CHAT SYSTEM USER MANUAL Version 2.2



Revision History

Version	Date	Description
1.0	10.12.18	Initial draft - basic data structures
1.1	19.12.18	Added user discovery and username exchange in UDP
1.2	25.12.18	Added message exchange
1.3	11.01.19	Added file exchange
1.4	12.01.19	Username change is made possible
2.0	15.01.19	Interface window created
2.1	16.01.19	New WAN connection mode added
2.2	17.01.19	Link to a local Postgresql database

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1) Introduction

1.1) Purpose of this document

The purpose of this manual is to show the capabilities of the ChatSystem and how to properly use it. The goal of this product is to allow the user to have chat sessions with connected users in a way so that previous sessions information can be easily retrieved later. This product should be user-friendly.

1.2) Intended audience

Our intended audience is customers using it in the workplace and wishing to facilitate communication with their teammates.

1.3) What is ChatSystem

The task of this project is to provide a chat service allowing to have chat session with other users and easy access to previous chat session information. The Project outputs will be development of a small software desktop that runs locally at client machine and connects to distant clients through network connection protocol. This project will identify the possibilities of making messenger programs context aware and define an architecture that supports a number of instant messenger session, and implement a general framework, database connected graphical user interface and specific components needed for different messengers.

2) Computer demands and running the program

2.1) Computer demands

ChatSystem must be installed beforehand (cf. readme) by an authorized and competent person with access rights. PostgreSQL must be installed on the computer and the installer must have created the database to-be-linked to the program as described in the readme. The computer must also have a JRE (Java Runtime Environment) version 10 or older.

A LAN connection is required to send messages to other users. An Internet connection is required to use the presence server. The server must have a routable IP which is not provided with the application. The program is expected to work on all platforms supporting Java 8 and PostgreSQL 9.1, it will run on Windows (Windows Vista and later), Solaris (version 10 and later), Mac OS X, Linux (all recent releases), and other Unix OS.

2.2) How to run ChatSystem

See the README.

3) How to use ChatSystem and supported functionalities

3.1) Login view





Fig.1 - Login view

When the program is executed, the login view should appear by default. The login view is composed of a title bar, the program title, a login text field, a connection mode radio

button and a Enter button. The title Bar contains the name of the program, and three buttons: Minimize, Maximize/Restore Down and Close Button, which are windows standard.

3.1.2) Choose a nickname

You can choose your nickname by typing it on your keyboard in the login text field provided for this purpose. Your nickname can't contain any blank spaces and can't be 'listRQ', 'disconnect' or 'end'. You will get an error message if your nickname is not convenient because it's already used by someone else or because of a format error.

3.1.3) Choose the connection protocol

Before login, you must choose the connection protocol by ticking the right one. *LAN-UDP Connection* will connect you to your local network and thus you will only be able to chat with other people connected in the same local network.

WAN - Presence Server will connect you to a server via the Internet and allow you to chat with other people connected to that same server. You must have an internet connection for this.

3.1.4) Enter the main ChatSystem view

To login, click on the Enter button after choosing a nickname and a connection protocol.

If you choose to connect in WAN Server mode, the following window will appear.



Fig 2. Wan Server Connection View

Enter the IP address of the distant server that you want to connect with in the text field, then click on the Connect button.

3.2) Main view

3.2.1) Description of the view

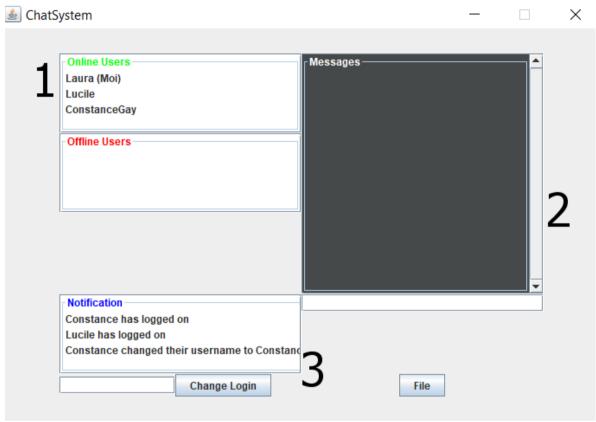


Fig 3. Chatroom View

- (1) This is the users window. You can see which users you can chat with (in Online Users) or you have chatted with (in Offline Users).
- (2) This is the message window. You can see the historic of your communication with a user. You can write a message in the blank space.
- (3) This is the notification window. You can see the logs and the username changes. You can also change your login here.

3.2.2) Open a session

To open a chat session, double click on a name in the Online Users window.

3.2.3) Send a message

To send a message, type it in the dedicated blank space as described in 3.2.1 and then press the enter key to send the message. You cannot send a message to someone who is in the "Offline Users" window.

3.2.4) Send a file

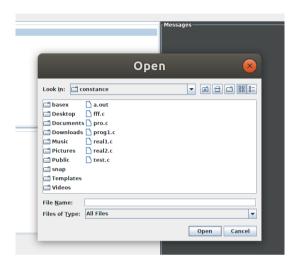


Fig 4. Select file to send view

To send a file, click on the provided button "File" and click on the file you want to send, then press "OPEN".

3.2.5) Receiving a file

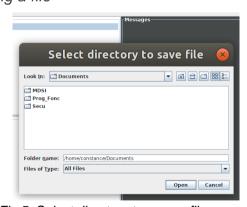


Fig 5. Select directory to save a file

When you will receive a file, you will get a message in the conversation that a file was sent and then a window will open with the title "Select directory to save file". You can then select in which directory you want to save the file.

If you don't want to save the file, click on cancel or the red cross on the top right of the pop-up window.

3.2.6) Modify nickname

To modify your nickname, type your new nickname in the dedicated blank space as described in 3.2.1 and then press the enter key. As your first nickname, your new nickname can't contain any blank spaces or correspond to 'listRQ', 'disconnect', 'end' or another connected user's nickname.

3.2.7) Retrieve an old message

To retrieve an old message, open the corresponding conversation and scroll up to find the message you want. This will work on both Online and Offline users. The Offline Users box shows the IP address and the last nickname used by the user.

4) Unsupported functionalities and exceptions

To contact other users over the Internet, the WAN Server address must be routable otherwise you will not see other users that are not on your local network.

5) The presence server and how to run it

The presence server should be set up by an authorized and competent person. It is an entirely separate application from the ChatSystem application.

5.1) Computer demands

The computer on which the presence server runs must have a routable IP address in order to function outside of a local network.

The computer must also have an internet connection.

5.2) How to run the program

Double-clicking on the jar file icon will launch the following window:



Fig 6. Server view

The local address given is the address of the server, it is the address that must be given to the ChatSystem interface when connecting in WAN mode (see part 3.1.4). To properly shutdown the server, click on the "Disconnect" button or on the cross on the top right corner of the window.

6) Privacy Policy

6.1) How we collect personal data

This application will collect some data to be effective, such as other users address IP and the content of the messages sent and received. All this data will be stored locally on your computer and can be deleted by a competent person.

6.2) How we use personal data

None of the data is reused for any other purpose than to allow you discuss with other people through this application. All collected data can be found in your local database.