

ISAAS THE HOMEWORK PROJECT DESIGN IN DETAILS

March 30, 2016

OVERVIEW

1. Project Scope

Development time: 5 days

Start date: 9:32 AM April 4, 2016

End date: End of April 9 2016

2. Requirements

Requirement:

Build a simple chatting program which includes:

- A chat server which allows chat clients to register and responses to chat clients' requests
- Chat clients which can register name to chat server, get list of other clients and establish chatting session with other client
- Chat server and chat clients run on different processes.
- Programming language: Python
- No need GUI, client can also be console-based program
- All of code lines need to be self-writing
- A document about how TCP socket connection do (self-writing)

Release package:

Below items need to include in your release package:

- Source code
- All documents for your development process
- Release note
- User guide

3. The Design

- Client side app: PyDelta (Console)
- Server side app: PyDeltaSE (Console)
- Port for connection: 49512 (a private port)

FEATURES:

COMMAND	BEHAVIOR
1. Login to server	
LOGIN <user name> <password>	1.1 When user login successful server response : - <username> LOGIN SUCCESSFUL 1.2 If user enter wrong username/password, server response: - LOGIN FAILED
2. To Register a new account	
REGISTER <user name> <password>	2.1 If user create account successful, server will return: CREATE ACCOUNT <user name> SUCCESSFUL 2.2 If user create account successful, server will return: CREATE ACCOUNT <user name> SUCCESSFUL - If their username is registered, this message will appear:
3. Get list of user online from server	
GETLIST	3.1 Server will return the list of user online to client 3.2 If there is no user online, server response: NO USER ONLINE
4. Chat with another user	
MGS <des_username> <content>	4.1 Only can use when user logged in. 4.2 If destination user is not online, server will return: <des_username> IS NOT ONLINE
5. Invalid command	
- Command with wrong arguments - Wrong command	5.1 Server will return: SERVER RESPONSE: INVALID COMMAND