

TO DO:

- Understanding the problem (Hassan)
- Research and analysis
 - What's in the market already (Hassan)
 - surveys /data (Hassan)

Personas (Hassan)

User goals (Hassan)

User journey (Hassan)

Storyboard (Hassan) ~

User flow diagram (Hassan)

Sketches (Alexander)

Color palette / typography / design etc (Alexander)

Prototype with Style guide (Alexander)

Demo (Alexander)

Logo (Hassan)

Conclusion (Hassan)

References (Hassan)



Introduction to the Problem Statement

In recent years, the aging population has seen a significant increase in lifespan, with Canadians expected to live up to 82.8 years. However, this extension in years does not necessarily translate to an improvement in quality of life, as healthspan—the period free from chronic diseases or conditions—lags over a decade behind. The advent of pervasive technologies presents an opportunity to enhance the self-reliance, social engagement, and overall well-being of elderly individuals, potentially extending the healthspan. Despite this potential, the adoption of such technologies among the elderly remains limited, largely due to designs that fail to cater to their diverse needs and abilities. The challenge lies in creating user-friendly, adaptable, and elder-friendly designs that can effectively engage this demographic, taking into account their varied experience with technology and physical or cognitive limitations.

Our Solution

Addressing the unique needs and challenges faced by the elderly, especially in times of increased social distancing and isolation due to the COVID-19 pandemic, our team proposes the development of a simplified, highly accessible mobile application. This app is designed to support the physical and mental well-being of elderly users, whether they are living independently at home or in a nursing facility. By incorporating activities such as meditation, gentle reminders for physical movement, stretching exercises, and other health-promoting tasks, the app aims to foster a more active and healthy lifestyle. Recognizing the critical role of technology in maintaining social connections and access to health resources, our solution prioritizes ease of use and inclusivity, ensuring that even users with minimal technological experience can benefit fully.

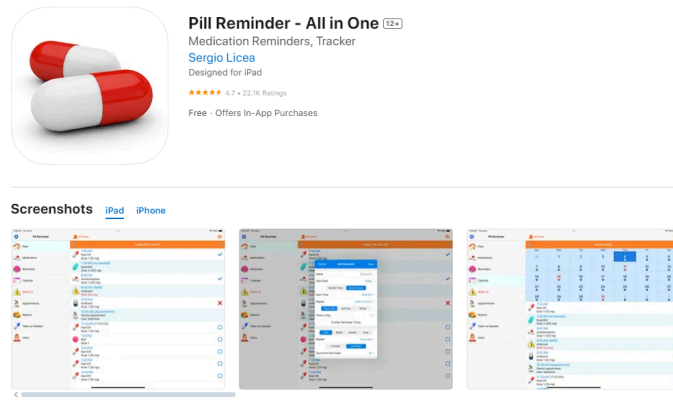
Research and Market Analysis

Our initial market analysis reveals a landscape where existing applications either focus narrowly on specific aspects of well-being (such as physical fitness or mental health) or fail to address the unique usability needs of the elderly population. Many apps offer valuable features but lack the comprehensive approach needed to truly enhance the day-to-day lives of older adults. To understand our target users better and to tailor our app to meet their specific needs, we plan to conduct a survey exploring their daily routines, technology use, and health habits. This survey will help identify key functionalities that could significantly improve their quality of life, such as easy-to-navigate interfaces, large text options, voice commands, and reminders for medication, hydration, or activity. Through this research, we aim to pinpoint gaps in the current market offerings and design an app that not only appeals to the elderly demographic but also effectively supports their physical and mental well-being during and beyond the pandemic era.

Alternatives

There were many alternatives on the market but many either lack features or focus on one feature and do it well but there were not many that include all the features with proper attention to the individual's difficulties.

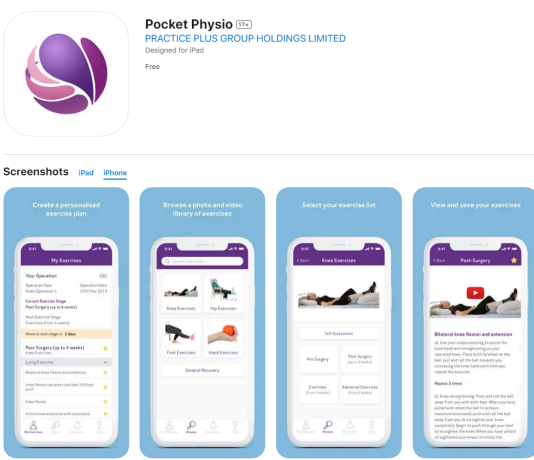
The first example, Pill Reminder - All in One, is an app that reminds the user to take their medication but lacks in many other features:



Pill Reminder is an easy-to-use and reliable app that helps you remember to take your medications at the right time. It allows you to create any type of recurring reminders (every X hours, specific times, daily, weekly, monthly, every X days, etc.). It tracks the remaining quantity of each medication and shows a refill alert when running low.

<https://apps.apple.com/us/app/pill-reminder-all-in-one/id816347839>

The next example, Pocket Physio, is an app that focuses on physical well-being. It provides a wide range of physical activities and features but lacks some of the non-physical aspects of our app:



Practice Plus Group's free Pocket Physio app is an easy to use guide to the physiotherapy exercises you need to do to prepare for, and recover from, hip or knee replacement surgery as well as foot and hand surgery.

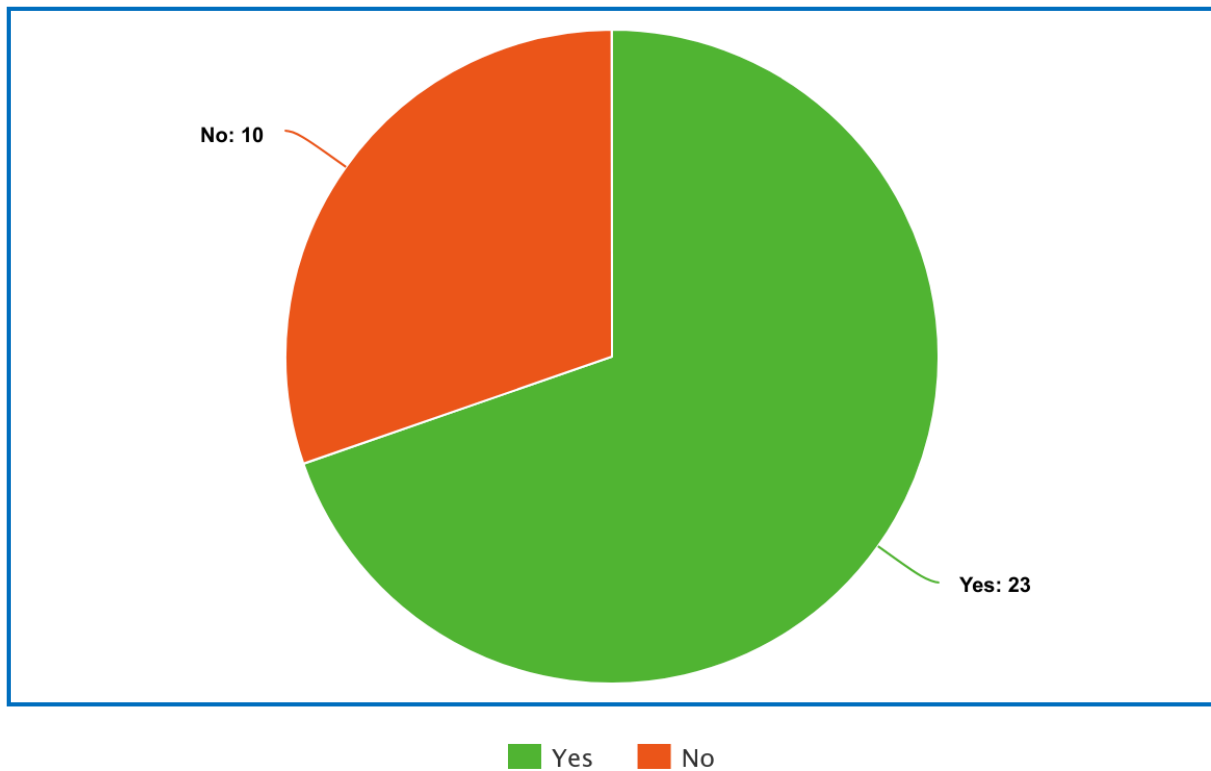
<https://apps.apple.com/gb/app/pocket-physio/id811124736?platform=iphone>

Survey

Survey Demographic: Older than 65
Survey Location: Canada
Survey Size: 33

Question 1: Are you comfortable with using mobile apps or technology in general?

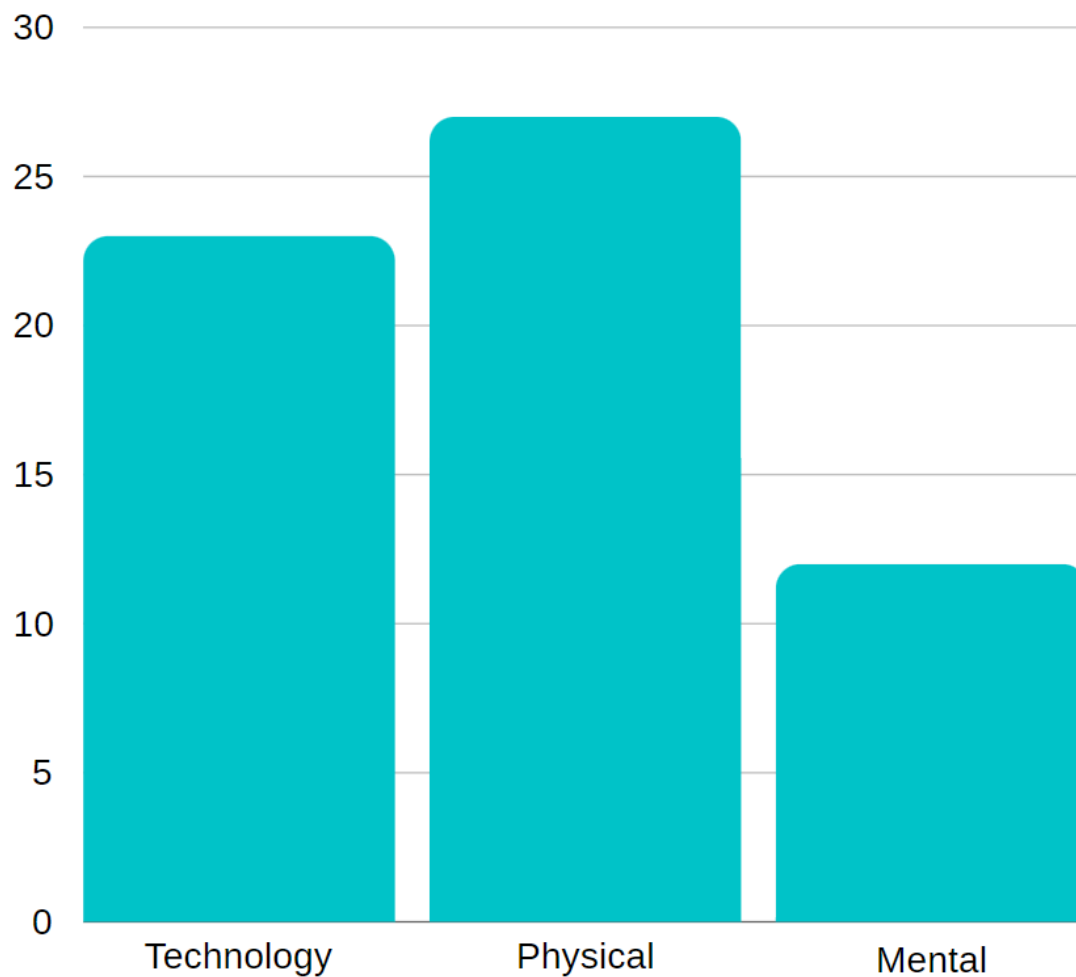
Yes: 23
No: 10



meta-chart.com

Question 2: What challenges do you face when trying to improve your health? (checkbox)

Technology: 23
Physical: 27
Mental: 12



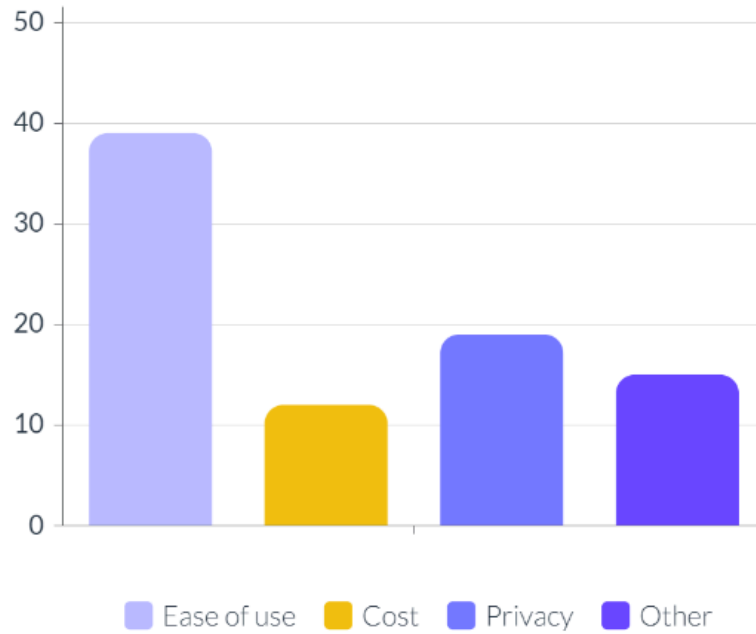
Question 3: What concerns or reservations do you have about using a mobile app for managing your health and well-being? (open-ended)

Ease of use: Various responses highlighting difficulties in navigating apps, understanding features, or manipulating small interfaces.

Cost and Affordability: Some expressed concerns about the potential expenses associated with using health management apps, including subscription fees or in-app purchases.

Privacy: Several respondents voiced worries regarding the security and privacy of their personal health data when using mobile apps, expressing fears of data breaches or unauthorized access.

What concerns or reservations do you have about using a mobile app for managing your health and well-being?




Personas


Based on the results of our survey, we created three personas which we considered to be representative of certain archetypes within the general demographic.

Persona 1: Jacques


Jacques resides in a nursing home in Montreal. He used to be an avid painter and enjoyed going for walks in the park, but his mobility has decreased in recent years due to arthritis. Jacques has limited vision and hearing impairments, which make it difficult for him to engage with traditional communication methods like phone calls and video chats. He enjoys listening to classical music and reminiscing about his travels with his late wife. Jacques is feeling increasingly isolated and longs for opportunities to connect with his family and friends, as well as engage in activities that stimulate his mind and body.




Jacques

 **Age/Gender**
85/Male

 **Location**
Montreal, Canada

 **Occupation**
Retired

 **Family Status**
Single, residing in a nursing home

Bio

Jacques used to be an avid painter and enjoyed going for walks in the park, but his mobility has decreased in recent years due to arthritis.

Motivations

Finding joy in artistic activities, connecting with others in the nursing home, maintaining a sense of purpose and fulfillment.

Goals






To stay physically and mentally active despite his limitations, to maintain a sense of independence and creativity.

Pains

Limited mobility due to arthritis, feeling isolated or bored in the nursing home, longing for the freedom and independence he used to have.

Persona 2: Margaret

Margaret is a retired teacher who lives alone in her own home in Quebec City. She has been relatively healthy but finds it challenging to stay active and connected since the onset of the pandemic. Margaret enjoys reading, gardening, and spending time with her grandchildren, but she misses social interactions with her friends from her weekly book club and gardening club meetings. She has a smartphone but is not very tech-savvy and often struggles to navigate new apps and features. Margaret is concerned about maintaining her physical health and emotional well-being during this period of isolation.

		Bio	Motivations
		Margaret is a retired teacher who has been relatively healthy but finds it challenging to stay active and connected since the onset of the pandemic. She has a smartphone but is not very tech-savvy.	To maintain her physical and mental well-being, and to continue enjoying life in her retirement.
Margaret		Goals	Pains
 Age/Gender 75/Female	 Location Quebec City, Canada	To stay active and connected despite the limitations imposed by the pandemic.	Feeling isolated and disconnected from others, struggling to find ways to stay engaged and active.
 Occupation Retired teacher	 Family Status Lives alone		

User goals

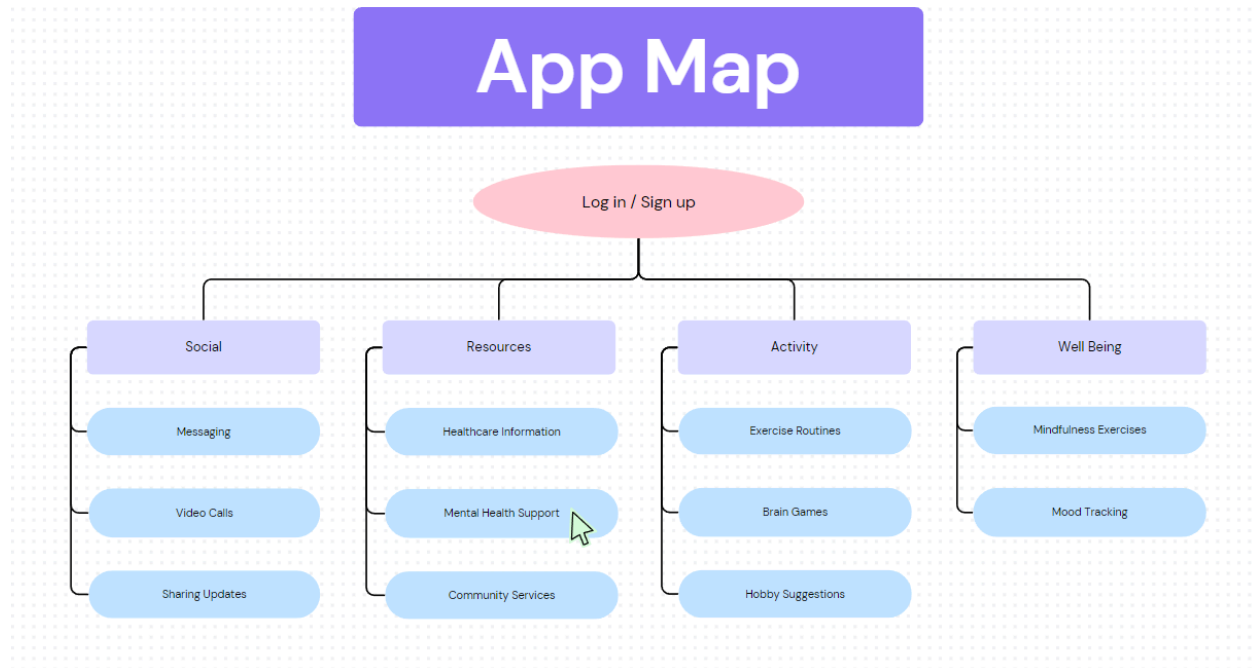
Find a platform to stay connected with family and friends and to stay physically and mentally active by providing features for personalized exercise routines, brain games, and hobby suggestions tailored to their interests and abilities.

Access Resources: Offer access to relevant resources such as healthcare information, mental health support, and local community services to address the diverse needs of users.

Promote emotional well-being by offering features for mindfulness exercises, guided relaxation techniques, and mood tracking tools to help users manage stress and maintain a positive outlook.

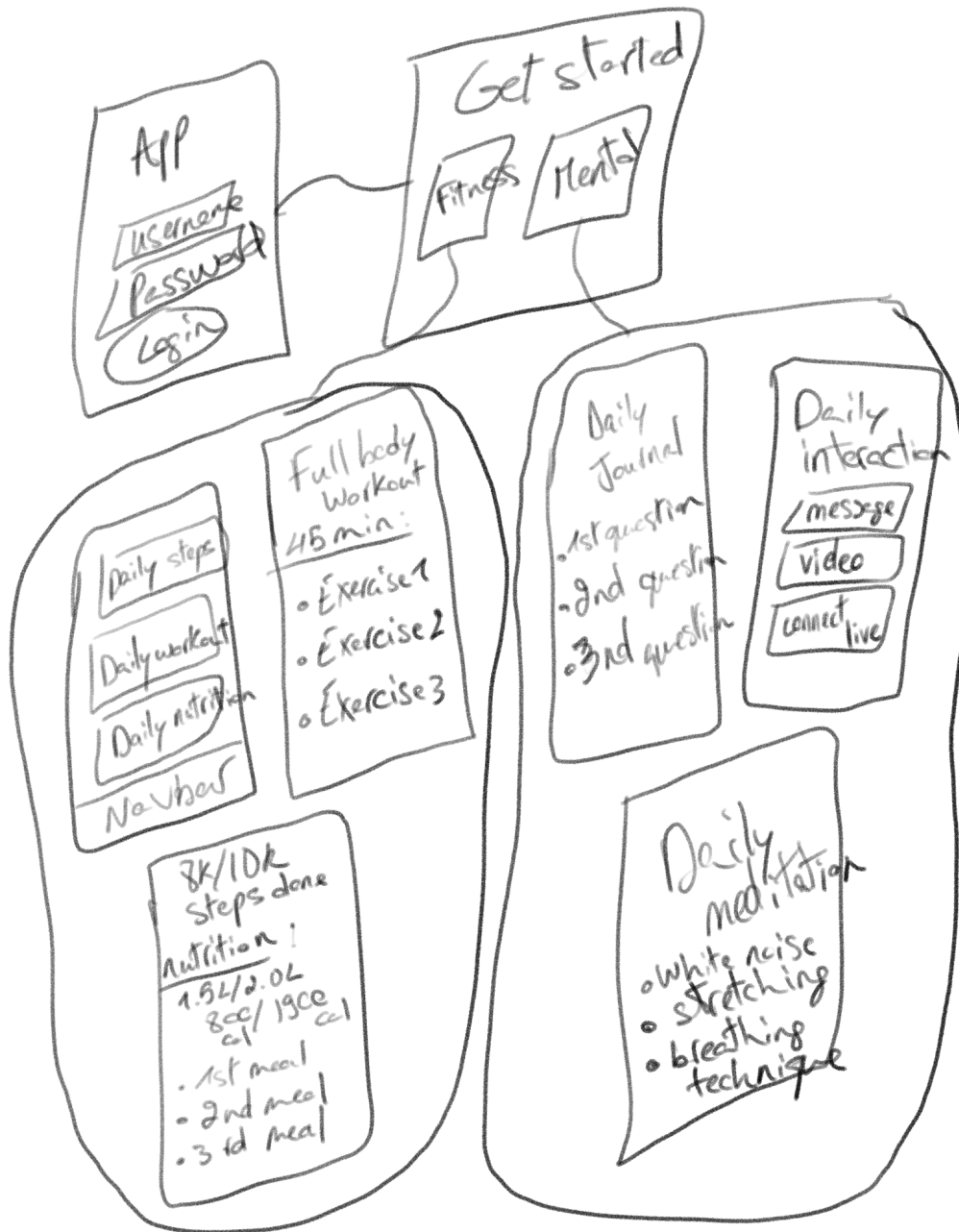
User Journey

We listed all the requirements and features as a user journey map to show the general use flow of our app.



Sketches

We were able to sketch the app's first design after finishing the user journey. These sketches, which came from a brainstorming session, were essential for seeing the app's layout.



Typography



A single font was chosen for all of the app's modules and features in order to increase cohesion. The font used is Poppins.

Poppins is a sans serif typeface designed by Indian Type Foundry in 2014. It is a geometric sans serif font, with influences from both humanist and grotesque typefaces. Its design features include slightly rounded corners, a tall x-height, and an open aperture.

Colors



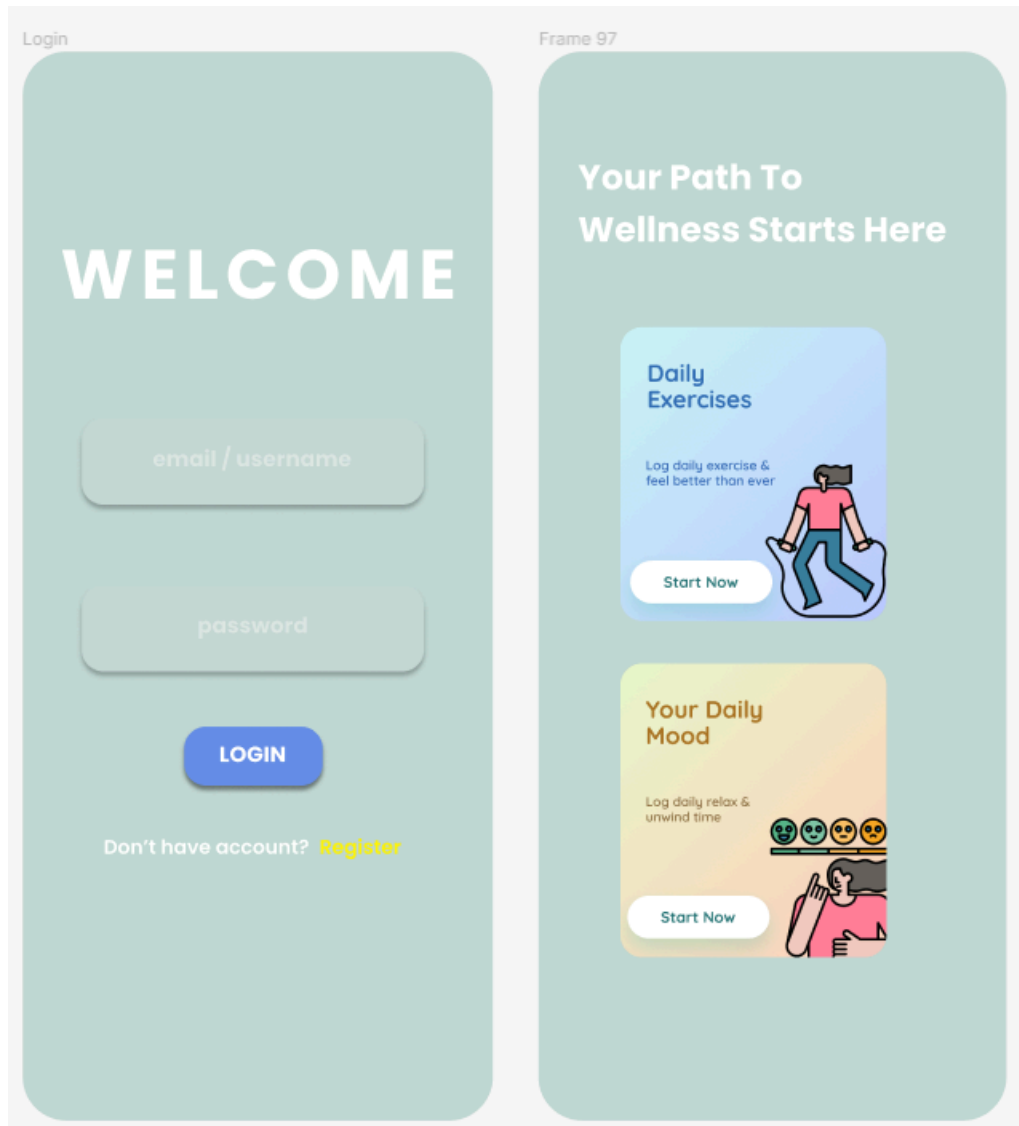
The color palette presented in the image showcases a harmonious blend of cool and warm tones, carefully selected to create an eye-soothing and relaxing atmosphere, ideal for the intended elderly user base of the app. The light blue tones are reminiscent of clear skies, promoting a sense of tranquility and calmness. The muted purple adds a touch of warmth and softness, while the deep black provides a strong contrast for readability. The vibrant orange

offers an energizing splash, albeit used sparingly to maintain the overall soothing theme. Neutral tones of gray and beige serve as balancing elements, grounding the palette and ensuring that the design remains light and accessible. The inclusion of pure white completes the palette, ensuring a clean and uncluttered aesthetic that enhances usability and contributes to the overall gentle and inviting interface of the app.

Final design and prototype

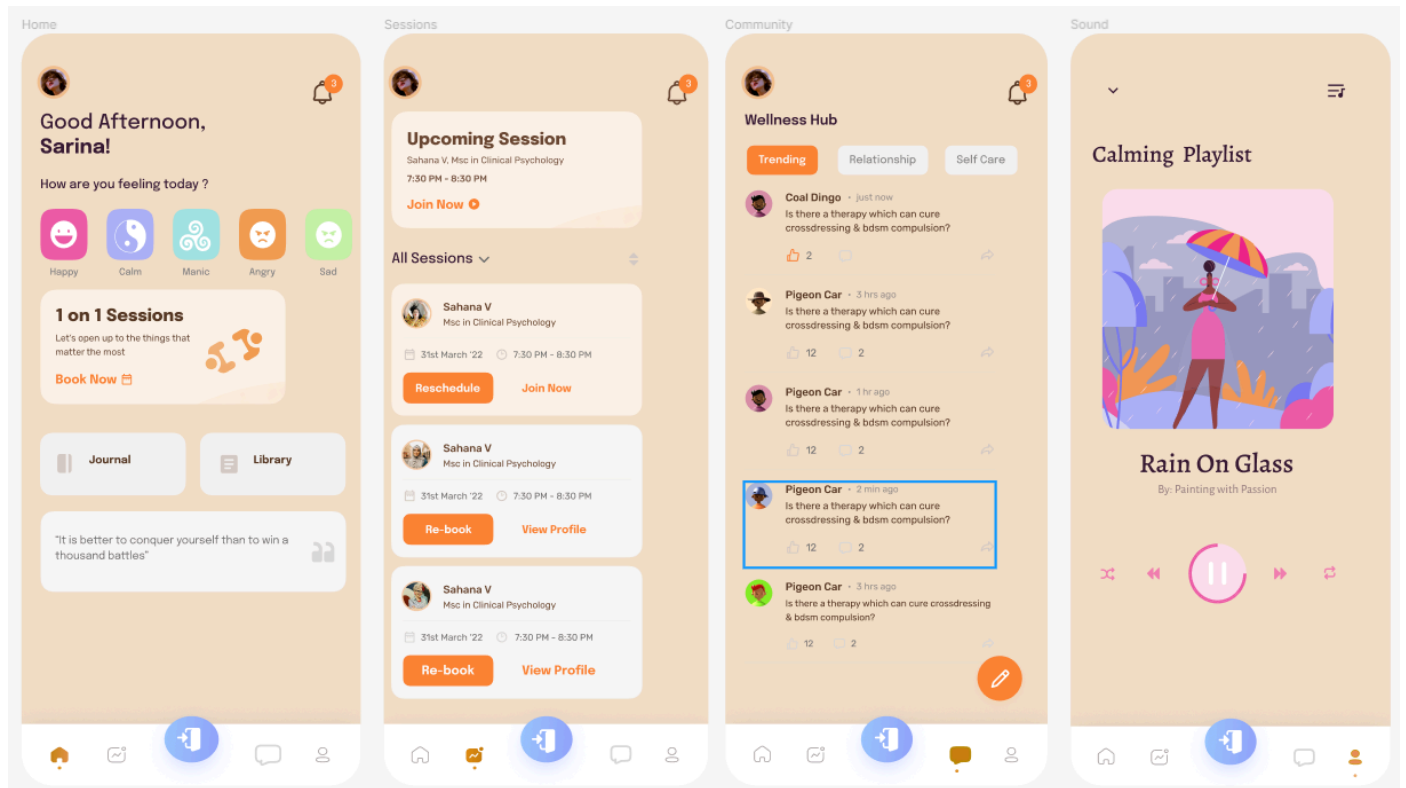
Onboarding

The user is first being prompted to login or create an account then suggested to start taking care of themselves either mentally or physically. The onboarding process was designed to be short and easy and mostly elderly friendly to not complicate things.

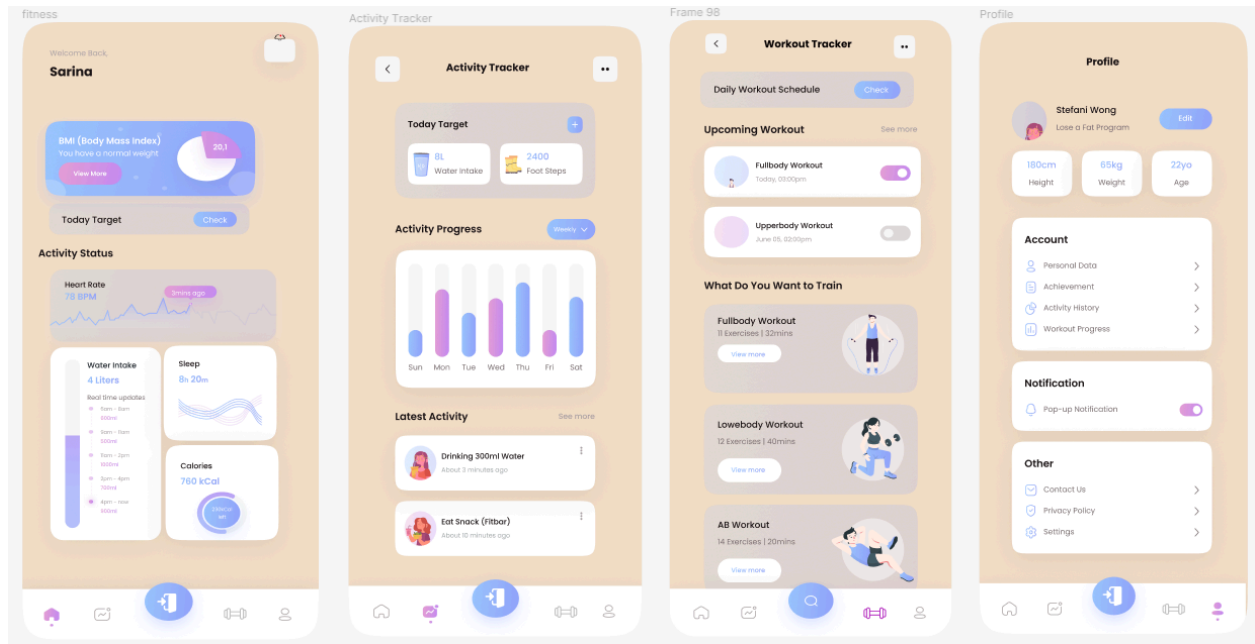


Mental Health

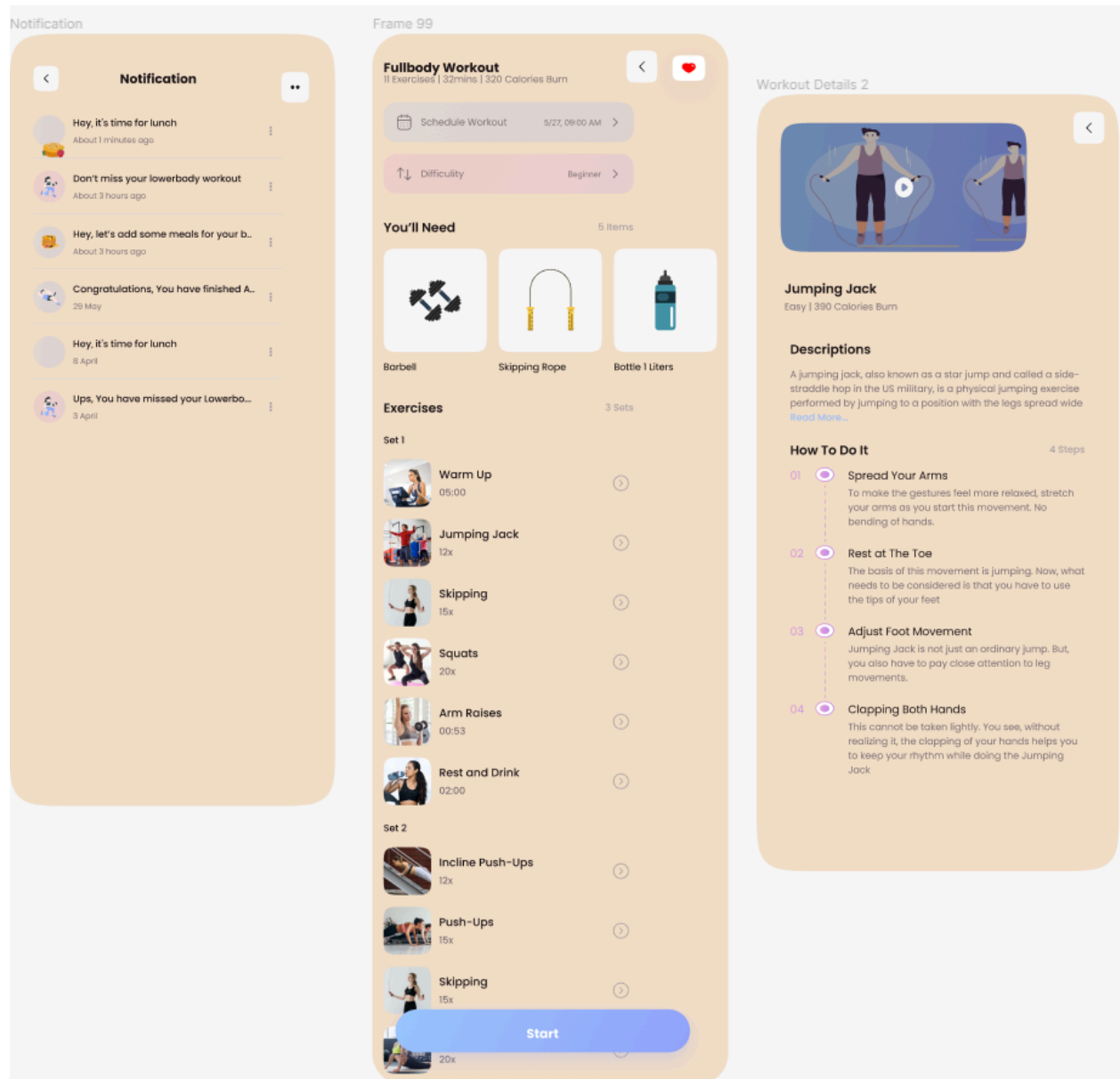
The mental health section of the app provides users with mood tracking capabilities, allowing them to record and monitor their emotional well-being through a simple interface. It also offers a platform for social interaction, enabling users to engage with others via chat or video, thus fostering a supportive community environment. Additionally, the app includes a feature to listen to calming music, to aid in relaxation and stress reduction. These features collectively support the mental health of users by providing tools for self-awareness, social connection, and relaxation.



Physical Health



The physical health section of the app is a comprehensive suite designed to support users in monitoring and enhancing their fitness. It includes a personalized fitness dashboard that tracks key health metrics like hydration levels, and sleep patterns, encouraging users to meet daily targets for water intake and calorie burn. There's also an activity tracker visualizing progress throughout the week and a workout tracker that schedules exercises, suggesting routines like full-body or lower body workouts, tailored to the user's preferences. The section appears to be rounded off with a user profile, displaying personal statistics and achievements, fostering a sense of accomplishment and motivation. These integrated features provide a holistic approach to physical wellness, promoting an active lifestyle tailored to the user's individual health goals.



Here is an example of a full body workout with clear written instructions or a visual representation on the steps to take depending on the user's preference.

Conclusion

In conclusion, our design team has undertaken a comprehensive approach to address the pressing need for a mobile application that supports the physical and mental wellbeing of the elderly. Through diligent research, market analysis, surveys, and persona development, we gained valuable insights into the specific needs, preferences, and limitations of our target demographic.

In the future, we envision further refinement of the app based on user feedback and usability testing, as well as potential partnerships with healthcare providers and community organizations to enhance its reach and impact. Ultimately, our goal is to make a meaningful contribution to the wellbeing of elderly individuals in Quebec, helping them live happier, healthier lives through the power of our app.

Tools and references

Persona: <https://userpersona.dev>

User journey: canva.com

Design: Figma.com