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SEG 2105 - Summer 2020 - Assignment 1

#### Notes:

- Many of the test cases say to run EchoServer, however, only ServerConsole was programmed to read inputs from the console since it is the server UI. So, ServerConsole was used in the test cases instead.
- After running through the testcases, I realized that my interpretation of #login and #login <login ID> might have been different from others. In my program, #login <login ID> could only be automatically sent by the client; I interpreted E7b such that #login <login ID> is not a command the user can type themselves. The client can still use #login since their ID is saved, which will invoke the automatic message of #login <login ID> to the server. I do not believe that the instructions stated that the client should be able to change their ID.
- I am limited to 2 computers and they have the same platform.

Test Case Logs - Part 2: System: Simple Chat

Testcase 2001

System: Simple Chat Phase: 2 to 4

Server startup check with default arguments

Severity: 1

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### Result: Successful

Testcase 2002

System: Simple Chat Phase: 2

Client startup check without a login

Severity: 1

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## Result: Successful

Command Prompt			×
C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\simplechat1>java rs\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; ClientConsole ERROR - No login ID specified. Connection aborted.	-classp	ath C:	\Use ^
C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\simplechat1>			

Testcase 2003

System: Simple Chat Phase: 2

Client startup check with a login and without a server

Severity: 1

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# Result: Successful

Command Prompt - java -classpath C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; Cli			×
C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\simplechat1>javars\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; ClientConsole clientA	-classp	ath C:\	Use ^
Cannot open connection. Awaiting command.			

Testcase 2004

System: Simple Chat Phase: 2 Client connection with default arguments

Severity: 1

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Result: Successful, similar but different text than specified. However, no message such as "Message received #login <loginID> from null."

## Server:

#### Client:



Testcase 2005
System: Simple Chat Phase: 2
Client Data transfer and data echo
Severity: 1

### Result: Successful

### Server:

### Client:

```
Scrient.
Scommand Prompt - java -classpath C\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; ClientConsole Cli...
C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; ClientConsole Cli...
C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; ClientConsole ClientA
ClientA has logged on.
```

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Testcase 2006

System: Simple Chat Phase: 2

Multiple local connections

Severity: 1

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### Result: Successful

#### Server:

```
© Command Prompt - java -dasspath C\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\Se... —  

C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\Simplechat1\java -classpath C:\Use \nabla rs\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\Simplechat1\java -classpath C:\Use \nabla rs\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\Simplechat1\java -classpath C:\Use \nabla rs\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\ServerConsole

Server listening for connections on port 5555

∆ client has connected. Welcome!
Client has logged on.
A client has connected. Welcome!
Client has logged on.
A client has connected. Welcome!
Client has logged on.
SERVER MSG> test message 1

SERVER MSG> test message 1

Message received: test message 2 from ClientA
Message received: test message 3 from ClientB
Message received: test message 4 from ClientC
```

### Client 1:

### Client 2:

### Client 3:

Testcase 2007

System: Simple Chat Phase: 2 and subsequent

Server termination command check

Severity: 1

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# Result: Successful

Command Prompt			×
C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\simplechat1>java - rs\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; ServerConsole Server listening for connections on port 5555 #quit	classpa	th C:\	∖Use ^
C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\simplechat1>_			

Testcase 2008

System: Simple Chat Phase: 2 and 3

Server stop check

Severity: 2

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## Result: Successful

## Server: At step 5:

### Server: At step 6:

# Client 1:

Select Command Prompt - java -classpath C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; ClientCons	×
C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\simplechat1>java -classpath C:\Us rs\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; ClientConsole ClientA ClientA has logged on.	e ^
WARNING - Server has stopped listening for connections.	
a message ClientA> a message	
	¥

# Client 2: At step 5:

citent 2. At step 3.
Command Prompt - java -classpath C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; Cli
C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\simplechat1>java -classpath C:\Use ^ rs\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; ClientConsole ClientB

# Client 2: At step 6:

Command Prompt - java -classpath C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; ClientConsole Cli	_		X
C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\simplechat1>java -cla rs\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; ClientConsole ClientB ClientB has logged on.	sspat	h C:\	Use ^
			~

# Client 3: At step 5:



# Client 3: At step 6:

Command Prompt - java -classpath C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code	e; Cli	_ [		X
C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\simplechat1>jrs\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; ClientConsole ClientChas logged on.		classpath	n C:\U	lse ^

Testcase 2009

System: Simple Chat Phase: 2 and 3

Server close command check

Severity: 2

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### Result: Successful

### Server:

```
    □ Command Prompt - java - dasspath C:\Users\ajsot\\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\\Lloseng-A1\code\simplechat1>java -classpath C:\Use \
C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\\Lloseng-A1\code\simplechat1>java -classpath C:\Use \
rs\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\\Lloseng-A1\code\simplechat1>java -classpath C:\Use \
rs\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\\Lloseng-A1\code\simplechat1>java -classpath C:\Use \
rs\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\\Lloseng-A1\code\simplechat1>java -classpath C:\Use \
rs\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\\Lloseng-A1\code\simplechat\) ServerConsole

Server listening for connections |
#stop
Server has stopped listening for connections.
#close
ClientA has disconnected. Have a nice day!
```

### Client:

```
Select Command Prompt - java -classpath C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; ClientCons... − □ × ClientA has logged on.

WARNING - Server has stopped listening for connections.

SERVER SHUTTING DOUN! DISCONNECTING!

Abnormal termination of connection.
```

Testcase 2009 System: Simple Chat Phase: 2 and subsequent Server restart Severity: 1
Result: Fail. I looked through my code and was unable to find the reason why
Server:  Command Prompt - java -dasspath C\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code Se — X C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code simplechat1\rightary - classpath C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code simplechat1\rightary a - classpath C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code serverConsole Server listening for connections on port 5555 A client has connected. Welcome! ClientA has logged on. #close ClientA has disconnected. Have a nice day! Server has stopped listening for connections. #start The server is listening for new clients. Server listening for connections on port 5555  -
Client:
Command Prompt - java -classpath C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; Cli — \ C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\simplechat1>java -classpath C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; ClientConsole ClientA ClientA has logged on.  Abnormal termination of connection.  #quit Connection closed.
C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\simplechat1>java -classpath C:\Use rs\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; ClientConsole ClientA ClientA has logged on.  SERVER SHUTTING DOWN! DISCONNECTING! Abnormal termination of connection.

Testcase 2010

System: Simple Chat Phase: 2 and subsequent

Client termination command check

Severity: 1

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Result: Step 1 says to use Testcase 2002, but I believe it should be Testcase 2003. If 2003 is used, then the client may take console input and will successfully terminate when given #quit.



	-======
Testcase 2011 System: Simple Chat Phase: 2 and subsequent Client logoff check Severity: 1	
Result: Successful	
Server:	
C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; Se — C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\simplechat1>java -classrs\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\simplechat1>java -classrs\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; ServerConsole Server listening for connections on port 5555 A client has connected. Welcome! ClientA has logged on. ClientA has disconnected. Have a nice day!	□ X spath C:\Use ∧
Client:	
COMMAND Prompt - java -classpath C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; ClientConsole Cli —	o x
C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\simplechat1>java -classrs\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; ClientConsole ClientA ClientA has logged on.	path C:\Use ^
#logoff Connection closed.	

Testcase 2012

System: Simple Chat Phase: 2 and subsequent

Client host and port setup commands check

Severity: 1

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### Result: Successful

Testcase 2013

System: Simple Chat Phase: 2 and subsequent

Starting a server on a non-default port

Severity: 1

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### Result: Successful



Testcase 2014

System: Simple Chat Phase: 2 and subsequent

Connecting a client to a non-default host or port

Severity: 1

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### Result: Successful

## Server: (On DESKTOP-L329JDB)

```
© Command Prompt - java -dasspath C\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\Se... —  

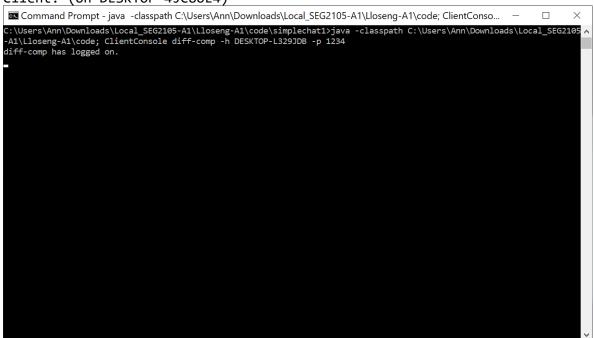
C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\simplechat1>java -classpath C:\Use \rightarrow rs\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\Simplechat1>java -classpath C:\Use \rightarrow rs\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\ServerConsole 1234

Server listening for connections on port 1234

A client has connected. Welcome!

diff-comp has logged on.
```

## Client: (On DESKTOP-4JC80L4)



Testcase 2015

System: Simple Chat Phase: 2

Multiple remote clients disconnections and reconnections

Severity: 1

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Result: I performed the Testcase using 2 computers, because I don't have more computers. Expected Result 7 states that the clients should disconnect. My program used EchoServer.close() which forces the clients to close, so they will display "Abnormal termination of connection." because it was forced.

Server: (On DESKTOP-L329JDB)

```
Command Prompt
C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\simplechat1>java -classpath C:\Use /rs\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; ServerConsole
Server listening for connections on port 5555
A client has connected. Welcome!
ClientA has logged on.
A client has connected. Welcome!
diff-comp-A has logged on.
A client has connected. Welcome!
diff-comp-B has logged on.
Bacon Pancakes
SERVER MSG> Bacon Pancakes
 Message received: Baking bacon pancakes from ClientA
Message received: Take some bacon and put it in a pancake from diff-comp-A
Message received: Bacon pancakes, that's what its gonna make from diff-comp-B
SERVER MSG> Bacon pancaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaakes
#close
ClientA has disconnected. Have a nice day!
diff-comp-A has disconnected. Have a nice day!
diff-comp-B has disconnected. Have a nice day!
Server has stopped listening for connections.
#setport 1
Port set to: 1.
#start
The server is listening for new clients.
Server listening for connections on port 1
 A client has connected. Welcome!
ClientA has logged on.
 A client has connected. Welcome!
diff-comp-A has logged on.
A client has connected. Welcome!
diff-comp-B has logged on.
#quit
ClientA has disconnected. Have a nice day!
diff-comp-A has disconnected. Have a nice day!
diff-comp-B has disconnected. Have a nice day!
Server has stopped listening for connections.
C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\simplechat1>
```

## Client 1: (On DESKTOP-L329JDB)

## Client 2: (On DESKTOP-4JC80L4)

# Client 3: (On DESKTOP-4JC80L4)

```
Command Prompt - java -classpath C:\Users\Ann\Downloads\Local_SEG2105-A1\Lloseng-A1\code; ClientConso... — X
C:\Users\Ann\Downloads\Local_SEG2105-A1\Lloseng-A1\code\simplechat1>java -classpath C:\Users\Ann\Downloads\Local_SEG2105 A
-A1\Lloseng-A1\code; ClientConsole diff-comp-B -h DESKTOP-L329JDB
diff-comp-B has logged on.
SERVER MESSAGE> Bacon Pancakes
ClientA> Baking bacon pancakes
ClientA> Baking bacon pancakes
diff-comp-A> Take some bacon and put it in a pancake
Bacon pancakes, that's what its gonna make
SERVER MESSAGE> Bacon pancakes, that's what its gonna make
SERVER MESSAGE> Bacon pancakes, that's what its gonna make
SERVER MESSAGE> Bacon pancakes
diff-comp-B> Bacon pancakes, that's what its gonna make
SERVER MESSAGE> Bacon pancakes
Abnormal termination of connection.
#setport 1
Port set to: 1.
#login
diff-comp-B has logged on.
Abnormal termination of connection.
```

Testcase 2016

System: Simple Chat Phase: 2 and subsequent

Client changing hosts

Severity: 1

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Result: Successful within the constraints set by my notes.

## Client: (On DESKTOP-L329JDB)

```
© Command Prompt - java - classpath C\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; ClientConsole Cli... —  

C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\; clientConsole ClientA -h DESKTOP-4JC80L 4

ClientA has logged on.
#logoff
Connection closed.
#sethost DESKTOP-L329JDB
Host set to: DESKTOP-L329JDB.
#login
ClientA has logged on.

-  

GlientA has logged on.

#logoff
Connection closed.
#sethost DESKTOP-L329JDB.
#login
ClientA has logged on.

-  

GlientA has logged on.

-  

GlientA has logged on.

-  

GlientA has logged on.
```

### Server 1: (On DESKTOP-4JC80L4)

```
■ Command Prompt - java -classpath C:\Users\Ann\Downloads\Local_SEG2105-A1\Lloseng-A1\code; ServerCons... — X C:\Users\Ann\Downloads\Local_SEG2105-A1\Lloseng-A1\code; ServerCons... — X C:\Users\Ann\Downloads\Local_SEG2105-A1\Lloseng-A1\code; ServerConsole Server listening for connections on port 5555 A client has connected. Welcome! ClientA has logged on. ClientA has disconnected. Have a nice day!
```

# Server 2: (On DESKTOP-L329JDB)

Command Prompt - java -classpath C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; Se	_		X
C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\simplechat1>java - rs\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; ServerConsole Server listening for connections on port 5555	classp	ath C:\	Use ^
A client has connected. Welcome!			
ClientA has logged on.			

Testcase 2017
System: Simple Chat Phase: 2 and subsequent
Client quitting or logging off a server with multiple connections
Severity: 1

Result: Successful within the constraints set by my notes.

#### Server

```
Command Prompt - java - classpath C\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\Se... - X
C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\simplechat1>java - classpath C:\Use \
rs\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; ServerConsole
Server listening for connections on port 5555
A client has connected. Welcome!
ClientA has logged on.
A client has connected. Welcome!
ClientB has logged on.
A client has connected. Welcome!
ClientC has logged on.
ClientB has disconnected. Have a nice day!
ClientC has disconnected. Have a nice day!
```

### Client 1: No actions taken after initiation.

<u> </u>			
Command Prompt - java -classpath C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; ClientConsole Cli			×
C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\simplechat1>java -cl rs\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; ClientConsole ClientA ClientA has logged on.	asspat	h C:\U	Jse ^
			г
			~

# Client 2: Used #quit.

			×
C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\simplechat1>java rs\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code; ClientConsole ClientB ClientB has logged on. #quit Connection closed.	-classpa	ath C:	\Use ^
C:\Users\ajsot\OneDrive\Documents\University\2020_SummerTerm\SEG_2105\Lloseng-A1\code\simplechat1>_			

# Client 3: Used #logoff.

	->	<
lasspati	h C:\Use	^
	— lasspati	— □ X

Testcase 2018
System: Simple Chat Phase: 2
Different platform tests
Severity: 1

Was not able to perform this test since I do not have different platforms.

Testcase 2019
System: Simple Chat Phase: 2
Interaction between different platforms
Severity: 1

Was not able to perform this test since I do not have different platforms.

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