José Manuel Chávez Reynoso 4528485
Sistemas para IoT
U1 A1: Cliente-Servidor en Python

Brief

We wrote two python scripts to create a client-server application.
The server and client communicate thru port 5000, in this case we're using loopback address as the communication is made within the same host.
The server must be running before client connects, so it starts hearing for incoming connections, then we run the client and we are able to establish connection from point to point.

Code

//server.py

```
import socket


def server():
    host = socket.gethostname()
    port = 5000

    server_socket = socket.socket()
    server_socket.bind((host, port))
    server_socket.listen(2)

    conn, address = server_socket.accept()
    print("Conexion: " + str(address))
    while True:
        data = conn.recv(1024).decode()
        if not data:
            break
        print("User: " + str(data))
        data = input(' -> ')
        conn.send(data.encode())

    conn.close()

if __name__ == '__main__':
    server()
```

//client.py

```python
import socket

def client():
    host = socket.gethostname()
    port = 5000

    client_socket = socket.socket()
    client_socket.connect((host, port))

    message = input(" -> ")

    while message.lower().strip() != 'byebye':
        client_socket.send(message.encode())
        data = client_socket.recv(1024).decode()
        print('Server: ' + data)
        message = input(" -> ")

    client_socket.close()


if __name__ == '__main__':
    client()
```

Evidence