ChitChat User's Guide

Introduction

ChitChat is a Flask-based web application that implements a simple chit-chat service. ChitChat consists of HTML, PostgresQL DB, and Flask-based Python web-server. Users can login and then send messages to others that are logged in. The messages may be sent globally or to specific rooms. Messages are saved in a DB that incudes the user, message, and room. Users can also search the DB of messages. The search is dependent upon the room. If a user is logged in globally, the search examines the entire DB. If the user is logged in a specific room, the search is restricted to messages in that room.

Login

The browser provides a login panel with three entries:

Username:
Password:
Room:

You have to have a user account with a password to login. You can examine the file chitchat.sql to see the list of users and their passwords.

Rooms

There are two types of rooms.

1. Restricted rooms. There are 5 restricted rooms: COOPERS, RONSFOLKS, CPSC110, CPSC125, and CPSC350. The DB places some of the accounts in these rooms. Only these users can login and join (/j) these rooms. The restricted rooms and users are as follows.
   - COOPERS – gusty jerrianne jeremy brandalee zachary emily
   - RONSFOLKS – raz ann lazy gusty
   - CPSC110 – gusty sepher shana shehan
   - CPSC125 – tyler campbell eric zach gusty
   - CPSC350 – gusty taka ron chris thomas shehan shana tyler campbell sepehr zach eric

   The password for each user is the same as their user name. The passwords are blowfish encrypted in the DB.

2. String rooms. All other rooms are simply strings. As long as two users agree on a string, they can enter a room and chat. For example gusty and raz can login and /j room B. If you do not provide a room on the initial login you are placed in a room GLOBAL. When in GLOBAL, your messages to to everyone; however, you do not see messages from other rooms.

Messages and Commands

After logging in the user has two entry panels. One is for sending messages and the other is for (a) searching and (b) entering commands.

1. The messages entry panel allows users to send messages. When you login and /j a room, all of the messages in the DB from that room are displayed in this panel. As you send messages or others (in the same room) send messages they appear in the panel.

2. The search entry allows for searching strings and entering commands. The search is restricted to the room you are in. The commands are the following:

   - \x - exit current room into room GLOBAL
   - \j <room> - join the room <room> (and exit current room). You cannot join a restricted room if you are not a member. You can join any string room.
   - \l - list all of the people in your room
   - %* <string> - special search. Search the entire DB for <string>. This special search is not restricted by the current room.

Main Files

The main files for studying the implementation details of ChitChat are the following.
1. index.html – contains the browser code.
2. server.py – contains the Python server code.
3. chitChat.sql – contains the SQL needed to create the DB
4. chitChatUsersGuide.pdf – contains this user's guide.