

## README

The program was written entirely in Java. The full source code can be opened as an existing project via Eclipse.

**Summary:** Pub-Sub application, Server side with log files, and Client side program to chat via multiple topics.

### Client config file instructions:

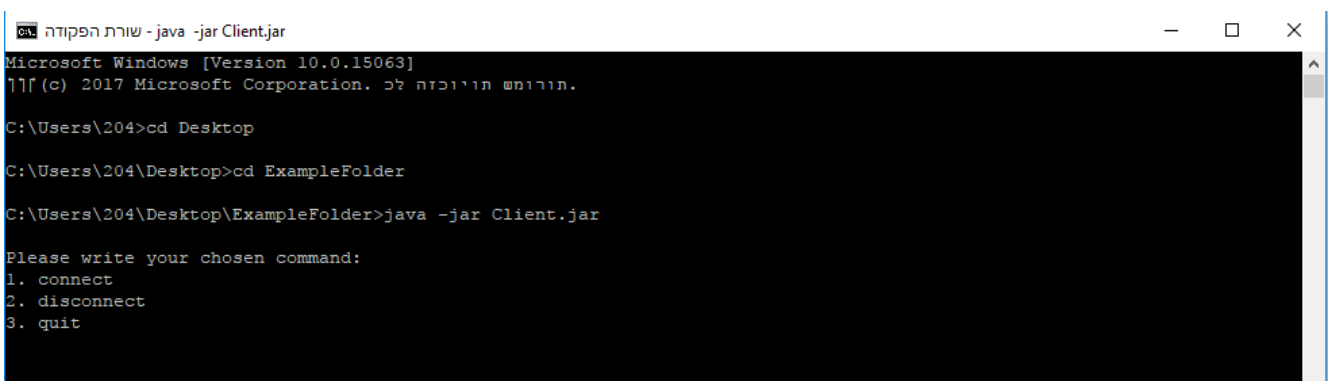
- The config file should be in the same folder as the jar file. The file contains the IP and Port of the server.
  - Any free port can be chosen to talk with the server, occupied ports will cause exception.
- The CMD should be routed to the configuration file destination, because the program is reading the config file from the CMDs dir. (save yourself the trouble)

### Client Instructions:

- Extract the jar (Client.jar) and config (configuration.txt) files to the same folder.
- Open the CMD and route to the extracted folder (saves problems with config destination). (e.g. C:\>cd C:\Example\_folder\Client\_folder)
- Run the client jar file:  
C:\example\_folder\client\_folder> java -jar Client.jar

From here on the client program is working. Follow the instructions inside:  
connect – to connect, disconnect – to disconnect, quit – to terminate program.

After running the jar the program should work:



```
שורת הפקודה - java -jar Client.jar
Microsoft Windows [Version 10.0.15063]
(c) 2017 Microsoft Corporation. כל הזכויות שמורות.

C:\Users\204>cd Desktop
C:\Users\204\Desktop>cd ExampleFolder
C:\Users\204\Desktop\ExampleFolder>java -jar Client.jar

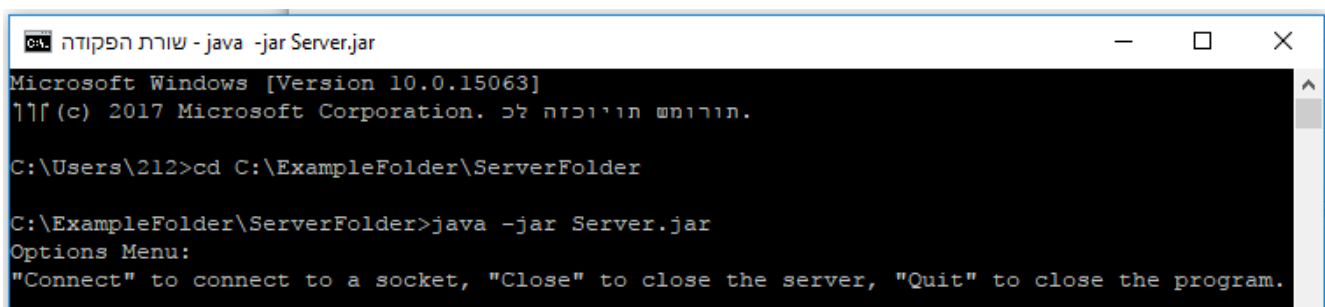
Please write your chosen command:
1. connect
2. disconnect
3. quit
```

### Server config file instructions:

- The jar and config files should be in the same folder. The configuration file contains the port that the Server will be listening to.
  - Any free port can be chosen to talk with the server, occupied ports will cause exception.
- The CMD should be routed to the configuration file destination, because the program is reading the config file from the CMDs dir. (save yourself the trouble)

### Server Instructions:

- Extract the jar (Server.jar) and the config (configuration.txt) files to the same folder.
- Open the CMD and route to the extracted folder.  
(e.g. C:\>cd C:\example\_folder\server\_folder)
- Run the jar file: C:\example\_folder\server\_folder> java -jar Server.jar
- Follow instructions of the program:  
connect – to connect, close – to disconnect, quit – terminate server program.

A screenshot of a Windows Command Prompt window. The title bar reads 'שורת הפקודה - java -jar Server.jar'. The window content shows the following text: 'Microsoft Windows [Version 10.0.15063]', 'תורומט חיוכזה לכ. 2017 Microsoft Corporation.', 'C:\Users\212>cd C:\ExampleFolder\ServerFolder', 'C:\ExampleFolder\ServerFolder>java -jar Server.jar', 'Options Menu:', and '"Connect" to connect to a socket, "Close" to close the server, "Quit" to close the program.'

```
שורת הפקודה - java -jar Server.jar
Microsoft Windows [Version 10.0.15063]
תורומט חיוכזה לכ. 2017 Microsoft Corporation.

C:\Users\212>cd C:\ExampleFolder\ServerFolder

C:\ExampleFolder\ServerFolder>java -jar Server.jar
Options Menu:
"Connect" to connect to a socket, "Close" to close the server, "Quit" to close the program.
```

### Servers Log file

While the server works, a "Log.txt" file will be generated in the same folder of the server. (e.g. C:\example\_folder\server\_folder\Log.txt).

The Log.txt file will contain the server logs with the clients. (Do not open with normal windows "Notepad" as it does not recognize "new line" characters. Notepad++ advised).