Pronto - A place where you will heal

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[High Fidelity Wireframe](#)

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Team Members

Thomas Emnetu: My strengths are primarily in the user interface aspect of mobile application design, therefore I chose to take the UX design role. My duties included providing my team with sketches, prototypes, and eventually designing a fully interactive high fidelity wireframe based off of the user research conducted. Essentially, my role was to convert our ideas into something visually appealing and refine it in response to feedback from users and my team members.

Louisa Chen: My strengths would be doing research. I can help the group to search for information we need to ensure that we have enough information to support our project. I also can do the user research part, such as interviewing potential users and collecting data from them.

Jing Cao: I could take part in research work, including exploring relevant resources and organizing the discoveries. Besides, I could provide my thoughts on technological possibilities and user experience design, as I have some programming skills and I am interested in creating good user experience.

Sahil Bains: My individual strengths would be coordinating with all group members on meeting times, ensuring that we are all content with all aspects of the project, including overall design and research. I would also help to contribute in making design edits for user experience as well as conduct research.

Introduction

Our plan while developing our app is to serve people who are in need of another peer to talk to, our main target is supporting mental health no matter the range of severity. A few problems that need to be addressed in this industry is not having a secure platform where one could talk to another peer of the same age - we could offer more security and the ability to have a streamlined system of talking. We also plan to combat the stigma against talking on a suicide hotline or with a psychologist. Specifically, in certain regions and cultures around the world, there is collective shame that takes place for those who try to reach out for help. In today's day and age, there

are lots of mental health concerns over a mass amount of media exposure - especially for adolescents. Apps and sites that offer one-on-one conversation like Omegle have proved to be an ineffective method of talking with another person. While the app does allow you to refine the people you're able to talk to, the level of security on the site makes it difficult for people to take their time and communicate your feelings with another human - let alone have a conversation for over 20 seconds.

This problem needs to be addressed because on similar platforms like Omegle, a lot of bullying and hate crimes occur which if nothing is done causes many ordinary and mentally ill individuals to face depression and in some cases suicide. What is at stake here is the lives of many innocent people who needed a resource where they could anonymously get their emotions off of their chest without dealing with racial slurs, hate speech etc. This solution would tightly monitor users on its network and only let verified individuals join as a resource for those feeling depressed. If any bullying at all is detected, the platform verified users can ban the harasser and all bans will be investigated within 24 hours to ensure that the correct person was banned and there was no further harm. Ultimately, solving this problem will provide benefits for groups of people who are in a bad mood, dealing with depression or any mental health related problems.

User Research

Survey

We designed a survey to learn from our potential users' perspectives on online chat services, including their mental health situations, preferred types of online chat, and experiences with using existing online anonymous chat services. With the survey, we can develop empathy for our potential users and figure out their needs and preferences to better design our chat app in more aspects. We distributed our survey mainly by sending it to group chats and inquiring random people in the school's library to fill it. As we hope to make our app open to all types of people above eighteen years old who have bad moods or mental illness, our survey responses are from both male adults and female adults and from American, European, Asian, and African.

The first key question is, "Do you think it's a shame to tell someone you have a mental health problem?" which is to find people's needs to chat with strangers besides acquaintances. The second key question is "What kind of people do you like to talk with

when you are not feeling well?" which is to learn how we can set matching modes in our app. The third key question is "What functions do you want online anonymous chat services to have?" which is to explore people's preferences on chatting anonymously. The fourth key question is "What may prevent you from using online anonymous chat services?" to discover people's concerns about using anonymous chat services.

We have collected 28 responses. 60.7% of respondents are female, and 39.3% of respondents are male. According to Graph 1 and Graph 2, the respondents' ages are between 18 to 32, and the ethnicities of respondents include American, European, Asian, and African. As Graph 3 and 4 show, 53.6% of participants sometimes have bad emotions or feel depressed. 25% of participants feel that it is nothing shameful to talk about their mental health illnesses, 53.6% of participants feel that they sometimes will be ashamed to tell someone that they have mental health problems, and 21.4% of participants are extremely ashamed to tell others they have mental health problems. People sometimes want to hide that they have mental health problems and don't want to share their feelings with someone familiar. So for these people, anonymous chat is a great way to help them release their bad feelings and pressure. They can talk to others and hide their identity at the same time. 72.9% of the population prefer text chat, 85% and 38.5 % of them want to share their emotions with family members or Random people with similar emotional cares. For people's opinions about anonymous chat, 30.8% of participants have used some types of chat services, and 25% of them reported that the reason preventing them from using anonymous chat services is the safety concerns, which means our team should focus on the safety problem in our future design.

Link to survey questions:
https://forms.gle/SK5cUwqRgySyJZDM8

Link to survey results:
https://docs.google.com/forms/d/1TkQ9Ek2B6pJCc2BC1yNdXAi_q1-oGfvZoiOMPQ-yQoc/edit#responses

Interview

We also interviewed three stakeholders, including direct stakeholders and indirect stakeholders. This research method is appropriate because we aren't only getting the users point of view/perspective, we are also observing and getting feedback

on how experienced medical personnel who treat cases of depression view our app as a viable solution.

Some key takeaways we got from a pediatric pharmacist was saying that if we can pull off this app correctly and ensure the platform is secure then without a doubt it can be very successful. He also mentioned that the tricky part is to make sure security doesn't get breached because that in turn could cause bullying, racism, sexism etc which would cause users to get very upset. Perhaps the most useful feedback we received from Dr. Gebriel was "Teenagers and kids are great with technology and most are by nature scared or reluctant to reach out for help, this app, if executed correctly might be just what they need ". This reaffirmed to us that this is the correct approach from a medical standpoint, but it reminds us that we must make sure that security is made a priority if we want any hope of longevity for this app.

An international student who is our potential user reflected that during her time in the U.S., she would sometimes have bad moods due to schoolwork and health reasons, such as too much homework, low productivity, or a toothache. She would usually communicate with her mother via text and WeChat video. She also kept in touch with her friends who currently live in New York, and they texted every day and had a video chat once a week. When there was something that she didn't want to or was embarrassed to share with her family and friends, she chose to type it in text and send it to a platform where no one knew her. For example, creating a Twitter account but did not follow anyone she knew. Her view on anonymous chat was that she preferred to post her feelings via text on an anonymous platform but did not prefer one-on-one chatting with strangers, even if they had the same concerns. She said she was worried about the identity of the anonymous person, so she was afraid that they would do something inappropriate, especially sexual harassment. Lora thought she would prefer anonymous platforms to have discussion groups for different topics, such as "anxiety," "depression", "loneliness", etc. People with different worries and emotions could discuss in different groups and find support in each group. Still, every time a person spoke once, their profile photos and usernames would change, thus ensuring that users had enough privacy and giving the speakers more security.

Major insights and learning that were gained from a psychologist would be a further insight of the importance of technology, especially in the modern-day climate with the increasing application of telemedicine. Further, it distinguishes that there are more risks associated with emotionally opening up online - as there are certain factors that may compromise one's safety. Additionally, it gives perspective on the dependence of technology - with the COVID-19 pandemic affecting in person affairs - it is a mutual transition we all have to face, with the correlating challenges.

User Personas

Hans Liu

AGE	19
ETHNICITY	Asian
STATUS	Single
OCCUPATION	Student
LOCATION	Seattle, WA

" Of course I talk to myself... sometimes I need other platforms.

Personalities

Introvert Sensing

Feeling Percieving

Used Services

WeChat Omegle

Bio

Hans is an international student from China who has just moved to UW two months ago. As his classes begin to get harder, he is looking for friends to help with studying as well as for emotional support. He is currently also looking for a platform online to express himself as he's become frustrated with living in a new environment.

Core Needs

- A safe anonymous platform to post personal emotions
- A network to connect with other college students
- Easy and free support from psychological consultants

Pain Points

- Posting bad moods on social media will always be seen by familiar ones
- Don't want to go to a psychiatrist when feeling down for a long time because it's too expensive
- Fail to find reliable listeners for private chats

Current Resources

- 👬 Social Networks   35%
- 👪 Family Members   35%
- 📱 Mobile Apps   25%
- 🏫 Mental Health Center of Colleges   5%

Emily Johnson

AGE	32
ETHNICITY	American
STATUS	Married
OCCUPATION	Psychiatrist
LOCATION	Boston, MA

" You don't have to struggle in silence.

Personalities

Extrovert Intuitive

Thinking Judging

Used Services

Doxy.me VidHealth

Bio

Emily is a psychiatrist that has been living in Boston for over 20 years, and is experienced with combatting mental health issues with her clients. A few main concerns that she has, especially in the current climate is having a secure app that allows her to chat with her clients online without the fear of any breach occurring.

Core Needs

- To provide free professional advice from people have mental illness in leisure time
- To reframe mental health problems in a more goal-oriented plan
- To spread the use of mindfullness

Frustrations

- Unreliable platforms for one-on-one sessions
- Hard to reach people who have mental illness
- Clients not having secure connections

Current Resources

👫	Social Networks	15%
👨‍👩‍👧	Family Members	5%
📱	Mobile Apps	25%
🏥	Consultation Department of Clinics	55%

Solutions Considered

Mobile App

A scalable mobile application that allows users to interact with individuals offering an open ear that they can use to vent. Qualified users looking for a job can apply as a professional or freelance consultant and offer support to those in need. Some advantages with creating a mobile application include: using ad revenue to pay employees, more accessibility, enhanced user experience and allows for versatility with messaging, calling, video call etc. Although there are a few disadvantages that need to

be addressed, for instance high initial costs, lengthy development periods, and utilizing different programming languages depending on the operating system the user is on.

Graphic Novel/Comic

A graphic novel that follows the story of a mentally ill individual, the different interactions and methods of reaching out for help that the person takes. This solution would be effective in appealing to a younger audience that has a prior interest in comic books such as elementary students. This creates the disadvantage of narrowing our target audience down too much and missing out on a much more broad user space that includes students who may not like comics, or even simply middle and high school students. Although, an advantage that could arise from this is a different, fictional novel series, made for older audiences. It would create a more engaging story to keep advanced readers interested and properly informed on topics around mental health. If good feedback is received more novels can be released for both series, these new additions would then add onto the previous books story.

Hotline

A hotline would provide the opportunity for those simply needing the bare bones function of the application, a professional ear to speak to, or even just a few mentoring words. The effectiveness of this strategy would look to provide the most basic functions that users are looking at this type of platform for, and would also require the lowest amount of cost to us as creators to maintain. A disadvantage for using this program specifically would be that it wouldn't offer the same advantages as a seamless user interface as an app or a website would, creating the potential for users to be uninterested or to discontinue usage.

Website

An open source online website that matches users with medical professionals around the world and allows for users to openly express with the assurance of anonymity. A web service can raise certain advantages such as faster download speeds, web server storage allowing more network congestion, and a wide range of support options and maintenance. Where the disadvantages come in though is with lack of features like updates and notifications on mobile applications. Another big disadvantage is more sophisticated UI and more difficult marketing strategies to the user. It is through these pros and cons that we notice a mobile application can solve many of the problems surrounding a website, which is why we have selected the app as our final solution.

	Mobile App	**Graphic Novel/Comic**	**Hotline**	**Website**
Description	Application available on the app store and google play store that allows anonymous messaging and video calling	Physical and digital copies of the non-fiction story following a teen and his mental health journey	Phone service where users seeking help call the registered phone number to speak to a specialist	A web service that matches users with medical professionals around the world via text/video
Advantages	Simple UI, Accessibility, Ad revenue	More concrete, allows for anecdotal support via real world examples	Convenience, discrete, can feel more authentic to the user	More navigation options, room for network to grow, data servers, AWS
Disadvantages	High cost, time consuming development, different coding languages	Small target audience, difficult marketing space	Similar solutions exist already	Sophisticated UI, managing site traffic, subject to malicious attacks on the network

Table 1. Summary of the four solutions considered

Selected Solution

We ultimately chose to use a mobile app as our anonymous chat platform because it is the most commonly used and most accessible to people. Compared with other platforms, a mobile app has the advantages of a simple user interface, which allows people to master the rules of using chat services in rapid ways and thus effectively and efficiently communicate with others. Moreover, a certain amount of revenue from advertisements will be created in this way, which can support the operation of the design and development teams of the chat services. The other chat platforms have several issues that cannot be easily covered by their merits, such as limited market and complex regulation. Admittedly, a mobile app also has some

drawbacks due to its high cost and time-consuming development, but it can give more profound benefits by establishing stable chat services.

The number of global mobile app downloads has been increasing since 2016, surpassing 200 billion in 2019. 218 billion mobile apps were downloaded to their connected devices in the most recently measured year, up more than 50% from 140.7 billion app downloads in 2016 (Statista, 2021). Also, according to research, Americans spend an average screen time of 5.4 hours per day on their mobile phones, and 86% of them go online daily using their mobile devices. (Deyan, 2021). Therefore, compared to other methods, such as using hotlines, websites, or graphic novels, mobile Apps will be the most accessible way for users to access Pronto. Research also mentions that mobile devices have opened a new frontier in mental health support. More and more people will use their mobile devices to seek mental health help.

Description of Your Solution

With the target of offering a guaranteed and effective platform for people in bad moods to build emotional connections, we developed a mobile app for anonymous chat. To address the security and functionality problems on existing chat services, we made innovations on user group identification, chat content regulation, chat topic classification, and so on. In our app, we also incorporated design elements to enhance user experience, such as signifiers to change interface, conventions of conversation style, and folksonomy of chat topics. We hope that by using this app, people will have an open channel to communicate with others and receive mental health support in comfortable ways.

Product Features

Primary Features

Secure environment with anonymity: Our app provides a secure environment for users to share their worries and concerns without pressure. To ensure that the environment is completely anonymous, users' profile photo and usernames are automatically changed after exit chat room, which will give users a great sense of security. Then users will feel relaxed to talk about their experiences (Botha, Vant & Leenen, 2019). In one-on-one chats, the user's identity is also completely anonymous unless he/she actively tells another person. Although users are initially required to register when logging into the app, they are only required to provide their email or

phone number for the purpose of contacting professionals and avoiding inappropriate posts.

Free professional and peer support: Our app wants to provide users with unlimited opportunities to create emotional connections. Learning from existing chat platforms (Seven Cups, 2021), users can match with other like-minded people or receive professional counseling from licensed therapists and psychologists without restriction. Users can either start new chats with different people on an ongoing basis or build long-term communication with specific people. These options are free with no payment or subscription required, which facilitates those who have communication needs but are affected by spending preferences or financial conditions.

Secondary Features

Different tags: Other than group chat, users can choose different tags to chat more deeply, find more people with the same troubles, and communicate with them. Communicating with people with the same worries will let people find more resonance with each other. For example, there can be different tags such as lost pets, failed tests, anxiety, etc. This way, people can communicate their worries and share some of their resources in the chat of specific areas.

Text/voice/video in private chat: In the one-on-one chat mode of our app, three chat ways are offered: text, voice, and video. According to the results of our previous user research survey, all three online chat ways are in demand to some extent. Also, considering the order of preference of most users, text chat serves as the main interface, while voice and video chat are available as buttons. By covering multiple chat ways, the different communication needs of different users are satisfied as much as possible.

Colors of interface: According to psychological findings, pink elicited less anxiety or anger than blue or white. Therefore, we selected pink as our main color in our interface in order to make people more relaxed and comfortable during the chatting process (Valdez & Mehrabian, 1994).
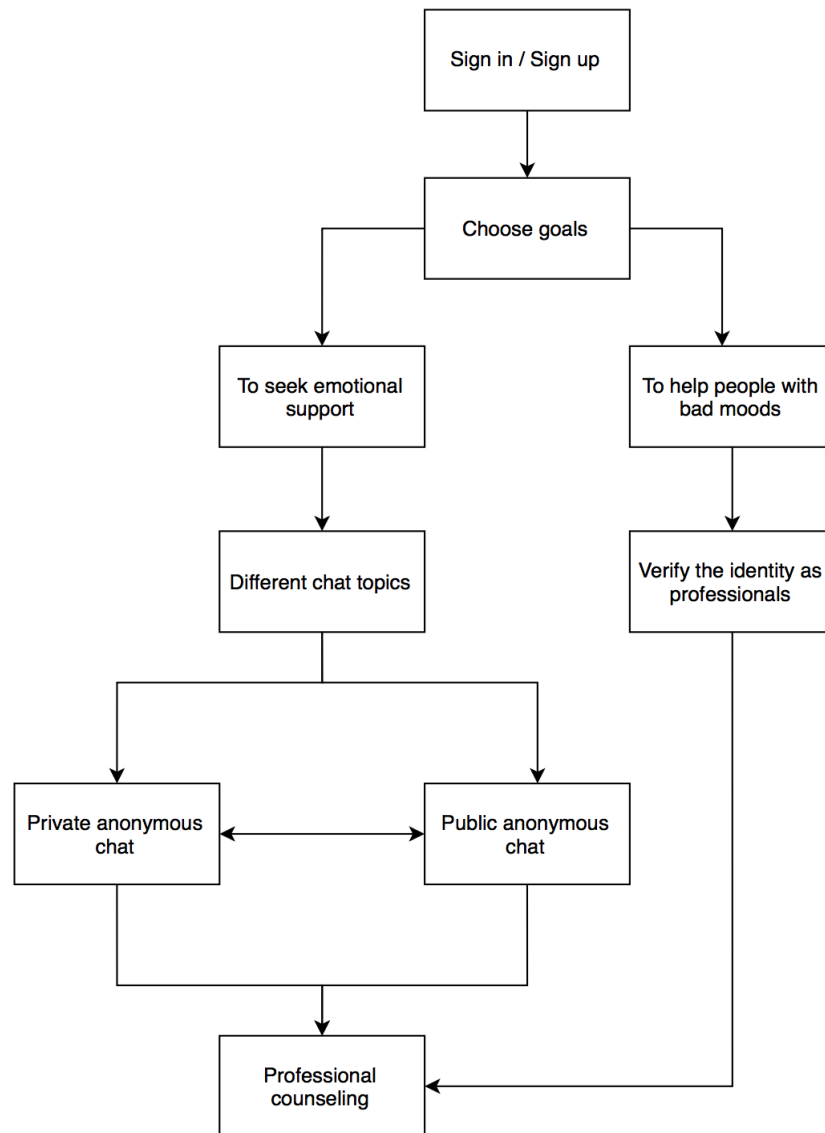
SiteMap

Figure 1. The structure of Pronto
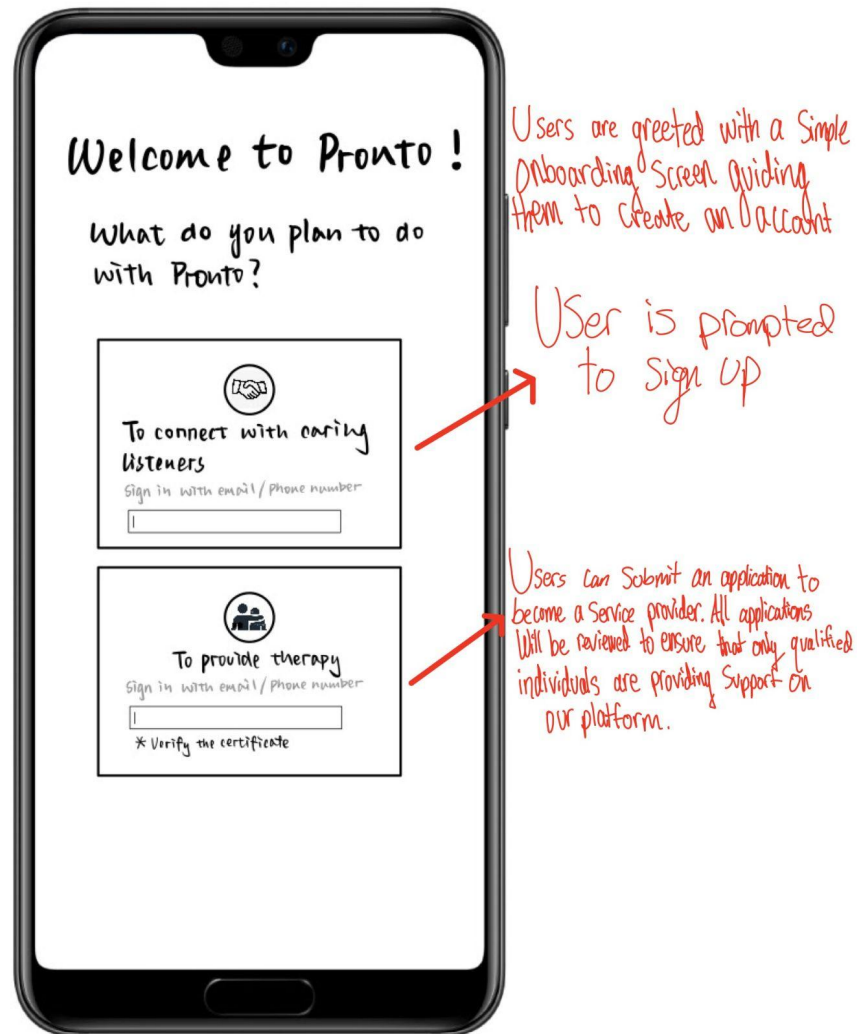
Low Fidelity Wireframes

Login

Figure 2. The interface of login page

In order to meet the purposes of use of different groups, we designed two login approaches, in which users can choose a suitable one for themselves according to their identity and needs. At the same time, to build a secure environment for our app, we set up a user authentication process even if the chat will be anonymous. For people in bad moods who seek emotional support, information that can be associated with a single identity, such as phone number and email account, is required to prevent repeated registration from violating the discipline. For specialists who apply for a job, certificates

that can verify their professional identity and education are needed to ensure that their counseling is reliable.
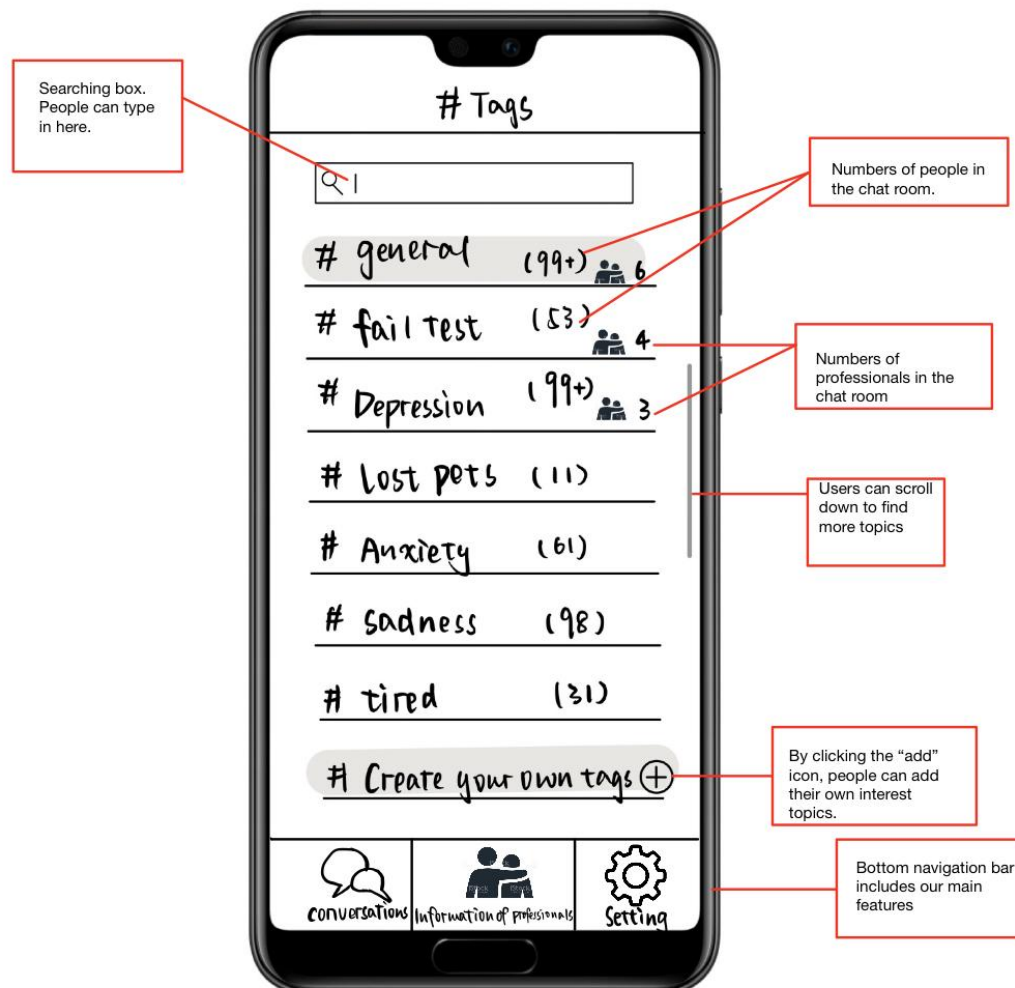
Topics

Figure 3. The interface of chat topics

As users usually need different types of emotional connections, we designed a detailed page presenting different chat topics in tags. Users can browse or search on existing tags and can also create new tags relevant to mental health. The number on the right side of each tag shows the number of people online under a certain topic, and the number near the icon shows the number of professionals under a certain topic.

Using these tags, users can enter either public chat or private chat. When these tags are single clicked, users can enter specific group chats with their interests. When these tags are long pressed, users can start matching for one-on-one chats with people who have chosen the same tags.
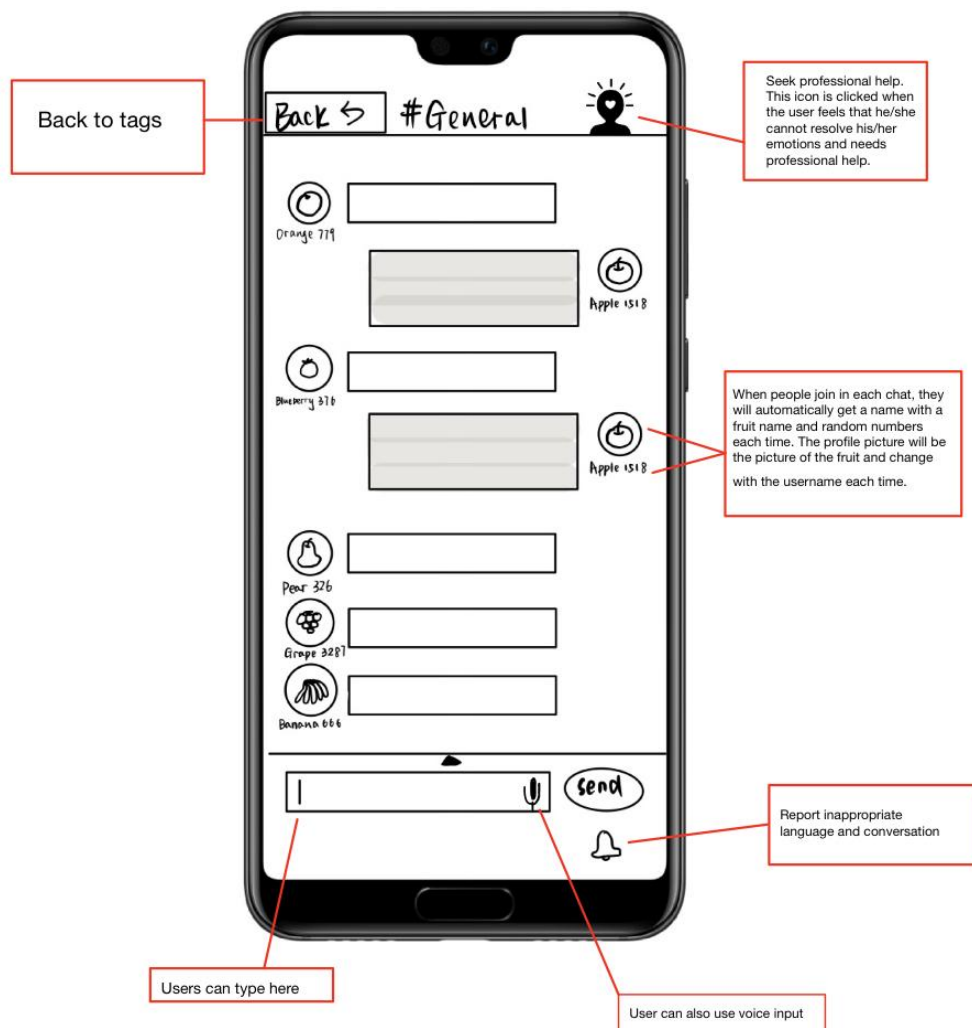
Public Chat

Back to tags

Seek professional help. This icon is clicked when the user feels that he/she cannot resolve his/her emotions and needs professional help.

Back ↰   #General

Orange 779

Apple 1518

Blueberry 316

Apple 1518

When people join in each chat, they will automatically get a name with a fruit name and random numbers each time. The profile picture will be the picture of the fruit and change with the username each time.

Pear 326

Grape 3287

Banana 666

send

Report inappropriate language and conversation

Users can type here

User can also use voice input

Figure 4. The interface of public chat

Aiming to provide users with more opportunities to find contacts, we designed open public chat areas. At the upper end of this interface, there is a tag showing the topic of the current group chat. The rest of this page follows the design of a regular chat page, which makes it more intuitive for users. In group chats, users can request someone to have one-on-one talks after permission from another person. Besides, by

tapping the button in the upper right corner, users are able to request help from psychotherapists and obtain general professional advice. If the person asks an inappropriate question, the professional can report the user and the user will not be able to seek professional help that day.

To ensure the friendliness of public chat, we designed three main regulation methods. First, when the user sends a message, AI will automatically check the appropriateness of the text and block any unhealthy content. Second, people's behaviors in public chat areas will be monitored by volunteers, and any potential emotional harm will be avoided. Also, users can report other's inappropriate behaviors by clicking the "bell" button in the lower right corner of the screen.

Private Chat

Figure 5. The interface of private chat

To make our app easy to use, we also follow the design of conventional conversation style in private chat areas, in which the text boxes on the right come from oneself and the text boxes on the left come from the other person. In addition to text chat, we also set voice calls and video chat. Considering that other chat modes are not used so frequently, we hide these options in a menu, which will appear after the user clicks the "plus" button at the bottom of the screen. Users can also receive individualized professional counseling by clicking the button in the upper right corner.

Hoping to provide users with a high level of freedom, users are allowed to switch chat modes at any time in our app. Users can temporarily leave private chat and return to group chat by clicking the "back" button in the upper left corner of the screen, and the conversation will be kept and shown in the "topics" interface. Users can also end the private chat by clicking the "end" button in the menu. In order to give users feelings of comfort and security, we do not set content monitoring but keep the report function in private chat. By clicking the "bell" button in the lower right corner of the screen, users can report other's behaviors if there are any problems.

Low-Fidelity Wireframing Stage

We received feedback on several aspects of our app from our TA and a potential user. Our TA suggested that different features on the login interface could be separated into more pages. She also recommended that there could be a function of saving certain tags and a button of saved/starred on the top of the screen on the tags interface. Besides, a potential user said that it would be better if users could chat with others via completely random matches. From our TA and the potential user's advice, we learned to design our app from broader perspectives, as we need to provide useful functions and make our app user-friendly as much as possible. Therefore, based on the feedback, we added new features and improved the previous design to enhance clarity and bring convenience to the user experience on our app. For instance, we divided the process of choosing goals and signing in/up into different pages to make the onboarding more clear. We also added the features of saving tags and matching in random on the chat to create more opportunities for users to connect with others. Furthermore, we adjusted the navigation bar based on updated pages of our app to facilitate straightforward usage scenarios.

Design Language / Style Guide

Font

Figure 6. The font used in Pronto

Upon looking among a variety of different font styles, we decided to utilize 'Inter'. The simple yet pronounced structure of the letters ensure that users are comfortable with the clarity and satisfied with the design of the assimilated information. In addition to that, the streamlined interface complements the neatness of the font.
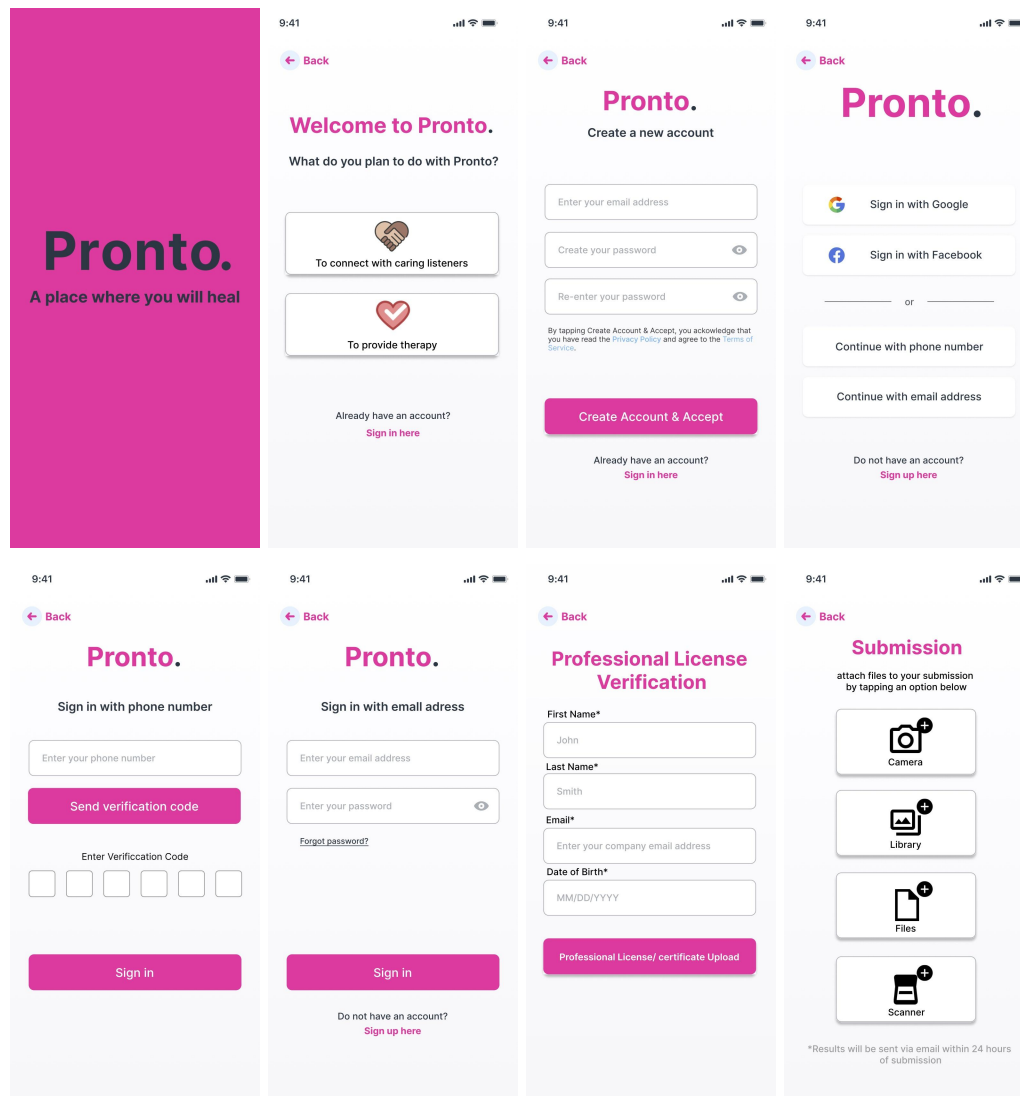
Colors

Figure 7. The colors used in Pronto

We have chosen 4 colors as our selected colors for each interface. We use pink as our main color. According to psychological findings, pink elicited less anxiety or anger than blue or white. Therefore, we selected pink as our main color in our interface

in order to make people more relaxed and comfortable during the chatting process (Valdez & Mehrabian, 1994). Also, instead of using pure black as our font color, we used a grayish, low-saturation black. This can make the whole interface a softer tone.
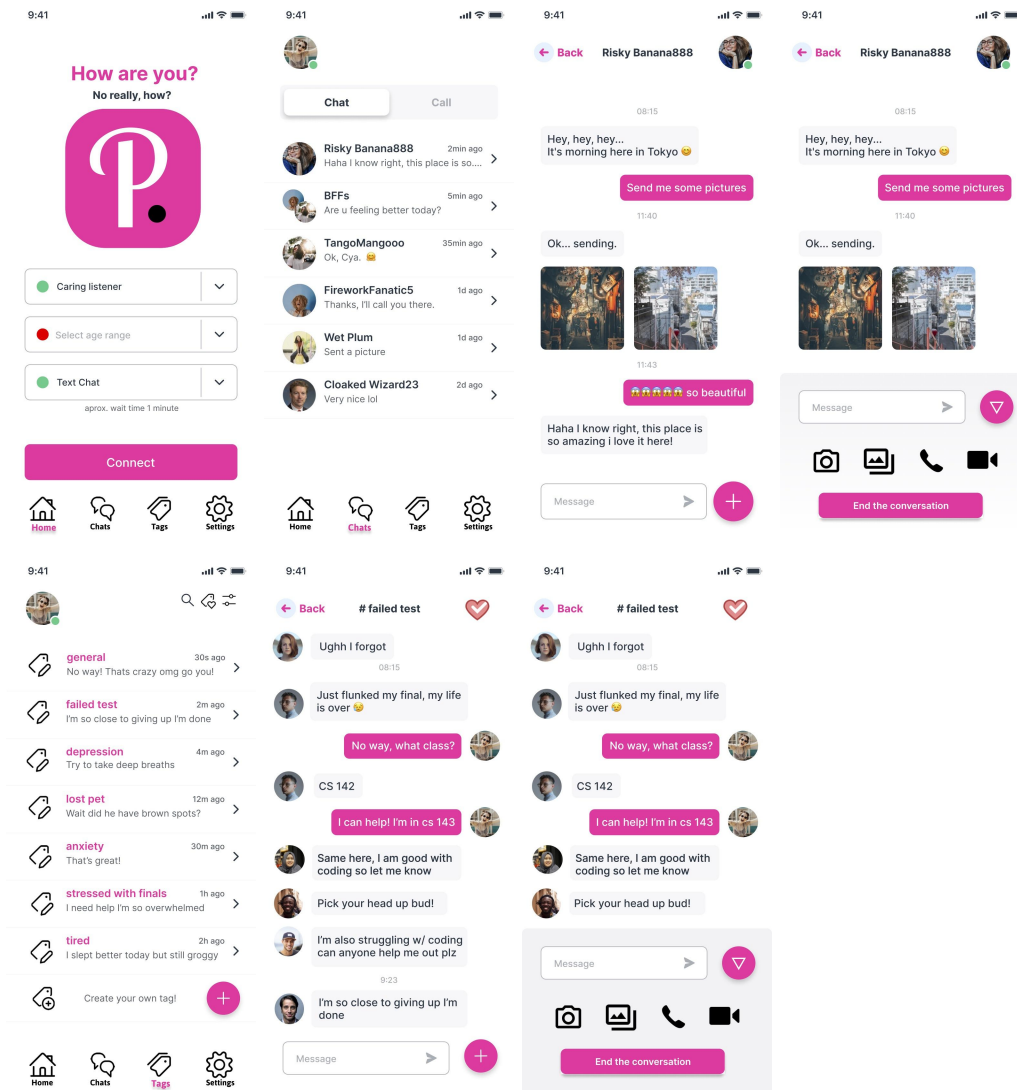
High-Fidelity Wireframes

Onboarding

Create Account & Sign In
- There are two pathways to sign in Pronto. First one is for people to connect with caring listeners. The other one is for professionals to provide help for people with bad emotions.

- For professionals, they need to submit their license or certificate in order to provide professional help for users.
- For users, they can sign in with either Google, Facebook, phone number, or email to make the process easier and faster.
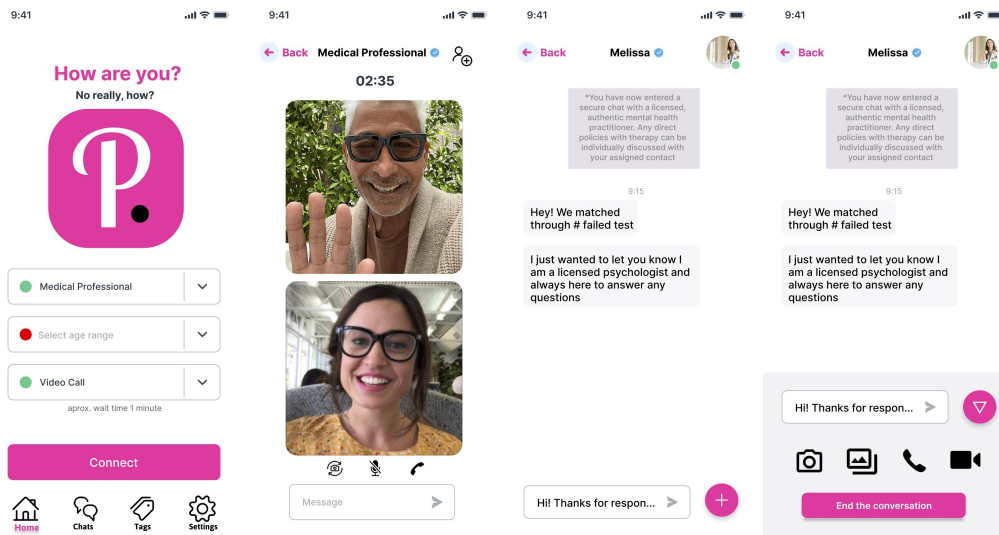
Connecting with caring listeners

1 on 1 Chat & Group Chat & Tags
- In the home page, by setting preference, users can match to other anonymous users to talk with. If users feel uncomfortable with the conversation, they can press the "end of conversation" button to end the conversation, and the chat history will not be keeped.

- In the group chat mode, users can choose any topics they want to discuss and can ask for professional help by pressing the "heart" button on the top of the screen.
- In the "Chats" page, users can see the chat history they have either with licensed practitioners, caring listeners, or group chats.
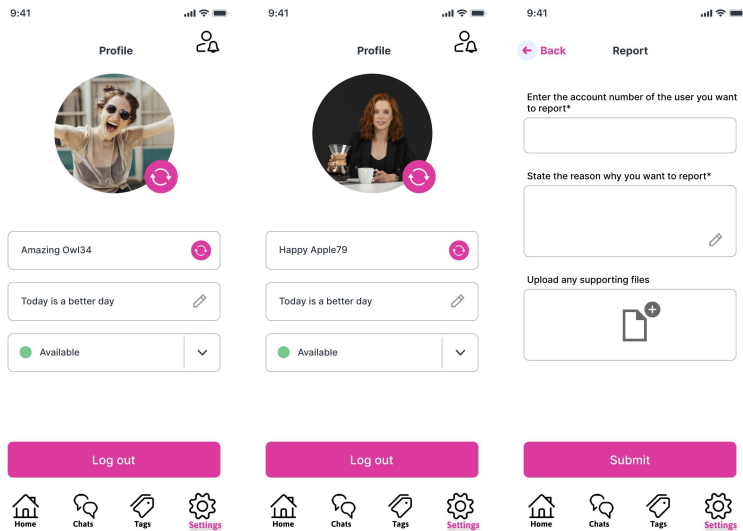
Speaking with a licensed practitioner

Text & Voice Call & Video Call
- By choosing the connect preference, people can choose to talk with a medical professional in any way they want, including texting, voice call, and video call. Each professional in Pronto is certified, so users can feel free to share their worries and confusions with them.

Improving security of online chat

Profile & Report

- Pronto is an anonymous platform, people can choose different profile pictures in the system by pressing the "switch" option on the side of the name textbox and picture.
- People also can select their availability status to avoid disturbance by others.
- Users can report other users who used inappropriate language or have inappropriate behavior in the group chat or one on one chat.

Interactive Prototype

We used Figma to make the interactive prototype of our app.

Link to the prototype:
https://bit.ly/3EhiHXe

Project Pitch Video

https://youtu.be/FTghaZth1TY

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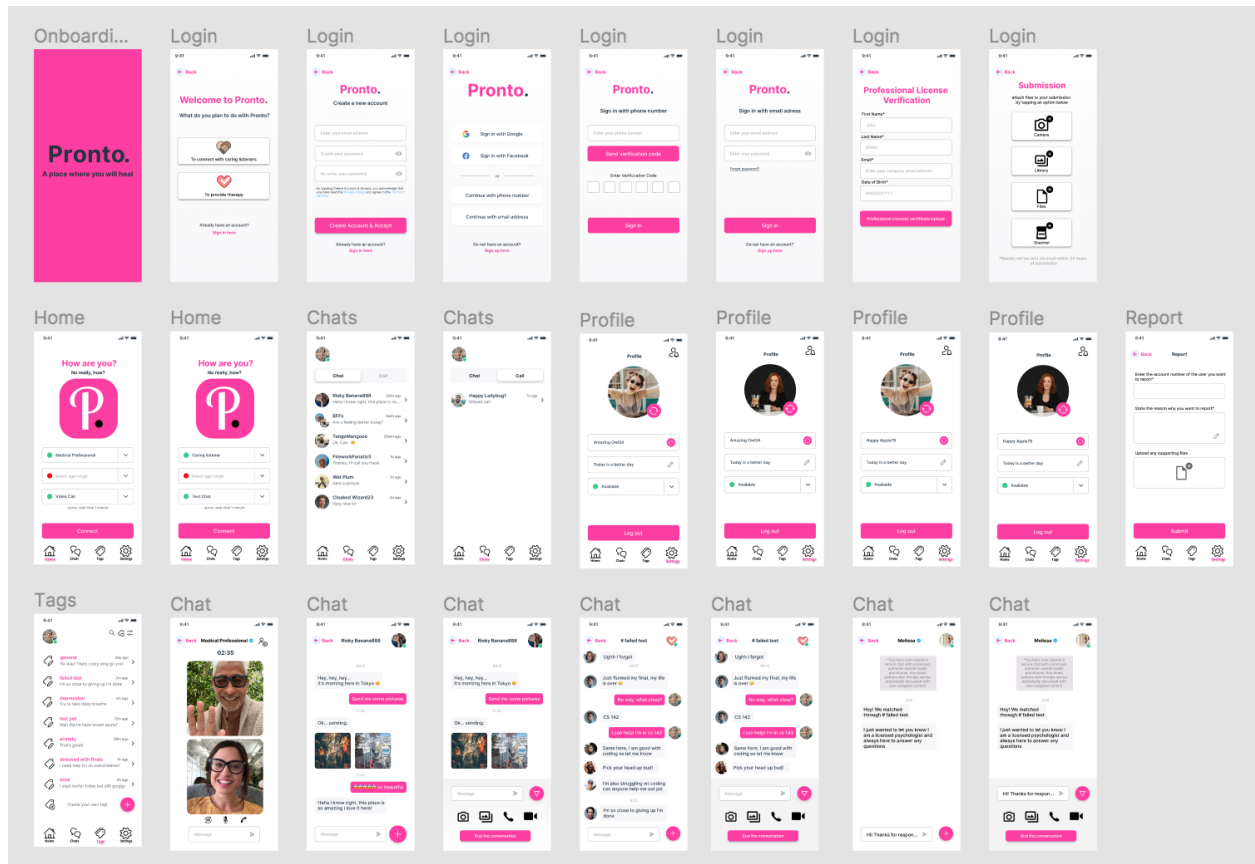
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Appendix

Figure 8. All designed pages of Pronto