**clientCode documentation**

Raspberries settings

1. The clients that will be physically connected to the fan modules are raspberries. You can use either raspberries pi 3 or 4. In my case I use both. To configure them you can use **Raspberry Pi Imager** app, following the instructions of this document, <https://bricolabs.cc/wiki/guias/guiadeinicioraspberrypi2021> . Make sure you put a different hostname for every raspberry, so that later you can distinguish them.
2. After that, you will connect your raspberries to current. Now, open the **Advanced IP Scanner** app to scan all the active ip addresses on your net. If the configuration has been done correctly you will see your raspberries and their ip addresses.
3. Now, using the **PuTTY** app, connect to each one of your raspberries introducing their ip address. When you do that, for every one of your raspberries a new terminal window will open. There you can navigate through its files and folders.
4. Open the **pythonCode** folder (for example on Visual Studio). The file used for the raspberries to connect to the server, is the one called **pwm\_client.py**.
5. On the raspberry’s terminal, find a place to save this file. Once you find the place you can do *nano pwm\_client.py* and in this file paste the content of the **pwm\_client.py** file. Make sure you know the location of the file.

Connection (if the previous configuration has been already done)

1. Connect the raspberries to current.
2. Open **Advanced IP Scanner** and with **PuTTY** connect to each one of them.
3. In the terminals, search for the location of **pwm\_client.py**. To execute it you need to introduce the IP address and a port number of the server. So, before executing the file, make sure the server is active and listening for clients.
4. Next, execute the file like this: *python pwm\_client.py “ip” “port”*.
5. If the connection is successful, it will be printed, *I am client x*. You are now connected to the server.
6. From now on, you won’t have to use the raspberries anymore.