# Mandatory Assignment 1 - Chat system Protocol

List of allowed messages (and their meaning):

# JOIN <<user\_name>>, <<server\_ip>>:<<server\_port>>

From client to server.

The user name is given by the user. Username is max 12 chars long, only letters, digits, '-' and '\_' allowed.

# J\_OK

From server to client. Client is accepted.

# J\_ER <<err\_code>>: <<err\_msg>>

From server to client.

Client not accepted. Duplicate username, unknown command, bad command or any other errors.

### DATA <<user\_name>>: <<free text...>>

From client to server.

From server to all clients.

First part of message indicates from which user it is, the colon(:) indicates where the user message begins. Max 250 user characters.

#### **IMAV**

From client to server.

Client sends this heartbeat alive every 1 minute.

#### QUIT

From client to server.

Client is closing down and leaving the group.

#### LIST <<name1 name2 name3 ...>>

From server to client.

A list of all active user names is sent to all clients, each time the list at the server changes.

# Note:

This notation <<info>> indicates a placeholder, and they need to be replaced with appropriate content.