

Secret Code Guess Game Instruction

1. Single Player Guess Game

- Open both SinglePlayer.java and SingleServer.java and change the PORT and HOST fields according to your host address and port that you are going to use.

```
public class SinglePlayer {  
    // declare field variables and objects for global use  
    // public static final String HOST = "localhost";  
    public static final String HOST = "ml-c27n1.csit.rmit.edu.au";  
    public static final int PORT = 18745;  
}  
  
public class SingleServer {  
    // Declare field variables and objects  
    public static final int PORT = 18745;  
    public static final int BACKLOG = 1;  
}
```

- Upload all java files onto the server and compile the files through makefile. Make sure the java files must be stored with the same folder as makefile. After uploading all the files into the same file, run 'make' command to compile those files. If the files are compiled without any error, you are ready to play the game.

```
[s3558745@ml-c27n1 ass]$ ls  
GameConfig.class      MultiServer.class  
GameConfig.java       MultiServer.java  
GameLobby.class       ServerCoordinator$.class  
GameLobby.java        ServerCoordinator.class  
GuessGameThread.class ServerCoordinator.java  
GuessGameThread.java  single_communication_log.txt  
makefile              single_game_log.txt  
multi_communication_log.txt SinglePlayer.class  
multi_game_log.txt    SinglePlayer.java  
MultiPlayer.class     SingleServer.class  
MultiPlayer.java      SingleServer.java
```

- Run the server first with command 'java SingleServer'.
- Once the server starts running properly, you can connect your client file to it. The command is 'java SinglePlayer'.
- After everything works correctly, you can play the game and enjoy!

2. Multi Player Guess Game

- Proceed the same process as the Single Player Game version up to b phase.
- Run the server first with command 'java MultiServer' and this will open the server.
- After the server is open successfully, type command 'java MultiPlayer' to connect players based on how many players do you want to play in a game. This is available up to 3 people simultaneously.
- If there is only 1 player in the game lobby, the process is rather similar to Single Player version, however, in this case, you might have to register with your first name.
- If there are more than 2 players, the first player sets the secret code length, and others are asked to wait until the code is generated successfully.

```
[s3558745@ml-c27n1 ass]$ java MultiServer  
[SERVER SAYS] >> Server running on port 18745  
[SERVER SAYS] >> Waiting for player connections...  
[SERVER SAYS] >> The game lobby is now open  
[SERVER SAYS] >> Player has been connected to the server!  
[SERVER SAYS] >> First player on /10.102.128.128:41140  
[SERVER SAYS] >> The player host name ml-c26n1.csit.rmit.edu.au  
[SERVER SAYS] >> Would you like to wait for another player (Y/N)? Y  
[SERVER SAYS] >> The server is waiting for other players...  
[SERVER SAYS] >> Player has been connected to the server!  
[SERVER SAYS] >> Second player on /10.102.128.128:41140  
[SERVER SAYS] >> The player host name ml-c26n1.csit.rmit.edu.au  
[SERVER SAYS] >> Would you like to wait for another player (Y/N)? Y  
[SERVER SAYS] >> The server is waiting for other players...  
[SERVER SAYS] >> Player has been connected to the server!  
[SERVER SAYS] >> Third player on /10.102.128.128:41140  
[SERVER SAYS] >> The player host name ml-c26n1.csit.rmit.edu.au  
[SERVER SAYS] >> Would you like to wait for another player (Y/N)? Y  
[SERVER SAYS] >> The server is waiting for other players...  
[SERVER SAYS] >> Game start with 3 players  
  
[s3558745@ml-c26n1 ass]$ java MultiPlayer  
[SERVER SAYS] >> Inet address ml-c27n1.csit.rmit.edu.au/10.102.128.127  
[SERVER SAYS] >> Socket address /10.102.128.128:41140  
Welcome To MP Multi Player Guessing Game!  
Network Programming Assignment 1  
Semester 1, 2016  
s3558745 - Minyoung Cho  
[SERVER SAYS] >> Register with your first name  
[PLAYER SAYS] >> Min  
[SERVER SAYS] >> Please enter the secret code length between 3 and 8  
[PLAYER SAYS] >> 3  
[SERVER SAYS] >> The secret code is being generated...  
[SERVER SAYS] >> The secret code has been successfully generated with 3 digits!  
[PLAYER ATTEMPT 1] >> 364  
[SERVER SAYS] >> You have corrected the secret code. Congratulations!  
[SERVER SAYS] >> Your score is 100  
[SERVER SAYS] >> The secret code is 364  
[SERVER SAYS] >> Exit the game.  
[SERVER SAYS] >> Waiting for other players to finish their game...  
[SERVER SAYS] >> Every player has finished their game!  
[SERVER SAYS] >> Player Min achieved 0 point!  
[SERVER SAYS] >> Player Cho achieved 50 point!  
[SERVER SAYS] >> Player Allen achieved 100 point!  
[SERVER SAYS] >> Good job all!  
[SERVER SAYS] >> Press "q" to quit the game
```

- Also, this version has another function called "forfeit" meaning that you can forfeit (give up) the game while in progress by typing "f" in guessing phase. Then the user who has forfeited gets 0 score and waits until others finish their game.
- At the end of the game, all the players are given their achieved scores and also notified everyone's score with rankings from lowest to the highest.

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[PLAYER SAYS] >> 3  
[SERVER SAYS] >> The secret code is being generated...  
[SERVER SAYS] >> The secret code has been successfully generated with 3 digits!  
[PLAYER ATTEMPT 1] >> f  
[SERVER SAYS] >> You have forfeited this game!  
[SERVER SAYS] >> Waiting for other players to finish their game...  
[SERVER SAYS] >> Every player has finished their game!  
[SERVER SAYS] >> Player Min achieved 0 point!  
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```

- The server can keep running the game by typing "Y" key at the end of the game.
- Enjoy!