

1.1. Administrator/Server

Purpose of the server

The administrator can access to the server, controlling the flow of protocols and the database, able to:

- Change the database, although it requires a Database browser.
- View the protocol messages in the console while the clients are interacting.
- Shutdown directly the server through a command and prefix password.

```
[Server] [OUT] Replied : {"type":"RESPONSE","action":"LIST_APPOINTMENTS","requestId":"list_mes
[Server] [IN] Received: {"type":"REQUEST","action":"LIST_MESSAGES","role":"DOCTOR","requestId":"list_mes
[Server] [OUT] Replied : {"type":"RESPONSE","action":"LIST_MESSAGES","requestId":"list_mes
[Server] [IN] Received: {"type":"REQUEST","action":"LIST_MEASUREMENTS","role":"DOCTOR","requestId":"list_mes
[Server] [OUT] Replied : {"type":"RESPONSE","action":"LIST_MEASUREMENTS","requestId":"list_mes
[Server] [IN] Received: {"type":"REQUEST","action":"GET_MEASUREMENT_VALUES","role":"DOCTOR","requestId":"list_mes
[Server] [OUT] Replied : {"type":"RESPONSE","action":"GET_MEASUREMENT_VALUES","requestId":"list_mes
```

Figure 1. Protocol messages flow in console

```
[Server] Connection closed for / [REDACTED]
shutdown
Enter admin password to confirm shutdown: [REDACTED]
[Admin] Shutting down server...
[Server] Shutting down thread pool and DB connection...
[DB] Connection closed.
-----
[Server] Server stopped successfully.
```

Figure 2. Server shutdown through command and password

How to make it work?

- 1- Initialize the server by *run* in IntelliJ. Can be also done by running the jar file.
- 2- The server will function automatically, meaning it doesn't require any action from the administrator to accept new clients.
- 3- The administrator can observe through the console the protocol messages, viewing who is connecting and if the client has closed the connection.
- 4- To shut down the server must write "shutdown" command in the console and password (it is stabilised as "admin").