

COMP90015 SM1 2018 Project plan

GROUP : 666

Aim

The project task is to build a simple multi-server system for broadcasting activity objects between a number of clients. This multi-server system has three main features:

- 1.load balance client requests over the servers, using a redirection mechanism to ask clients to reconnect to another server.
- 2.allow clients to register a username and secret, that can act as an authentication mechanism. Clients can login and logout as either anonymous or using a username/secret pair.
- 3.allow clients to broadcast an activity object to all other clients connected at the time

Task breakdown

INVALID_MESSAGE	Both client and server	sender close connection
AUTHENTICATION	Server -> server	
AUTHENTICATION_FAIL		close connection
INVALID_MESSAGE		
no-reply (success)		
LOGIN	Client -> server	
Success	server->client	
Whether REDIRECT?	server->client	close connection
Failed	server->client	close connection
LOGOUT	client->server	close connection
ACTIVITY_MESSAGE	client->server	
AUTHENTICATION_FAIL		close connection
INVALID_MESSAGE		
Succes		
ACTIVITY_BROADCAST		
SERVER_ANNOUNCE	Server -> server	

REGISTER	client->server	
Failed	server->client	close connection
Success	server->client	
LOCK_REQUEST	Server -> server	
Denied (INVALID_MESSAGE)		
Allowed(INVALID_MESSAGE)		

Individual tasks

The code part:

Zhengqing Zhu: [INVALID_MESSAGE and AUTHENTICATION](#)

Shujing Xiao: LOGIN and LOGOUT

Ziyi Xiong: [ACTIVITY_MESSAGE and SERVER_ANNOUNCE](#)

Ziqi Zhang: REGISTER and LOCK_REQUEST

The report part:

Ziqi Zhang: Introduction

Ziyi Xiong: Server failure model

Shujing Xiao: Concurrency issues

Zhengqing Zhu: Scalability

Expected completion

Week6(Mon.-Thur.): “[INVALID_MESSAGE and AUTHENTICATION](#)”

Week6(Fri.-Sun.): “LOGIN and LOGOUT”

Week7(Mon.-Thur.): “[ACTIVITY_MESSAGE and SERVER_ANNOUNCE](#)”

Week7(Fri.- Mon. on week8): “REGISTER and LOCK_REQUEST”

Week8(Tues.): Integrate the code section and debug

Week8 (Wed.): The individual report part

Week8 (Thur.): Combine personal report and add meeting minutes