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COSC 3P91 Assignment 4

How to run:

- Run the Game Engine file (the server) then run the Client file to connect to the server.

No additional parts. Only the mandatory points.

- I or a): The server class is called Game Engine that can be found in the Game Package. The thread class in the server to support multi clients is called PlayerControl in Game Package. The client class is called Client in Game Package.
- Ii or b): the server socket can be found in the GameEngine class while the socket can be found in Client class.
- Iii or c): The communication between client and server is purely text based. The server will send text which is the guide for the player, asking them for input. While for player, the client will read the input and send that input to the server while reading and printing messages from the server. There is a 3 seconds delay in some cases in the client to ensure that when the server is idle (wait for something to be crafted), the client will be able to receive all of the messages (indicate the craft is completed) from the server before entering their input. Also , when the player connect to the server, they will be asked for id, if the id is not in database the server will notice them, if they are in then the server welcome them back. Can be found in multiple methods in PlayerControl and Client class where inputstream, outputstream, buffereader and printwriter are used for exchanging text.
- The database is just an arraylist with only 2 ids, 123 and admin. Since the prof only ask to check for id in database and not adding new id in, there's no option for adding new id. Also because the prof just want to check given id with the existed id, no "real" database (SQL) is created since arraylist will the job just fine.
- Iv or d): Once the player choose to exit, the thread will close its socket while the client will also close the socket.