GENERAL SETUP FOR TESTCASES

System: Simple Chat/OCSF Phase: 1

Instructions:

1. Install JAVA, release 7 or 8, on Windows 7, 8 or 10, if it is not

already installed.

2. Install the Simple Chat on Windows 7, 8 or 10, if it is not

already installed.

Testcase 1001

System: Simple Chat Phase: 1

Server startup check

Severity: 1

Instructions:

1. At Eclipse RUN EchoServer.

Expected result:

1. The server reports that it is listening for clients by displaying the

following message: Server listening for clients on port 5555

Cleanup:

Terminate the server by pressing red button on console.

Testcase 1002

System: Simple Chat Phase: 1

Client startup check without a server

Severity: 1

Instructions:

1. At Eclipse RUN ClientConsole.

Expected result:

1. The client reports it cannot connect by displaying message:

Error: Can't setup connection! Terminating client.

2. The client terminates.

Cleanup: (if client is still active)

Terminate the client by pressing red button on console.

Testcase 1003

System: Simple Chat Phase: 1

Client connection with default arguments

Severity: 1

Instructions:

1. Start a server (Testcase 1001, instruction 1)

2. On a different console on the same computer, start a client (Testcase

1002, instruction 1)

Expected results:

1. The client displays no message and waits for user input.

2. The server displays no message.

Cleanup: (unless proceeding to Testcase 1004)

Terminate the client by pressing red button on console.

Terminate the server by pressing red button on console.

Testcase 1004

System: Simple Chat Phase: 1

Data transfer and data echo

Severity: 1

Instructions:

1. Start a client and a server on the same computer and connect using

default arguments (Testcase 1003, instruction 1)

2. When the client is waiting type something into its console and press ENTER.

Expected results:

1. The message is echoed on the client side, but is preceded by a greater

than symbol (">").

2. The server displays a message similar to the following:

Message received: <user input> from localhost(127.0.0.1)

Cleanup: (unless proceeding to Testcase 1005)

Terminate the client by pressing red button on console.

Terminate the server by pressing red button on console.

Testcase 1005

System: Simple Chat Phase: 1

Server termination check

Severity: 1

Instructions:

1. Start a server and a client on the same computer and connect using the

default arguments (Testcase 1003, instruction 1).

2. Terminate the server by pressing by pressing red button on console.

Expected result:

1. The client waits for input. Upon receiving input, the client displays

the message "> Could not send message to server. Terminating client."

2. The clients exits.

Cleanup:

Terminate the client by pressing red button on console.

Testcase 1006

System: Simple Chat Phase: 1

Client termination check

Severity: 1

Instructions:

1. Start a client and a server on the same computer and connect using the

default arguments (Testcase 1003, instruction 1).

2. Terminate the client by pressing red button on console.

3. Start another client using the default arguments.

Expected result:

1. The server does not display any message regarding the disconnection,

and then accepts the second connection.

Cleanup: (unless proceeding to Testcase 1008)

Terminate the server by pressing red button on console.

Testcase 1007

System: Simple Chat Phase: 1

Multiple client connections and data transfer

Severity: 1

Instructions:

1. Start a server (Testcase 1001, instruction 1).

2. On a different console start a client and connect to the server using

default arguments (Testcase 1003, instruction 1).

3. Repeat instruction 2 at least 2 more times.

4. Type in data on any of the consoles and press ENTER.

Expected results:

1. Each client connects properly.

2. Every message typed into any one of the consoles is echoed on all of

the client consoles and the server console in the same way as in Testcase

1004.

Cleanup: (Unless proceeding to Testcase 1009)

Terminate the server by pressing red button on console.

Terminate the clients by pressing red button on console.

Testcase 1008

System: Simple Chat Phase: 1

Remote connection

Severity: 1

Instructions:

1. Start a server (Testcase 1001, instruction 1).

2. On a different computer's Eclipse RUN ClientConsole

where hostname is the name by which the computer running the server is

identified on the network. The client and server computers should be

running the same OS.

Expected result:

1. Connection occurs as in Testcase 1003.

Cleanup: (Unless proceeding to Testcase 1010)

Terminate the server by pressing red button on console.

Terminate the client by pressing red button on console.

Testcase 1009

System: Simple Chat Phase: 1

Data transfer to a remote connection

Severity: 1

Instructions:

1. Start a server (Testcase 1001, instruction 1).

2. Start a remote connection (Testcase 1009, instruction 2).

3. Type data into the client console and press ENTER.

Expected result:

1. The connection occurs as in Testcase 1003.

2. Any data typed is echoed as in Testcase 1004.

Cleanup: (Unless proceeding to Testcase 1011)

Terminate the server by pressing red button on console.

Terminate the client by pressing red button on console.

Testcase 1010

System: Simple Chat Phase: 1

Multiple remote connections

Severity: 1

Instructions:

1. Start a server (Testcase 1001, instruction 1).

2. Start a remote connection (Testcase 1009, instruction 2).

3. Repeat instruction 2 from different computers.

Expected result:

1. Connections occur as in Testcase 1003.

Cleanup: (Unless proceeding to Testcase 1012)

Terminate the server by pressing red button on console.

Terminate the client by pressing red button on console.

Testcase 1011

System: Simple Chat Phase: 1

Data transfer to multiple remote connections

Severity: 1

Instructions:

1. Start a server (Testcase 1001, instruction 1).

2. Start a remote connection (Testcase 1009, instruction 2).

3. Repeat instruction 2 from different computers.

4. Type data on different consoles and press ENTER.

Expected results:

1. Connections occur as in Testcase 1003.

2. Any data typed in is echoed to all the clients as in Testcase 1004.

3. The server displays messages similar to the ones in Testcase 1004.

Cleanup: (Unless proceeding to Testcase 1013)

Terminate the server by pressing red button on console.

Terminate the clients by pressing red button on console.

Testcase 1012

System: Simple Chat Phase: 1

Server terminating with multiple remote clients

Severity: 1

Instructions:

1. Start a server (Testcase 1001, instruction 1).

2. Start a remote connection (Testcase 1009, instruction 2).

3. Repeat instruction 2 from different computers.

4. Once connections are established, Terminate the server by pressing red button on console.

Expected result:

1. All clients behave the same way as expected in Testcase 1005.

Cleanup:

Terminate the client by pressing red button on console.

Testcase 1013

System: Simple Chat Phase: 1

Server terminating with multiple local clients

Severity: 1

Instructions:

1. Start a server (Testcase 1001, instruction 1).

2. On a different console on the same computer start a Client and connect

using default arguments (Testcase 1003, instruction 1).

3. Repeat instruction 2 a few times.

4. Once connections are established, Terminate the server by pressing red button on console.

Expected result:

1. All clients behave the same way as expected in Testcase 1005.

Cleanup:

Terminate each client by pressing red button on console.

Testcase 1014

System: Simple Chat Phase: 1

Other platform checks

Severity: 1

Instructions:

1. Repeat all the above testcases under other platforms. Use only one

platform for each test, e.g. do not use a unix machine for the client and

an Windows machine for the server.

Expected Result:

1. Same behaviour as all of the above testcases.

Testcase 1015

System: Simple Chat Phase: 1

Different platforms for the client and servers

Severity: 1

Instructions:

1. Start a server (Testcase 1001, instruction 1).

2. On a computer running a different OS, connect to that server (Testcase

1009, instruction 2).

3. Exchange data.

4. Repeat instructions 2 and 3, switching operating systems at random.

5. Terminate any client.

6. Terminate the server.

Expected results:

1. All connections occur the same way as in Testcase 1003.

2. All messages are echoed the same way as expected in Testcase 1004.

3. All messages are displayed on the server console using the same format

as Testcase 1004.

4. Terminating a client has the same effect on all clients and the server as

in Testcase 1007.

5. Terminating the server has the same effect on all clients as in Testcase

1005.

Cleanup:

Terminate all clients by pressing red button on console.

Testcase 1016

System: Simple Chat Phase: 1

Severity: 1

Instructions:

1. Repeat Testcase 1015 altering the server OS.

Expected results:

1. Same as Testcase 1015.

Cleanup:

Terminate all clients by pressing red button on console.