File list

config.dat

client.c

reservation\_server.c

README

Config file format

Client1=127.0.0.1:5000 <- Client interface IP: port number (always first line)

Client2=127.0.0.1:5001

Instructions

Make sure that config.dat file has all the clients listed properly with their IP addresses and ports.

Each client should be run using two arguments i.e. <Secretary name> and <Server IP> (Server Port is fixed at 4000)

Ex: client Sheila 127.0.0.1 (Sheila would be the name of the secretary)

Compiling

use the below commands in each folder to compile single and multiple access variants…

gcc -o client client.c

gcc -o reservation\_server reservation\_server.c

More about Client

Client program picks up a random UNIX time (epoch) between Aug 23, 8:00 to Aug 25, 17:00 and send a request for reservation to the server. It receives an acknowledgement as “1” in return from the server. Return of “0” means an error in request.

Client also has a child who listens to Server for any changes in the global schedule. Every client has its own copy of global schedule.

More about Server

Server maintains four structs as below:

Struct Requests

* Secretary\_name
* Log\_timestamp
* Start\_time
* hostname
* port

Struct client\_register

* Hostname
* port

Struct reservation\_queue

* Struct Requests

These structs are used to store the active requests. There is child2 process running on the server which makes reservation once in every 10 seconds and clears the active queue. Once the reservations are made, the snapshot of the reservation\_queue is shared with all the clients using their information from client\_register struct.

Thank you,

Manideep Bollu

Saifuddin Syed