Feature	Points
Overall Program Structure	**20**
● GUI code still works!	5
● Correct "main" handling	5
● Ability to configure server IP address and port number	5
● Good modularity, with networking code in net.py, which loads correctly	5
Basic Protocol Functionality	**30**
● Correct REGISTER handling	10
Sends well-formatted REGISTER message at startup time	
● Correct ONLINE_USERS handling	10
Should receive and process ONLINE_USERS messages from server	
Should update online users list appropriately	
The current user should not be displayed in the list of online users	
● Correct GOODBYE handling	10
Send GOODBYE message at time client shuts down	
Conversation Management	**50**
● Should be able to support multiple chats at one time	10
In other words, everything below should work when there are two or more chats going	
● Correct INVITE handling	5
Send INVITE message when new conversation is attempted	
Optionally: show a "pending" window, or use other mechanism to indicate no one else is in the conversation	
● Correct INVITATION handling	5
Display invitation window if INVITATION is from a different user	
Show no invitation window if INVITATION is from you	
● Correct JOIN handling	5
Generate JOIN message to server when user accepts an invitation	
● Correct LEAVE handling	5
Generate a LEAVE message to server when user exits a chat	
● Correct CONVERSATIONS handling	10
Receive and process CONVERSATIONS messages from server	
Correctly update all current conversations with information about currrent users	
GUI should correctly show current members of each conversation	
● Correct SEND_MESSAGE handling	10
Sending text should cause a SEND_MESSAGE to be sent to the server	
Sent text should appear (once) in the transcript	
Correctly handle received SEND_MESSAGES from the server	
Any received text should appear (once) in the transcript, tagged by whom it is from	
Bonus	**20**
● Server Enhancements (sending icons, for instance)	10
● Exploit STATUS messages to let users change online status, display this in the GUI, propagate to other users	5
● Exception handling above and beyond the call of duty (survive server crashes, malformatted messages from server, etc.)	5