## 1. Add a new contact

Account A clicks the add a new contact button in client C. A text box pops up with text telling user to enter a contact name. Account A enters a contact name B into the text box. Client C sends server S the account name B to validate if the account name B exists. Servers S checks the list of accounts and sees if B is on it. If an account exists in server S with name B, server S adds B to A's contact list. Server S then notifies client C that B exists and is now on account A's contact list. Client C adds name B to be displayed on A's contact list in the client C itself. If B does not exist, server S notifies client C that B does not exists. Client C notifies account A that B is not a existing account name via text box.

## 2. Log out

Account A clicks the log out button of client C. Client C notifies server S that it would like to log out. Server S notifies other online users that have A in their contact list that A is now offline. Client C proceed to return to the log in screen state and awaits a new user.