

Java Networking Practice

There will be a single server and multiple clients. Any client will have the following four menu options (command-line based):

1. Connect
2. GetList
3. SendOne
4. Broadcast

Connect

The client will send the name to the server. The server will store the client's information.

GetList

The client will request the server to send the list of names of all the connected clients. The server will send the list.

SendMessage

The client will choose one from the list and request the server to send a message to that specific client. That specific client will display the received message.

Broadcast

The client will request the server to send a message to all the connected clients except itself. Then, all the clients will display the received message.

You have to design all the different types of messages between the server and the clients. You have to create new classes if required for proper encapsulation. You can use the provided codes in the theory class.

Java Networking Practice

There will be a single server and multiple clients. Any client will have the following five menu options (command-line based):

1. Register
2. Login
3. GetList
4. SendOne
5. Broadcast

Register

The client will send a name and a password to the server. The server will store the client's information.

Login

The client will send the name and password to the server. The server will authenticate it and, upon success, will add the client to the list of connected clients.

GetList

The client will request the server to send the list of names of all the connected clients. The server will send the list.

SendMessage

The client will choose one from the list and request the server to send a message to that specific client. That specific client will display the received message.

Broadcast

The client will request the server to send a message to all the connected clients except itself. Then, all the clients will display the received message.

You have to design all the different types of messages between the server and the clients. You have to create new classes if required for proper encapsulation. You can use the provided codes in the theory class.