

VIVA



01.

Introduction

As the world's population ages, there is a growing need to address the challenges that senior citizens face. Older adults are more susceptible to physical and mental health issues, social isolation, forgetfulness, safety concerns, and difficulty accessing local resources, all of which can negatively impact their quality of life and can be especially difficult for the elderly, who may have restricted mobility, social support, or money.

02.

Problem

While there are existing applications that address some of these challenges, there is a need for a more comprehensive solution that can address all of them in one platform. Additionally, many existing applications are designed with younger people in mind and may be too complex or difficult for seniors to navigate. There is a clear gap in the market for an application that provides a user-friendly interface and a comprehensive range of features that cater to the needs of the elderly population.

03.

Solution

VIVA offers a comprehensive solution to the challenges that seniors face by incorporating features that promote physical and mental well-being, social connection, safety, and access to local services. VIVA includes physical health tracking, mental health support, social connection, daily reminders, safety and emergency response, connections to local services, and interactive educational resources. VIVA empowers seniors to maintain their physical and mental health, engage with their community, and access the resources they need to live their best life. Overall, VIVA provides a valuable tool to improve the well-being of the elderly population and help them enjoy their golden years with greater comfort, security, and joy.

Article-Research

1

According to a poll performed by the University of California, San Diego, elderly people are interested in using mobile applications to assist them to manage their health and preserve social relationships. ***According to the report, 75% of senior adults own mobile devices, and 83% of those people utilize mobile apps.*** According to the poll, senior adults want to use smartphone applications to manage their prescriptions, physical activity, and contact with their healthcare practitioner. Furthermore, older individuals want to use mobile applications to ***preserve social ties and interact with family and friends.*** These findings validate the necessity for our software, which aims to provide a comprehensive solution that satisfies the physical, mental, and social requirements of the elderly.

2

The article Design Elder-Friendly Mobile Apps: An Exploratory Review presents an overview of the issues that elders confront while using mobile applications and provides insights into design elements and usability characteristics that can contribute to a more pleasant experience for older users. That is crucial for our app since it highlights the significance of building user-friendly and accessible mobile apps for geriatric consumers.

The findings of the paper reinforce the necessity for our software by ***recommending that it feature bigger font sizes, simple user interfaces, straightforward navigation, and common icons and symbols to respond to the special needs of senior users.*** Our software may give a more pleasant and gratifying experience for older users by including these design aspects and usability considerations.

3

The Mobile Health Applications: Is It a Tool to Increase Patient Involvement in the Health Care System? A Scoping Review article conducts a comprehensive assessment of research that investigated the usage of mobile health apps (mHealth apps) by seniors. **According to the research, 77% of surveyed seniors said they would be eager to use a mHealth app**, with the most popular types of applications assisting with medication management, symptom tracking, and contact with healthcare professionals.

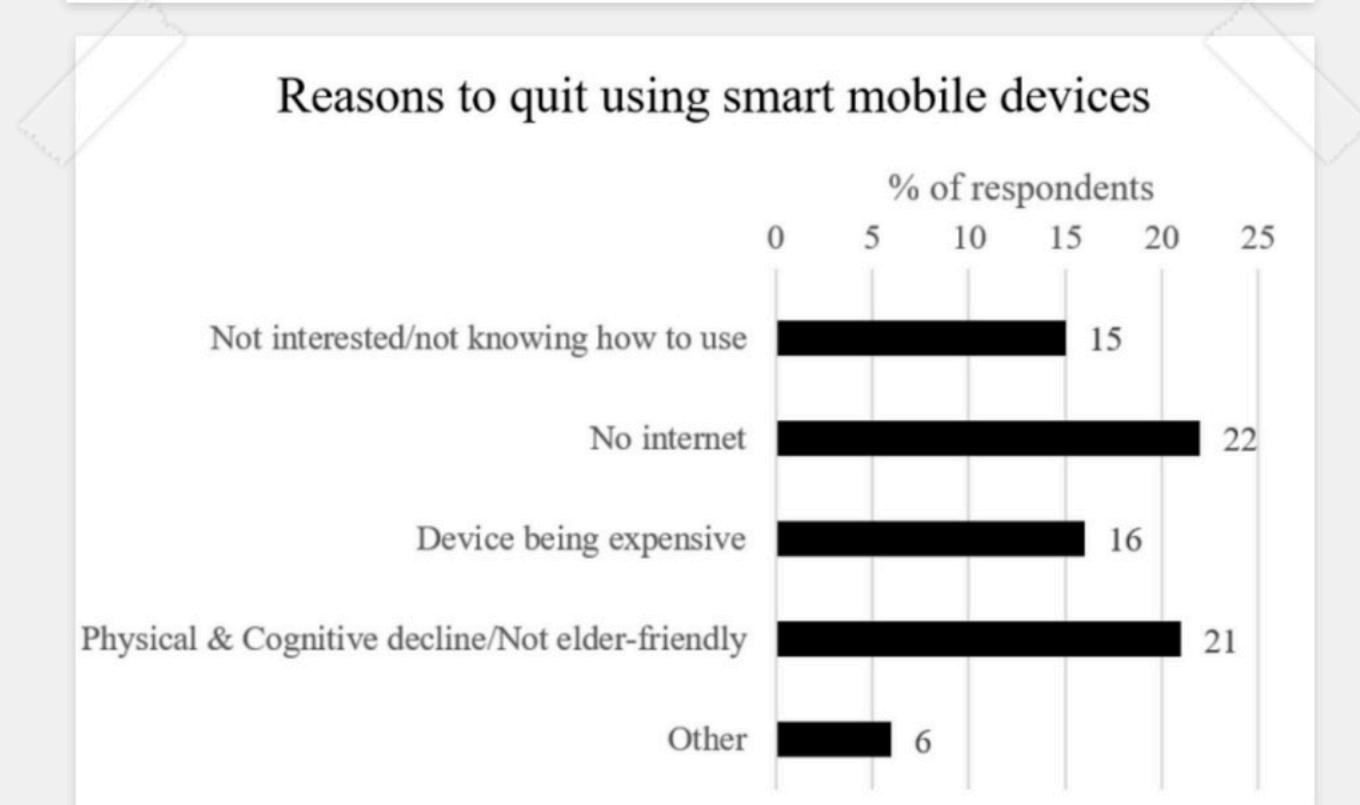
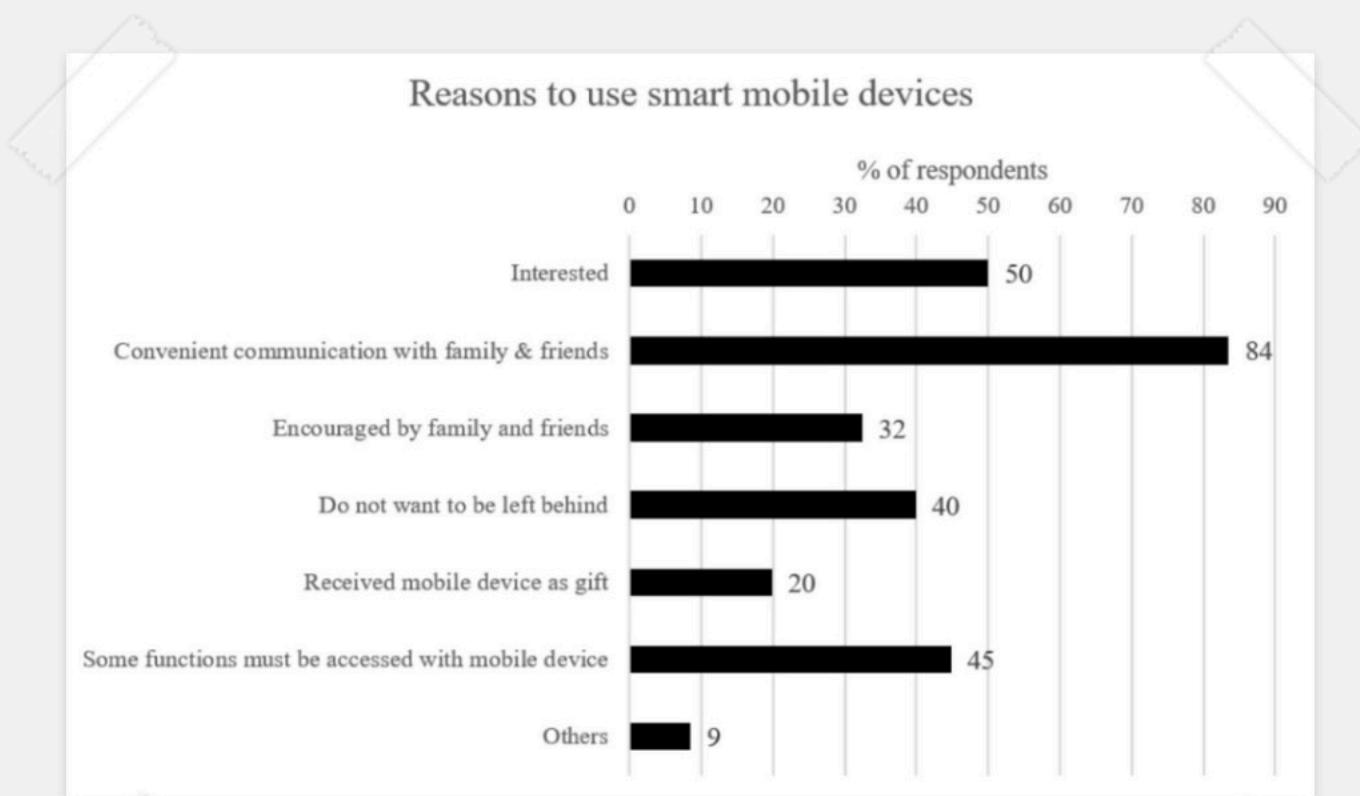
According to the study, seniors with higher levels of education and more expertise with mobile devices were more likely to be interested in utilizing mHealth apps. The paper underlines the potential benefits of mHealth applications for elders, such as **improved health outcomes, higher self-management abilities, and improved contact** with healthcare professionals, and underscores the need of creating these apps with their individual needs and preferences in mind. These findings reinforce the necessity for our application, which seeks to give seniors with an easy-to-use and accessible platform for managing their health and connecting with healthcare professionals.

4

The article Mobile Application Use and Loneliness among Older Adults in the Digital Age: Insights from a Survey in Hong Kong during the COVID-19

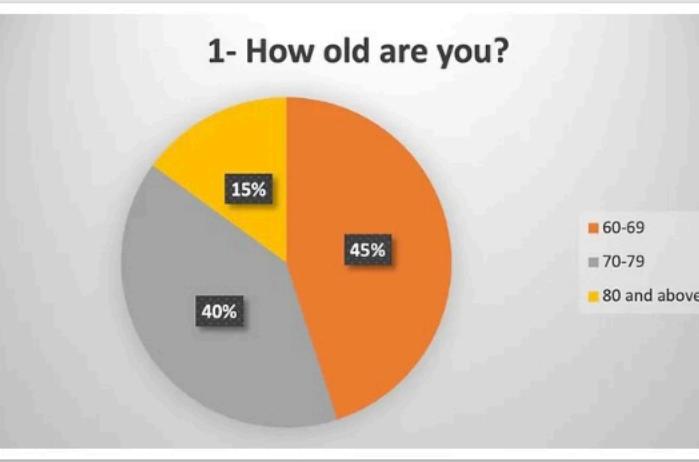
Pandemic investigates the relationship between mobile app use and loneliness among older adults in Hong Kong during the COVID-19 pandemic. The study discovered that **utilizing social media and instant messaging apps might help older persons feel less lonely**. These findings imply that mobile apps, such as those provided by our application, have the potential to improve social ties and reduce feelings of loneliness among older persons. The research also emphasizes the significance of

creating user-friendly and accessible mobile apps to meet the requirements
and preferences of older folks.



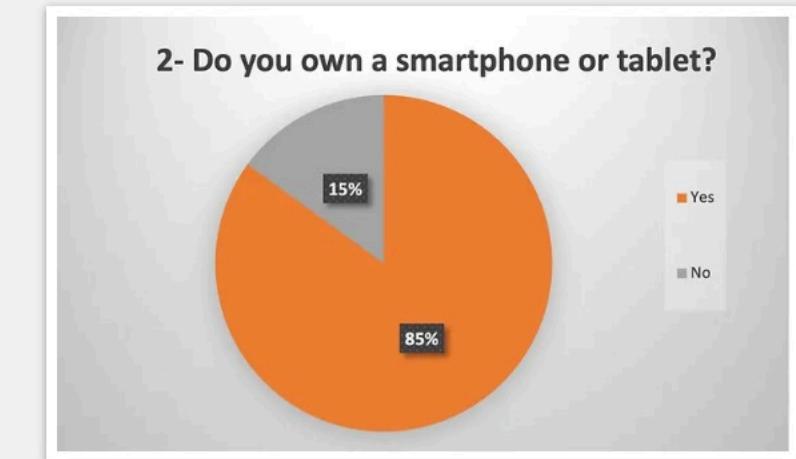
Survey-Research

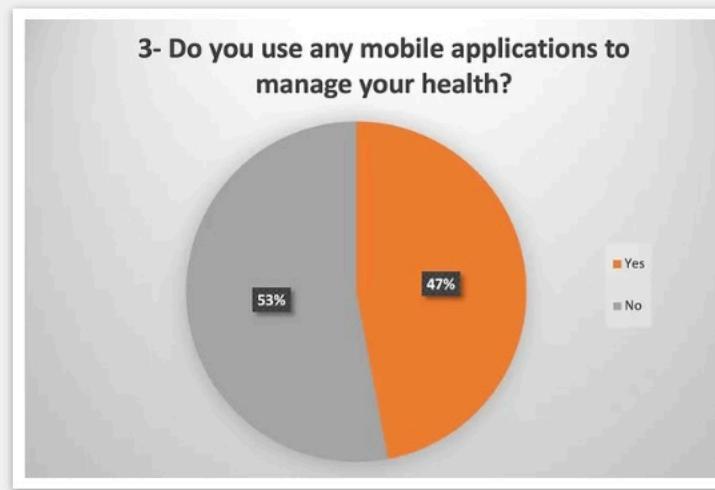
A study was conducted by our team to better understand how elderly people could use our VIVA app, a survey was provided to 30 people about their age, use cases, preferences, and what they consider important to them. The goal was to gather key takeaways about potential users, as well as to determine their needs and have an app tailored more towards them.



These findings suggest that the target market for our application is likely to be older adults, with a focus on those in their 60s and 70s.

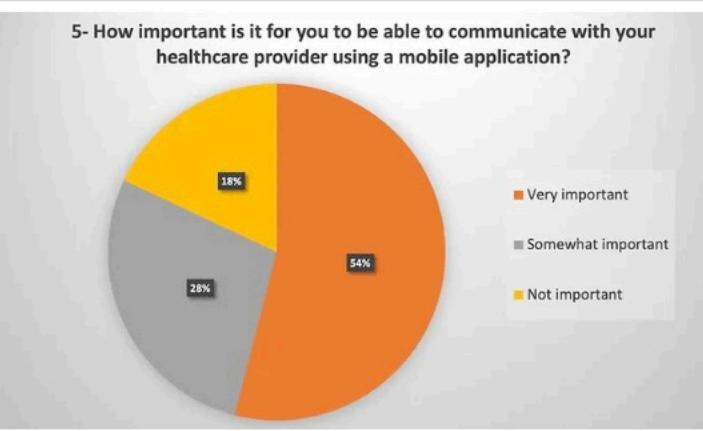
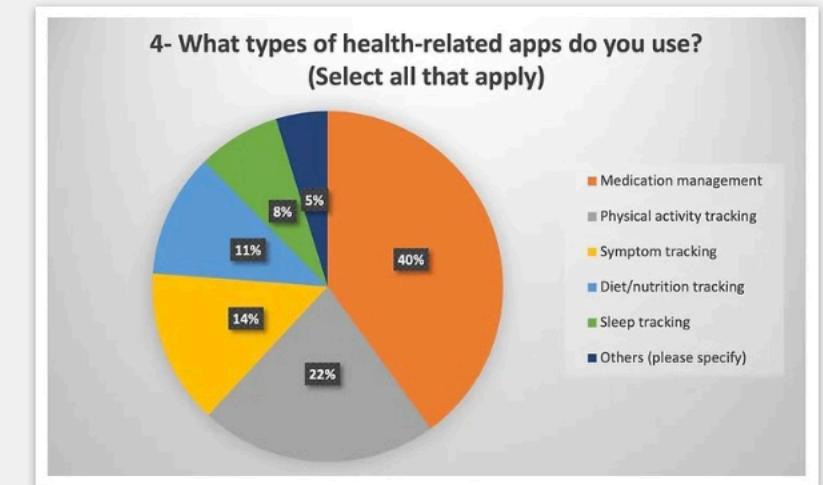
The majority of participants (85%) own a smartphone or tablet. This indicates that there is a potential market for a mobile application targeted toward the elderly population.





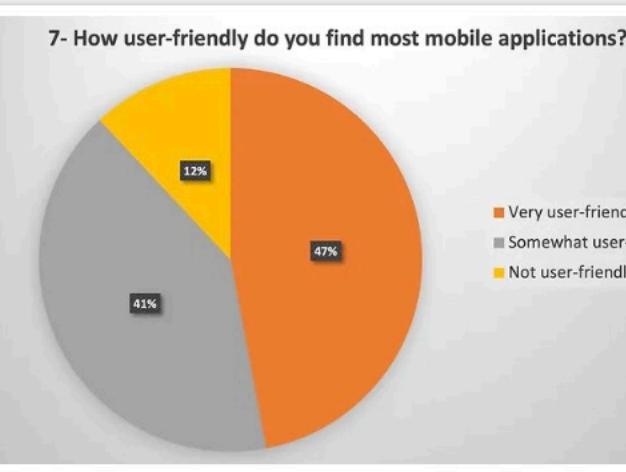
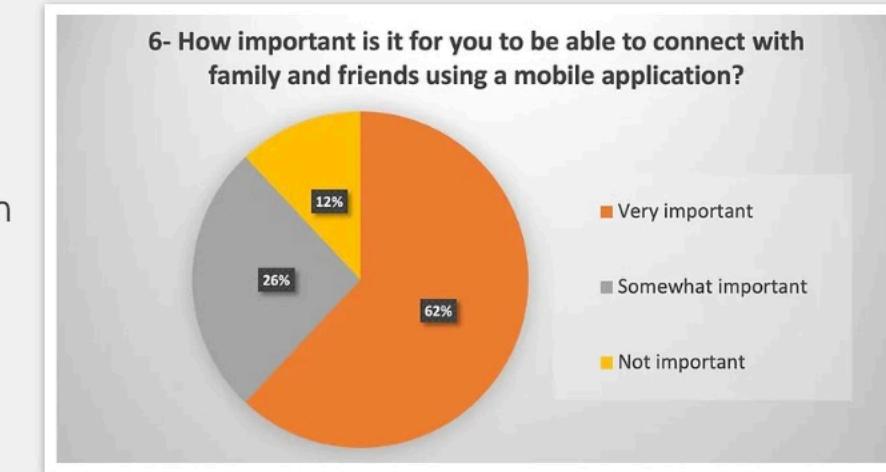
About half of the participants in the sample use mobile applications to manage their health, while the other half do not.

Participants selected more than one option, with additional responses including responses included stress management, meditation, blood pressure tracking, and glucose tracking



Findings suggest that there is a significant interest among the elderly population in being able to communicate with their healthcare providers using a mobile app, which is a key feature that our app aims to provide.

Finding reinforces the importance of including social connectivity features in our application to better meet the needs of older adults

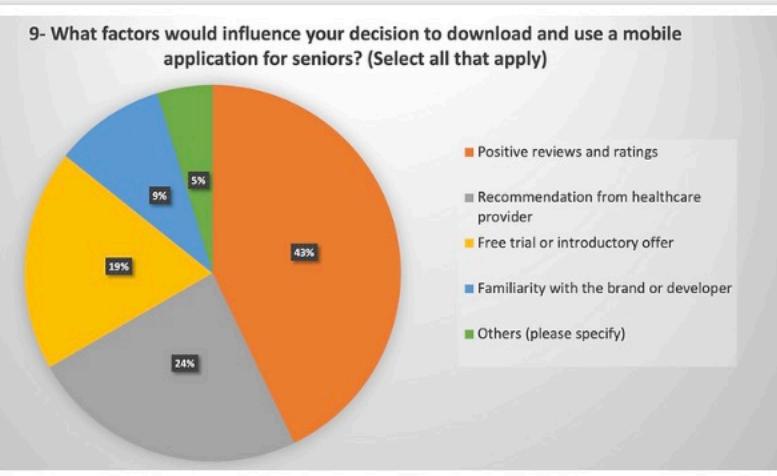
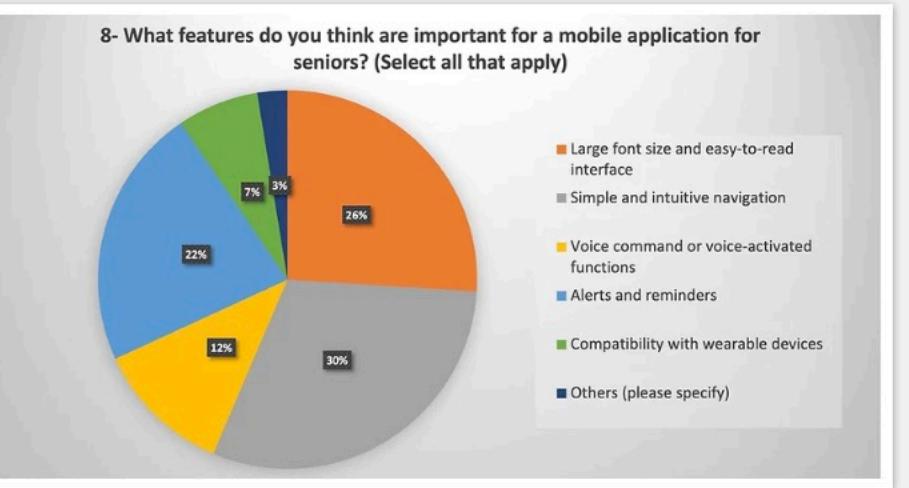


The majority of the participants found most mobile applications to be user-friendly to some extent, with almost half indicating that they were very user-friendly, and only a small percentage of participants found mobile applications to be not user-friendly.

This finding highlights the importance of catering to the needs of a significant proportion of users in our application, ensuring that it is user-friendly and accessible to a wider elderly population.

Findings suggest that seniors find a large font size and an easy-to-read interface, as well as simple and intuitive navigation to be the most important features for a mobile application.

Alerts and reminders were also considered important by a majority of participants, while voice command and compatibility with wearable devices were considered less important.



The most influential factors in participants' decisions are positive reviews and ratings, then recommendations from a healthcare provider, a free trial or introductory offer, and familiarity with the brand or developer. Suggesting it may be important to focus on building a positive reputation.

Quotes from Participants

<

"I always struggle with technology, but I really wish there was a simple way to manage my health and stay connected with my family and friends."

>

User Personas

Upon reviewing the data, two distinct user profiles were identified, which were then developed into personas.

Persona #1: Mary Watson

Mary Watson



AGE 74
EDUCATION Bachelor's in Education
STATUS Widow
OCCUPATION Retired Teacher
LOCATION Pennsylvania
TECH LITERATE Medium

“ I want to be able to take control of my health, stay connected with my loved ones and feel less isolated, all without the added stress of complicated technology.

Personality
Extrovert Caring

Bio
Hi, I am a 74-year-old retired teacher who has spent most of her life teaching others. I have some health issues like hypertension and arthritis, which make it challenging for me to stay active and healthy. Despite being tech-savvy, I find complicated interfaces difficult to navigate.

Core needs

- Easily manage my medications
- Track physical activity
- Communicate with my healthcare provider.
- Stay connected with family and friends.

Frustrations

- Feeling isolated and disconnected from family and friends due to social distancing
- Struggling to navigate complicated interfaces and technology
- Difficulty remembering to take medications and keep up with exercise routine

Brands
 fitbit 

Platform
 Website  Mobile App

Mary is a retired teacher who values staying active and healthy. She enjoys using technology but finds complex interfaces challenging. Mary is motivated to manage her health status and communicate effectively with her healthcare provider. However, she struggles with remembering to take her medications on time and keeping up with her exercise routine. She also feels isolated from her family and friends due to social distancing. The following empathy map applies to Mary's situation:

Mary Watson

What do they

Think?

"I want to stay healthy and active, but it's getting harder to keep track of everything"

"I wish technology wasn't so complicated sometimes"

I feel concerned about my health status

"Talking to close ones really matters "

I feel frustrated with complicated interfaces

"I wish I had an easier way to manage my medications"

What do they

Feel?

I feel isolated from family and friends

What do they

Say?

"I wish i could stay in touch with my healthcare provider digitally"

I am motivated to stay active and healthy

"I wish i was still connected to my family and friends as I used to be"



I use smartphones and tablets for browsing and social media

I try to remember to take my medications on time

I try to keep up with my exercise routine

What do they

Do?

I have difficulties remembering to take my medications on time

I want to maintain my motivation to manage health status despite challenges

Pains

Fears, frustrations, obstacles...

I struggle to track the progress of my physical activities.

I find complicated interfaces challenging

Gains

Want/needs, measures of success, achievements

I want to maintain an active and social lifestyle through technology

Mary Watson User Goals

Mary's goal was to stay active and healthy, manage her medications, and keep track of her health status. She struggles with remembering to take her medications on time and keeping up with her exercise routine. Mary also wishes to communicate more effectively with her healthcare provider and feels isolated from her family and friends due to social distancing. She would benefit from an application that is user-friendly, and can help her manage her medications, track her physical activity, and monitor her health. The app's reminders and alerts can help her stay on track with her medication schedule and exercise routine. The communication feature can help her connect with her healthcare provider and family/friends, which would alleviate her feelings of isolation. Mary would not want the app to be too complicated or frustrating to use, as she finds it challenging to navigate through complicated interfaces.

Persona #2: John Mckay



John Mckay

AGE 81
EDUCATION High School Diploma
STATUS Married
OCCUPATION Retired Farmer
LOCATION Iowa
TECH LITERATE Low

“ I want to stay healthy and keep in touch with my loved ones, but technology these days is too complicated for me. I just need something simple that I can understand and use easily.

Bio
I am a 81-year-old retired farmer who lives in a rural area with his wife. I have some health issues, including type 2 diabetes and mild cognitive impairment. I value independence and enjoy spending time in my garden and reading books. Although i'm not very tech-savvy, I am open to learning new things and keeping up with the times.

Core needs

- Manage his diabetes effectively
- Stay in touch with his healthcare provider and family members.

Frustrations

- Challenging to navigate complex technology and read small text.
- Struggling with remembering to take medications and tracking blood sugar levels.

Platform

Website Mobile App

Personality

Introvert Hardworking
Family Oriented

John is an elderly man who values his health and staying connected with his loved ones. As a retired farmer living in a rural area, John is not very comfortable with new technology and finds it challenging to read small text. His main goals are to manage his diabetes and keep in touch with his healthcare provider and family members who live far away. However, he struggles with keeping track of his medications and blood sugar levels. John also experiences feelings of isolation due to his rural location and limited ability to communicate with others.

The following empathy map applies to John's situation:

PERSON PERSPECTIVE

John McKay

What do they

Think?

"I need to stay on top of my diabetes management, but it's not always easy"

"Technology could be helpful if it wasn't so complicated"

"Talking to close ones really matters "

Feeling isolated from family and friends

I am frustrated with new technology and small text

What do they

Feel?

I am concerned about my health status

I am motivated to manage my diabetes and stay healthy

Hard to connect with others

I use basic mobile phone for calls and texts

I struggle to keep track of medications and blood sugar levels

I relatively live a simple and rural lifestyle

What do they

Say?

"I wish I could keep track of my blood sugar levels more easily"

"I find new technology to be confusing and hard to use"



What do they

Do?

Pains

Fears, frustrations, obstacles...

Difficulty keeping track of medications and blood sugar levels

Struggling with new technology and small text

Feeling isolated from family and friends

Gains

Want/needs, measures of success, achievements

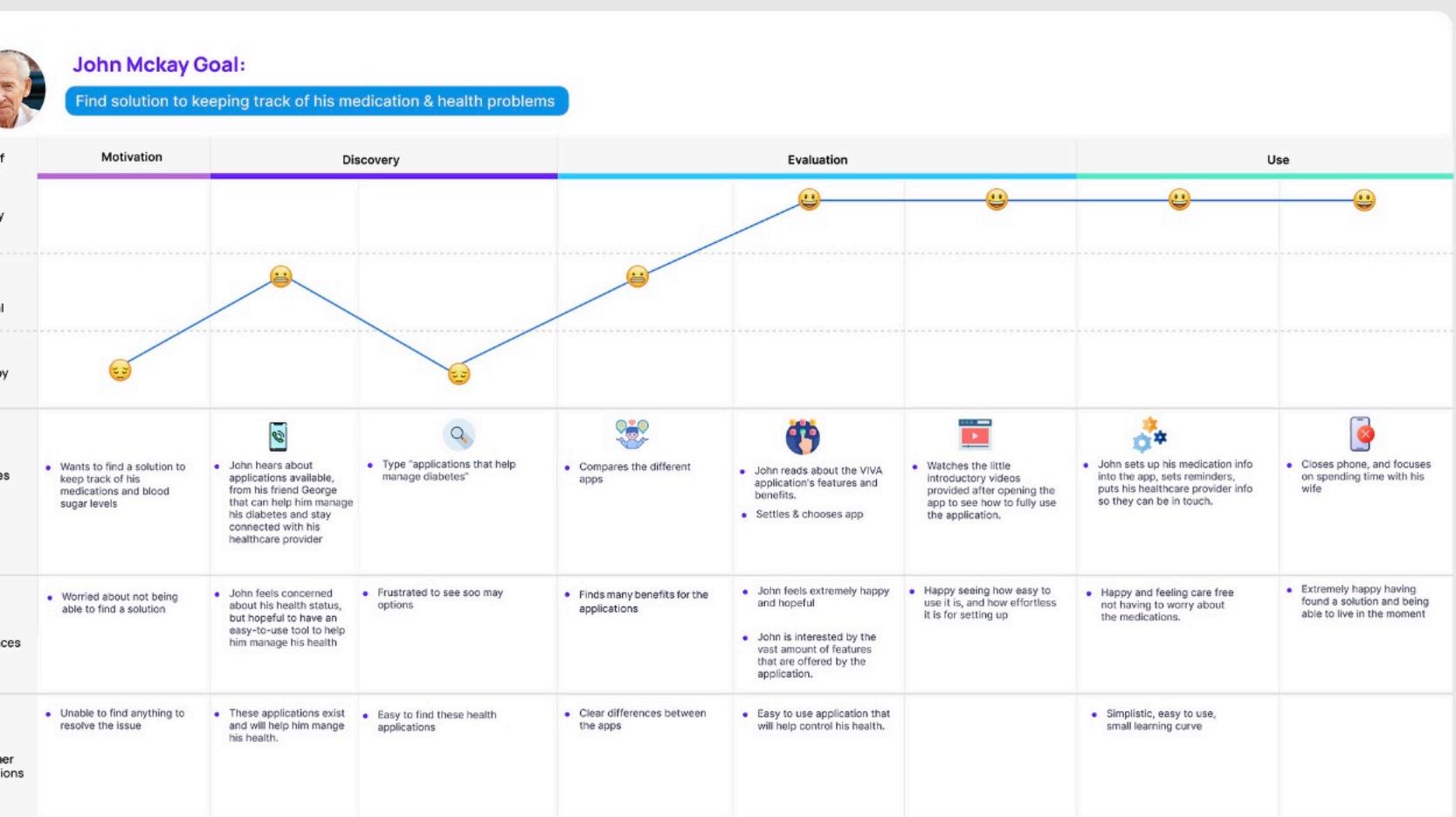
Maintaining motivation to manage my diabetes despite challenges

Living a simple and fulfilling rural lifestyle

John Mckay User Goals

John's primary goal was to manage his diabetes effectively and stay healthy. He faces challenges in keeping track of his medications and blood sugar levels and also wishes to stay connected with his healthcare provider and family members who live far away. John prefers a simple and easy-to-read interface that can help him manage his health without feeling overwhelmed or frustrated. He values timely reminders and alerts to help him stay on track with his medication and exercise routine. Additionally, he desires an app that can help him connect with his healthcare provider and family members easily, alleviating his feelings of isolation.

User Journey



Story Board



Waking up feeling overwhelmed with managing & keeping track of medications.



Ughh....
Soo many medications to keep track of



Ring..
Ring..
Ring..

I heard of this new app VIVA that does it all for us.



Let me check this VIVA on my cellphone



WOW! it offers soo many features



BEEP
BEEP
BEEP

Looks like it's time to take my medication



I can see all my
medication info

I can get in touch with
my doctor

But most importanly I
can....



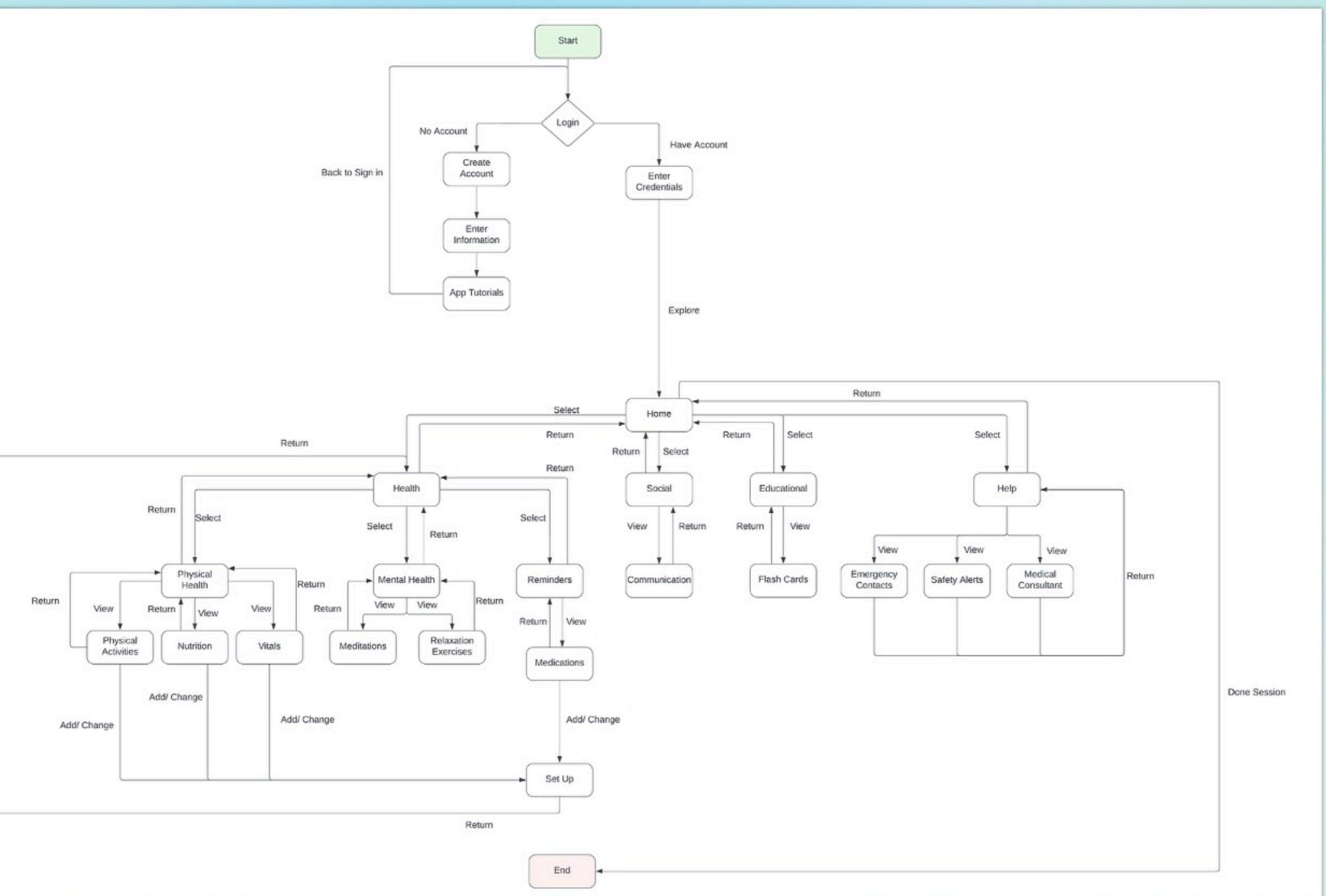
Stay in touch with my
family

The Design Process

The research was conducted by our team, creating personas of individuals whose concerns we would be targeting. Identifying the user journeys, and storyboards were all instrumental points in identifying a user-centered product. After identifying the primary user goals, we utilized the insights gained from our studies to formalize the process of satisfying them. This involved creating a user flow diagram that outlined the main steps involved in using the application.

User Flow Diagram





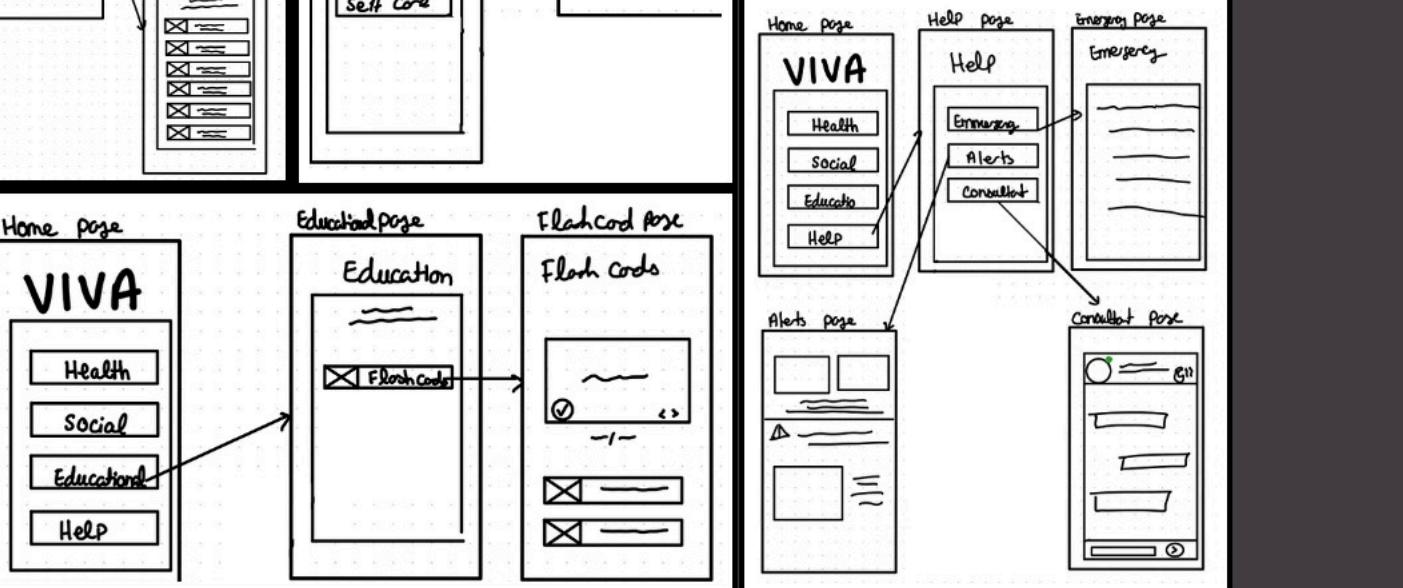
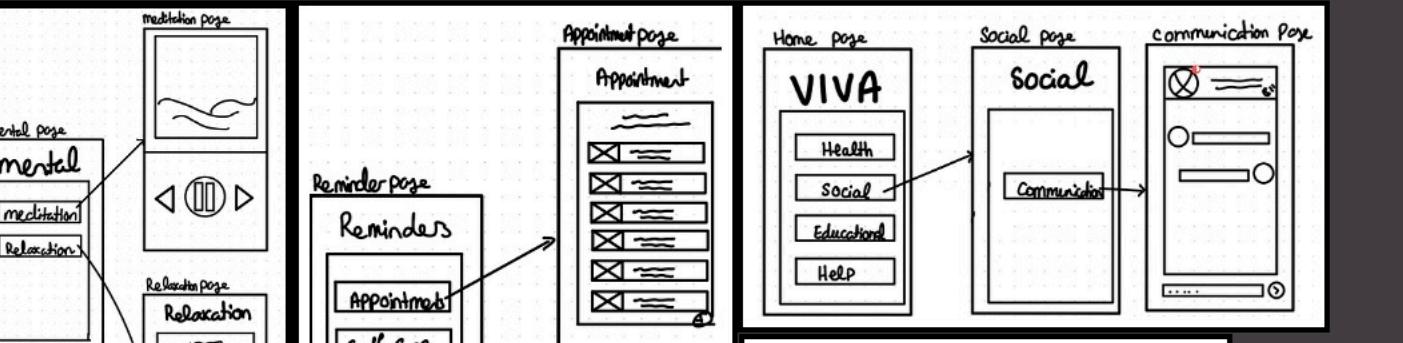
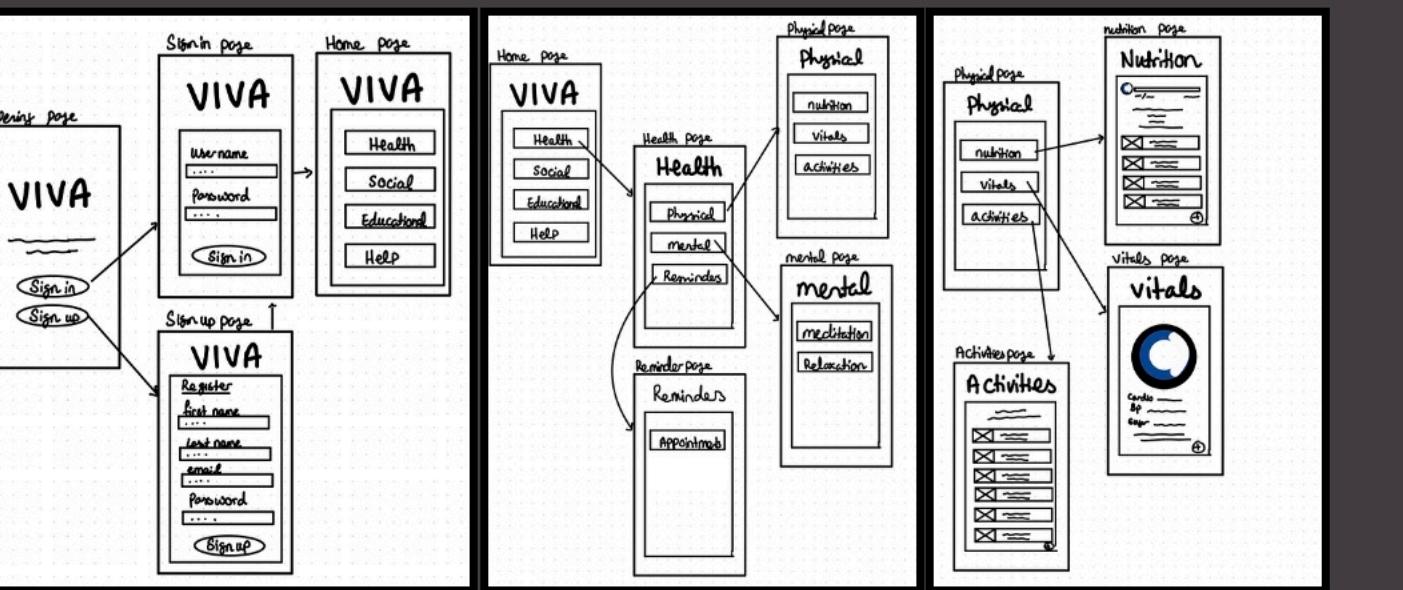
VIVA FEATURES

- 1. Physical health tracking:** The app would allow elderly users to track their physical activity, nutrition, and vital signs.
- 2. Mental health support:** The app would provide resources for mental health, such as guided meditations, relaxation exercises, and links to support groups.
- 3. Social connection:** The app would provide a virtual platform for elderly users to connect with each other, and video chat with family and friends.
- 4. Daily reminders:** The app would provide daily reminders for medication.
- 5. Safety and emergency response:** The app would provide elderly users with access to emergency contacts, safety alerts, and telehealth consultations.
- 6. Interactive educational resources:** The app would provide educational resources and interactive activities to keep the elderly users' minds active and engaged.



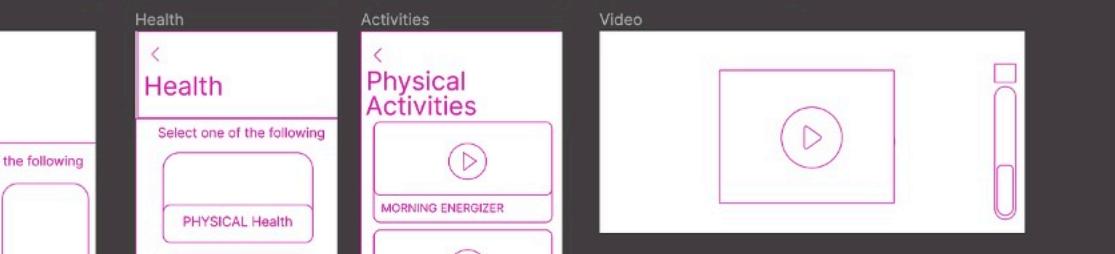
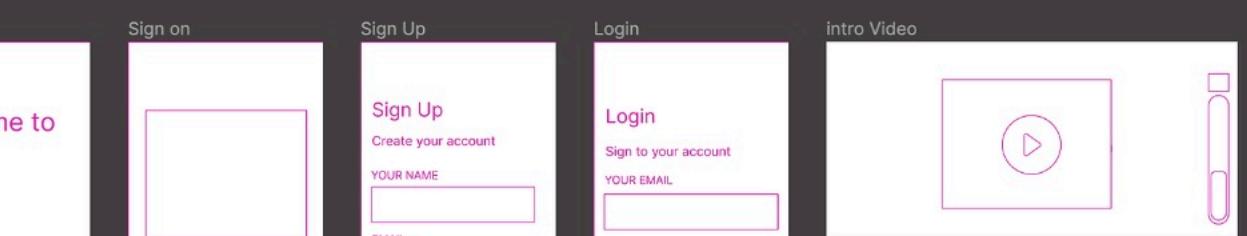
Sketches

Using the user flow diagram as a guide, we then began to sketch out the initial design of the app, which served as the basis for creating a functional design that met the needs and expectations of our users.



Wireframes

After the initial sketches were completed, we moved on to the wireframing stage where we were able to refine the app's UI. By inputting detailed descriptions and layouts, we were able to gain a better feel for the app and improve the overall user experience. This stage allowed us to make necessary changes and ensure that the app's design aligned with our primary user goals.



Vitals 1

Vitals 2

Vitals 3

Vitals 4

Vitals 5

Vitals 6

Vitals 7

Vitals 8

Meditation

Meditation 3

Relaxation

Video 2

The image displays a sequence of mobile application screens from a health and wellness app. The screens are arranged in two columns. The left column contains screens for vital signs and goal setting, while the right column contains screens for meditation sounds, relaxation exercises, and a video player.

- Vitals 1:** Shows Blood Pressure (102 / 72 mmhg, Normal) with a graph and three tabs at the bottom: ACTIVATED, NUTRITION, and MEDITATION.
- Vitals 2:** Shows Heart Rate (98 bpm, Normal) with a graph and three tabs at the bottom: ACTIVATED, NUTRITION, and MEDITATION.
- Vitals 3:** Shows Blood Sugar (80 mg / dL, Normal) with a graph and three tabs at the bottom: ACTIVATED, NUTRITION, and MEDITATION.
- Vitals 4:** Shows Water Intake (1 L, Normal) with a graph and three tabs at the bottom: ACTIVATED, NUTRITION, and MEDITATION.
- Vitals 5:** Shows Calorie Goal (2000 Calories, Normal) with a graph and three tabs at the bottom: ACTIVATED, NUTRITION, and MEDITATION.
- Vitals 6:** A 'Set' screen for Calorie Goal, showing 'Current: 2000 calories' and a 'New:' field with 'Calories' selected. It includes a 'Set' button.
- Vitals 7:** A 'Set' screen for Water Intake Goal, showing 'Current: 1 L' and a 'New:' field with 'L' selected. It includes a 'Set' button.
- Vitals 8:** A confirmation message 'Update Successful' with a checkmark icon.
- Meditation:** A list of relaxation sounds: Relax Sounds (Something the most productive thing you can do is relax, play now), Nature Sounds (Rain Sounds, Thunder, Forest Sounds, play now), and Tropical Sounds (Beach Sounds, Summer Sounds, play now). It also lists Meditation (Mindfulness, Relaxation Exercises).
- Meditation 3:** A playback interface showing a circular progress bar with a play/pause button in the center. Below it, the text 'Now Playing' and 'Summer Sounds TROPICAL SOUNDS' is displayed.
- Relaxation:** A list of relaxation exercises: PEACE, BALANCE, and TRANQUILITY.
- Video 2:** A video player interface showing a play button inside a square frame and a vertical video thumbnail on the right.

Educational list

Flash Cards

Flash Cards 1 back

Flash Cards 2

Flash Cards 2 back

Flash Cards

Geography

Capital: Brasília
Largest city: São Paulo
Famous landmark: Christ the Redeemer statue in Rio de Janeiro

Review

Capital: Brasília
Largest city: São Paulo
Major rivers: Amazon, Paraná, and São

Flash Cards

Geography

Capital: Beijing
Largest city: Shanghai
Famous landmark: The Great Wall of China

Review

Capital: Brasília
Largest city: São Paulo
Major rivers: Amazon, Paraná, and São

Message box

Communication

Messages

John Mckay
Edward Kio
Group Chat

Communication

John Mckay
Offline - Last seen, 2:02pm

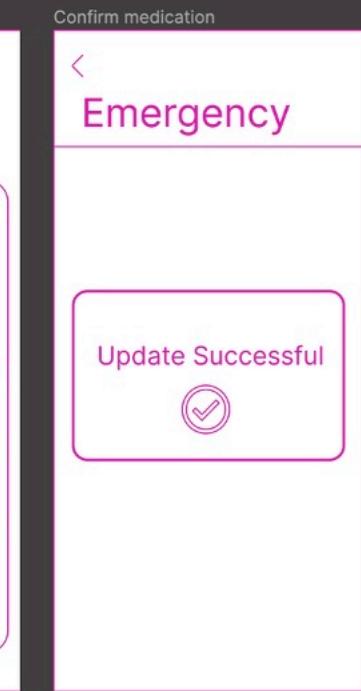
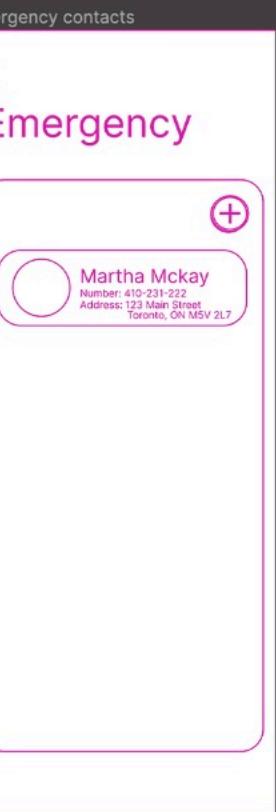
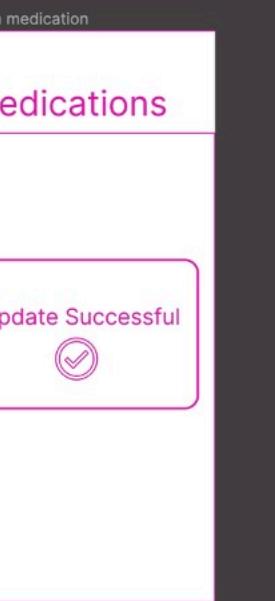
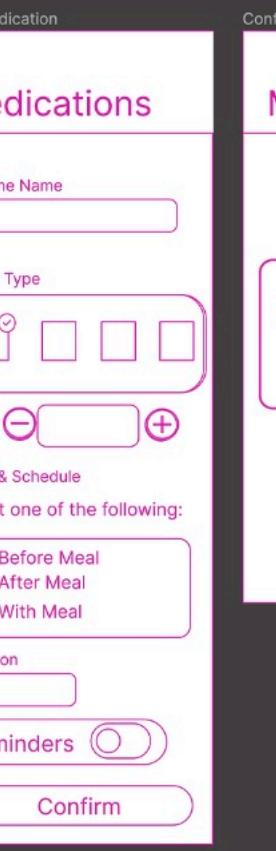
2:00 pm
Hey There!

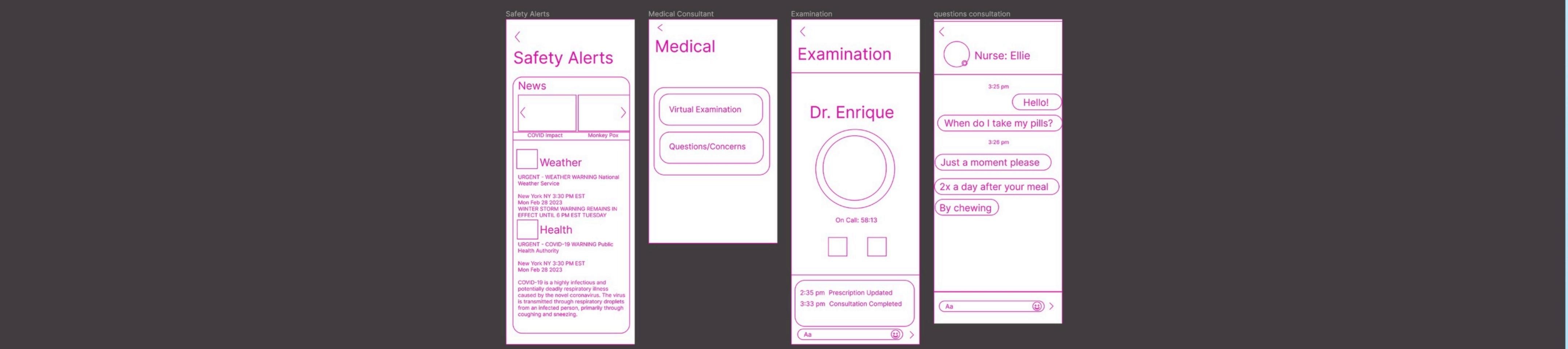
2:25 pm
How are you?

Hello!

Fine and how are you?

Aa



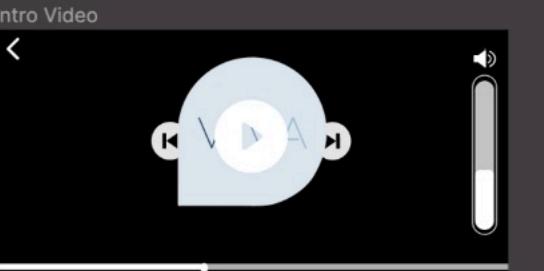
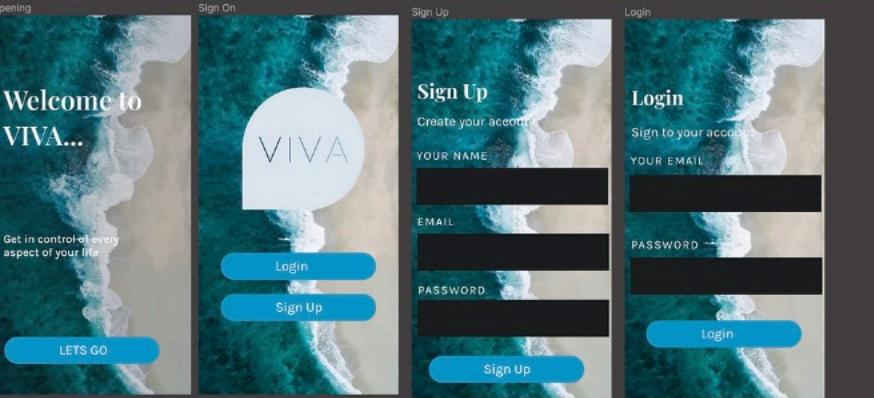


Final Design

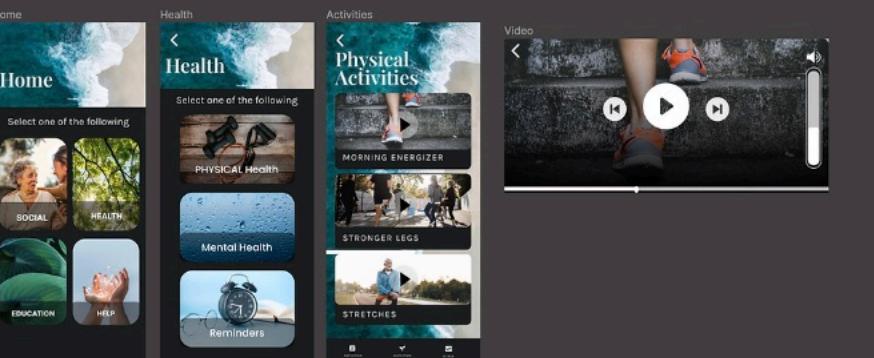
Colour Inspiration:

Our team chose shades of blue, white, and dark/light grey as the color scheme for our application based on several factors. Blue is often associated with trust, calmness, and reliability, making it a suitable color for a healthcare-related app like ours. Additionally, blue has a calming effect on the human mind and can help reduce anxiety, which is important for users who may be dealing with health issues.

We also chose to use white as a background color, which creates a clean and professional look. The dark and light grey shades were used to provide a contrast and help guide users to the important sections of the app.



Our application starts off with an opening message and then asks you to sign in or sign up if you don't already have an account. If you're signing up for the first time then it ask for your info as well as provides an application tutorial of all the features.



Then from the home page you may select one of the 4 major categories of features you would like to use. Health, Social, Education or Help. In the above

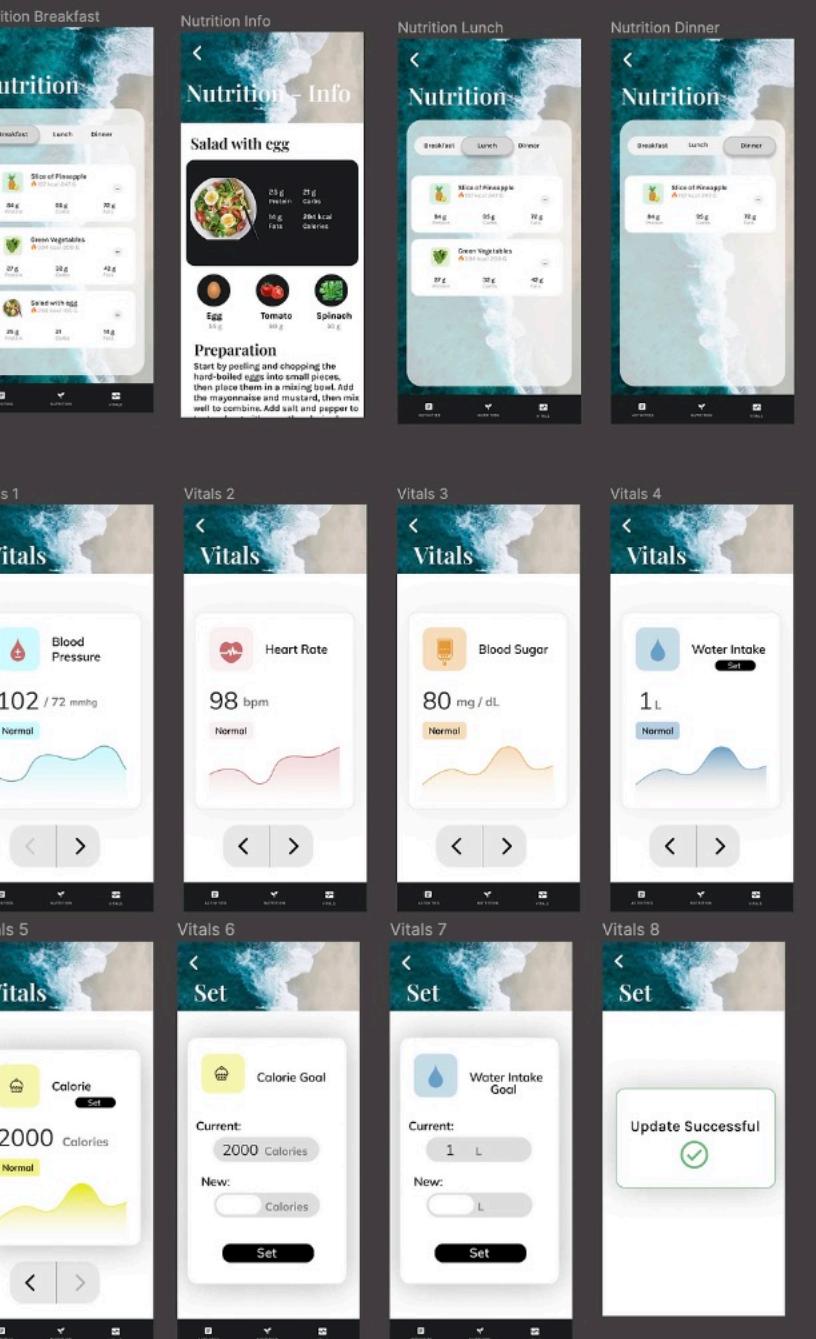
Our team took inspiration from a variety of sources when selecting these colors, including current design trends in healthcare apps and existing color palettes used by successful apps in the market. By refining our color palette and selecting these shades, we were able to create an app with a clean and professional look that also inspires trust and calmness in our users.



Typography:

For our application we utilised Karla and Playfair Display as the typography/fonts for our application. Due to the two fonts served well to complement each other and provide the right balance between modernity and elegance. Karla, being a sans-serif

sequence you can see if health is selected it provides physical, mental as well as reminders that are important to maintain ones health. In the sequence you can see how phcial health selected looks.



font, is clean and easy to read on screens of various sizes, while Playfair Display, a serif font, adds a touch of sophistication to the design.

Additionally, the combination of the two fonts creates a visual hierarchy that guides the user's attention to important elements on the screen. Karla was used for body text and secondary information, while Playfair Display was used for headlines and titles.

Playfair Display:

ABCDEFGHIJKLMNPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz

Karla:

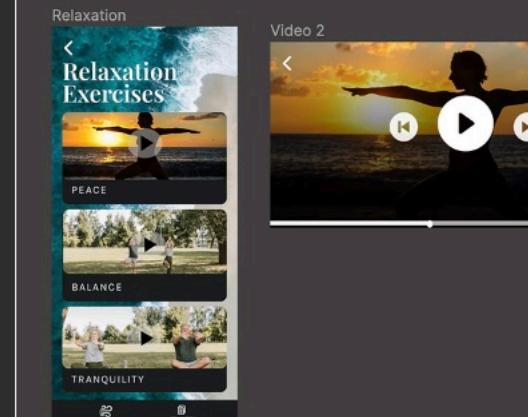
ABCDEFGHIJKLMNPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz

Naming And Logo:

The name "Viva" was chosen for our application because it represents life and vitality, which aligns with the overall goal of our app to improve the health and well-being of our users. The name also has a catchy and memorable sound to it, making it easy for users to remember and recommend

While still within the physical health category, you can go from physical activities to nutrition that focuses on healthy food intake that will provide benefit for the individual, as well as a guide and recipie on how to make it.

You may also see nutrition as being one of the other options we can navigate to, that provides insight into the individual overall health, as well as option to set water or caloric goals. The application relies on third party app to proivde the health data of the individual, may it be connecting with smart watch or any other smart device.



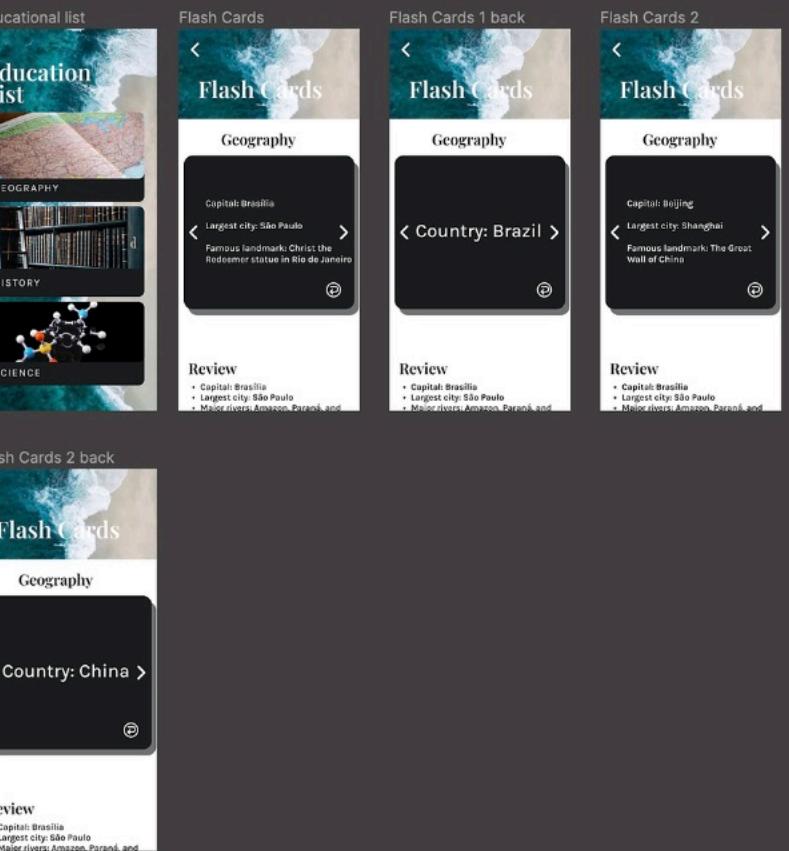
Additionally, one of the other features for health we

to others.

As for the logo, the baby blue bubble with "VIVA" written in it was chosen for several reasons. The blue color represents trust, security, and professionalism, which are all qualities that users would want in a healthcare app. The bubble shape represents a friendly, approachable, and welcoming design that encourages users to engage with the app.

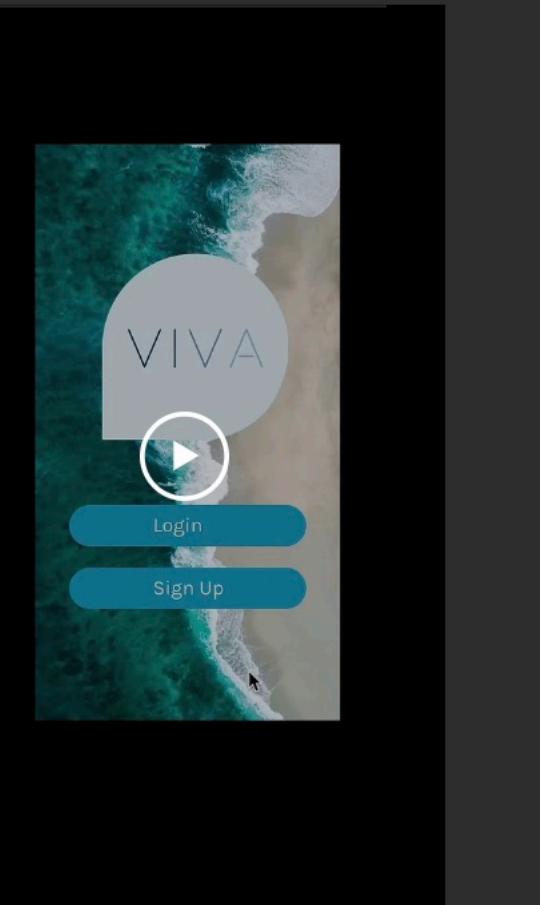


offer is mental health. We provide audio and visual options from select list to choose from. It provides sense of relief to the individual using it, as well as they are also provided with videos for relaxation exercises to choose from.



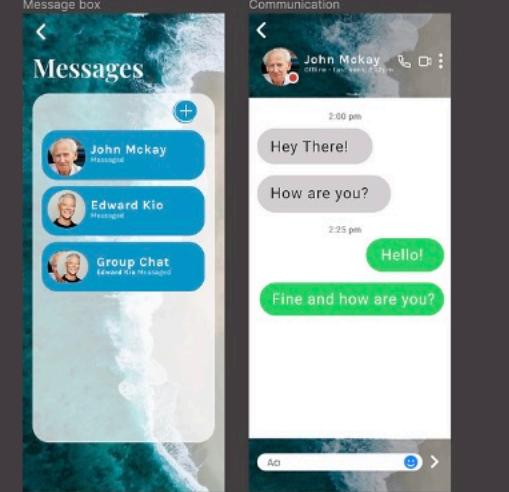
We additionally offer option for keeping the mind active and health by learning and testing yourself constantly with easy to use flash cards.

Demo:

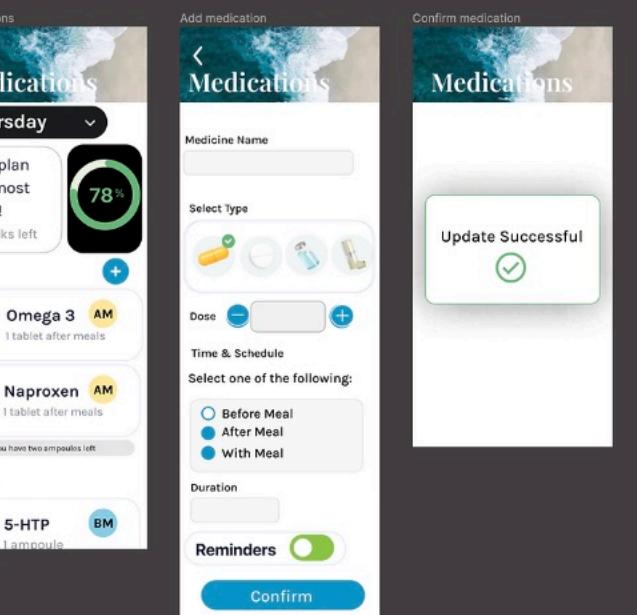


Conclusion:

In conclusion, developing Viva has been an exciting journey for our team, as we delved into the world of UI/UX design and user research to create an application that helps users manage their diabetes and stay connected with their healthcare providers. Through the



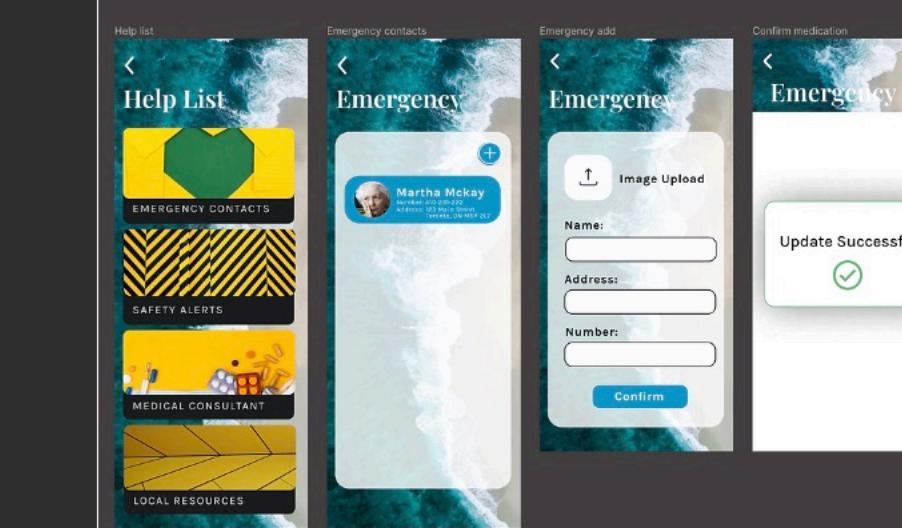
We additionally provide social connect support amongst the elderly, where they can connect with others and stay in touch with family and friends all in a single application.



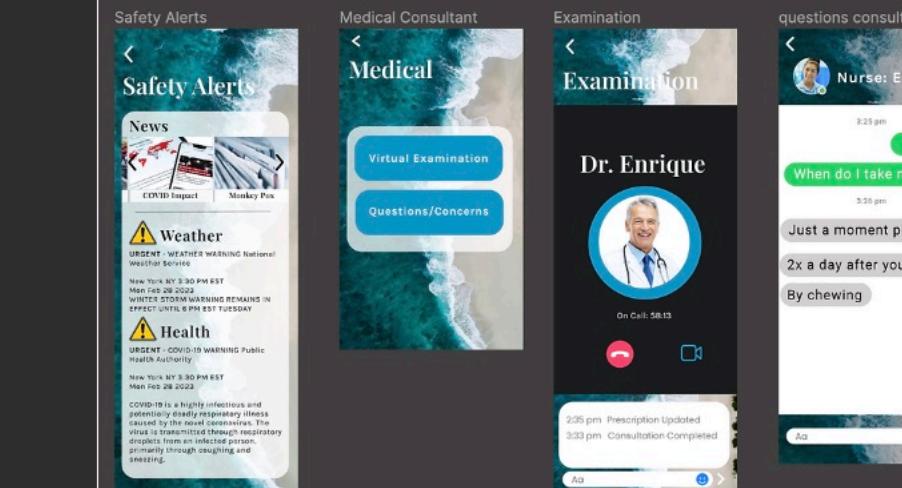
We additionally have feature for individuals to view and add their medication, they can set reminders. As well as see their schedule for the corresponding day.

process of creating user flows, wireframes, and UI design, we were able to refine the functionality and aesthetics of the app to best serve the user's needs. Our color palette and font choices were carefully selected to create a calming and approachable feel, while the name Viva and logo of a baby blue bubble with the word Viva reflect the app's emphasis on vitality and health.

One of the main challenges we faced while developing Viva was creating an app that was not only visually appealing but also easy to use for users with different levels of technical expertise. Through user research, we were able to gain a better understanding of our target audience and their needs, which helped us to refine our design and create an interface that was intuitive and user-friendly. Additionally, we had to ensure that the app's features and functions were tailored to meet the needs of our users, which required a deep understanding of their habits and behaviors. By putting in the effort to



We additionally provide additional support in terms of making it easy for getting touch with emergency contact, as well updating it.



Safety alerts to be aware of the warnings and cautions, in a single page for those who would appreciate not having to search a lot. Additionally, examination option to connect with their healthcare provider and have their prescription updated and questions answered

truly understand our users, we were able to create an application that not only met their needs but also exceeded their expectations.

Overall, the project has highlighted the importance of putting the user's needs at the center of the design process, and we are excited to see how Viva can positively impact the lives of those who use it.



Final Thoughts

Future Addition

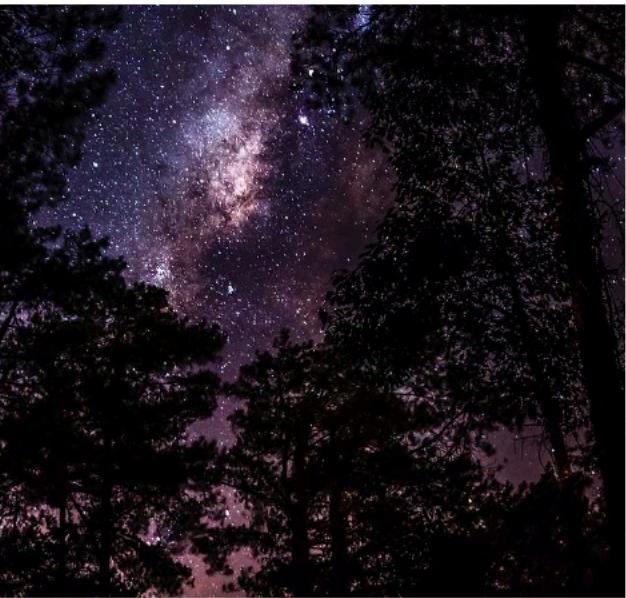
In the future, VIVA could be expanded to include more comprehensive health tracking features, such as tracking sleep. Viva could also benefit from more social features such as allowing users to support each other in their health journeys. Another potential addition could be personalized coaching and recommendations based on user data and goals.

Remarks

One of the key insights of this design project is the importance of focusing on the elder user application base. As the population ages, it is crucial to provide them with an easy-to-use and accessible platform that meets their specific needs. By investing in research and understanding of their unique challenges, we can tailor the application towards their needs, making it easier for them to use it. This is not only beneficial for their overall health and wellbeing, but also for their connectivity with loved ones and communities. The potential impact of improving the lives of the elder population through technology is tremendous and should not be overlooked.

Rights to VIVA

This is an Academic base application proposal, however the team involved
in the creation, planning and work are:



Haris Mahmood



Louisa-Lina Meziane