SNAKChat
A CS 252 Lab Project

Introduction:
We have designed a chat application using PyQt GUI as the user interface and python socket programming at the backend. Chat application supports creating of groups, group chats, multimedia messaging, LDAP registration besides the basic chat functionality

Running the software:
Find the following files in `SNAKChat/src` directory:
- `server.py`
- `chatclient.py`

Open a terminal on any machine on the same network as the chat server you are connecting to and run:
`$ bash script_client.sh SERVER_IP_ADDR PORT_NO username password`
Enter the same value for port number as that of the chat server. The username and password correspond to the the LDAP username and password respectively.

This should open up a GUI window.

Note: If you want to set up your own server:
Open up a terminal and run the following command:
`$ bash script_server.sh SERVER_IP_ADDR PORT_NO`
Specify IP Address of the machine on which server is hosted on inside the file server.py and a random port number in the command above

Logging In:
Logging in requires sending the credentials in the command itself.
The chat application matches the credentials with those hosted on
www.cs252lab.cse.iitb.ac.in. This authentication server can be changed by editing this url in server.py.
If the credentials are correct, the main chat application window would open up, otherwise you'll have to try logging again.

Chatting:
On the left side, you will see a list of all users who are registered on the chat server. They include all users who have logged in at least once onto the network. Click on any of the buttons with the user names.
Now type away into the chat box in the bottom right and hit 'Send'! Do not press 'Enter' inside the textbox. I.e. no '\n' characters.

Create a new group:
Click on 'Create group' at the bottom left of the window.. You'll find additional fields on the window screen. Check all the users you want in the group. Enter a quirky group name for your

group (PLEASE DO NOT ENTER A SPACE IN THE NAME), submit and you'll find another button for your newly created group on the left, click on it and chat away!

Log out:
Find the Logout button on the top right corner of the application. Clicking on it closes the application.

That's more than enough to get you started on our chat app!
Cheers!