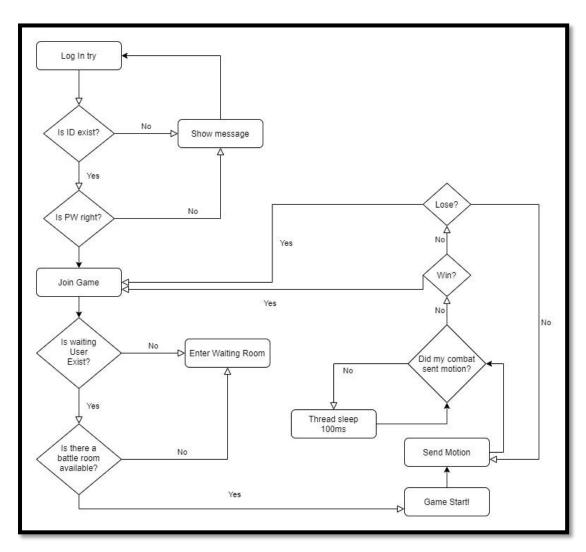
# Report

Name: Doyeol Kim

## 1. Flow Chart



#### 2. Class Diagram

Motion UserData battleRoomData int cost String ID String client1ID char motionType String PW String client2ID int code Motion client1Motion String getUserID() String getUserPW() Motion client2Motion void setCost (int cost) void setUserID (String ID) void setMotionType (char type) int peekNum void setUserPW (String PW) void setCode (int code) boolean isFull int getCost() void insertMotion (String s, Motion m) char getMotionType() int getResult (String s) int getCode() int getCombatMotionCode (String s) int getBattleResult(Motion x)

#### 3. Development Environment

Used IDE: Eclipse (Version - 4.15.0.v20200305-0155)

Graphical User Interface (GUI): WindowBuilder (Eclipse Plugin)

JDK, JRE: 1.8.0\_241

#### 4. Detailed Program Manual (with screenshots)

#### [1] Execute Server.java (or server.jar)

This Server.java makes your computer to a server of this Dragon Ball Game.

In this Server java file, Server socket is using your computer IP address as a server, port number is "5123". Also, client program tries to connect server by IP address of the computer of client program, so if you want to run server and client in different computers, you can simply write IP address of server computer to Client program's corresponding code.

You can run program by eclipse or use command prompt to run jar file.

[Figure 1] Running server.jar by command program

```
| Description |
```

[Figure 2] Running Server.java by Eclipse

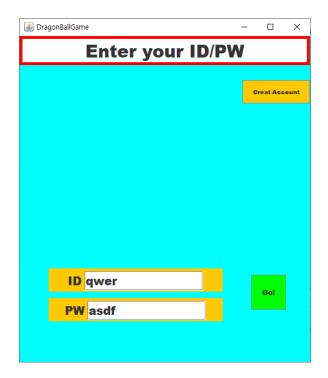
#### [2] Execute ClientFrame.java, Log in and Join Game.

This is program for client. This is also can be run by both eclipse and command prompt.

You can do some Log-In, Join-Game and so on.

The only way to exit program on GUI is close button on frame.

But while you are logged in, you cannot use exit button. Therefore, please log out first.

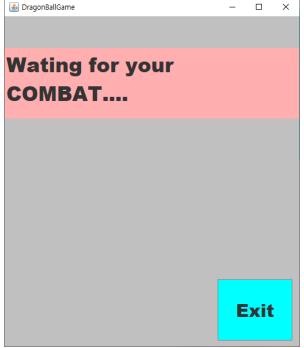




[Figure 3] Log In

[Figure 4] Create account



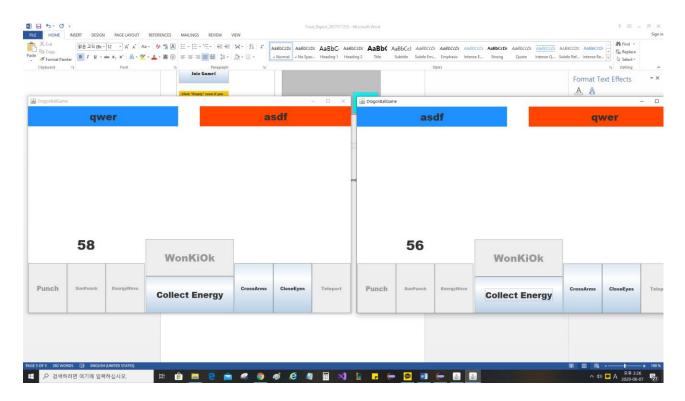


[Figure 5] Game Room

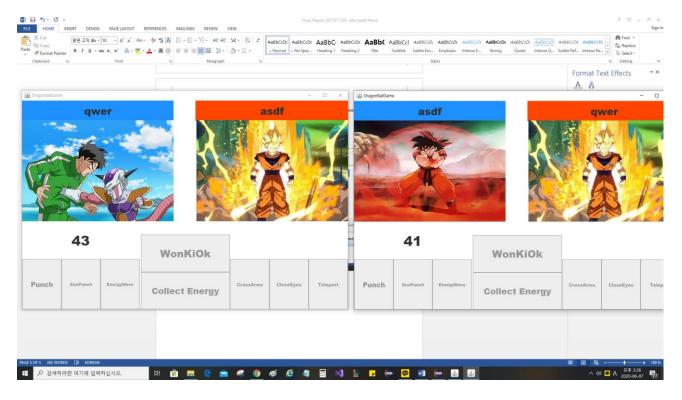
[Figure 6] Waiting Room

#### [3] Execute another client program to meet combat – Also Log in, Join Game.

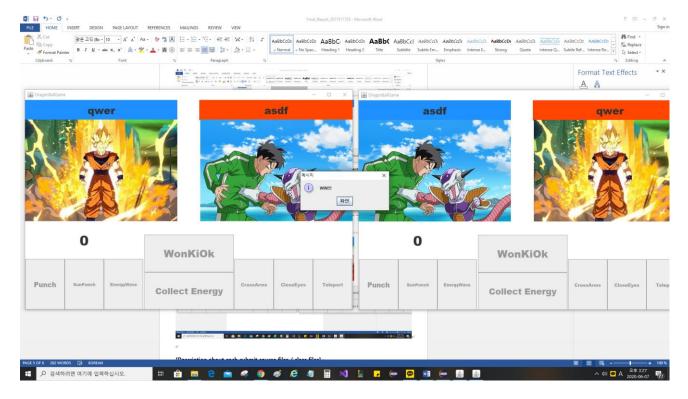
Because we are now using client and server in one PC, to test the game running we should execute client program again, to meet the waiting client.



[Figure 7] When a User pressed Join Button, while another player was waiting.



[Figure 8] Playing Example\_1



[Figure 9] Playing Example\_2

### [Description about each submit source files / class files]

- [1] client.jar : client program, exported as runnable jar file.
- [2] server.jar: server program, exported as runnable jar file.
- [3] ClientFrame.java : client java code.
- [4] Server.java : server java code.
- [5] getClientThread.java : java class to perform multi thread in server. Called by server.java.
- [6] UserData.java: java class to supervise users data.
- [7] Motion.java : java class to supervise motions when clients are playing game.
- [8] battleRoomData.java : java class to supervise battle room of 2 clients. Use Motion class as field. Battle rooms are most 10 available.