title Group 21 Sequence Diagram

participant User

participant LoginWindow

participant ApplicationWindow

participant ChatClient

participant Server

participant ChatServerApplication

participant Other Clients

participant ActiveMQBroker

ChatServerApplication->ActiveMQBroker: start

ChatServerApplication->Server: start

User->+LoginWindow: start

LoginWindow->ChatClient: instantiates

LoginWindow->+ChatClient: connect

ChatClient->-ActiveMQBroker: connect

LoginWindow->-User: prompt for username

User->+LoginWindow:enter username

LoginWindow->+ChatClient: attempt login

ChatClient->+Server: login request

Server->Server: check login info

Server-->-ChatClient: login response

ChatClient-->-LoginWindow: confirm login

LoginWindow->-ApplicationWindow: instantiates

destroy LoginWindow

ApplicationWindow->+ChatClient: get chatrooms

ChatClient->+Server: chatroom list request

Server-->>-ChatClient: chatroom list response

ChatClient-->>-ApplicationWindow: return chatroom list

ApplicationWindow->>User: display rooms

User->>+ApplicationWindow: enters broadcast message

ApplicationWindow->+ChatClient: broadcast

ApplicationWindow->-ApplicationWindow: end task

ChatClient->>+Server: broadcast

ChatClient->-ChatClient: end task

Server->>ChatClient: user message

Server->>-Other Clients: user message

User->>ApplicationWindow: select user to send message to

User->>+ApplicationWindow: enters private message

ApplicationWindow->>+ChatClient: send user message

ApplicationWindow->-ApplicationWindow: end task

ChatClient->>+Server: user message

ChatClient->-ChatClient: end task

Server->>-Other Clients: user message

User->+ApplicationWindow: change chatrooms

ApplicationWindow->+ChatClient: enter chatroom

ChatClient->+Server: enter chatroom request

Server->Server: add user to new chatroom

Server-->>-ChatClient: enter chatroom response

ApplicationWindow->ChatClient: get current chatroom

ChatClient-->>-ApplicationWindow: return new chatroom

ApplicationWindow->User: display new chatroom

User->+ApplicationWindow: log out

ApplicationWindow->>+ChatClient: log out

ChatClient->>-Server: log out message

destroy ChatClient

destroy ApplicationWindow

Server->Server: remove user from chatroom