Overview

We finish all the functions on both server and client side. Clients are able to give proper input to the server, and server will act differently according to the input. User can check all list group, subscribe a certain group, create a new post for certain group, check how many unread post in subscribed group and read a post. The Server uses multithread to handle client, each client per thread. For login process, the server will use FIFO to login users

User documentation

rg menu: enter rg <group name> (optional integer)

integer : will read the corresponding post

integer : will redisplay the post with at most (interger) lines

q : quit the submenu and back to rg menu

r : r integer or r integer-integer, this will mark the corresponding post as read

n: list next N post, N is giving by the optional number when you get into the rg menu, if not specify, N will be 5

p : create a new post

q quit the rg menu go back to main menu

System documentation

To compile the source code, you need to run server in one terminal and client in other terminals,

Compile Server: (python 2.7 is required, not compatible with python3)

Python Server.py

Compile Client :

Python Client.py host port

The server is running an infinite while loop, once user send login information to the server, server will respawn a thread to handle each user separately. In each thread, server will handle client’s input and send back a response corresponding to the input.

Testing documentation

login Viresh # login with user id Viresh

help # display all commands with a brief description and syntax of each

ag 5 # list all existing groups, 5 at a time. Some may be subscribed

s 1 # subscribe to an unsubscribed group, say #1 in the current list (page 1)

n # show next five groups (page 2). Initially must have 15-20 groups

s 2 3 # subscribe to two unsubscribed groups in page 2

q # exit from ag command

sg 5 # list all subscribed groups, 5 at a time. Three shown, maybe more

u 2 # unsubscribe from the 2nd group in the current page

n # list next 5 groups if there are any. Pick a group, say comp.lang.c

q # exit from sg command

rg comp.lang.c 5 # reading the post titles in comp.lang.c, 5 posts at a time

# unread posts first, read ones after. Not reverse chronological is fine

4 # display the 1st page content of the 4th post in the current post list

n(\*) # display the content of this selected post until the end of post

# (\*) is not part of a command. It only means press n multiple times

q # exit from reading the post. The post list before '4' is shown

r 1-2 # mark the first two posts in this page as read

n # show the titles of the next 5 posts

p # make a post to this group. Prompted for post subject line

(subject) # enter post subject line. Prompted for post content

(content) # enter post content. It should have at least two paragraphs

. # enter a dot by itself on a line at the same time as Aich

# show post list, two new posts shown on top as unread

# interact with server, say, by press n, to see Aich's 2nd new post

q # Exit from rg command

logout # logout from the application