

Steps	Instructions	Expected Result	Actual Results	Validation/ Defect
1	Go through all possible operations and combination choices (Req. 1)	No additional windows or instances of the program should open		Validation
2	Send 10 messages in a row, one right after another (Req. 2)	All messages should be completed within 10 seconds		Validation
3	Log in without creating an account (Req. 3)	User should be set to guest		Validation
4	Create an account whenever logged in (Req. 4)	User should be allowed to make an account and signed into that account		Validation
5	Select create chatroom (Req. 5)	A chatroom should be created		Validation
6	Enter the command to change chatrooms (Req. 6)	User should change chatrooms to desired		Validation
7	Create 10 chatrooms (Req. 7)	All 10 chatrooms should be allowed		Validation
8	Enter a nickname whenever prompted on login (Req. 8)	User will be identified from this point on based on their nickname		Validation
9	Log into chat client and do not leave the current room (Req. 9)	User should be in the lobby by default		Validation
10	Make 100 messages that are numbered based on their order (Req. 10)	The last 100 messages should be visible upon scrolling		Validation
11	Have 50 users created and signed in at once (Req. 11)	All 50 users should be able to be signed in		Validation
12	Have the server running for 30 minutes (Req. 12)	The server should not crash		Validation
13	As a user, have another user sign in and type in "mute [username]" (Req. 13)	The other user should have messages not shown		Validation
14	Attempt to transfer a file between users (Req. 14)	A file should be tranfered from one users directory to another	Requirement Dropped	Validation
15	Input "/encode [message]" (Req. 15)	Message should be coded to unknown values until decoded	Requirement Dropped	Validation

16	Have a superuser type "delete [chatroom]" (Req. 16)	If the chatroom is the lobby, nothing should happen, otherwise the chatroom will be deleted	Requirement Dropped	Validation
17	Have users in a chatroom and have a superuse type "delete [chatroom]" (Req. 17)	All users in the chatroom should be moved to lobby	Requirement Dropped	Validation
18	Type in the first 10 messages in dictionary incorrectly (Req. 18)	Messages should be indicated as spelled incorrectly		Validation
19	Type in the first 10 messages in dictionary and hit the tab key (Req. 19)	Message should be tab completed	Requirement Dropped	Validation
20	Have a user type in the phrase "Davis is an awesome person" and have another user type "Davis" and hit tab 4 times (Req. 20)	Message should auto complete to "Davis is an awesome person"	Requirement Dropped	Validation
21	Have a user create a chatroom. Have them leave and sign in as another user. (Req. 21)	Upon returning, the chatroom should remain even after everyone has left the server		Validation
22	Type in the letter 'a' 150 times and hit enter (Req. 22)	The server should display the letter 'a' 255 times		Validation
23	Have a user type in "/exit" (Req. 23)	The user should leave the chat client		Validation
24	Have a user type in the word "Hey" several times (Req. 24)	The words.txt should have the word "hello" listed in their under a common reply	Requirement Dropped	Validation
25	Have a user sit idle for 300 seconds (Req. 25)	The user should be kicked from the client	AFK timer will not count by itself	Validation
26	Have a user sit idle for 280 seconds, type something and wait and additional 20 seconds (Req. 26)	The user afk timer should have been reset and should not be kicked		Validation
27	Have a user type in "/broadcast test" (Req. 27)	The word "test" should be displayed across all chatrooms	Does not display to all chatrooms	Validation
28	Have 3 different users enter within 30 seconds after one another (Req. 28)	Each users time in the server will be updated		Validation

29	Have each of the 3 users from test case 28 type in the command "/uptime" (Req. 29)	Their time in the server should be displayed	Validation
30	Attempt to delete the lobby chatroom (Req. 9)	The lobby should not be able to be deleted	Validation
31	Create 11 chatrooms (Req. 7)	Only 10 chatrooms should be created	Defect
32	Type in 110 messages (Req. 10)	Only the last 100 messages should be displayed	Defect
33	Have 51 users sign into the server (Req. 11)	Only 50 users should be allowed	Defect
34	Have a superuser type "delete lobby" (Req. 16)	The lobby should not be able to be deleted	Defect
35	Type in the letter 'a' 151 times and hit enter (Req. 22)	Only the first 150 characters will be displayed	Defect

### Group 3 Testing Summary

Our process for testing was to run the command in the order that they were written in. Our program did not have any sort of unexpected errors, incorrect display, or crashes. Based on our testing document we decided to also split some of our original requirements into two or more.

Our tests came back mostly in working, intended conditions. There were several tests that failed in the beginning and over course of a couple of weeks we were able to fix many of the defects. Any defects that did not get fixed are highlighted in red as they were not removed from the document.

Most of the defects had to do with the lack of a GUI in certain circumstances like specific chatrooms and such. The tab completion was also not able to be implemented correctly.

In summary, our code is usable especially if you are a fan of command line chat rooms (like yourself). It is not buggy as any requirement that was defected was not implemented. It is usable, and our group heartily recommends the usage of our Superchat program.

Identifier	Requirement	Functional / Non Functional	Source	Client/Server/Bot	Notes
001	Superchat should have all uses within one page/window	NF	Details	Client	(user friendly)

002	Superchat needs to send messages within 1 second	NF	Details	Server	(responsive)
003	Create the login screen	F	Group	Client	*ncurses
004	Display the login screen	F	Group	Client	*ncurses
005	GUIS are inherited from interface	NF	Group	Server	
006	Settin up empty GUI	F	Group	Client	
007	Display a menu GUI	F	Group	Client	
008	Get the input from user inside GUI	F	Group	Client	
009	Display port numbers/rooms in GUI	F	Group	Client	

010	Drew borders in GUI for user	F	Group	Client	
011	Check if user info is valid	F	Group	Client	
012	Create 10 chat rooms on start	F	Details	Client	'/create '    *asio (point to chat_room)
013	Add the room to the list of rooms	F	Details	Client	(in constructor)
014	Give the user an option of rooms to enter	F	Details	Client	
015	Create the menu screen with list of rooms	F	Group	Client	
016	Display when joining new chatroom	F	Group	Client	
017	Move into a new chatroom	F	Details	Client	*asio

018	There will be a maximum of 10 chat rooms	NF	Group	Server	(if vector>10,do not create) in room constructor)
019	User will be able to create a nickname (nick")	F	Details	Client	
020	There will be a default chat room called "lobby" that cannot be deleted	F	Details	Server	
021	The server will keep track of all the previous messages	NF	Details	Server	(per chat_room)
022	The server will support up to 50 users at once	NF	Details	Server	(break up into more req? chat_room holds participants)
023	Users can be muted by other users	F	Details	Client	'/mute '   (how to block messages on client)
024	File transfer between home directories will be allowed	F	Details	Client	'/transfer'    (figure out how to send files using asio)
025	There will be the ability to have your message coded	F	Details	Client	

026	Superusers will be able to delete chatrooms	F	Details	Client	'/delete'
027	Users in a chatroom that is deleted will be moved to the lobby	NF	Group	Both	
028	Superchat messages will be spell checked against a file provided	F	Details	Server	
029	Superchat will support tab completion on messages	F	Details	Client	*readline
030	Tab completion will be done from "common" replies	NF	Details	Client	*readline
031	The file "~.SuperChat" will store persistent information across clients	F	Details	Client	
032	Messages will be no more than 150 characters long	NF	Group	Client	
033	Users can leave the superchat	F	Group	Client	'/exit'

034	There will be a file that keeps track of the common replies	F	Group	Server	
035	Users that do not type something within 300 seconds will be kicked	F	Group	Client	
036	There will be an option to broadcast a message to all chatrooms	F	Group	Client	'/all '
037	The amount of time a user is in the server will be recorded in seconds	F	Group	Server	
038	A user can input a command that will display their uptime	F	Group	Client	
039	Calculates edit distance between word	F	Group	Client	
040	List corrections within a certain edit distance	F	Group	Client	
041	Help window will be displayed when typed "/help"	F	Group	Client	



042	User can quit to main menu without exiting	F	Group	Client	
043	User can request uptime in minutes	F	Group	Client	
044	Create GUI for specific chatrooms	F	Group	Client	Ncurses
045	Display error message if user enters unknown command	F	Group	Client	
040	User will not see their own messages	NF	Group	Client	
047	Get a functional backspace	F	Group	Client	