Program Assignment *#2*

Chat Chat! & Whisper

- **Due date : 2022. 11. 18 (Fri) 23:59**

HW#2: Chat Chat & Whisper (30pt)

- Goal
  - Understanding of multi-threaded socket programming
  - Analysis of well-made serve-client applications
  - Learn (simple) GUI Java programming
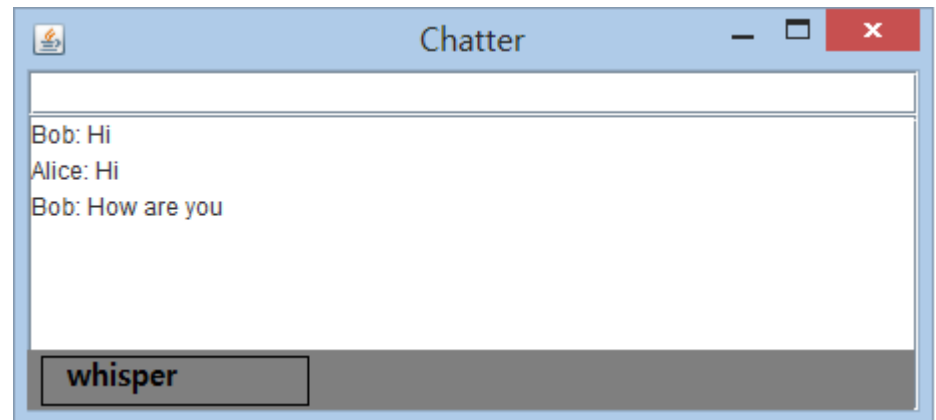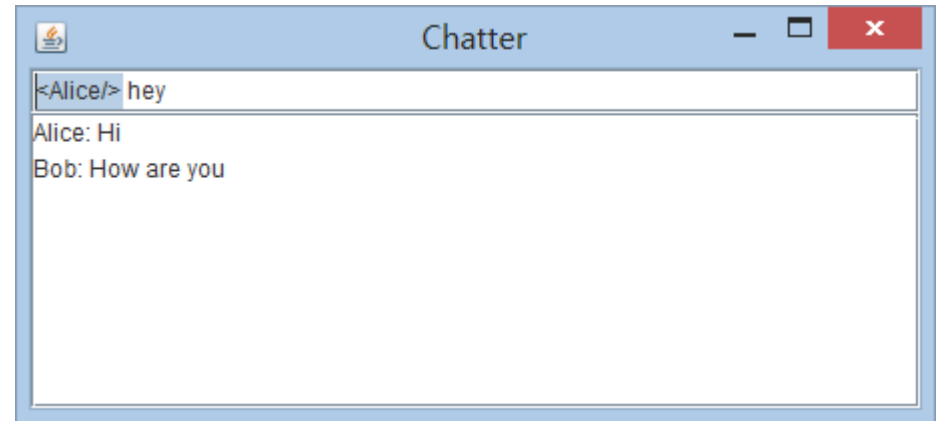
Overview

- Big Picture
  - Analysis: See & understand well-made multi-threaded server-client applications
  - Extension: Add a new function
  -

- Functions you have to additionally implement
  - @Client&server : Through [*Whisper*] function, each user can send a secret message to whom he/she chooses
- Protocol for Server-client Interaction
  - Commands and responses formats

Requirements

- Analyze & Extend the original codes
  - Add comments to the original codes and your own codes
- The server must handle multiple clients at a time
- Server manages the room information and broadcasts the state to all clients in the room
  - Entrance / Exit
- Through [Whisper] function, each user can send a secret message to whom he/she chooses
  - Bonus Features: Add GUI control (e.g., button, selection box, or etc.) for the use of whisper function in the client program
- Server information at a client is stored with a configuration file (e.g., serverinfo.dat)
  - Refer to HW1

Whisper support

□ Default:
  ▪ You may treat the whisper function via a special tag
  ▪ E.g. <ID/> message

□ Bonus Features (GUI)
  ▪ You may add a button to choose the target receiver for whispering

  ▪ Or, you can use a different design & UI !

□ Implement one or more whisper function

Grading: 30 points

Features : Good / Mid / Low credits

- Basic running/communication : 10 / 5 / 0 points
- Whisper support: 10 / 5 / 0 points
- Analysis/Report: 10 / 5 / 3 points
- Bonus Features (GUI): bonus 10 / 5 / 0 points

- Any violation of submission guideline
  - File name or file format
  - -5 points

- No late submission is allowed
  - Late submission : 0 point

What should you do also ?

- 1. Report (written in Korean)
  - Describe the architecture of your application
  - Explain the message formats (protocol for your application)
  - Should include:
    - **all your source codes be attached on the tail of the template document**
    - **Screenshots (at least three output cases)**

- 2. Comments in source files

Submission Guideline

- Zipped Java project files
  - export your project (source files + environments files)
  - https://www.admfactory.com/how-to-import-and-export-java-projects-in-eclipse/
  - One report file   (Template provided)
  - HW2_YOURNAME.docx
- Compressed the document and project files with a single zip file
  - NAME: "your name"-2.zip

End.