

Bitalino's Parkinson Application – Admin Manual

Running the application

Server

The server is the first program that needs to run. If no server is running, the connections of the clients and the doctors will fail. Once running, the server requires of no interaction.

Client

The client can be started as soon as there is an available server. The interaction between the client and the server is done through the command line, where the user introduces data as he is required. The Bitalino device needs to be paired to the computer prior to its use. Multiple clients can be running at the same time.

Doctor

The doctor program can be started as soon as there is an available server. As with the case of the client, the doctor interacts with the server through the command line. Multiple doctors can be running simultaneously.

Communication protocol

Server-Client

First, the client needs to introduce the address of the server. Afterwards, the application will ask for a username and a password. This are sent to the server, where they are verified to be valid and a response is sent to the client.

Once the patient has signed in, he will introduce the signs and symptoms and will record two or more signals. This information is sent to the server, where it is saved in two different files in a directory with the username of the client. Afterwards, the client releases resources and disconnects.

Server-Doctor

The doctor needs to introduce the address of the server and to write his credentials in the same way as the user. Once in, the doctor will receive from the server a list of patients. He can choose to work with one or to leave. If he exits, his resources will be released before.

If he chooses a patient, he can tell the server so and will receive the files corresponding to this patient. He will then be able to view, modify or delete a file. When viewing is chosen, the server will send the information to the doctor as a string. This is also done for modifying a file, but the doctor can respond with some text that the server will add to the end of the file. Finally, when deleting, the server will directly receive the name of the file to be eliminated.