

Appendix

Appendix 1 - Interview with Client (Ms. Xx)

Me: Hello, thank you for joining me.

Ms. Xx: Hello

Me: I wanted to talk to you today about this application you had in mind.

Ms. Xx: Yes, I wanted to ask you for an application, that will be basically, a chat room between me and my friends while also staying anonymous.

Me: Ok. What are some basic features you would like this application to have?

Ms. Xx: Well, sending private messages, that would be the first and the most important. Having a username and regarding anonymity, I think you should not link your phone number for example.

Me: So, you would like to have only the basic credentials as sign up?

Ms. Xx: Yea. There is also something else I had in mind, but I am not sure it is possible. I was thinking that maybe only people that received a link from a previous user can sign up for this app. I think they are called link-based invitations.

Me: Ok so, basically you want this application amongst your friends only at first and then if your friends decide that they want to invite more people into the app we should also give them and invite link.

Ms. Xx: Yes.

Me: Ok, I might be able to do that.

Ms. Xx: Ok. That would be great!

Me: Are there other important features you had in mind?

Ms. Xx: Yea, private messaging. Or I think it is called encryption or something like that?

Me: Oh, you are referring to end to end encryption. Basically, the server will not be able to view your messages. It will receive the message you want to send but will not be able to read it because it is encrypted.

Ms. Xx: Yea, so like, really private.

Me: Ok, I can do that.

Ms. Xx: I would also like to be able to add people as my friends, to block people as well.

Me: Ok.

Ms. Xx: And if it also possible, I would like to add file sharing too. Sending pictures to somebody or something like that, but that is like a minor requirement. It is not as important as the previous ones.

Me: Ok I could do this, but do not expect this feature to hit the first update.

Ms. Xx: Ok! That will be all.

Me: Ok, I think I have got a big picture of this application and a plan on how it is going to work. If I have any more questions, I will not hesitate to call you. Thank you for your time today.

Ms. Xx: No problem! Thank you!

Me: Bye.

Ms. Xx: Bye.

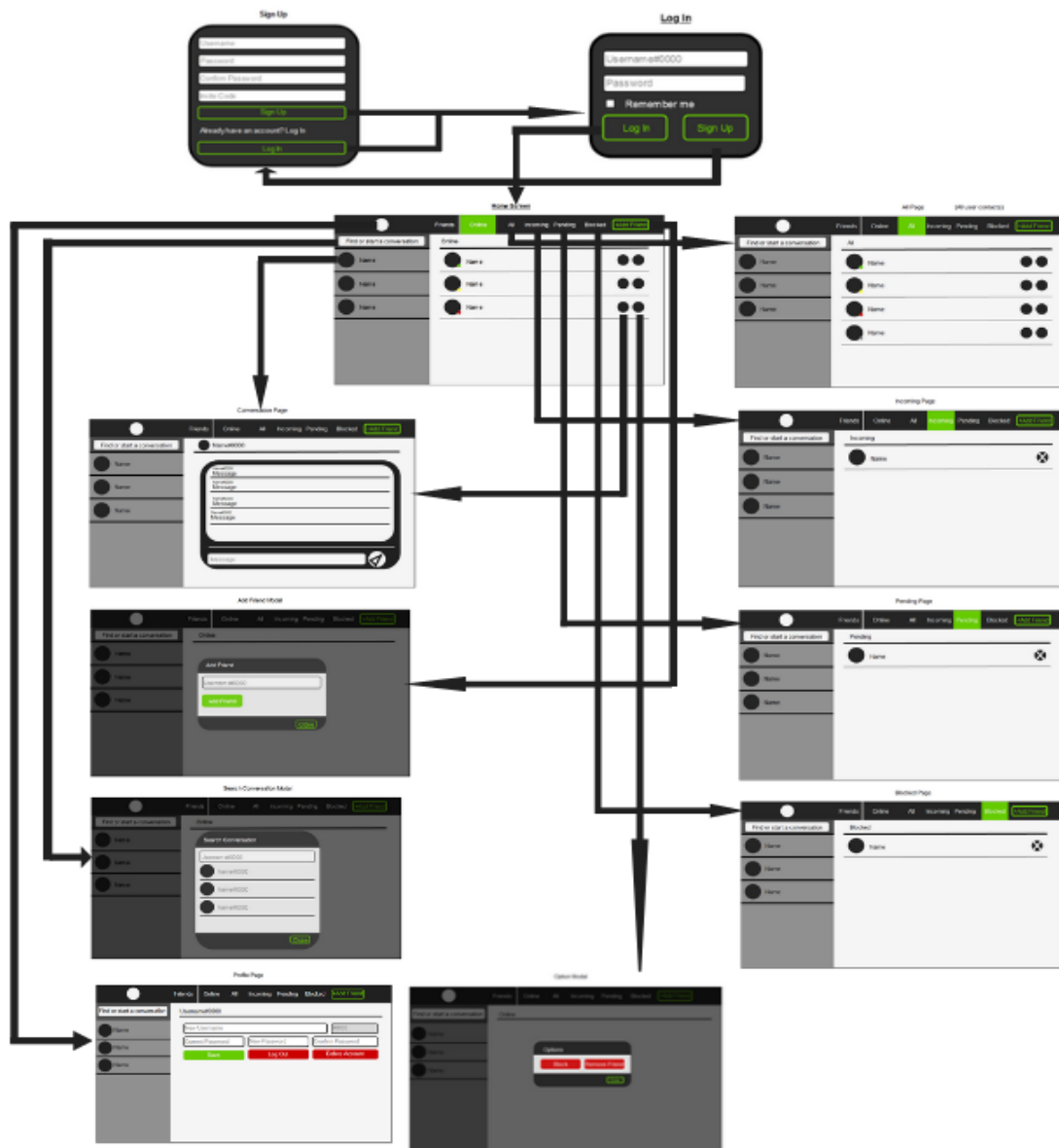
Appendix 2 – Follow-Up Client Survey

Fraktal Private Messaging Application Questionnaire

Question	Answer
What information would you like to use in order to make an account?	I believe a username; a password (that respects security criteria) and a valid invite code are necessary!
Would you like to log in with an email or just a username and password?	No, just with a username and password.
What should this application show when you first log in	The user's friends (the contact list), and a list of active conversations on the side.
What functionalities would you like the application to have?	I want users to be able to search, add and remove other users, chat with them and I also want a blocking system.
What account details would you like to be able to edit?	Username, password and possibly profile pictures.
Would you like to be able to view chat history?	Yes, most definitely.
How do you envision this application working?	I expect the application to be able to log me in, identify me, and after I'm done using the application, I want to be able to log out. I believe users should also be automatically logged out after a certain period of time.
Do you want to be able to delete accounts?	Yes.

Appendix 3 – Client GUI Feedback

Final GUI Diagram Sent to Client:



Additional images were sent at the request of the client to view the pages in more detail.

Client Evaluation Form

Fraktal Private Messaging Application GUI Evaluation Form

- 1) Were you pleased with the design of the Login Page? **y/n**
If no, please elaborate:

- 2) Were you pleased with the design of the Sign-up Page? ☐ y/n
If no, please elaborate:
- 3) Were you pleased with the All Page? ☐ y/n
If no, please elaborate:
- 4) Were you pleased with the Incoming, Pending and Blocked Page? ☐ y/n
If no, please elaborate:
- 5) Were you pleased with the Options modal? ☐ y/n
If no, please elaborate: It is ok for now, however for the future I would like to be able to observe mutual friends.
- 6) Were you pleased with the Add Friend modal? ☐ y/n
If no, please elaborate:
- 7) Were you pleased with the Search Conversation Modal? ☐ y/n
If no, please elaborate: The design looks fine, however I would like for the functionality of this element to be that of searching users, instead of conversation.
- 8) Were you pleased with the profile page? ☐ y/n
If no, please elaborate:
- 9) Were you pleased with the Conversation Page? ☐ y/n
If no, please elaborate:
- 10) Were you pleased with how the active conversations were displayed in the sidebar? ☐ y/n
If no, please elaborate:
- 11) On a scale of 1 to 10 (with 10 being the best) are you pleased with the designs presented?
10
- 12) Do you have additional concerns regarding the design?
Not much, maybe the font size can be improved in the final product.

Appendix 4 – Client Feedback on Developed Program

Fraktal Private Messaging Feedback Form

- 1) Does the log in and sign-up criteria meet all your requirements? ☐ y/n
If No, what is missing:

- 2) Do all the user functionalities meet your requirements (Add friend modal, Incoming page, Pending page, Blocked page and Search Users modal)? **y/n**
If No, what is missing:
- 3) Does the Profile Page meet your requirements? **y/n**
If No, what is missing:
- 4) Does the Conversation Page meet your requirements? **y/n**
If No, what is missing:
- 5) Does this application fulfill all the success criteria of this project? **y/n**
If No, what criterion has not been fulfilled:
- 6) Please rate out of 10 your overall satisfaction with the application 9/10
Reason: *The application meets my requirements; however, I would like to be able to make it resizable.*
- 7) Is there any part of the application that you feel needs to change? **y/n**
- 8) Please fill in the following table if you have experienced and bugs when using the application.

Bug	How it could be replicated
Once you remove a user from your friend list, you can still send messages to that user.	Start a conversation with a user, and then delete him from your contacts list

- 9) Please fill free to write general comments you have regarding the program, which might aid in future development.
Comment: *I appreciate the fact that it has a clean interface, and if it could be more animated it would improve by a lot.*
- 10) What additional features would you like this program to implement in the future?
 - *Send media through messages*
 - *Add a profile picture.*
 - *More security measures, the inability of users to make screenshots of chats*