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Echo Server

The Echo Server is a server that is created that allows clients to connect to. The server will receive and broadcast messages to and from all clients that are connected.

**Server.java**

Contains the main method which constructs and runs the GUI

**ServerController.java**

The ServerController file is used for starting the server, connecting clients to the server and broadcasting messages that are posted to every client

* ServerController is the constructor method that will connect the view to the controller, create a new array list for handling clients and will create the port number
* broadcast uses a passed in string to send to every client that is connected
* The run method will handle the create of new client connections to the server
* listenForConnection will start the thread that allows for client connections
* stopListening will terminate the connections

**ClientConnection.java**

The ClientConnection file handles the connection of clients to the server

* ClientConnection is the constructor that connects this file to the controller. As well as, it gets the input and output streams and buffer for connecting clients to the server
* The run method will continue to listen for new strings while it is still running
* the listen method will continue to read in messages from the buffer and broadcast them to everyone on the server
* sendMsg will write out the string that was given to broadcast

**ServerView.java**

The ServerView handles the GUI and its buttons controls

* postMsg shows what messages are being written to the server by the client
* postNumConnections formats the number of clients connected to the server so that it may display in the text field in the upper right of the GUI
* startButtonMouseClicked, By pressing the start button, the server starts up and allows for connections by clients
* stopButtonMouseClicked, By pressing the stop button, the server stop accepting connections and messages

Picture of program being used:

