*Adding a new contact:*

The user presses an “add” button with the contact’s information in a textbox. The client controller handles the event and sends the server the information. The server controller handles the input and calls for the database to add the contact. The database will check if the contact’s information exists, add them if able, and return true if this was accomplished. The controller will relay this response to the user’s client and add whether or not the requested contact is online.

*Log out:*

The user presses a “log out” button. The client controller handles the event and alerts the server that the user is logging out. The server controller receives the call and calls the database. The database updates the user’s status to “offline” and returns nothing. The controller calls for clients to update their information with the database and returns to the client controller. The client controller closes the user’s client.