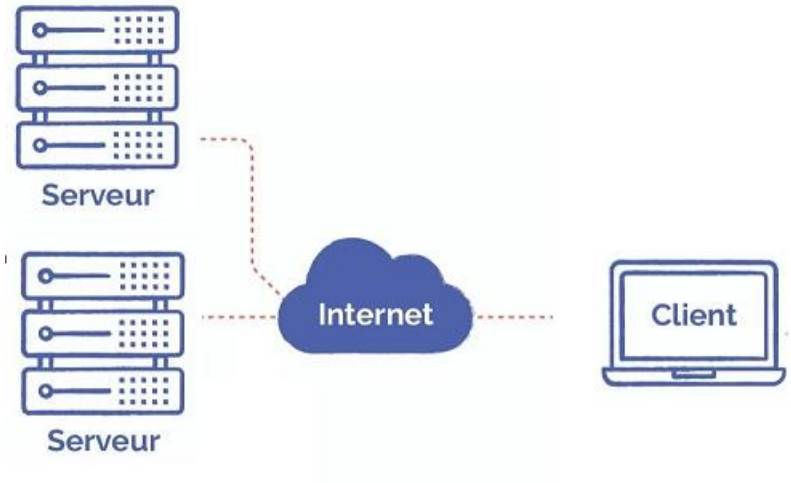
SAE 3.02

SHELL
GUI GUIDE

DAOUDI KHALIL

In this project we want to create a client-server system to send system commands to monitor and diagnose machines or servers remotely.

I will first present the architecture of my project:



Here is a server on the right of the diagram it will be launched using the script Server.py then will be waiting for a connection from a client such as for example on the left of the diagram a client will connect to the server launch using its graphical interface. It will therefore be necessary to indicate the port and the IP address of the server. Then it will be possible to retrieve information from the server using certain commands that we will type in the graphical interface.

1) Installation of libraries

Here is the list of libraries to install:

- PyQt5

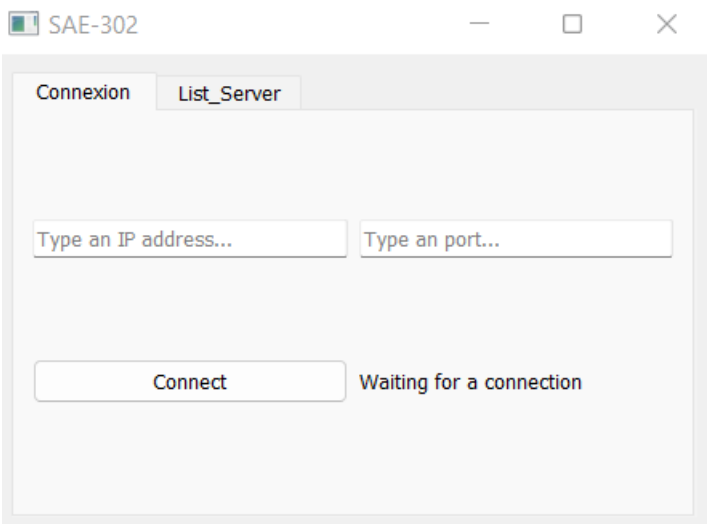
- psutil (needed for RAM and CPU commands)

2) How to use the interface

First launch the server script with port 5 for example.

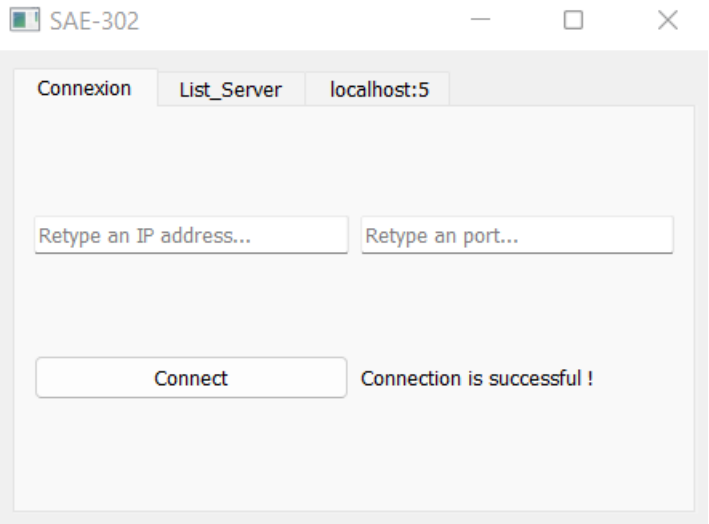
```
C:/Users/proda/Desktop/SAE302/Server.py 5
```

Then run the client script that will open the graphical interface.



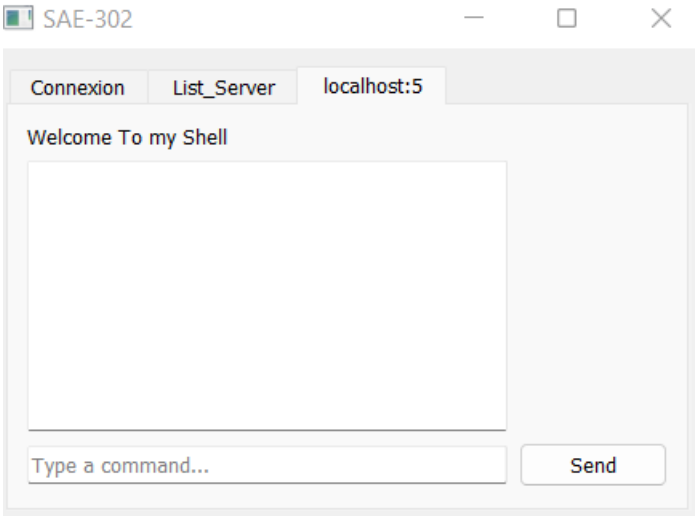
As you can see a sentence is written next to the connect button which specifies that it is waiting for a connection.

Then just enter the IP address and the port such as localhost and port 5.

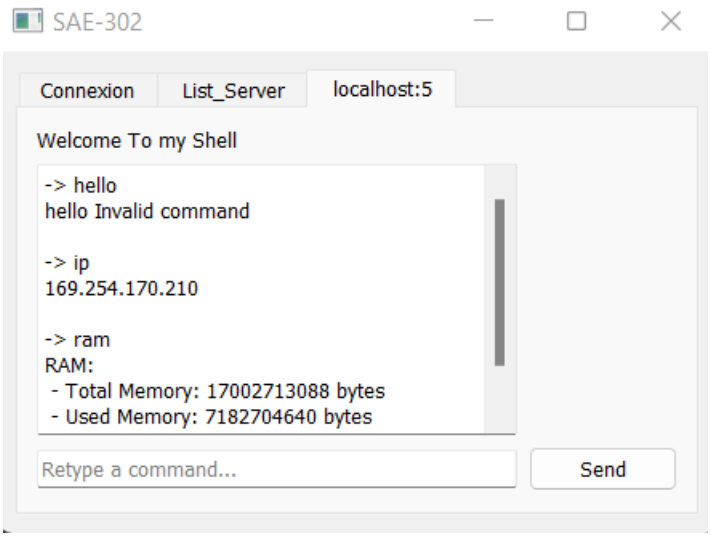


Once the port and the IP address enter you just must press enter or press the connect button then we can notice that the sentence to change that the connection was successful.

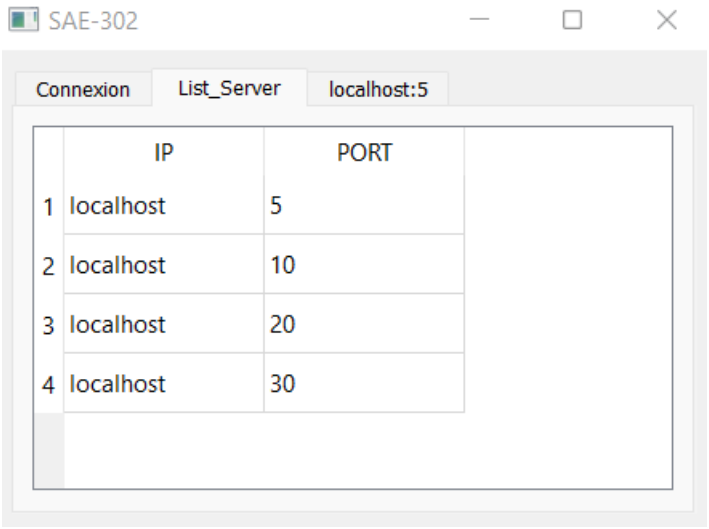
A window has been added



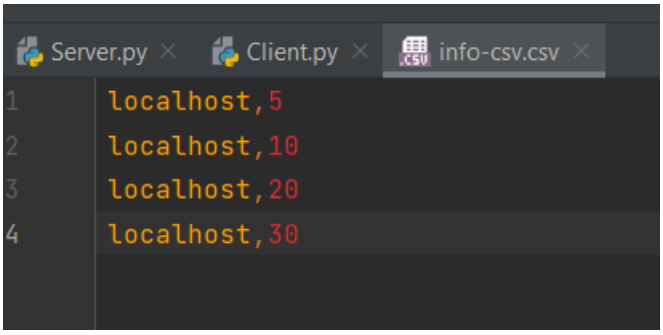
Here is the client shell connecting to the server on port 5 so it is possible to write commands in the bar below then press enter or the send button to send.



Once the commands type the answers appears in the interface if the command is not recognized then it displays invalid command otherwise the server sends the answer like the IP address or the ram...



A server list is also available on another window which retrieves the elements of a CSV file so for it to work I advise you to create a csv file yourself and fill it in as below.



Unfortunately, I don't have the option to add directly to the csv file from the GUI.

Finally, it is possible to quit the graphical interface with the red cross without error or to type the disconnect or kill command to kill the server.