Amendment

The design amendment is to incorporate a typing status for each user in a conversation. This functionality is implemented in Google Talk; the UI alerts you when your conversation partner is currently typing, or has entered text.

Each user should be in one of three states: *no_text*, *is_typing*, *has_typed*. *no_text* is the start state. A user can transition into *is_typing* by starting to type into the UI corresponding to the given conversation. A user transitions into *has_typed* if a certain amount of time has elapsed. This time window is up to you to decide. A user can re-enter the *is_typing* state from *has_typed* by typing again, or by backspacing over text they have already typed. Sending the current message will get you back to *no_text*. It is up to you to decide if deleting all the text can also get you back to *no_text*.

You can display this information as a change in the UI of the conversation (e.g. Alice is typing…), or into the buddy list UI (by changing the color of the user, or making the user italics, or …). All three states should be easily distinguishable in your UI, regardless of how you choose to display this information to the user. This information has to be pushed to users by the server; it is not acceptable for users to be forced to click a button in order to get their partner's typing status.

Note that if user A is typing to user B in a conversation between only them, it shouldn't appear to user C that user A is in the *is_typing* state. Stated another way, user A should only be seen as typing by user C if user C is involved in a conversation with user A where user A is typing. Thus, you should logically have a state machine corresponding to each (user, conversation) pair.

6.[illegible] [illegible]

Fall 2011