Introduction:

In an era where digital communication has become an essential part of our lives, there remains a significant challenge for seniors residing in elderly care facilities. Many struggle to engage with their family members through existing communication apps, such as FaceTime, due to various usability barriers. Recognizing the importance of maintaining strong connections with loved ones, our project aims to create a specialized mobile application tailored to the unique needs of seniors residing in old folks' homes. This application will prioritize user-friendliness, accessibility, and simplicity to ensure that seniors can easily navigate and enjoy meaningful interactions with their family members.

## Understanding the Challenge:

The challenge lies in addressing the specific difficulties faced by seniors in elderly care facilities when using conventional communication apps. Issues such as complex interfaces, small fonts, and unfamiliar features often hinder their ability to connect with family members seamlessly. Additionally, factors like visual and hearing impairments, as well as potential cognitive challenges, further complicate the user experience. The goal of our project is to bridge this gap by developing an app that not only caters to the technological needs of seniors but also enhances their overall well-being by fostering regular, meaningful communication with family members. Through a user-centric design approach, we aim to create an inclusive solution that accommodates the diverse needs of seniors in various stages of aging.

Research

At this stage, our primary goal is to unveil user sentiments regarding their preferences and experiences with various apps. We aim to understand which apps are favored by users, taking into consideration factors such as font size, accessibility options, and overall user experience. By gathering insights on user likes and

dislikes, we can cross-reference this information to identify patterns related to specific features like ease of use, legibility, accessibility, and ease of communication.

We have surveyed 100 people, and these were the results

App Preferability for Communication
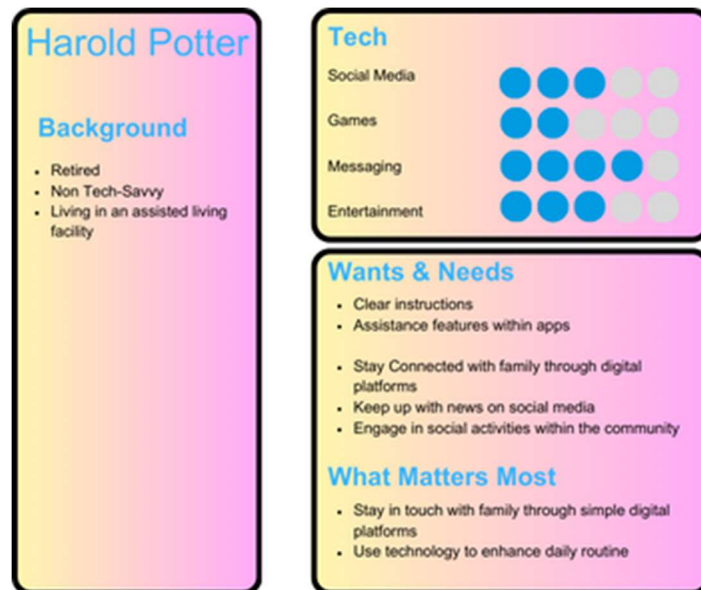
■ Facebook ■ Twitter ■ Whatsapp
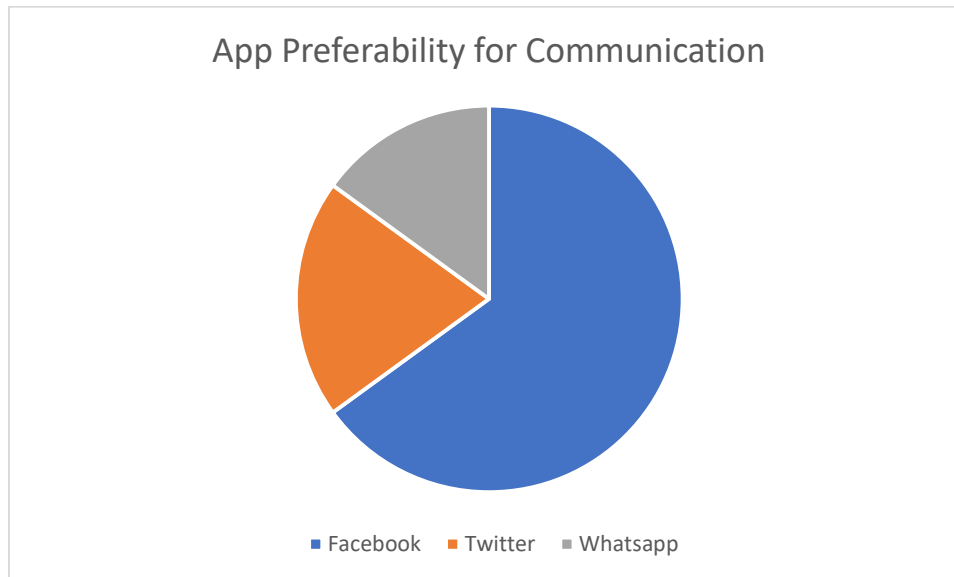
Based on our recent survey, it's evident that Facebook stands out as the most preferred app for communicating with loved ones among our participants. A comprehensive analysis, visualized through a pie chart, clearly illustrates Facebook's dominance compared to other platforms such as WhatsApp and Twitter.

With Facebook emerging as a popular choice, we are now delving deeper to understand the specific reasons behind its preference among our users, particularly among the elderly demographic. To gather more insights, we'd like to inquire about the ease of use, the accessibility, and the legibility of Facebook for elderly users.

Survey on Facebook's Qualities
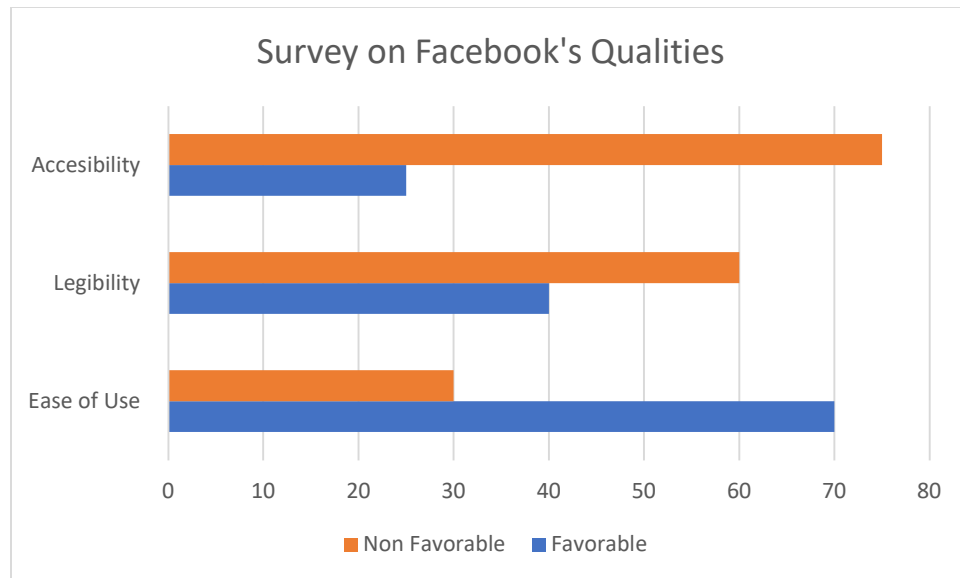
The recent survey results indicate that the Facebook app is perceived as easy to use in a general context.

However, significant challenges have been identified in terms of accessibility and legibility for most users.

This feedback will serve as a critical baseline for our upcoming development strategy.

The Personas

Grace Jones

Background

- Tech-savvy
- Living in an assisted living facility

Tech

Social Media		
Games		
Messaging		
Entertainment		

Wants & Needs

- User Friendly Interfaces
- Large Fonts
- High Contrast

- Stay Connected with family through digital platforms
- Keep up with news on social media
- Engage in social activities within the community

What Matters Most

- Values regular video calls and messaging with family and friends

Harold Potter

Background

- Retired
- Non Tech-Savvy
- Living in an assisted living facility

Tech

Social Media		
Games		
Messaging		
Entertainment		

Wants & Needs

- Clear instructions
- Assistance features within apps

- Stay Connected with family through digital platforms
- Keep up with news on social media
- Engage in social activities within the community

What Matters Most

- Stay in touch with family through simple digital platforms
- Use technology to enhance daily routine

Martha Lee

Background

- Retired
- Loves Social Media
- Living in an assisted living facility

Tech

Social Media	●●●●●
Games	●●●○○
Messaging	●●●○○
Entertainment	●●●○○

Wants & Needs

- Ease of use
- Apps with visual cues, simple icons

- Stay Connected with family through digital platforms
- Keep up with news on social media
- Engage in social activities within the community

What Matters Most
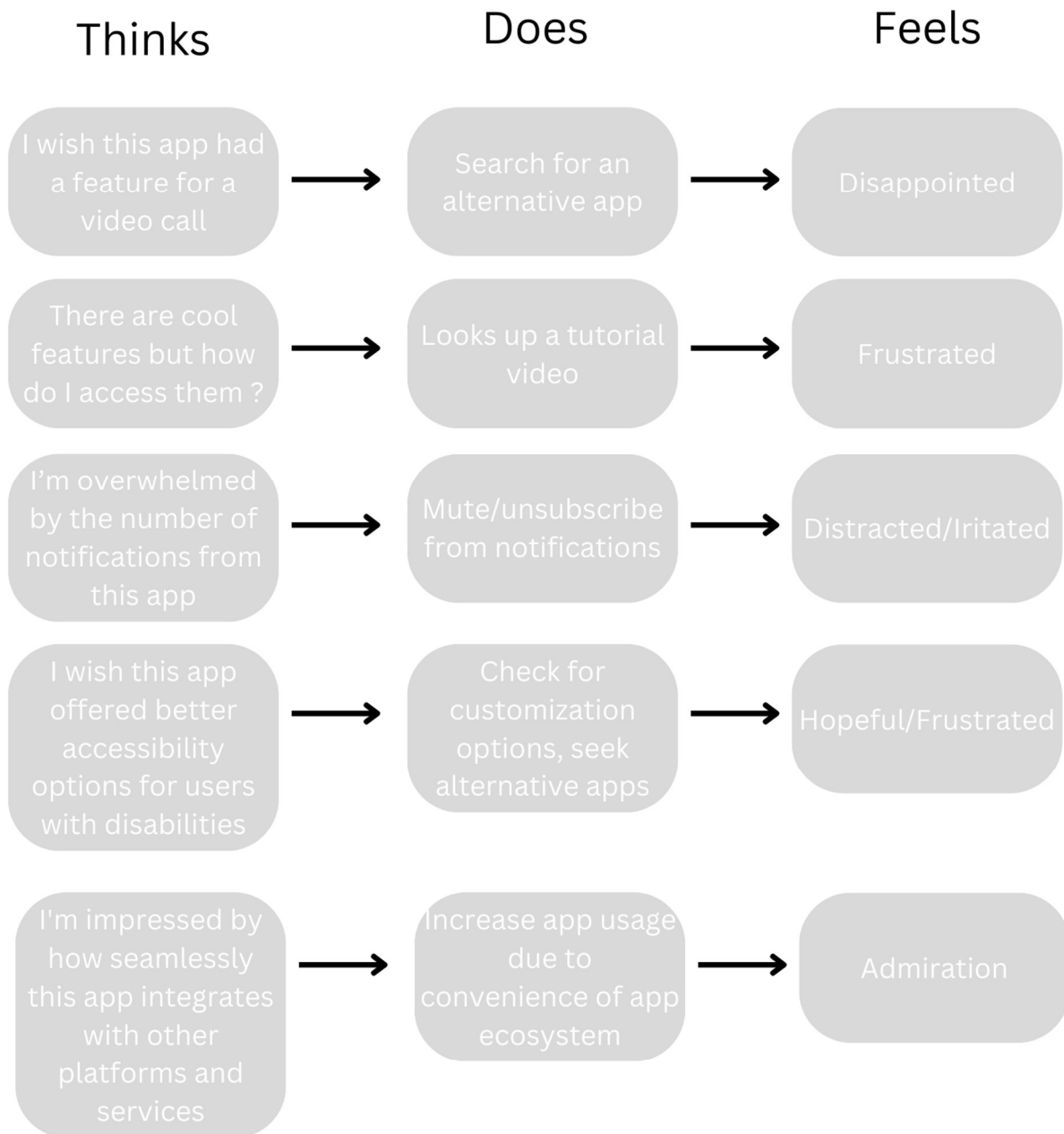
- Stay in touch with family through simple digital platforms

User Journey

The user journey delineates the trajectory individuals follow while engaging with a product or service, spanning from their first encounter to accomplishing their objectives. It encapsulates every interaction point and experience encountered, from initial discovery to decision-making and post-engagement reflection. In this case we will define it as what the user feels, thinks, and does to paint the emotional point of view of the customers.

Thinks	Does	Feels
I wish this app had a feature for a video call	→ Search for an alternative app	→ Disappointed
There are cool features but how do I access them ?	→ Looks up a tutorial video	→ Frustrated
I'm overwhelmed by the number of notifications from this app	→ Mute/unsubscribe from notifications	→ Distracted/Iritated
I wish this app offered better accessibility options for users with disabilities	→ Check for customization options, seek alternative apps	→ Hopeful/Frustrated
I'm impressed by how seamlessly this app integrates with other platforms and services	→ Increase app usage due to convenience of app ecosystem	→ Admiration

Sketches

The first sketch depicts the initial sign-in screen of our app, reminiscent of Facebook's interface. Upon signing in, users are presented with their contact list, allowing seamless communication with friends and acquaintances. Each contact entry will feature options for both texting and calling, conveniently accessible on the right side of the screen. The settings section offers customization options such as font size adjustment, text-to-speech functionality, and a night mode for comfortable browsing in low-light conditions. Additionally, users can access tutorial videos to familiarize themselves with the app's features, ensuring a user-friendly experience from the start.
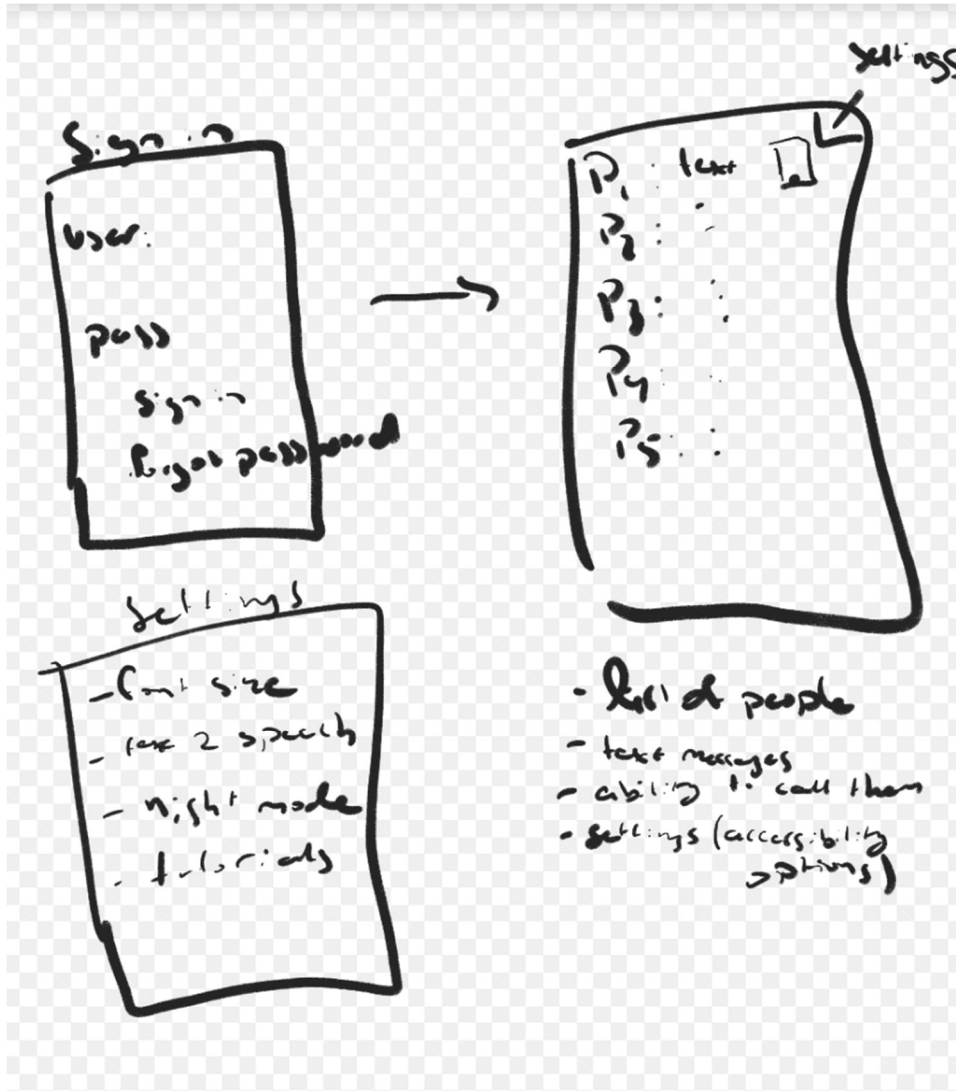
Wireframe

Login Page

▼◢ ▮ 12:30

‹ **Sign In**

Welcome to our app!
Please sign in to continue

Sign Up ›

Email

Enter your email

Password

Enter your password

Forgot Password?   **Sign In**

By signing in, you agree to our Terms of Service

· · ·

😃 Home   ⚙ Settings

Home Page / Contact List

▼◢ ▮ 12:30

Contact List   🔍 +

☎ Calls   💬 Messages

Favorites

◯ John Doe   Edit Profile ›

👥 Friends
234 contacts

🔒 Acquaintances
78 contacts

Call   **Text**

Settings Page

▼◢ ▮ 12:30

‹ **Settings**   🔍 ⚙

Customization

Font Size
Small   Medium   Large

Text-to-Speech
Off   On

Display

Night Mode
Off   On

Tutorials
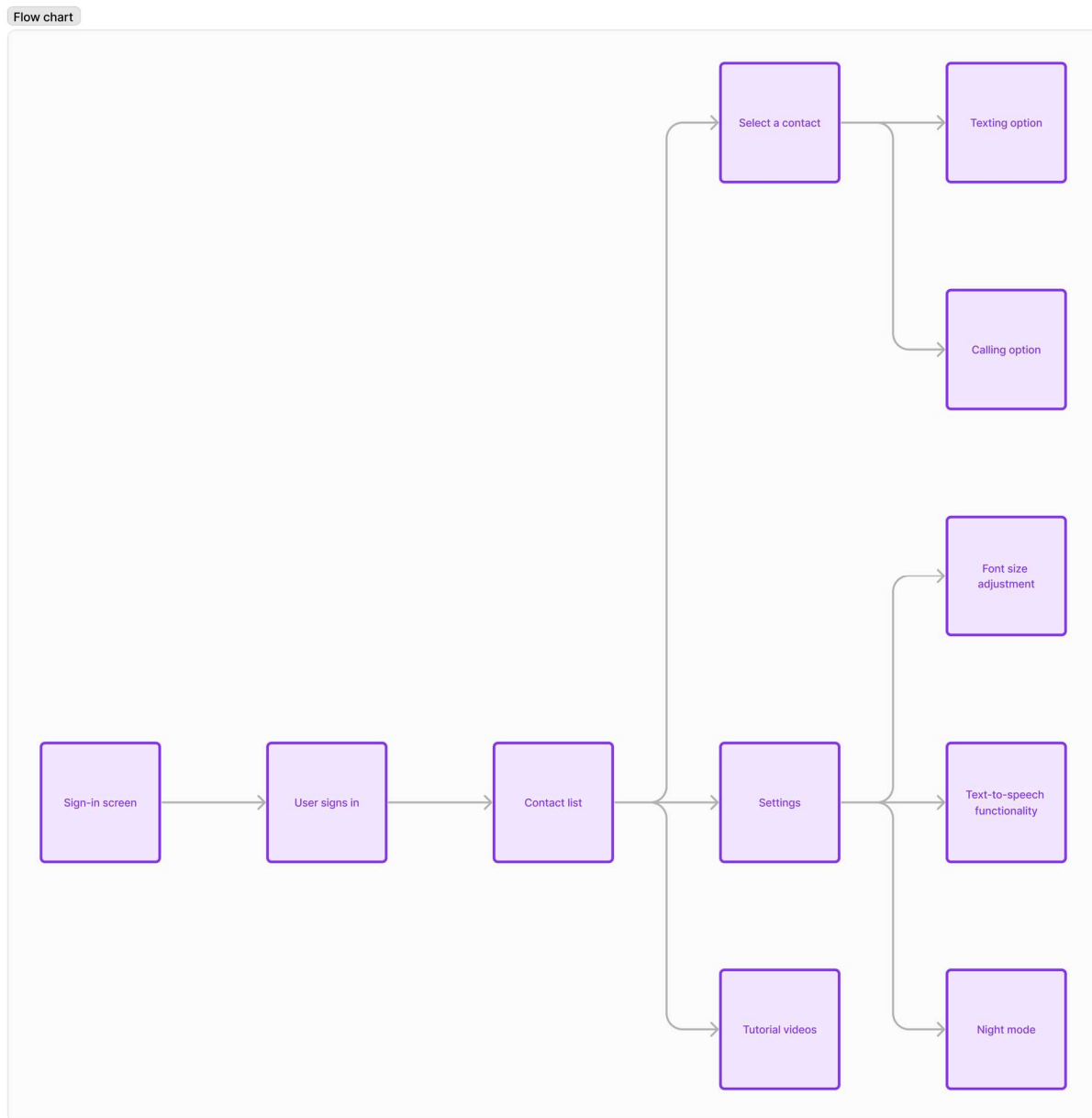
🎥 Getting Started
Introduction to the app

🎥 Advanced Features
Explore all the functionalities

🎥 Troubleshooting
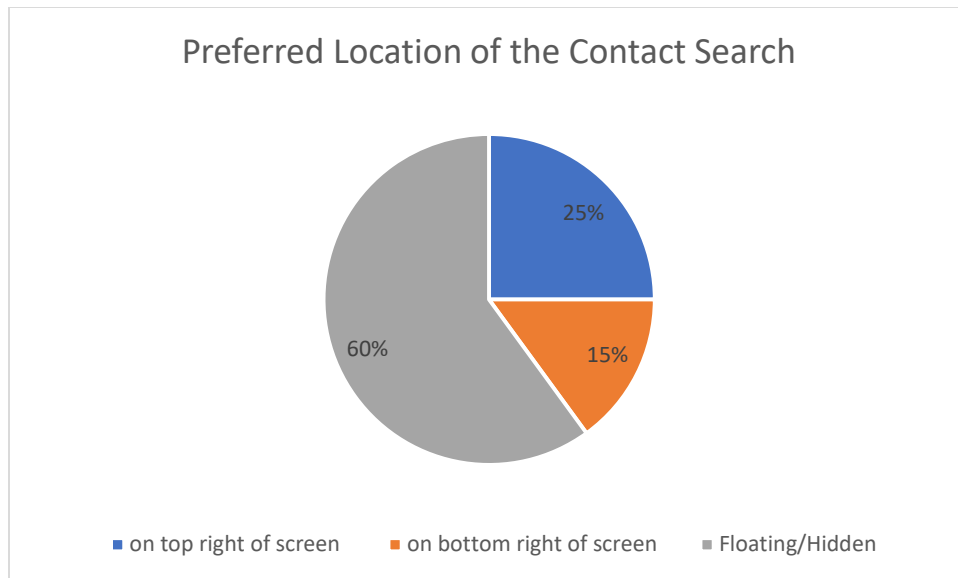Common issues and their solutions

User Flow

Design Survey

When conducting a design survey for your app, it's essential to gather feedback on various aspects, including the placement and functionality of features like the contact list search bar.

Placement Preferences

Preferred Location of the Contact Search

- on top right of screen — 25%
- on bottom right of screen — 15%
- Floating/Hidden — 60%

According to the results most people would prefer if instead of having the search bar stuck on a specific location of the screen, they would prefer to have it floating or hidden from view to ensure that it doesn't block the rest of the screen's elements going for a minimalist view.

Color Palette & Typography

For the color palette and typography of our app, accessibility and readability are paramount, especially considering our target audience, which includes many elderly users. We'll opt for a high-contrast color scheme to ensure ease of viewing, with muted tones to minimize visual strain. Regarding typography, we'll prioritize legibility by selecting clear, sans-serif fonts with generous spacing between characters. Additionally, we'll implement larger font sizes throughout the app to accommodate users with varying levels of visual acuity. Incorporating a dark mode feature will further enhance accessibility by reducing glare and minimizing eye fatigue during nighttime use. Overall, our design choices aim to create a user-friendly interface that promotes inclusivity and ease of use for all demographics.

Icons

When selecting icons for our app, we prioritize clarity and intuitive representation to ensure ease of navigation, particularly for elderly users. Each icon will be carefully chosen to convey its function at a glance, utilizing familiar symbols and avoiding ambiguity. Additionally, we'll opt for larger-sized icons with distinct outlines and simplified designs to enhance visibility and ease of interaction. Our goal is to create an icon set that facilitates seamless navigation and fosters a user-friendly experience for all individuals, regardless of age or technological proficiency.

Design

Mockups

Our app's home screen mockup features a clean and intuitive layout, with a prominent search bar at the top for easy access. Below, large, colorful tiles represent different sections of the app, such as 'Messages,' 'Contacts,' and 'Settings,' each accompanied by a recognizable icon. The typography is clear and legible,

with a sans-serif font used throughout. A subtle gradient background adds depth to the interface, while maintaining a modern aesthetic.
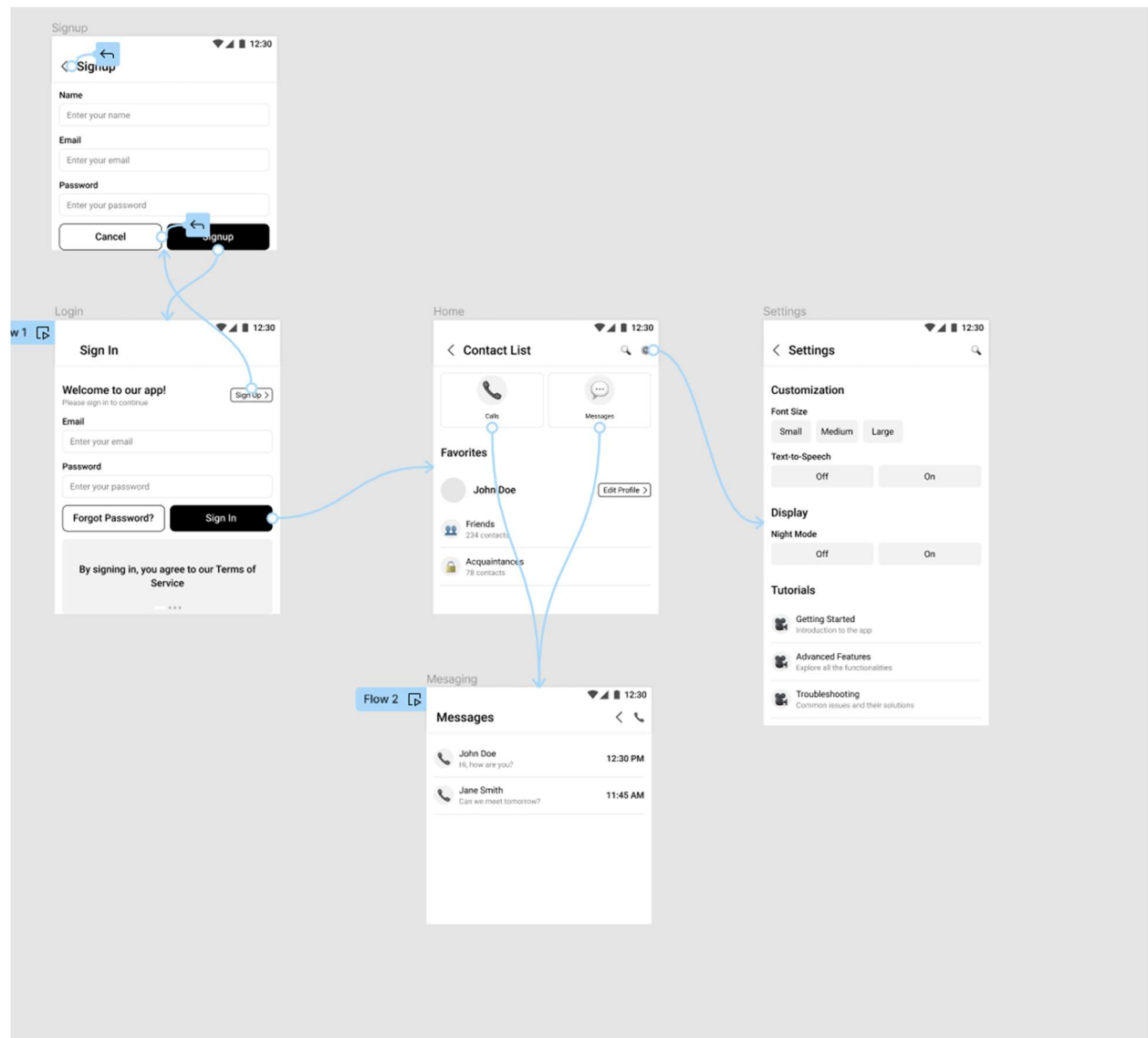
Conclusion

In conclusion, designing an app that caters to the needs of all users, including the elderly, requires careful consideration of accessibility, readability, and ease of use. By prioritizing high-contrast color palettes, clear typography, and intuitive iconography, we can create a user-friendly interface that promotes inclusivity and enhances the overall user experience. Additionally, integrating features such as dark mode further enhances accessibility, accommodating users with varying visual preferences. Through thoughtful design choices and continuous user feedback, we can ensure that our app meets the needs of our diverse user base and provides a seamless and enjoyable experience for everyone.