/Interface-Knowledge-Base/Legacy-OS-Software-and-Driver-Packages/ta-p/182585>

- c. All Macs: in the Arduino IDE, with your sketch open, go to **Tools** and put your mouse above (don't click!) **Port**:. Then select:

→ In the list of ports, select the one that has "/dev/cu.SLAB_USBtoUART" in the name

if you are on a PC:

→ In the list of ports, try selecting each port (COM1, COM17... you might have different ones) until the error disappears.

5. Upload complete but nothing on screen

Possible causes:

the wifi ssid is invalid: the name of the ssid you are using includes spaces or special characters (like: "my super wifi")*

→ Use a wifi ssid and passwords which are simpler (like: "mysuperwifi")

If you are on a Mac Computer, the adaptator for USB cables (white cable on the picture below) does not work:



→ try changing the usb cable. Some cables don't work.

The end

Find references for this lesson, and other lessons, [here](#).



This course is made by Clement Levallois.

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