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The Ultimate Care Platform for Families and Providers

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CareNetwork - Connecting Care, Creating Comfort

Abstract:

The dissertation focuses on researching and gaining insight into the various problems experienced by families and caregivers in today's busy world with regards to the provision and accessing of care services. It aims to analyze the need for dependable and easily accessible care services that cater to the needs of working families and individuals with caregiver duties, as well as the requirement of satisfying employment opportunities for caregivers. The study also covers the influence of caring on caregiver well-being and the high standards of care delivered to family members.

According to the study, the shortage of convenient, reliable, and high standard of care services for families, as well as limited employment prospects and support for caregivers serves as the main challenges. We firmly believe that through investigating these factors, we could shed light on possible areas for improvements and innovation in the care sector.



CareNetwork is a revolutionary care platform that strives to address these issues by appealing to the specific requirements of both families and caregivers. It offers an extensive range of care services, such as childcare, elderly care, pet care, housekeeping, and tutoring, all of which are available via a user-friendly interface.

The research approach chosen involves undertaking a thorough literature review to gain insight into the current challenges affecting the caregiving business and to identify potential solutions. Furthermore, user surveys and interviews will be undertaken to obtain useful input from users in order to design the interactive prototype for an application. We intend to get an in-depth understanding of everyday circumstances and requirements connected to care services by gaining perspectives and comments directly from the target demographic.

The primary outcome of the research is the creation of CareNetwork, which provides a straightforward, one-stop solution for families to find, manage, and access care services while simultaneously offering reliable job opportunities for caregivers.

The main implication of this work is the opportunity to lessen the anxiety and burden that families endure in locating qualified caregivers, as well as to provide caregivers with fulfilling and stable professions. CareNetwork strives to improve the whole caring experience, build an environment of belonging within the caregiving community, and establish a supportive atmosphere for both families and caregivers.

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Figure : 1 - Care

CHAPTER 1: INTRODUCTION

1.1 Background

My dissertation subject comprises of the merging of digital media, digital design, and branding in the context of caring and care services, with the goal of developing a one-of-a-kind digital solution for families in need of care services as well as caregivers seeking job opportunities. In today's fast-paced world, the demand for trustworthy, secure, and easily accessible care services has grown higher than ever.

The availability of reliable care services that cater to the needs and preferences of families is vital in today's world. It has proven to be a huge challenge for families to balance their responsibilities to care for their loved ones with their professional as well as personal obligations and other parts of their lives. With the growth in number of dual-income households and number of singleAs CareNetwork envisions a user-centric ecosystem where families and caregivers can interact, exchange support, and discover ideal matches, the research into this comprehensive solution is crucial. The study aims to address the fragmentation, isolation, and annoyance experienced by users in the existing caregiving landscape. CareNetwork seeks to bridge the gap in knowledge and practice through fresh features and a comprehensive approach, redefining the way families and caregivers interact and receive care services.

1.2 Problem Statement

In today's world, finding trustworthy and reliable services which

parent households, the requirement for good quality care has drastically risen. They have lesser time and energy to spare and therefore need to depend on external sources of care such as elderly care, childcare, home care, or pet care to fulfil their daily requirements and obligations (Modern Families, 2019).

The provision of support and assistance to both people and pets with specific requirements is a prevalent topic in the elderly care, childcare, home care, and pet care services. By catering to diverse age groups and circumstances, these services are meant to increase the quality of life of people receiving care as well as the overall well-being of pets.

In the realm of caregiving, there exists a significant gap between the needs of families and caregivers and what is possible in the field of caring. Current platforms lack a comprehensive approach that addresses the various care needs of families which includes elderly care, childcare, pet care, tutoring etc. Additionally, caregivers are often unable to locate meaningful employment opportunities that provide stability and growth. This gap in the caregiving landscape underlines the critical need for a comprehensive and innovative digital solution like CareNetwork.

Existing platforms tend to focus on a single type of care, resulting in disjointed user experiences for families needing numerous care services. Such division causes annoyance and a lack of coordination, which are common user complaints. Furthermore, the lack of a solid support group on these platforms can make caregivers feel isolated and disconnected. These flaws highlight the need of a platform like CareNetwork, which brings together multiple care services under one roof, encouraging a sense of belonging and removing the barriers of isolation. also suit our convenience and match our needs has not only become an increasingly difficult task but also a requirement. The burden of work, personal obligation or other commitments and responsibilities often leaves families with minimal time and energy to sufficiently take care of their loved ones. In such cases, having access to reliable care services that suit their convenience is vital for guaranteeing the well-being and satisfaction of both those providing these care services as well as the care recipients.

1.2.1 Issues faced by Families

- **Difficulty in Finding Suitable Care:** Finding caregivers who fit their specific preferences such as location, availability, experience and cultural or language compatibility may prove to be a challenging task for families. Having to wait for prolonged periods of time or incur high costs for specific kinds of care may additionally add to their difficulties.
- Lack of Transparency and Trust: Choosing a caregiver based on reviews on the internet or verbal recommendations are sometimes the only options available to families, but these may not always be dependable or suit their preferences. Especially when placing their loved ones under the care of someone they are not familiar with, families tend to be concerned about their safety and quality of care.
- **Complexity in Managing Care:** Families may face difficulties in managing various caregivers and their schedules at the same time. Additionally, they might face difficulties as it is also a time-consuming and troublesome process to manage multiple payment methods and insurance regulations.

1.2.2 Issues faced by Caregivers

- Lack of visibility and access: Caregivers may find it hard to recognize clients who match their skills and convenience, especially if they are a beginner or have minimal connections. Additionally, they may also face competition from caregivers offering similar care services.
- Difficulty Managing Schedules and Payments: It may be necessary for caregivers to manually manage their schedules and appointments, which could prove to be a time-consuming and error-prone process. Additionally, there's a possibility of receiving irregular or late payments, which might negatively affect their motivation and financial stability.
- Inadequate Support and Resources: Caregivers might not have access to the tools, resources, or systems they need to improve their skills, collaborate with other professionals, and stand up for their needs and rights. They might experience bias or prejudice due to their color, gender, ethnicity, or disability.
- Providing Personalized Care Options: The CareNetwork app will grant families the ability to find caregivers who match their preferences by making personalization the priority. Families will be provided with the opportunity to choose their caregiver from a wide range of options based on criteria such as location, availability, services offered, and language preferences.
- Improving the Transparency, Convenience, and Quality of **Care Services:** Openness and quality are vital with regards to care services. Through the provision of thorough profiles, certified reviews and ratings, and clarity in pricing information, the app will guarantee transparency. Additionally, it will facilitate families in leaving feedback and reviews, cultivating a clear and responsible care community. By collaborating with respected caregivers and employing measures for quality assurance, the app will aim to raise the benchmark for care services.



Aim 1.3

The project aims to develop a comprehensive and user-friendly digital platform that streamlines and enhances the process of finding and managing care services for both families and caregivers. The platform will cater to users' requirements, preferences, and budgets while also supporting a wide range of care services such as elderly care, childcare, pet care, housekeeping, and tutoring.

Objectives 1.4

The platform's primary objectives are as follows:

- Connecting Families with Reliable and Qualified Care **Providers:** The goal of the app is to connect families and caregivers by creating a reliable and resourceful platform for them. It will aid families in discovering and connecting with experienced caregivers who cater to their likes and requirements. The app will simplify the procedure of searching, evaluating, and hiring caregivers, guaranteeing that trustworthy and good people are available to families.
- Enhancing the Overall Well-being and Peace of Mind for **Families and Care Providers:** The CareNetwork app strives to enhance the overall well-being and peace of mind for both families and caregivers. By creating a link between families and trustworthy caregivers, families can concentrate on their own welfare and other commitments by providing them with simplified management tools. The growth in visibility, access to a larger client base, and simple, effortless managerial processes, will prove to be an advantage for caregivers, permitting them to concentrate on providing high-quality care.
- Promoting a Supportive and Trustworthy Care **Community:** The app will encourage cooperation, communication and information sharing between caregivers and families to promote an accommodating and reliable care community. To grant families and caregivers useful information and support, the platform will supply resources and forums. Additionally, the app will enable safe, secure, and private communication channels, ensuring confidentiality and fostering trust within the community.

By offering families a trustworthy, suitable, and customized platform for accessing and managing care services, these objectives strive to convert the broad landscape of care services.

 Offering a User-Friendly Platform for Accessing and **Managing Care Services:** The app will contain a user-friendly interface that simplifies the route to access and manage care services. The process of browsing through user profiles, surveying the services offered, managing appointments and finances will be made effortless. It will also provide useful features such as real-time updates, notifications, and secure communication channels to enhance the user experience.

1.5 Research approach

Being successful in today's technologically advanced and globally competitive marketplace requires the development and use of skills that were not previously required. Design Thinking is one such skill (Razzouk and Shute, 2012).

1.5.1 What is Design Thinking?

Design Thinking is becoming more popular as a problem-solving and innovation strategy. It is a non-linear and iterative methodology for solving complex problems in a user-centered manner. When used to handle difficult challenges that are illdefined or unknown, it is particularly effective since it helps to understand the human needs involved, reframe the problem in human-centric ways, generate multiple ideas in brainstorming sessions, and take a hands-on approach to prototyping and testing (Dam, 2022).

The five stages of Design Thinking are:

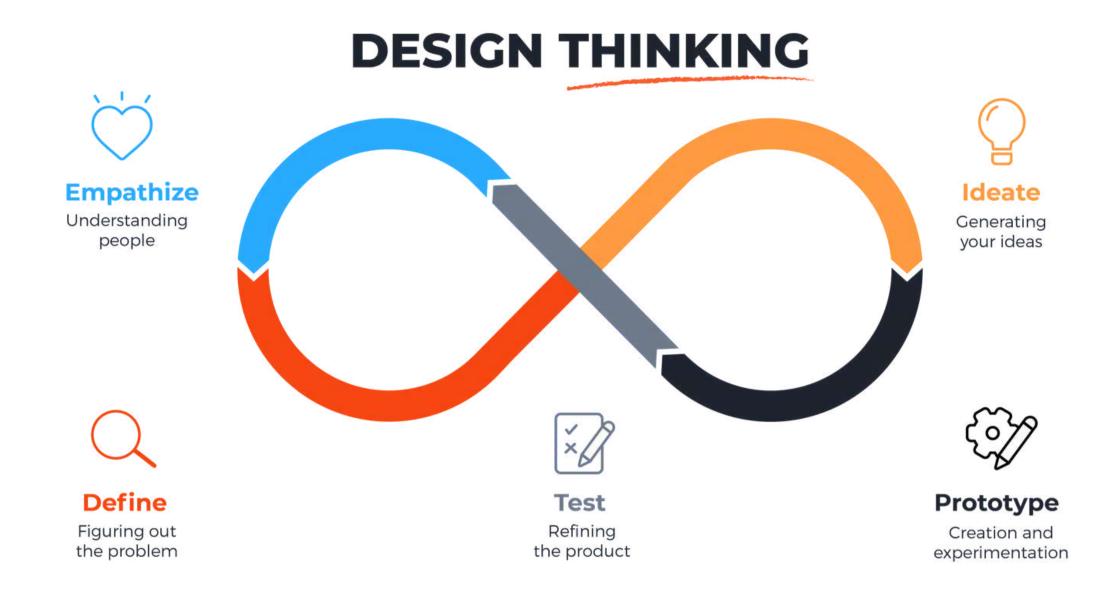
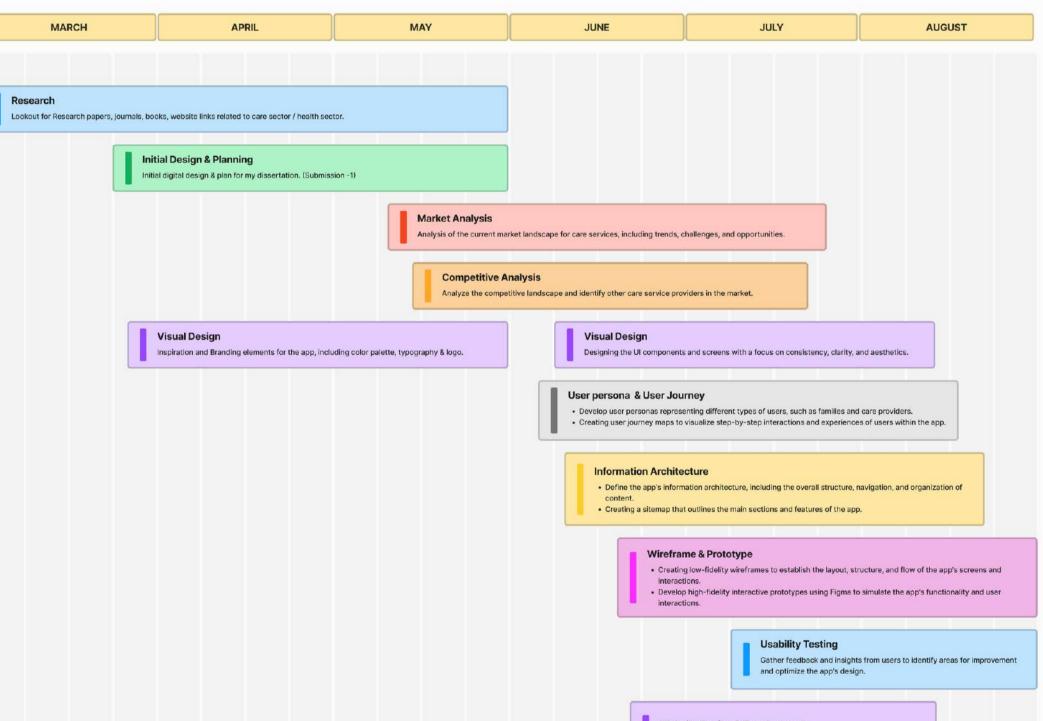


Figure : 2 - Design Thinking Process (Karl, 2020)

Finally, my decision to use the Design Thinking approach to design the CareNetwork app is based on its inherent strengths and benefits. I am set to produce a solution that truly connects with the needs and goals of caregivers and families by focusing my approach on empathy, creativity, and iterative problem-solving. The emphasis of Design Thinking on understanding the user experience, stimulating innovation, and encouraging collaboration fits in well with my objective to deliver a comprehensive, usercentric, and impactful care solution. As I begin on this adventure, I am certain that the Design Thinking approach will lead me to the development of a prototype that not only tackles existing pain points but also opens the door to new possibilities and exceptional user experiences.

- **Empathize:** In this phase, the focus is on gaining a thorough understanding of the needs, emotions, and challenges that caregivers and families encounter. User research methods like survey & interviews will be conducted to collect qualitative and quantitative data. The goal is to establish connections with users and an in-depth understanding of what they are experiencing.
- **Define:** The define step involves combining the obtained data to discover common pain areas and issues, building on the insights from the empathy phase. These findings are transformed into actionable problems that define exactly what needs to be solved. Personas help encapsulate the characteristics, behaviors, and motivations of users. This step defines the exact problems that the CareNetwork app seeks to address, directing the subsequent ideation process.
- Ideate: It is a creative brainstorming phase where I can begin to "think outside the box," explore alternate perspectives on the problem, and develop unique solutions to the problem statement produced. The purpose is to produce a wide range of potential features and techniques for addressing the identified challenges in unique ways.
- **Prototype:** The selected ideas from the ideation phase are



converted into tangible representations often in the form of prototypes, during this phase. These prototypes can range from low-fidelity sketches to interactive digital mockups.

• **Test:** Prototypes are put to the test in this phase involving real users to provide feedback. User feedback is gathered to figure out if the prototypes adequately meet the user needs and paint points. The iterative nature of this phase involves enhancing and iterating prototypes based on user testing data.



Figure : 3 - Gantt Chart

Certainly, using Figma's FigJam to create a Gantt chart enabled me to clearly plan out all of the processes and activities needed in finishing my project, from research and concept creation to wireframing, prototyping, testing, and implementation. This graphic depiction gave me a clear picture of the whole process, allowing me to stay focused and on top of every step that needed to be completed.

CHAPTER 2 : LITERATURE REVIEW

2.1 Introduction

In English-speaking countries, the word "care" can refer to both affective concern (caring about) and practical action (caring for); frequently, this double meaning supports the idea that caring behaviors are ideally or easily influenced by caring emotions (Buch, 2015). According to the research (Daly, 2020) we can determine that caring behavior can be placed in four broad categories: caring about; caring for; caregiving; and carereceiving. Caregiving has emerged as social approach and practice, emphasizing connections and behaviors, involving attention to need, desire to satisfy it, direct action (caregiving), and responsiveness to the care process (and therefore to the person receiving care).

Many families have either both parents working or a single parent who is balancing both work and caregiving responsibilities, which proves to be a major challenge. Finding reliable and trustworthy care services provides some reassurance and peace of mind for these parents, allowing them to focus on their work and other commitments without worrying about the well-being and safety of their loved ones, knowing they are in the capable hands of trained professionals. Another concern for families is finding care services that can accommodate their unique needs and busy schedules. Caregivers also tend to face a lot of issues both physically and mentally due to their caregiving responsibilities and therefore accessing trustworthy care services also provides them with the time needed for their self-care and ensuring their own well-being. Technological innovations are being employed on a greater scale to improve the observation and virtual interaction between older people and caregivers. However, these innovations are rarely adjusted to the true expectations and practical limits of older people, and thus are frequently rejected by them. They often require a lot of effort to use, and they lack several functions that older people consider essential for everyday interactions with their caregivers (Fabio Furlan Ferreira et al., 2013).

Due to the problems that the formal and informal care systems in the UK are confronting, the number of elderly people with unfulfilled support and care requirements is steadily rising. One of the crucial public health objectives is beginning to be the fulfilment of these unsatisfied requirements. Understanding the care and support requirements of elderly people is essential before developing successful approaches to these challenges. According to recent figures, people in the UK who are 65 and older are likely to spend over 50% of the remainder of their lives dealing with a chronic physical or mental health problem, which will increase their requirement for support and medical treatment. In fact, in this age bracket, about 20% of men and 30% of women already require assistance with at least one day to day activity. The total population of elderly people with low or high dependency is expected to rise by about a third by the year 2035, according to current estimates, presenting a considerable challenge in meeting their requirements for care and assistance (Abdi et al., 2019).

2.2 Elderly Care

According to research (Rodríguez-Dueñas, Aguia-Rojas and Valencia-Daza, 2021) a fast-growing issue in today's world is ageing. For humans, getting older is a normal process which is accompanied by a decline in functions, an increased risk of illness, and other disadvantages. Eldercare, often known as senior care, refers to specialized assistance suited to the requirements of older people at various stages of life. While aging alone doesn't necessarily warrant elder care, it's often the presence of age-related health conditions and physical limitations that prompts considerations about this type of care (AimsHe@Ithcare, 2020). More than one in every five of us is now over the age of 60, and the number of individuals over 60 is predicted to rise from 14.9 million in 2014 to 18.5 million in 2025 (NHS England, 2020).

The "ageing boom" and the growing number of many chronic conditions like diabetes, Parkinson's, dementia, Alzheimer's, etc. have increased the need for caregivers, or individuals who receive payment to help others take care of their daily needs (such as the elderly or those who have serious illnesses). One of the largest issues has been and remains the lack of caregivers, particularly in many nations with a large elderly population, such as the U.S., China, and Japan. What is worse is that caring for others is typically a difficult, messy, dangerous, and taxing work with little pay, social standing, and an overall lack of good health. Caregivers are one of the most unappealing jobs due to these drawbacks (Wang, Zhao and Sun, 2022).

As the population ages across modern countries, the number of elderly people living in total solitude grows. Enhancing the standard of life for older people requires research and technical advancement. Mobile applications are one example of a technology that enhances quality of life by promoting independence, confidence, self-assurance, and social engagement (Rodríguez-Dueñas, Aguia-Rojas and Valencia-Daza, 2021). Elderly individuals aspire to lead healthy, dignified, and financially independent lives while receiving the care and affection they deserve. Their overall well-being thrives when their needs and concerns are acknowledged and addressed effectively. Yet, due to work obligations, many are unable to provide the necessary care. Elderly individuals with cognitive disorders undergo significant behavioural shifts, requiring tailored attention and support. Neglect during this phase can lead to emotional distress and even aggressive behaviour. It's crucial to recognize that aging is a natural process with inherent challenges and to approach it responsibly and empathetically (CARE, 2015).

2.3 Child Care

Childcare amenities have raised significant concerns among the public in the past few years. Inexpensive and high-quality childcare alternatives may make it easier to balance both professional and familial responsibilities, promoting equal rights for men and women and job market involvement. By reducing the expenses of parenting with respect to employment and job prospects, childcare services may potentially play a significant role in the solution to diminishing reproduction rates. For working parents, having access to quality childcare that is both costeffective and convenient is crucial (Plantenga and Remery, 2009).

Parents often confront a complex decision whether to opt for childcare or stay home during their child's formative years. The choice varies based on individual circumstances, as both options have their advantages. Unfortunately, for many families, accessibility and cost concerns often compel them to step back from their careers and face reduced income during a period they might have otherwise continued working.

2.4 Pet Care

Pets are domesticated animals maintained in homes for just the sake of companionship, both for families and a specific person. People who keep dogs have a higher level of pleasure, according to psychologists. Individuals who are withdrawn or simply need a friend, for example, are advised to keep a pet. The general population has considered the concept of pets not only as friends, but also as substitutes for psychologists or physicians, as living with pets has been shown to boost mental health and lifespan. The number of households with pets is rising year after year, as is the need for professional pet care and pet grooming services (Gan Ai Leen, Shabana Anjum Shaik and Thong, 2023).

According to study (Salmansohn (Founder), 2023), pet ownership can provide a variety of challenges that all pet owners must be prepared to tackle.

• **Commitment of Time:** Having a pet necessitates a significant time commitment. Regular meals, grooming, physical activity, and playing are required to meet their emotional and physical

Accessible and affordable childcare changes this scenario. It eliminates the need for parents to compromise their professional growth and financial stability. Quality childcare empowers them to contribute to the economy, maintain their careers, and actively engage in their community. With reliable childcare services, parents can uphold their jobs, strengthen local connections, and foster support networks with fellow parents (Peacock, 2021).

2.3.1 Importance of Child Care Services for working parents

According to research (Purdy, 2022), as a result of juggling their employment and raising their children, working parents frequently experience tension and fatigue. The issue becomes much more unpleasant in cases where there is no alternative caregiver available (who could be a grandparent or family member) and the person's place of employment offers little to no flexibility concerning working hours. Based on the data provided by (Gitnux, 2023) more than 65% of two-parent households require childcare services for their children. The growth of dual-income parent families has proven to be among the biggest trends in the recent past. This change has had a significant impact on how family's function and how kids grow up.

The availability of childcare for working people proves to be an incredible gift considering the numerous perks it offers parents (Purdy, 2022).

demands. Disregarding these demands might result in behavioural problems such as stress or aggressive behaviour. Creating a daily schedule that includes dedicated exercise and playing times customised to your pet's breed and activity levels will assist you in efficiently managing this difficulty.

- **Financial Accountability:** Pets require lasting financial commitments in addition to the initial fees of adoption or purchase. Food, veterinarian care, vaccines, grooming, toys, and possible medical issues are all regular costs. Unexpected health emergencies may worsen financial strain, making effective financial preparation essential. Creating a monthly budget for pet-related costs and researching pet insurance choices can give financial protection in the event of an emergency.
- Behaviour and Training: Training is critical, particularly for young or freshly acquired pets. Violence and aggressive behaviours can emerge without sufficient training, compromising the pet-owner connection. Seeking advice from professional trainers and adhering to persistent, positive reinforcement-based training approaches can result in longterm behaviour changes.
- Loss and emotional bonds: Pets provide a lot of joy and

- Job Security
- Helps Parents Enter the Labor Market
- Increases Work Productivity
- Helps Parents Maintain a Healthy Life Balance

affection, but they have shorter lives than people. Recovering from the inevitable passing of a beloved pet may be an emotionally exhausting thing. The subsequent sadness and emotional gap can be unbearable. According to study (Ingraham, 2022), emergencies may happen while the owners are away, but the good news is that pet sitters are well equipped to handle them, whether it's a sick animal or anything else the owner would handle if they were there. They're also good communicators, informing owners of what's going on and assuring them that everything is under control. They can also send images and videos of cuddling or play time to keep the pet owner up to speed on how their pet is doing. Hiring a pet sitter brings these advantages to ensure your pet's comfort, well-being, and happiness while you're away.

- Routines are important to the pet. Pet sitters, equipped with knowledge of the pet's behaviours, keep them comfortable by sticking to their routine and offering reassurance, even adding continuous training.
- Pet sitters reduce stress-induced destructive behaviour by being there, engaging in play, exercising, and providing affection.
- Pet sitters keep track of the pet's health, dispense prescriptions, and make sure they get timely medical attention. Pets remain at home, avoiding possible diseases and

This type of home care is an important public service that allows elderly individuals to live independently inside their homes for a longer period of time. Almost all home care (97.5%) is delivered by independent companies, with authorities commissioning the majority of it – over 70% of total care given. The rest is privately managed and funded.

The advantages of home care are numerous. Hiring a trained individual can help many family caregivers relieve some of the burden associated with the job while avoiding caregiver burnout. For seniors who might need care in an institution, in-home care provides an option for those who require additional (or qualified) assistance. Here are more benefits of home care for elders and family caregivers. (Madison, 2020)

- **Peace of Mind for Caregivers:** Home care relieves family caregivers by lowering load and worry while maintaining the well-being of their loved one through regular updates.
- **Respect for Seniors' Wishes:** Elderly people can remain in their beloved homes while getting help that is in line with their

- parasites at boarding facilities.
- Pet sitters expose pets to new situations, people, and animals, improving social skills, trust, and confidence in a safe setting.
- Pet sitters with expertise of animal behaviour provide focused one-on-one engagement, decreasing stress caused by vying for attention in group situations.

There are some common issues faced by people with regards to pet caregivers. (Hurst, 2015)

- One of the most common issues Pet owners have with their pet caregivers is that they do not communicate on a frequent basis. Pet owners may occasionally receive a daily SMS informing them of how their pets are. Other pet sitters may fail to contact the pet owner on a regular basis and will merely leave a message for the pet owners to find once they are back.
- Many individuals have to scramble at the last minute to locate a pet caregiver since the business they had been approaching repeatedly would not answer. After multiple attempts at contacting them, pet owners have no choice but to to rely on friends to take care of their pet while they were gone.
- Unfortunately, another common complaint is that the pet caregiver has a "know it all" attitude. When it pertains to your pet's welfare, it is critical that the caregiver listens to any worries you might have regarding your pet.

wishes, fostering mental and physical well-being.

- Familiar Environment: Seniors find comfort and security at home, which is especially important for those suffering from illnesses such as Alzheimer's, while pet owners receive aid in caring for their pets.
- **Expert Health Support:** Trained caregivers provide specialised care for complicated health requirements, such as medication administration and expert assistance, and are frequently equivalent to assisted living facilities.
- **Daily Assistance:** Skilled home care assists elders with everyday activities and domestic duties, allowing them to retain their independence and hygiene.
- **Reduced Loneliness:** Home care minimises isolation by encouraging social connection, mental well-being, and participation in activities.
- **Personalized and Flexible Care:** Seniors receive individualised care, trust-building interactions, and the flexibility to maintain their routine, resulting in a customised answer to their requirements.

According to recent Age UK research (Pursch and Isden, 2018),

2.5 Home Care

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According to research (Pursch and Isden, 2018) Home care, also known as domiciliary care, refers to official social assistance provided to elderly and handicapped individuals in their own homes, typically by care professionals paid by a home care organisation. Paid carers may come once a day up to seven or eight times a day in rare circumstances to assist individuals with critical daily tasks such as getting out of bed, bathing, dressing, eating , using the bathroom, and managing medicines. over one-tenth (12%) of individuals over the age of 65 in the UK get some type of official aid or care in their own homes, including domiciliary care, assistance with domestic duties, and reablement, from local authorities, volunteer organisations, or privately funded organisations. This rises to one in every five (20%) adults aged 85 and up.

2.6 Caregivers

According to studies (Mukundan and Abedin, 2018), there is a considerable shift in an individual's standard of life once they take on the role of caregiver. A tweak like this might cause more problems. Furthermore, as a result of social exclusion, people face social and physical hurdles that might make learning new knowledge difficult. Caregivers are eventually tested by behavioural, physical, and cultural challenges. While online social platforms have proven to be effective in facilitating health-related assistance for patients, research into online support for caregivers is limited. Caregivers endure several problems, including concerns about their patients' future, financial constraints, travel requirements, and emotional strain. They frequently experience tremendous emotional and physical suffering as a result of the complications of caring, particularly for intensive care survivors. Despite these challenges, many caregivers accept their roles because they have an emotional connection with the patient. Online social networks have the ability to aid both individuals and organisations in the development and maintenance of connections. Several research have looked into how internet platforms might help caregivers overcome problems and improve their well-being. Carers benefit from the wealth of knowledge, professional training, and emotional support accessible online. They do, however, need financial stability, social inclusion, security, lively lifestyles, and better well-being. Online services offer promise in meeting these demands and overcoming these hurdles.



Millions of people's quality of life is impacted by the major public health issue of caregiving. Caregivers assist others with their social or medical needs. Caregiving may entail assistance with a few key everyday chores such as dressing and bathing, settling finances, purchasing things, and providing transportation. It might also include offering emotional support and assisting with the management of a long-term medical condition or disability. As the recipient's needs expand, the caregiver may experience more stress as their caring responsibilities expand and change. Caregivers might be paid caregivers or family members who do not get paid or friends. In-home long-term care is primarily delivered by unpaid informal caregivers. Numerous aspects of the caregiver's daily life, that includes their capacity to work, participate in social activities and relations, and keep up sound bodily and emotional well-being, might be impacted by providing care. The quality of life of the caregivers might be improved by the immense satisfaction and relationship-building that comes with

Figure : 3 - Caregiver

providing care. Understanding both the emotional and physical impact on caregivers, the variety of jobs caregivers may complete, and the social and financial repercussions of long-term chronic illnesses or impairment is crucial as the population grows and disabilities worsen (Centers for Disease Control and Prevention, 2019).

CHAPTER 3 : User Research

3.1 Target Audience

Our target audience comprises of families looking for care services for their children or elderly people in their household, individuals with pets, and homes that need caring for as well as caregivers who offer these services. The app is designed in such a way that it caters to individuals of all ages, backgrounds and knowledge of technology and can be used through any device such as smartphones, tablets, laptops, or desktop computers.

Let me go through the target audience in further depth.

- Families with loved ones who require Eldercare, Childcare, Special needs, Pet Care, Housekeeping and Tutoring. This audience seeks trustworthy, convenient, and high-quality care options to support their family members well-being and daily
- Pet Owners seeks dependable pet care services when they are unable to care for their pets themselves. CareNetwork links consumers with trustworthy pet sitters who can ensure the safety of their four-legged companions.

3.2 Competitor Analysis

A competitive analysis is a useful technique for finding areas of strength within a company, emphasizing areas that need improvement, and spotting trends that require active consideration (Fairlie, 2022).

Competitor analysis assisted me in gaining a thorough insight of the current industry situation. By analysing my competitors, I was

- needs.
- Individuals searching for work in the caregiving industry. This group includes professional caregivers, babysitters, nannies, pet sitters, and tutors who want to use the CareNetwork app to find meaningful and long-term jobs.
- Working professionals who need care services for dependants such as children or elderly family members while focusing on their professional commitments. They would undoubtedly appreciate the convenience and flexibility offered by CareNetwork.

able to find market gaps, specialized possibilities, and places where my app may stand out from the crowd. The next stage was to take the pros and cons of each competitor and analyze them. Due to this analysis, I could determine where my competitors excelled and where they fell short. I took advantage of their weaknesses and turned them into positives to benefit my app. By monitoring my competitors, it also allowed me to keep track of the changing market trends and innovations. Additionally, the negatives about each of the competitors that I obtained were from user reviews and feedback that gave me great insights into their likes and dislikes regarding already existing applications.



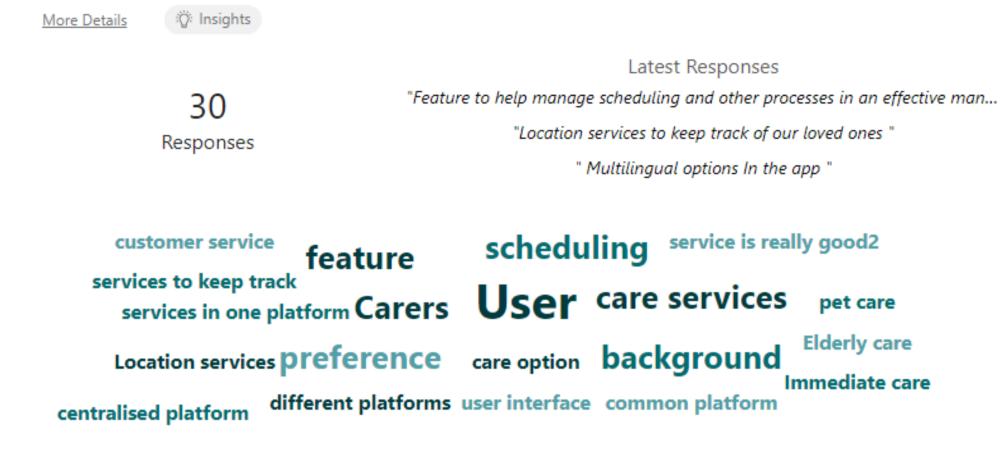
	Due to it large user base, users may not receive personalized suggestions.	Due to it large user base, users may not receive personalized suggestions.	The platform does not undertake extensive background checks on carers, leaving it upon parents to screen potential childcare providers.	To obtain a background checks and other tests, families must pay an extra fee.	The opportunity to do a last-minute background check on carers is not available through Urbansitter.
M OH <u>NO</u>	They lack a strong sense of community and a support network, making it difficult to share experiences.	They lack a strong sense of community and a support network, making it difficult to share experiences.	May require carers to pay for premium memberships in order to access extra features, which might be an issue for certain providers.	Carers have expressed concerns about receiving inquiries from spam profiles.	To do a background check on an sitter, we must first contact their support staff. then we'll get the report after it's finished.
	Membership fees and additional expenditures for premium features may be a barrier for some users.	Users have suggested that the app's user interface be enhanced for easier navigation and use.	While childcare.co.uk is well known in the UK, it services may not be offered in all localities, thereby restricting options for families in some areas.	Sittercity free profiles for carers only allow for the creation of a profile. To contact or respond to families, we must upgrade to the premium plan.	While Urbansitter undertakes background checks, carers may be required to pay an additional charge for these tests, which can be costly.

Figure : 4 - Competitors(Pros & Cons)

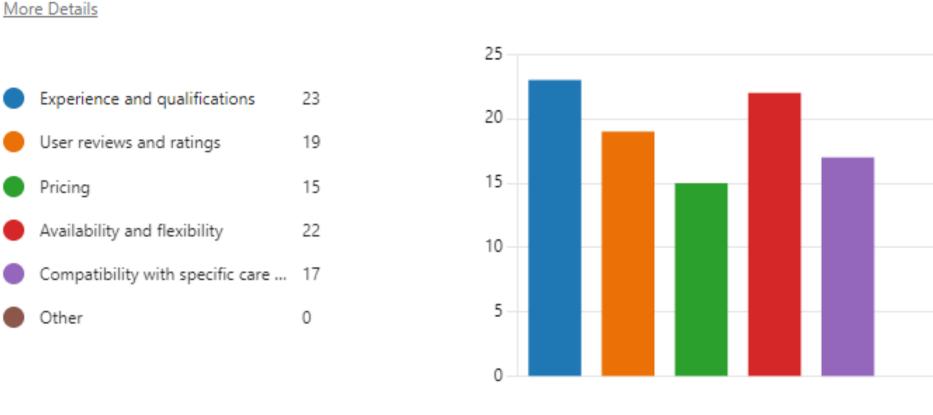
Results & Findings 3.3

27. What features or services would you like to see in a care services app?

The results of a comprehensive survey for the CareNetwork app revealed significant insights into user preferences and expectations. The following findings can be reported as







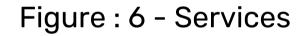
18. What factors influence your decision to choose a particular care provider? (Select all that apply)

Figure : 8 - Factors

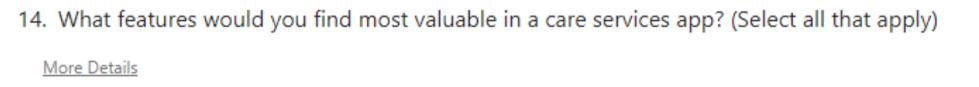
Almost everyone who replied said that experience and certification are significant factors in selecting a caregiver, followed by scheduling flexibility. They also rely on feedback and experience of others.

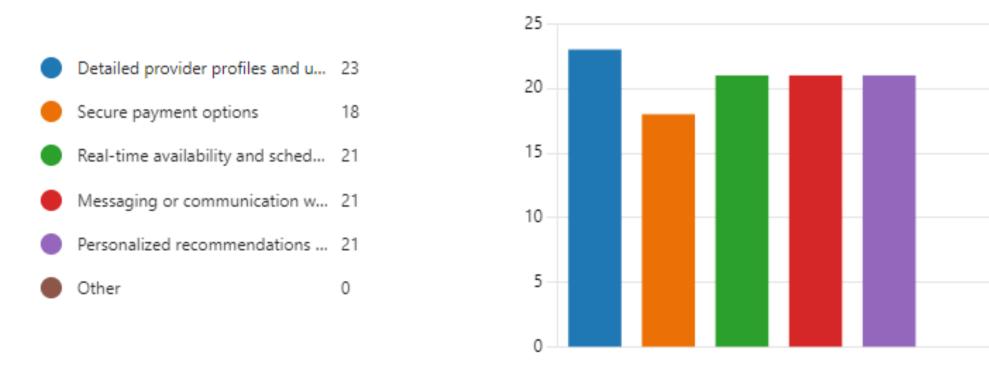
7. What types of care services are you most interested in? (Select all that apply)





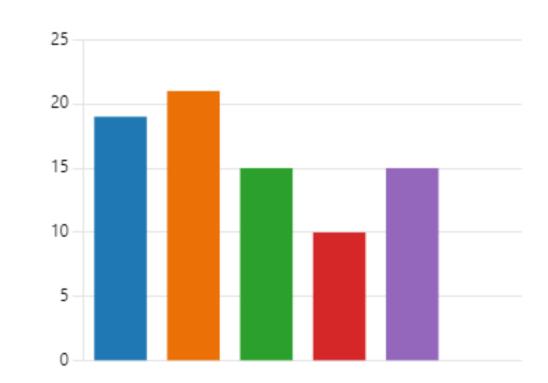
Majority of the responders opted for more than one service which helps reach the conclusion that they require a centralised platform to access all types of care services.

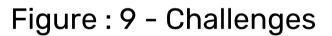




10. What challenges do you face when searching for care services? (Select all that apply) More Details







Many people have difficulty finding skilled and trusted caregivers, which is especially crucial when it comes to a care service app, followed by pricing transparency and availability.

20. What would make you feel more confident and comfortable when using a care services app? More Details

Verified user reviews and ratings 20 Clear and transparent pricing inf... 19



Figure : 7 - Features

Many people believe that extensive profiles of carers, as well as ratings, flexible scheduling, in-app messaging, and tailored suggestions, are important features of a care service app.

Figure : 10 - Feel & Comfort

Everyone appears to be more confident in a caregiver when the profile has extremely positive user reviews, which is how they feel secure in picking them, and when price information is straightforward.

CHAPTER 4 : Define Phase

4.1 User Persona

User personas help to promote a user-centred design approach. They make certain that the app's UI, navigation, and general user experience are based on actual user habits and preferences. Creating these user personas allow me to obtain in-depth understanding of the target audience's specific desires, likes, and pain points. This understanding leads to the creation of features and functions that are in line with user expectations. I can assign priority to features using user personas based on their relevance and significance to different user groups. This guarantees that the most important features get implemented first, increasing customer satisfaction.



Arun Kumar

"Balancing work, kids, and elderly parents, I need a reliable solution to

BIO

Arun Kumar, a 35-year-old skilled developer based in London, is a dedicated professional who values innovation and teamwork. He balances his demanding work in the tech industry with family responsibilities, including caring for his elderly parents and his child. Arun's desire and problemsolving approach motivate him to look for effective ways to manage his family's caregiving demands while prospering in his job. His journey is marked by the challenge of finding trustworthy caregivers for his parents and child, ensuring their well-being even during his work hours.

35 ROLE Developer AGE

GOALS

- Arun's parents are becoming older and require assistance with everyday tasks.
- As a working dad, seeks a secure and dependable daycare option for his child while he is at work. He is focused on locating caregivers who can ensure his child's safety and well-being.
- · Arun wants to be at ease knowing that his parents and child are well taken care of in his absence.
- He is looking for a solution that would allow him

care for my loved ones."	STATUS	Married LOCATION London	to properly handle both caring tasks and wor commitments.
PERSONALITY Introvert	Extrovert	EXPECTATIONS Reliable Ease Of Use Accuracy Safe User-Friendly Interface	 PAIN POINTS Trying to find a solution that assures the happiness and health of both generations. Having difficulty finding dependable caregive
Analytical	Creative		 for both parents and child. Balancing career aspirations with family commitments. Dealing with the emotional toll of caregiving
Busy	Time rich	GO-TO APPS	 while maintaining a busy lifestyle. Navigating the complexities of managing caregiving schedules and tasks.
Adventurous	Home-Body	(amazon	 In his absence, he is concerned for the safety and well-being of his parents and child.

Figure : 12 - User Persona 1



Jessica Parker

"As a carer, every day is an opportunity to make a positive difference and brighten someone's day." It's an honour to bring comfort, support, and smiles to people in need."

11

BIO

Jessica is a dedicated caregiver with a passion for providing compassionate support to the elderly. Born and raised in London, she has always been driven to assisting people and making a difference in her community. She became interested in caring after observing the difficulties her grandparents had in seeking adequate care as they became older. With several years of experience, Jessica has developed a deep understanding of the emotional and physical needs of her clients and is noted for her compassionate attitude to provide a safe and caring atmosphere for those in her care.

AGE	32	ROLE	Caregiver
STATUS	Married	LOCATION	London

- ers

GOALS

- To establish a strong reputation as a trustworthy and compassionate caregiver.
- Provide emotional support and companionship to older people who are lonely.
- Contribute to the well-being and happiness of her clients.
- To maintain a healthy work-life balance while pursuing her caregiving career.
- Enhance my caregiving skills through continuous learning and training opportunities.
- Assist clients in maintaining their independence and engaging in meaningful activities.

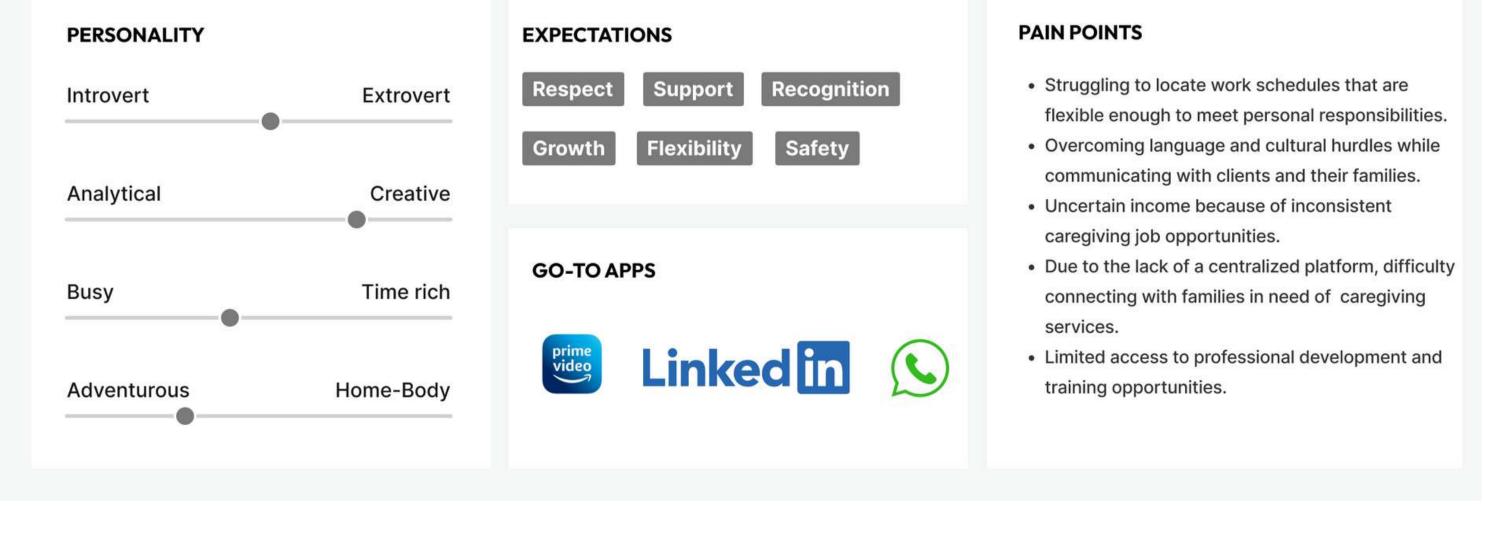


Figure : 13 - User Persona 2

4.2 Empathy Mapping

Creating an empathy map for the CareNetwork app allowed me to gain a more thorough knowledge of user attitudes and behaviours as a sole UX researcher. This technique also revealed potential data gaps in my research. Empathy maps are often divided into four quadrants (Says, Thinks, Does, and Feels), with the user in the middle. These empathy maps provide a comprehensive perspective of the user's characteristics and are not ordered chronologically or sequentially (Gibbons, 2018).

- **Says:** The "Says" quadrant of the empathy map incorporate direct quotations or remarks from users during usability research or feedback sessions. In our scenario, the user might state, "I'm having trouble finding dependable caregivers with the necessary qualifications for my elderly parent."
- **Thinks:** This quadrant dives into the user's caring ideas and motives. It might include data such as "Users consider the safety and well-being of their loved ones when selecting a caregiver through the app."
- **Does:** The "Does" quadrant focuses on user actions and behaviours, revealing how they interact with the application being used. This might include actions like looking for caregivers, scheduling appointments, or communicating within the app.
- Feels: It is critical to recognize and analyse user emotions. This quadrant represents a variety of feelings, such as relief upon finding a trustworthy caregiver or frustration at a lack of available caregivers.

Persona Details			
Name	Arun Kumar		
Age	35		
City	London		
Dele	Developer		

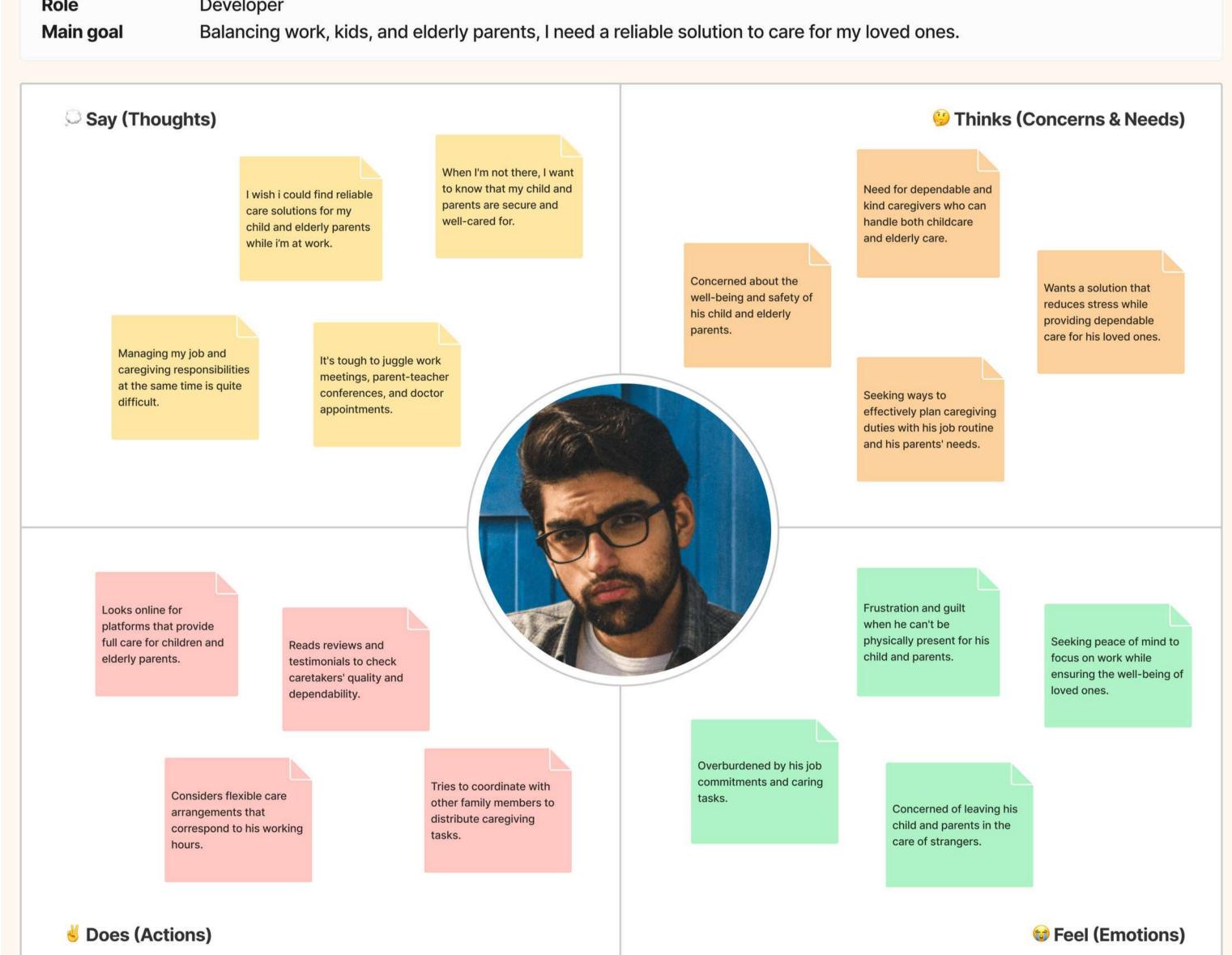




Figure : 14 - Empathy Map (Arun)

4.3 User Journey Mapping

A graphic depiction of a user's interaction, emotions, and touchpoints with a product or service from the beginning to the finish of their journey. It helps in understanding how people interact with a product or service, identifying pain points, and identifying areas for development.

Journey mapping, in its most basic version, begins by gathering a sequence of user activities into a timeline. The sequence of events is then built out with user ideas and feelings to form a story. This tale has been shortened and improved, culminating in a visualization (Gibbons, 2018b).

- I started by outlining the whole user path for the care recipient. This includes every touchpoint; from the time they downloaded the application until the time they continued to use it.
- Through this mapping process, I uncovered a lot of pain points for care receivers. Users such as Arun Kumar found it challenging to obtain suitable caregivers.
- I was also able to highlight the emotional parts of the care recipient's journey thanks to the user journey map. I was able to pinpoint specific times when users could feel anxious or satisfied.
- Indeed, in addition to resolving pain points, Arun Kumar's user journey map revealed chances for development inside the CareNetwork app. For example, I discovered that users such as Arun might benefit from more extensive and thorough caregiver profiles. This resulted in the creation of the "Enhanced Caregiver Profiles" feature. The Enhanced Caregiver Profiles enable users like Arun access to detailed information about caregivers, such as their credentials, experience, availability, services provided, and even a brief biography. This tool enables users to make well-informed selections while looking for a caregiver, ensuring they discover the best match for their

individual need.

I used insights from the user journey map to prioritize features and functions that addressed user's pain areas and emotional needs.

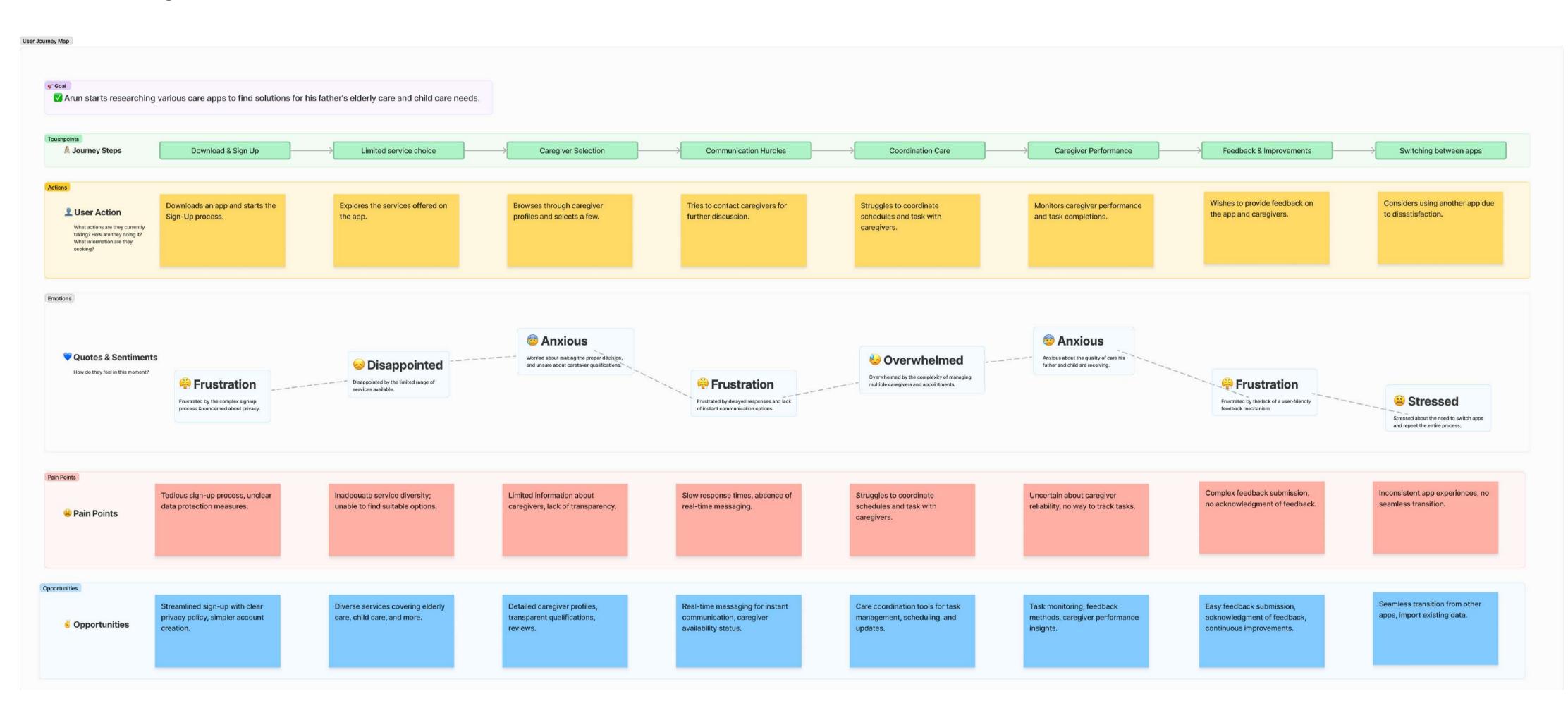


Figure : 15 - User Journey Map

Define Phase

CHAPTER 5 : Ideate Phase

5.1 Affinity Mapping

During the CareNetwork app design process, I utilized the Figma tool to undertake affinity mapping, a systematic approach for organizing and categorizing concepts or pieces of information. This method proved helpful in making difficult issues more manageable by breaking them down into smaller parts. Aside from its simplicity, affinity mapping was critical in exposing hidden connections and trends within the data, shedding light on otherwise buried ideas.

To put it another way, affinity mapping in the context of UX research involves the systematic arranging and classification of qualitative research data by discovering similarities or 'affinities.' This method yields an affinity diagram, which is a graphically organized and labelled collection of study data (Schreiber, 2023).

I used Figma's features to gather ideas or data points in a digital manner, similar to utilizing sticky notes or cards, to guarantee a clear and readily understandable structure for the report. Following that, I carefully arranged these digital notes into clusters within the Figma platform, depending on their shared characteristics. This method not only simplified the representation of information, but it also allowed for a more thorough understanding of the data's details.



User Friendly Inte	erface & Navigation	Communication	a & Coordination	Community	& Support	Trust &	Safety
Easy-to-use interface with clear icons and labels for quick navigation.	Easy search filters for discovering caregivers based on specific requirements.	An in-app messaging solution that allows caregivers and families to communicate directly.	Automated appointment reminders and alerts to avoid miscommunications.	Q & A forums where users can seek advice and recommendations from peers.	Dedicated customer support accessible with in the app for quick assistance.	Comprehensive care screening, including background checks and references	Real time GPS tracking during care sessions for added security.
Personalized dashboard for users to manage bookings, schedules, and payments.	Interactive calendar for effectively visualizing and planning care schedules.	Secure document sharing for relevant medical records and care plans.	Care coordination tools for families to easily share tasks and responsibilities.	Caregiver support groups within the app for sharing experiences and tips.	Virtual events and webinar on caregiving topics to foster a sense of community.	Option to view caregiver certifications and licenses directly on their profile.	Reporting system for any concerns or issues relate to caregiver conduct.
Integration	of Services	Caregive	er Profile	Custom	ization		
Convenience of having a platform that offers a wide range of care services, including elderly care, child care, pet care etc, in one place.	Pricing choices that change dependent on service kind, duration, and location.	Detailed caregiver profiles showcasing certifications, specializations, and availability.	Ratings and reviews displayed prominently for easy evaluation.	Personalized care plans that can be adjusted and updated as needed.	Advanced filtering options to narrow down caregiver options based on certain criteria.		
Customizable service bundles that cater to varying needs and preferences.		Embedded video introductions from caregivers to provide a personal touch.		Multiple family members can coordinate and manage care plans using family profiles.			

Figure : 16 - Affinity Mapping

5.1.1 Key Findings

- In today's fast-paced world, caregivers and care receivers frequently look for flexibility in scheduling and service types. This might include part-time, full-time, or on-demand care options to accommodate various lifestyles and needs.
- Users desire detailed information on caregivers, such as qualifications, experience, and background checks. This allows them to make informed decisions when choosing a caregiver.
- A smooth caring experience requires effective communication between carers, care recipients, and their families. Users that provide systems prefer simple and secure communication.
- In caregiving, trust is essential. To safeguard the safety of their loved ones, users prefer platforms that prioritize safety measures such as background checks and caregiver verification.
- Caring for someone else may be emotionally draining. Users value platforms that provide support networks, forums, or communities where they can interact with others going through similar experiences and share their own



- A simple app UI improves the overall user experience. Easy navigation, clear layouts, and user-friendly features make it simpler for users to access the care services they need.
- Users frequently demand a wide range of care services, from babysitting to eldercare. Having access to all these services in one place is convenient as it simplifies the caregiving process.
- Peer reviews and ratings provide useful information about the quality of caregivers and services. Users use this input to make informed choices and develop confidence in the platform.
- Everyone's care requirements are distinct. Users like platforms that allow them to tailor their care preferences, whether it's choosing a caregiver with specific skills or arranging care at times that work for them.
- Users' schedules vary, and they may demand flexibility in booking and scheduling care. A simple and effective booking procedure ensures that people have access to care services when they need them, without any needless obstacles.

5.2 Red Routes

The most important and frequently travelled paths that users utilise to do their activities efficiently and effectively inside a digital product or interface. These are the primary user journeys that need extra attention and optimization to create a positive and effective

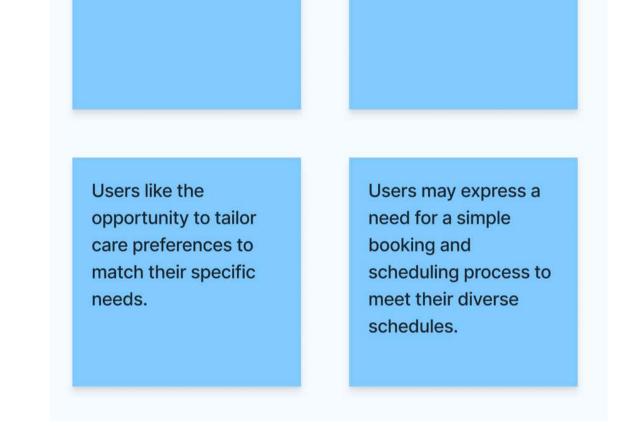


Figure : 17 - Key Findings



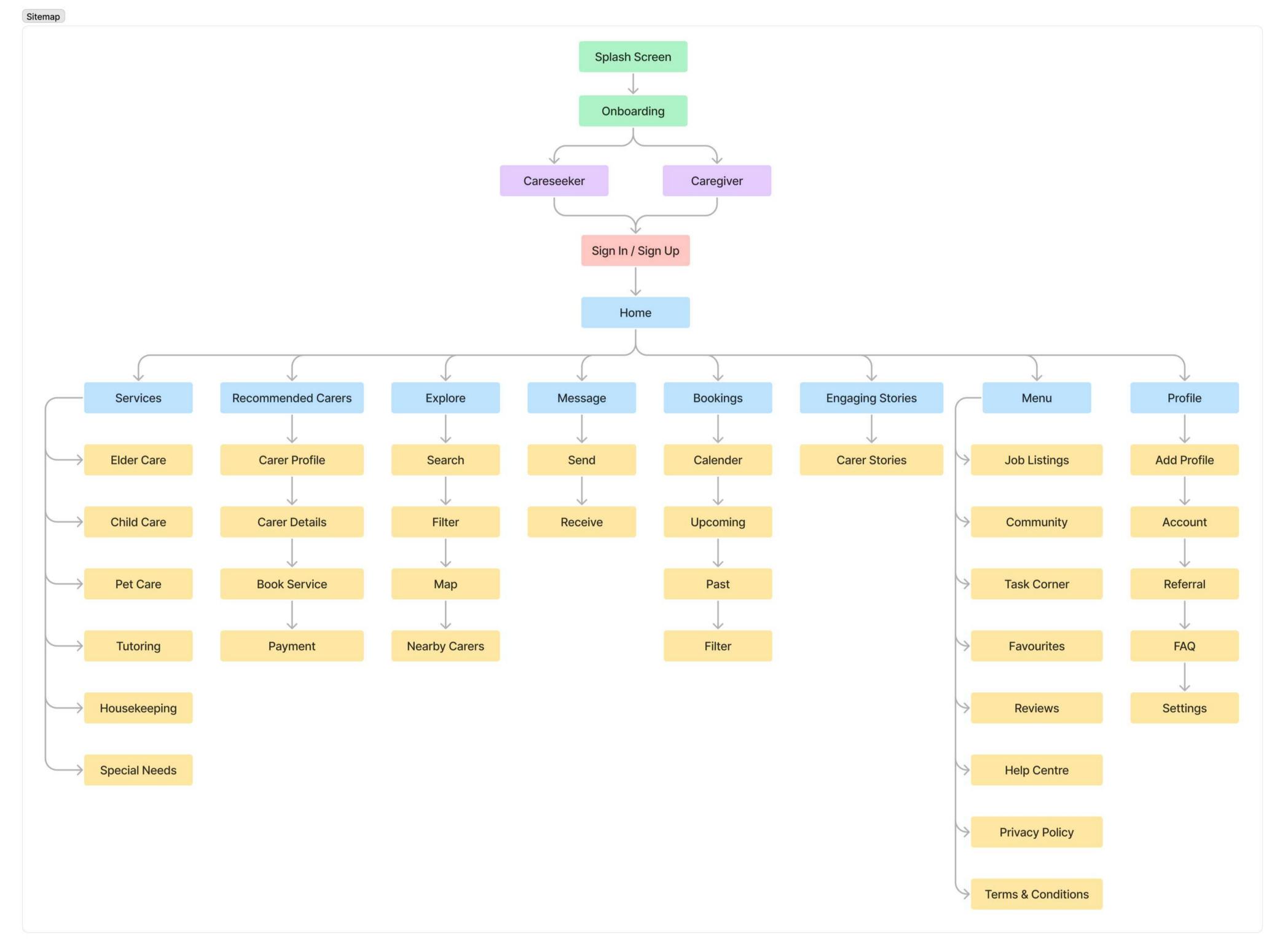
user experience (Baker, 2018).

Another key benefit of red routes is their capacity to produce actionable results. They have an impact on the product's features, focusing on a few essential functions that are crucial to the majority of users (Koyewon, 2022).

Figure : 18 - Red Routes

5.3 Site Maps

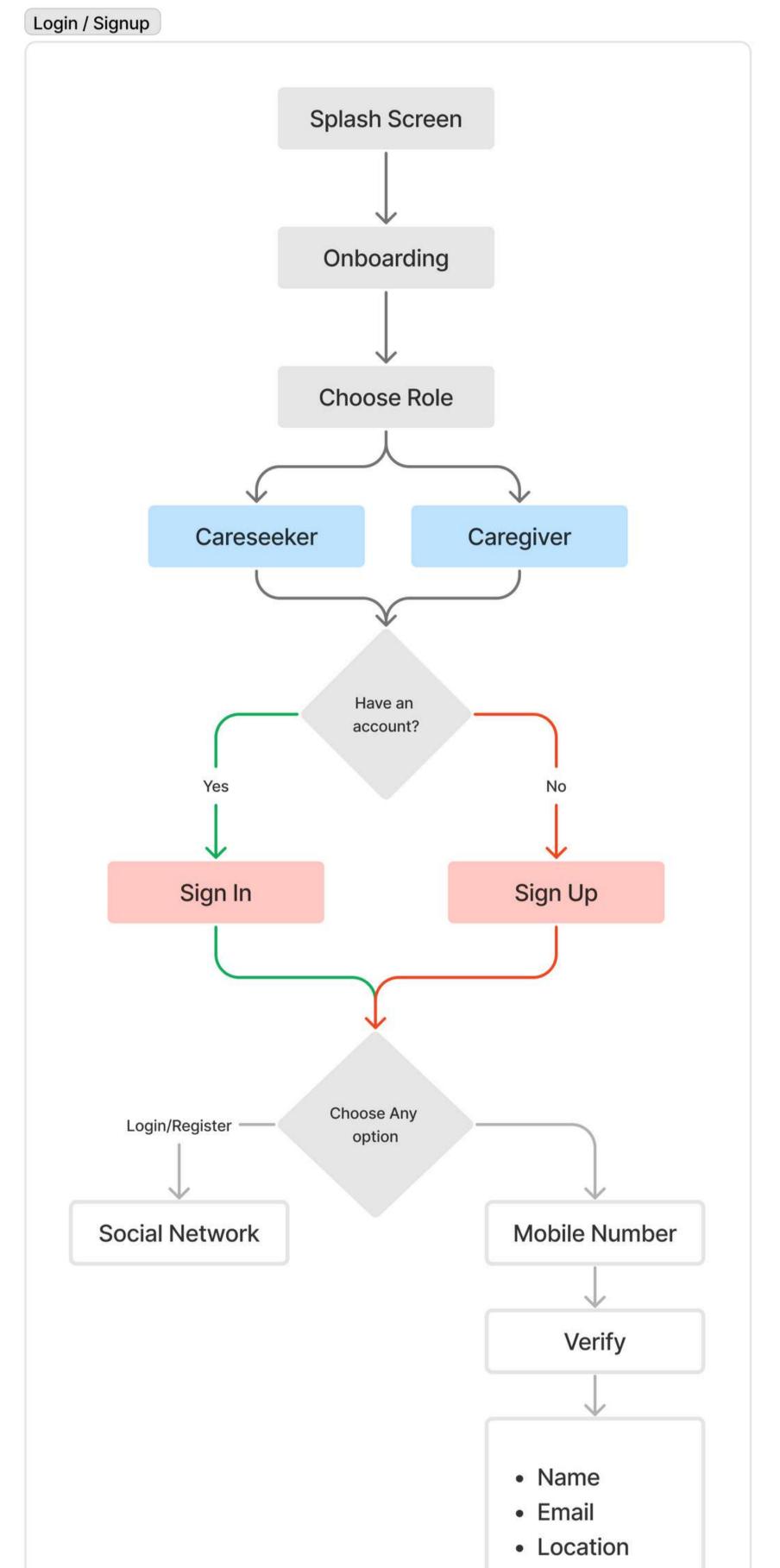
A sitemap is a visual or hierarchical representation of a website or mobile app's structure. It acts as a blueprint for the digital platform's various pages, sections, and content. It gave me a clear, high-level picture of the app structure that helped me understand the numerous ways in which different screens and features are linked and how users will navigate the app. It also assisted me in organizing my thoughts so that the screens are connected to one another and fit into the overall user experience. This guaranteed the content flowed smoothly from one screen to the next.



5.4 Userflows

The availability of a sitemap aided in the design of user flows inside the CareNetwork app. It revealed information about access points, exit points, and the numerous paths users might take when exploring the program. This comprehensive understanding enabled the creation of screens that matched these user experiences flawlessly.

- When users initially use the app, they are welcomed by an exciting landing page that sets the tone of adventure. This screen is intended to grab the user's interest and pique their curiosity.
- Users are given the option to choose their intended flow upon landing: "Care Seeker" or "Caregiver." This is a critical decision point since it allows users to select any position inside the app based on their requirements. I've tried to make this choice obvious and prominent in order to steer people to the appropriate features and services.
- Users are routed to the sign-up/log-in screen after selecting the preferred flow. I've offered many handy methods for people to establish an account or log in here. They may join up or register in using their mobile devices or social media profiles. This strategy accommodates a wide variety of their preferences while also simplifying the onboarding process.



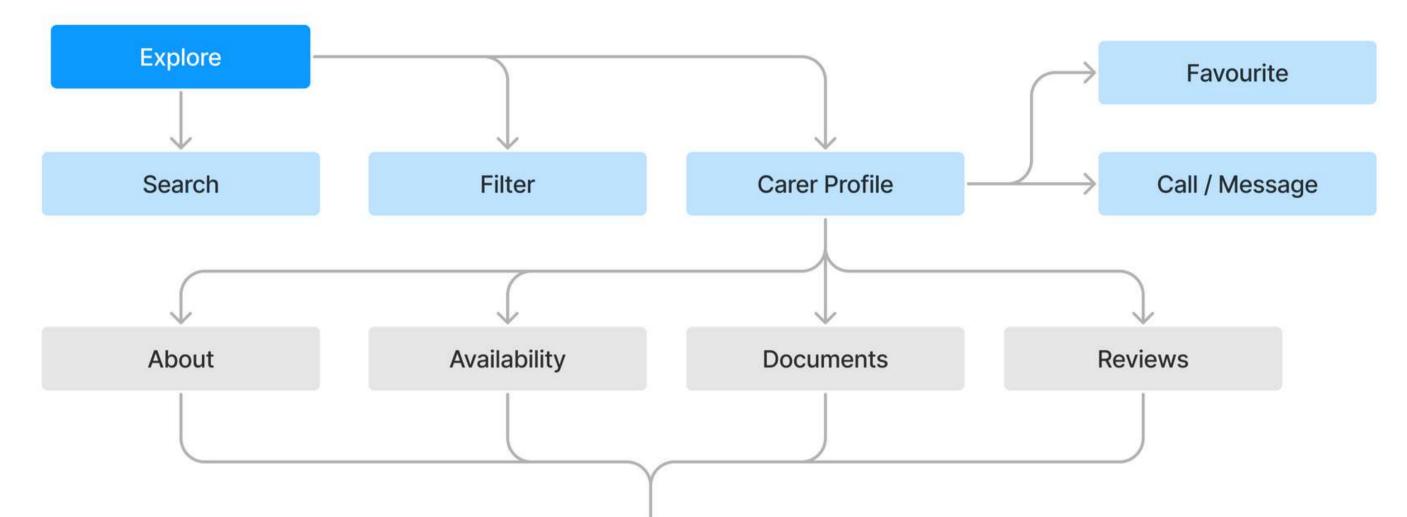
 Users are required to give basic information in order to establish an account. I've kept the first information gathering procedure simple, asking for simply the name, location, and email address. These three data pieces are critical for developing a tailored and secure user profile while protecting the user's privacy.

In today's mobile app market, the simplicity and convenience of an app's onboarding process typically determines its success and perception. Users are more likely to have a pleasant experience and continue using an app if their first encounter with it is seamless and easy. However, if the onboarding process is extremely complicated or unclear, it can cause user aggravation and result in a considerable loss of users. This emphasizes the vital necessity of an app's capacity to maintain and engage its user base, which is directly influenced by a user-friendly onboarding experience.



Figure : 20 - User Flow (Login)

- The app makes booking care services exceedingly simple. On the main page, users are provided with a variety of care categories. Furthermore, based on the location, our app proposes caregivers, ensuring that users obtain local and highly-rated choices. For those who want to look around, our 'Explore' function allows you to narrow down caregivers depending on the exact requirements.
- When exploring a caregiver's profile, user's will find plenty of information about them, such as their qualifications, scheduling availability, and the opportunity to obtain documents such as certification and background checks. User reviews are clearly presented, assisting in making a selection. Users may simply contact caregivers through text or phone and save them as favorites for future use.
- Following the selection of a caregiver by the user, a straightforward booking process takes place. They may choose a day and time period, as well as pay utilizing a variety of options. If users need to alter the booking, they may do so quickly via the bookings section of our app. This streamlined method ensures that our users enjoy a positive experience.



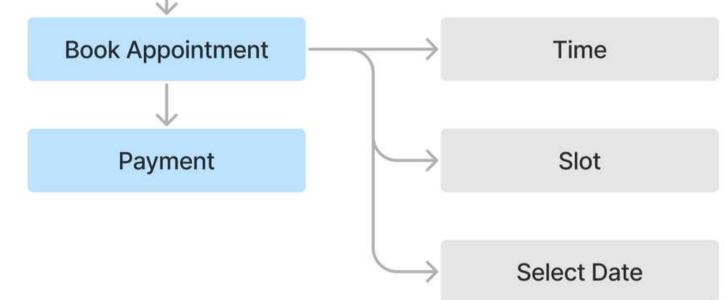
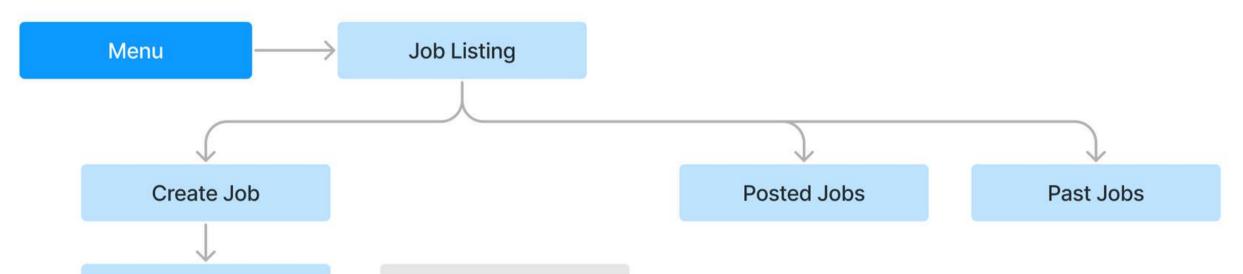


Figure : 21 - User Flow (Service Booking)

- I've simplified job posting and administration in the app. It's easily accessible from the menu, allowing users to see all of their job listings, create new ones, and quickly flip between previous and applied positions.
- The user interface for creating jobs is intended to be simple. Users must first input basic information about the individual needing care, as well as the date and time requirements. They can also supply any extra medical or particular caregiver instructions via simple upload choices.
- The method is laid out in a step-by-step format as they go through it. Users then enter caregiver preferences, such as availability and desired pricing. Finally, after inputting all of the required information, the last screen functions as a work summary and confirmation. It shows the job title and allows users to confirm their information before posting the job. This easy and systematic approach guarantees that our users get a consistent experience.



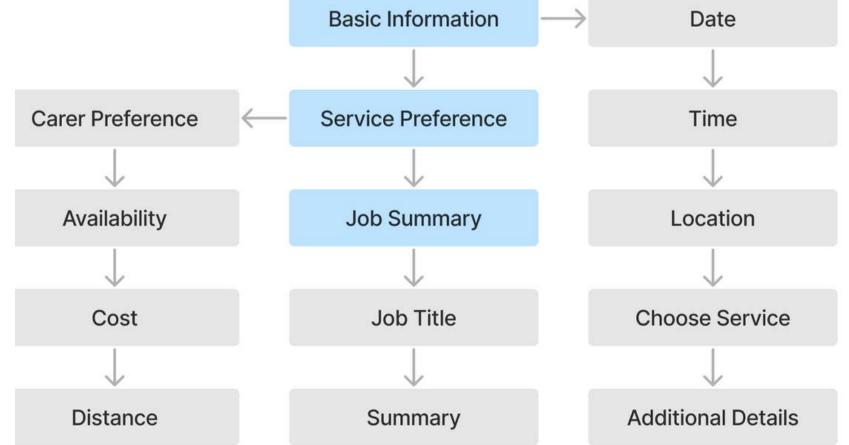


Figure : 22 - User Flow (Job Listings)

Ideate Phase

CHAPTER 6 : Design Phase

6.1 Early Sketches

Early sketching assists in the creation of numerous variants or solutions to a design problem. Having a variety of options allowed me to examine and compare solutions before deciding on the most effective and user-friendly one. It can be used to assess out a variety of concepts and solutions. They do give me with a blank canvas on which to think and experiment without regard for detail or perfection. This open-ended inquiry allows my imagination to bloom, leading to inventive and one-of-a-kind solutions (Rojas, 2021).

I can iterate quickly because early drawings are quick to make. Based on feedback and user testing, this iterative approach is critical for refining concepts, fixing problems, and making changes.

Home Screen Versily Number Onboarding X Location Welcome sLoganwing Upbile Number m xm Headurg LOGIN m



Explore Screen

Menu Screen

Job Listings

Activity Screen

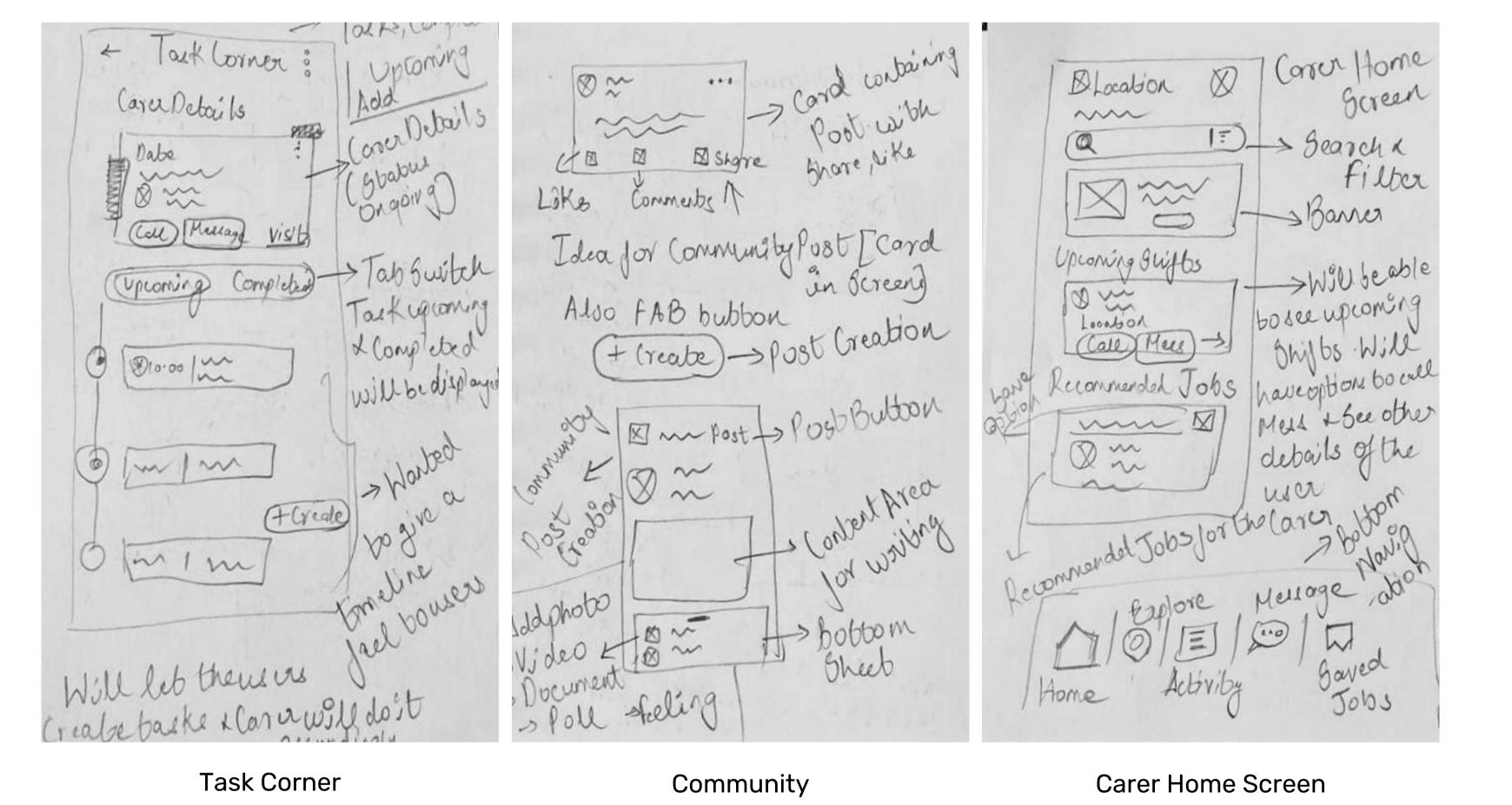
Bookinghlot profile Name MyReviews Date Nomerother Bobbom bookings 6 11 Sheet s debails 8 Negabive Calender Location 21 Calender 25 21 Carer 1 t65 Reviews (Modern 15) m 3100 Q~Q~Q~ ≥ Call browing Recent fevirus Den' Morning m Cardview Meriago About Arail Docounced Revices grad st *4.8 Overn gh × Bari 60 line Kven? ~ m IN MARCH avour be > Carra NULOge STime DAU details. 2 9 bione Q Call *4.7 2 Review time, Call Carca Details Post bookin all details Esperience, Queli ations given by 17 Have buttoon Conform in the card Confirmation 2 Jab BookAppornment user played Switch in Carde PaymentPage = Card View East Merrage B Debuild grownation of Carelis provided by the App Emiley Stokes Conbaining Date Date >Display) concedebails Ø 0 Ø (online Usor Cards >Chat Appointment will have of to waite in Nora Good is Write Comment Date pach (ar or ofi

Booking Screen

Care Profile

Booking Slot

Review Screen



I drew inspiration from well-known websites like dribbble, behance, pinterest, and applications, which assisted me in creating a variety of drawings.

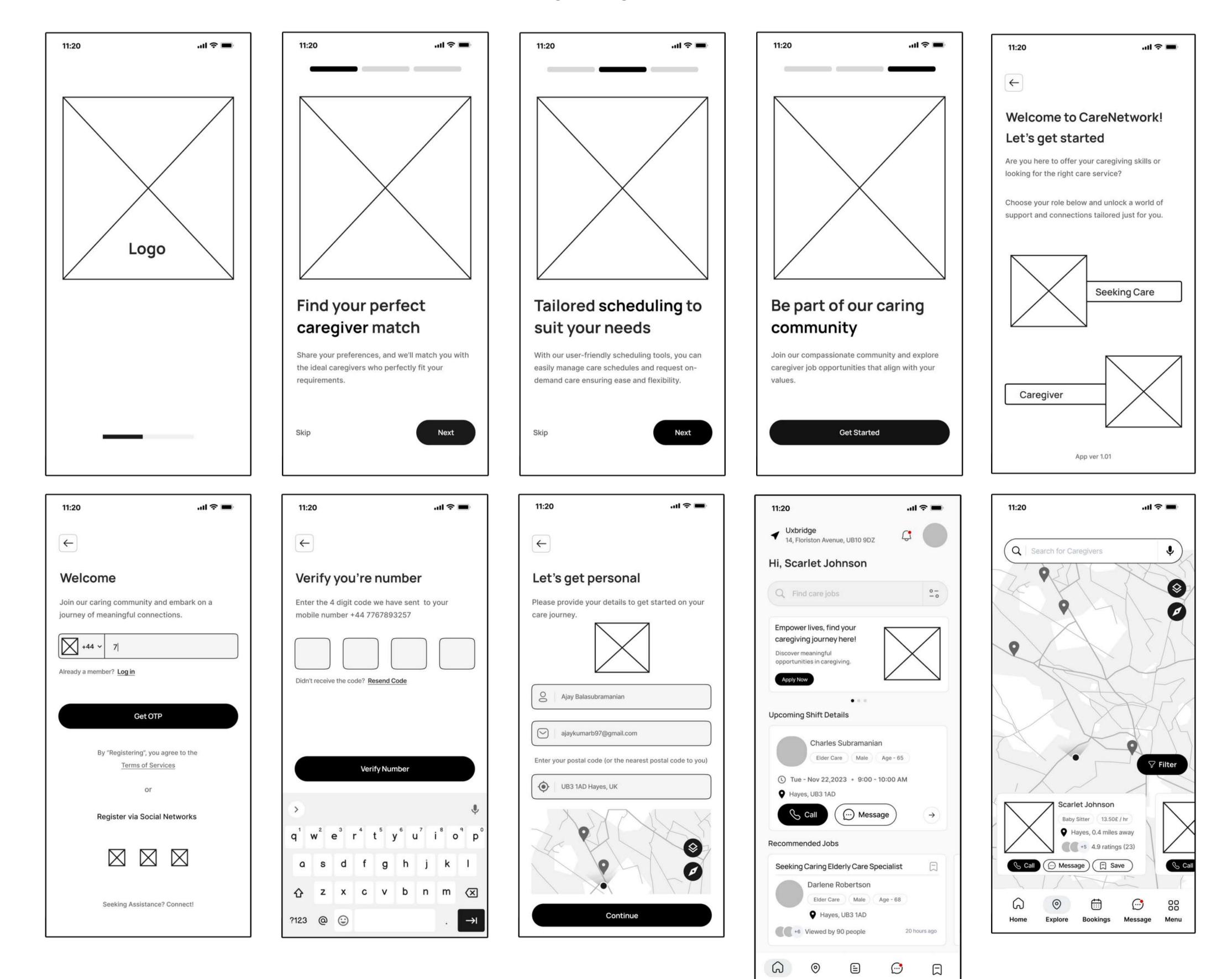
6.2 Low Fidelity Wireframes

Certainly, the process of making early drawings was critical in building the low-fidelity wireframes using Figma. Each screen's drawings served as the basic idea structure. They gave an initial design of where crucial features like buttons, forms, and text should go. When I produced the low-fidelity wireframes for the app, I made a conscious decision to utilize actual text rather than standard Lorem Ipsum placeholder text. The following factors influenced this decision.

- I was able to accurately portray how things will appear in the app by using genuine text.
- It assisted me in making informed choices regarding content hierarchy and layout based on the features of the real product.
- Using real text forced me to think about content strategy throughout the wireframing process, which resulted in better content decisions.
- With genuine text, I could account for differences in content length, which is vital for building flexible and adaptive user interfaces.

However, I had to consider potential difficulties, such as the resources and time necessary to gather and include genuine information, as well as the likelihood of content modifications throughout the design process. Despite these obstacles, the advantages of including actual words in low-fidelity wireframes for the CareNetwork app outweighed the disadvantages, resulting in a more realistic and successful design process.

While sketching enabled me to generate creative ideas, wireframing in Figma allowed me to turn these concepts into a more structured and ordered style. I could adapt the visual concepts from sketching into digital wireframe components.



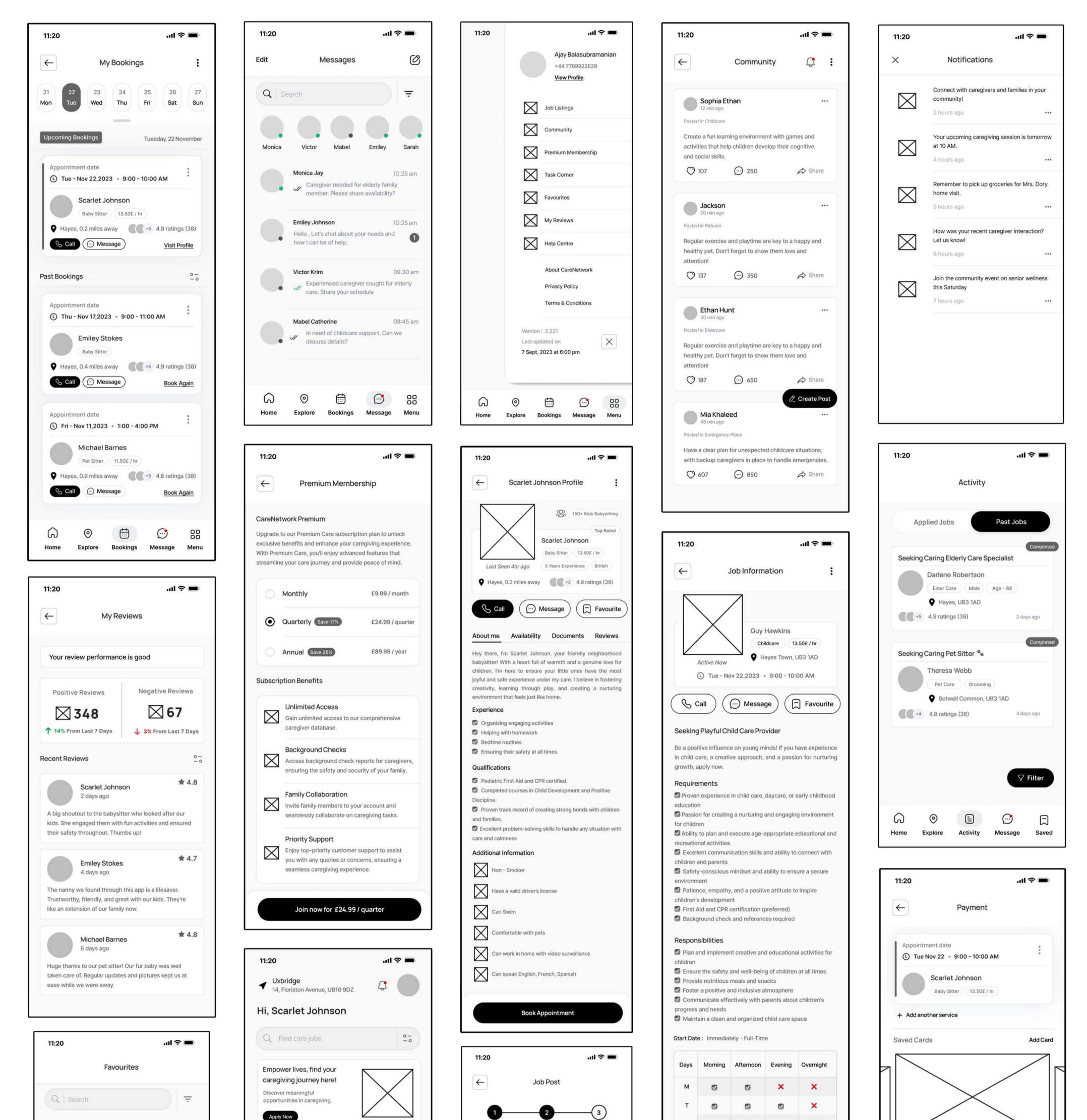
Activity

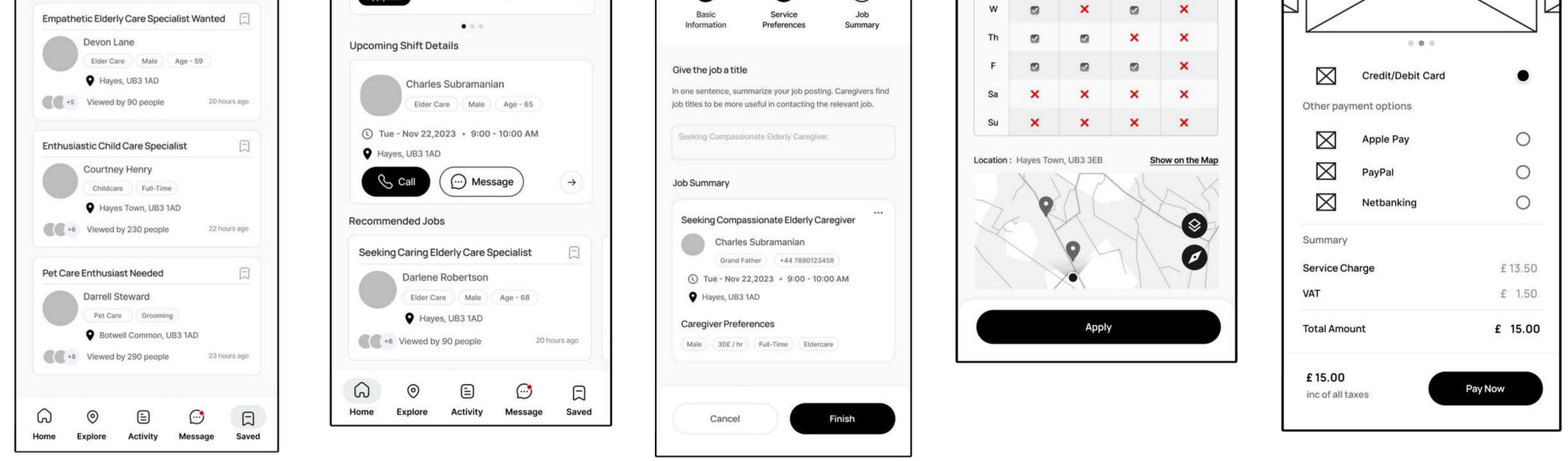
Message

Saved

Home

Explore



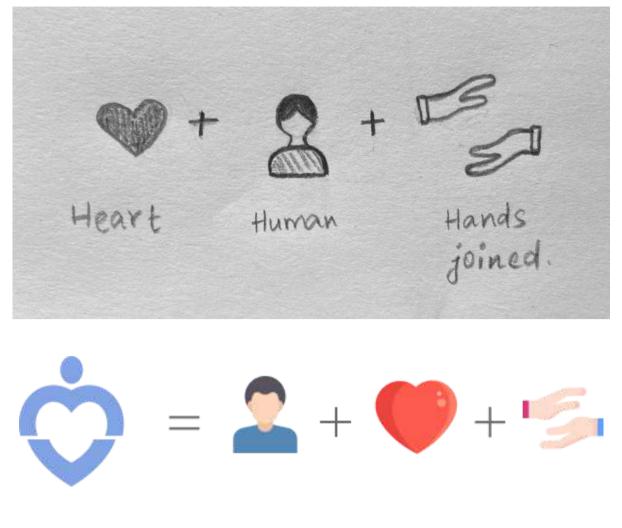


CHAPTER 7 : Branding

Creating low-fidelity wireframes was a critical step in improving my ability to imagine the CareNetwork app. It moved me one step closer to achieving my design objectives. However, the switch to high fidelity design represented a significant shift in my creative approach. During the high-fidelity phase, the emphasis is on the visual features of the app, where every detail counts.

I made a deliberate decision to begin my branding work early in the design phase. I started the process by deciding on the name and the tagline for the app. This early branding work enabled me to keep a clear vision and stay on track with the app's mission throughout the design process.

It was critical to consider the user's point of view. I realized that the app's name and tagline were crucial in explaining the app's identity and purpose to users. I was able to develop user experiences and user interfaces that resonated with the app's underlying values by settling on these aspects early on. I began generating branding materials such as logos, color schemes, and typography after deciding on the app's name and tagline. These materials were completed prior to the high-fidelity design process, enabling for the seamless integration of branding aspects into the UI designs.







Caring+Companion = CareNetwork (Act of providing support & assistance to someone in need + "Network" refers to a community of care providers. caregivers, and individuals seeking care services.)

7.1 Brand Name

Here are some of the reasons for considering the name "CareNetwork" as a suitable choice for the digital platform:

- Networking and Connection: The word "Network" suggest the concept of connecting and bringing a community of people together. In the care services environment, CareNetwork indicates the platform's power to connect families in need of care with a community of dependable and experienced caregivers.
- Care and Support: •The word "Care" in CareNetwork indicates the primary aim of the app, offering care and support services to families It highlights the app's commitment to offering considerate and dependable care solutions.

7.2 Brand Strapline

Connecting care, Creating comfort.

 The phrase "Connecting Care, Creating Comfort" encapsulates CareNetwork's goal of connecting families and carers in a friendly and personalised atmosphere. By facilitating clear communication, open pricing, and personalised suggestions, the platform aims to provide a sense of comfort and security for all parties involved.



Here is a full overview of the CareNetwork logo and its suitability:

- Heart Symbol: The heart represents love, caring, and compassion, all of which are core principles of the CareNetwork app. It symbolizes the deep bonds that exist between caregivers, care recipients, and families. This is crucial to the app's purpose of giving its users with real, loving care.
- Human Silhouette: The human silhouette depicts the people at the heart of the care network, including caregivers, care receivers, and families. It represents the human touch and personal attention that the platform enables. The app's usercentric design guarantees that it caters to each individual's unique requirements and preferences.
- Hands Holding: The hands holding the heart and human silhouette represent help, support, and the joining together of individuals in a caring network. It highlights the collaborative nature of caring, in which carers assist people in need. It also

The goal of the CareNetwork brand, which is to connect families and caregivers in an encouraging and personalized atmosphere is effectively conveyed through the brand's tagline "Connecting Care, Creating Comfort." The platform seeks to create a comfortable and secure atmosphere for all parties involved by clear communication, transparent pricing, and facilitating personalized recommendations. The tagline highlights the importance of fostering meaningful connections and relationships, while also emphasising on the company's responsibility of delivering high-quality and compassionate care services that focus on the welfare and the well-being and contentment of its users.

represents the platform's trustworthiness and dependability to its users.

Overall, the logo clearly represents the core of CareNetwork: a platform that connects people, promotes caring connections, and offers assistance in times of need.

7.3 Why Us?

The CareNetwork app is required due to the changing nature of caregiving and the rising demand for easily accessible, individually tailored, and effective care services. A number of variables highlight how important such an app is and the necessity for it in today's world:

- As the population ages, the demand for services for elderly people is rising. It can be difficult for many families to strike a balance between running their businesses and taking good care of elderly relatives. The urge to safeguard the protection and well-being of senior citizens emphasises this requirement even more.
- Because of the common requirement associated with contemporary lifestyles for both parents to work outside the home, there is a growing need for dependable and reputable childcare services. Families look for choices that allow them to satisfy their work obligations while also offering their children high-quality care.
- People who provide care services, whether professionally or for family members, frequently lack a centralised platform for showcasing their abilities, get in touch with potential customers, and effectively manage their calendars.

We do this with an emphasis on credibility, dependability, and personalised assistance. Our commitment to enhancing lives, fostering connections, and reinventing the caregiving experience is captured in our brand promise.

7.7 Brand Values

- **Empathy:** We are aware of the importance of providing care in the lives of other individuals. Our dedication to empathy motivates us to build a platform that encourages awareness of, appreciation for, and genuine consideration for each person's particular needs.
- **Reliability:** The foundation of our beliefs is trustworthiness. We uphold dependability by using vetted carers, open lines of contact, and reliable support services, giving both care recipients and carers comfort of mind.
- **Inclusivity:** We think that compassion has no geographic bounds. Our platform is made to be open-minded, honouring diversity and meeting the various requirements of individuals and families in terms of caregiving.
- Families and people are increasingly looking for customised care options that meet their own requirements and inclinations. The ability to interact with verified carers via an app can help people feel more at ease because trust is a key component of caregiving relationships.

7.4 Vision

Our vision is to build a future where everyone has the opportunity to receive outstanding care services that match their individual needs at reasonable pricing, and where families and caregivers can easily connect, communicate, and cooperate on care services.

7.5 Mission

Our mission is to shorten and enhance the process of finding and managing care services for families and caregivers, by offering an all-inclusive and user-friendly digital platform that meets their requirements, preferences, and budgets.

7.6 Brand Promise

- **Innovation:** We encourage creativity to transform the experience of providing care. We continue to be at the head of technological and caregiving advancements because of our relentless search for better solutions.
- **Collaboration:** We flourish on the strength of relationships. We develop a cohesive care community where information, assistance, and companionship are shared by caregivers, those receiving care, and families by encouraging interaction across these groups.

7.8 Voice and Tone

- Voice: Compassionate, Informative, and Supportive
- **Tone:** Professional, Kind, and Encouraging

Our voice is that of a sympathetic companion, offering knowledge, direction, and support as you go through the caregiving process. We communicate with kindness, understanding the difficulties you confront, and provide solutions that make providing care more bearable. Our interactions are accurate and trustworthy a result of our professional tone. It's also reassuring because it serves as a constant reminder that you're not travelling alone and that we're with you in each stage of your journey.

Our brand promise at CareNetwork is to deliver a smooth and empathetic caregiving experience that links people and families with dependable carers who respect their values and cater to their particular requirements. We are dedicated to providing outstanding care solutions, cultivating deep connections, and guaranteeing peace of mind. Our website offers a trustworthy and convenient platform to identify and deliver care services, empowering both families and carers. We pledge to be the link that ties carers and those looking for care, building an atmosphere of compassion where everybody can succeed.

7.9 USP for CareNetwork

- Holistic Care: In contrast to other platforms, CareNetwork provides a wide variety of caring services, such as childcare, elder care, and pet care. We provide for the whole range of care requirements, making us the preferred choice for both families and individuals.
- Flexible Scheduling: CareNetwork gives you the freedom to choose a care schedule that works for you. Our platform adjusts to your lifestyle regardless of whether it is an occasional necessity or a recurrent service.
- Comprehensive Care Support: CareNetwork provides a comprehensive platform that streamlines the caregiving process, from recruiting caregivers to keeping track of appointments and payments. We offer an effortless user experience so you can stop fumbling between different apps and platforms.
- Empowered Community: Be a part of our compassionate group where families, caregivers, and care receivers interact and exchange experiences. This interconnected environment promotes a sense of community, assistance, and education.

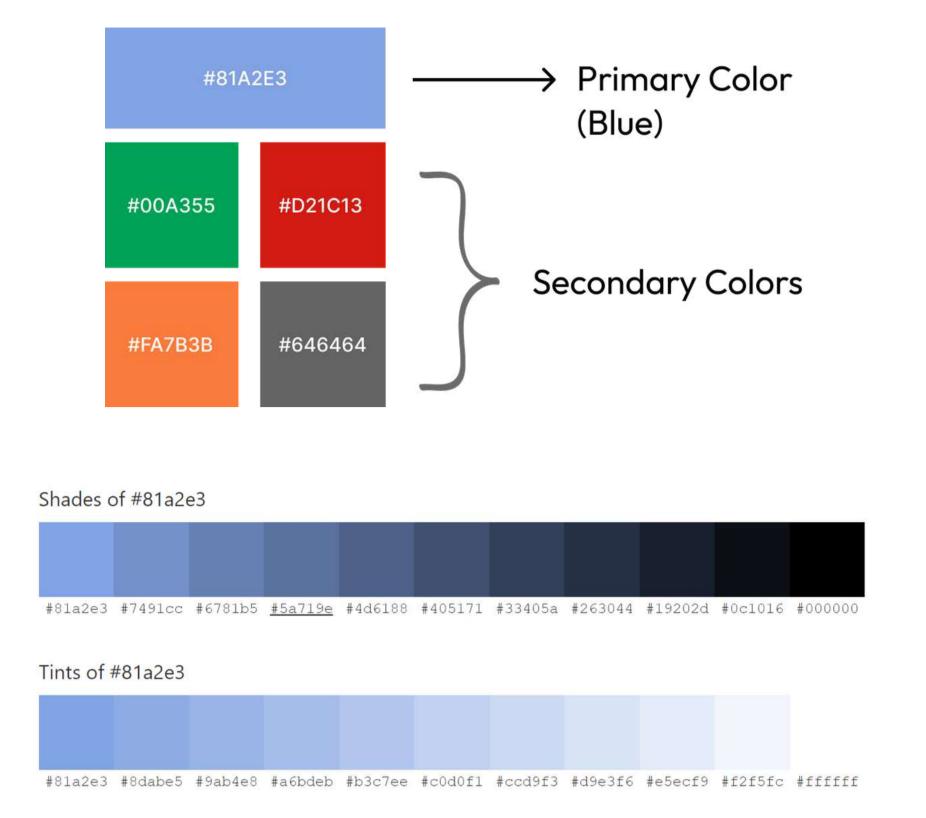


Figure : 25 - Color Pallete

- Approved Providers: Our primary goal is your tranquilly. CareNetwork makes sure that all carers go through extensive background checks, evaluation, and authentication to assure their reliability and safety.

Colour Palette 7.10

Given that the CareNetwork app is focused on care services, it's critical to take into account colours that inspire feelings of cosiness, dependability, and trustworthiness. Here are some colour schemes that fit the notion of empathy and care:

- Calming Blue: Blue hues like light blue and sky blue can evoke a sense of security and dependability, putting users at rest while using the app. Associated with serenity, dependability, and trustworthiness. to elicit a sense of calm and certainty. (Primary). A blue hue is represented by the colour code #81A2E3. It has the hexadecimal values 81 (red), A2 (green), and E3 (blue), and is a shade of medium to light blue colour. This is often referred to as sky blue or light blue. Its peaceful and calming qualities can inspire emotions of relaxation and tranquillity.
- Green: Represents peace and growth. gives a feeling of balance, freshness, and well-being. Create a nurturing, secure, and sustainable feeling.

Moodboard 7.11

CareNetwork's moodboard conveys warmth, compassion, and user-friendliness. It employs a color scheme that mixes calming and inviting tones to represent care and assistance.



- **Red:** Displays a feeling of cosiness and sympathy.
- Orange: Social engagement and the ability to create a welcoming environment.

The qualities of dependability and consistency can be communicated by utilising blue as the primary colour. Secondary hues like green, red, and orange can enhance the overall graphic identity of the care platform by bringing in aspects such as energy, understanding, and passion. This colour palette enhances the user experience as it is both aesthetically pleasing and emotionally compelling.

Figure : 26 - Moodboard

7.12 Typography

Typography was also important in the high fidelity design process. The fonts, sizes, and spacing used have a big influence on the app's readability and overall look. In CareNetwork, I went with a well-balanced font mix, using Manrope for headers and Inter for body text. This choice not only assured readability, but also contributed to the app's consistent and unified visual identity.

Primary Font

(Inter

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

1234567890

Regular 400

CareNetwork - Connecting Care, Creating Comfort

7.13 Mockups

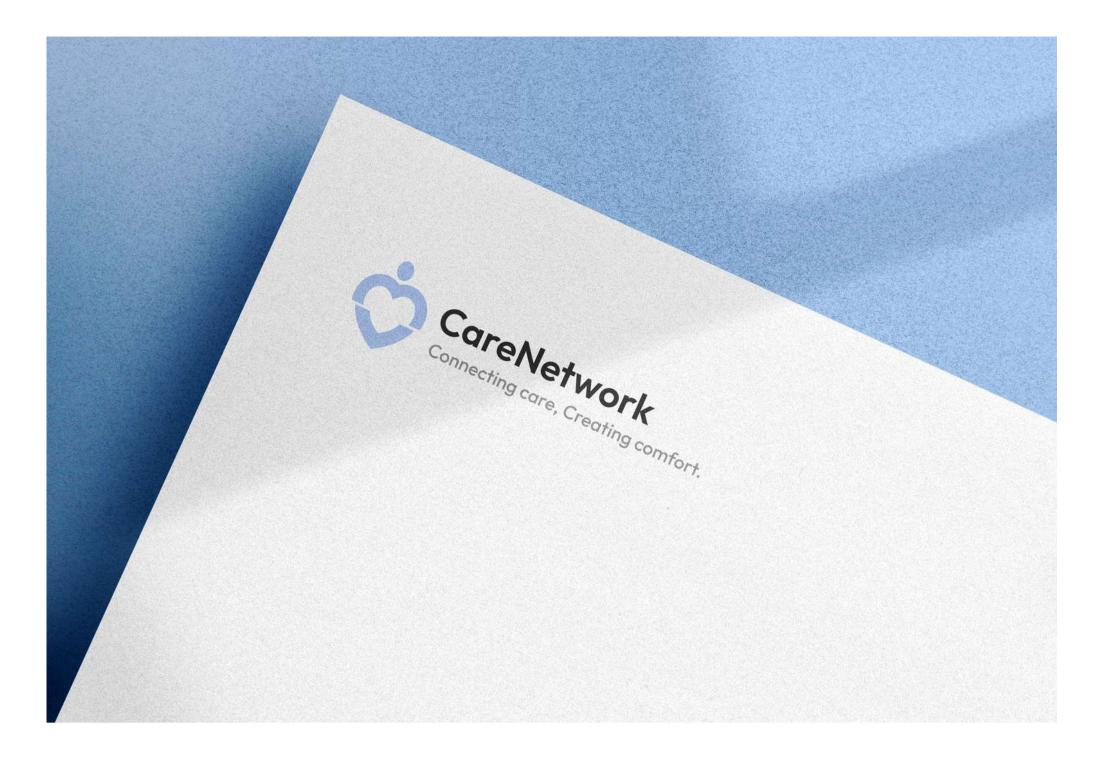


Figure : 27 - Logo(Mockup 1)

CareNetwork - Connecting Care, Creating Comfort

SemiBold 600

Medium 500

CareNetwork - Connecting Care, Creating Comfort

Bold 700

ExtraBold 800

CareNetwork - Connecting Care, Creating Comfort

CareNetwork - Connecting Care, Creating Comfort

Figure : 27 - Primary Font - Inter

Secondary Font

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

1234567890

Regular 400

Manrope - Font Family

Medium 500

Manrope - Font Family

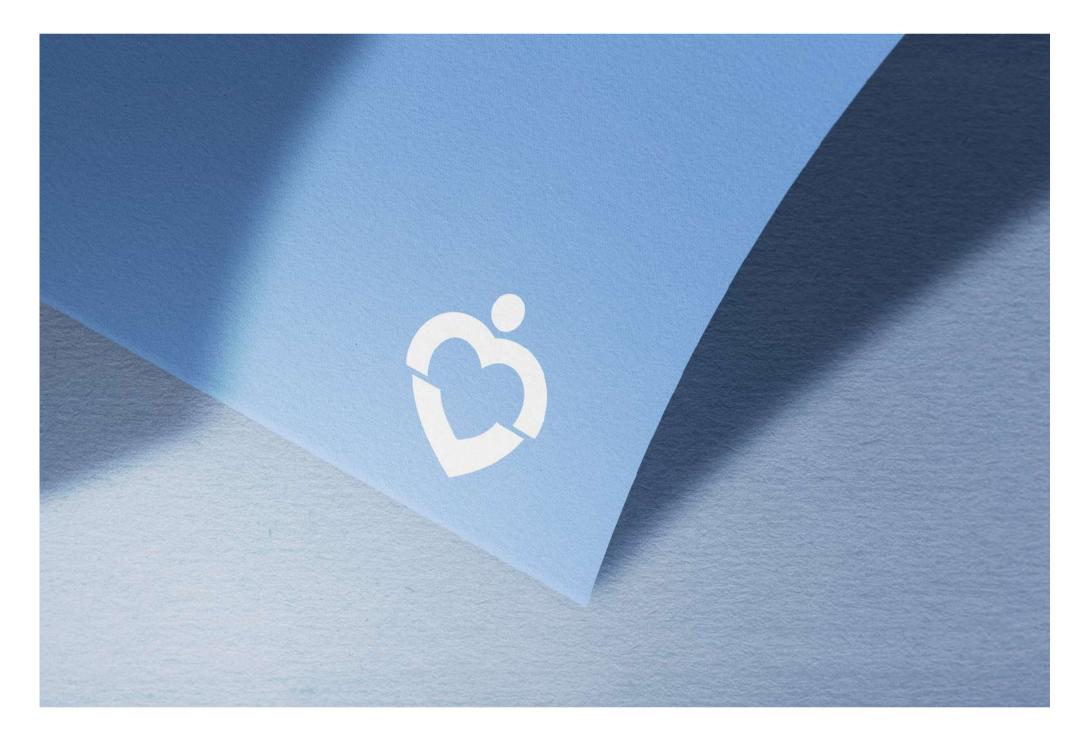


Figure : 28 - Logo(Mockup 2)



SemiBold 600

Manrope - Font Family

Bold 700

Manrope - Font Family

ExtraBold 800

Manrope - Font Family

Figure : 28 - Secondary Font - Manrope



Figure : 29 - Logo(Mockup 3)

Billboard Mockups

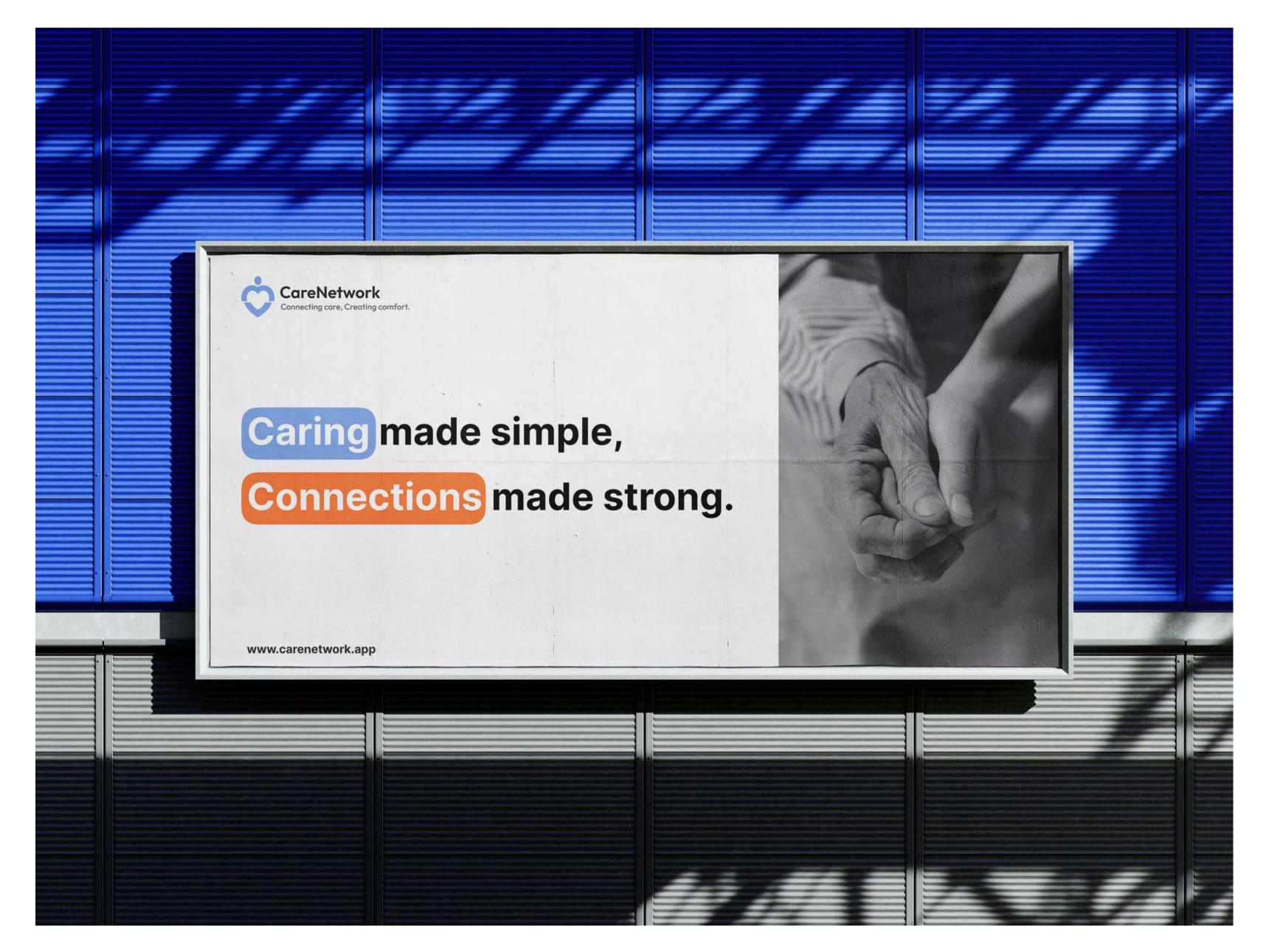


Figure : 30 - Billboard (Mockup 1)

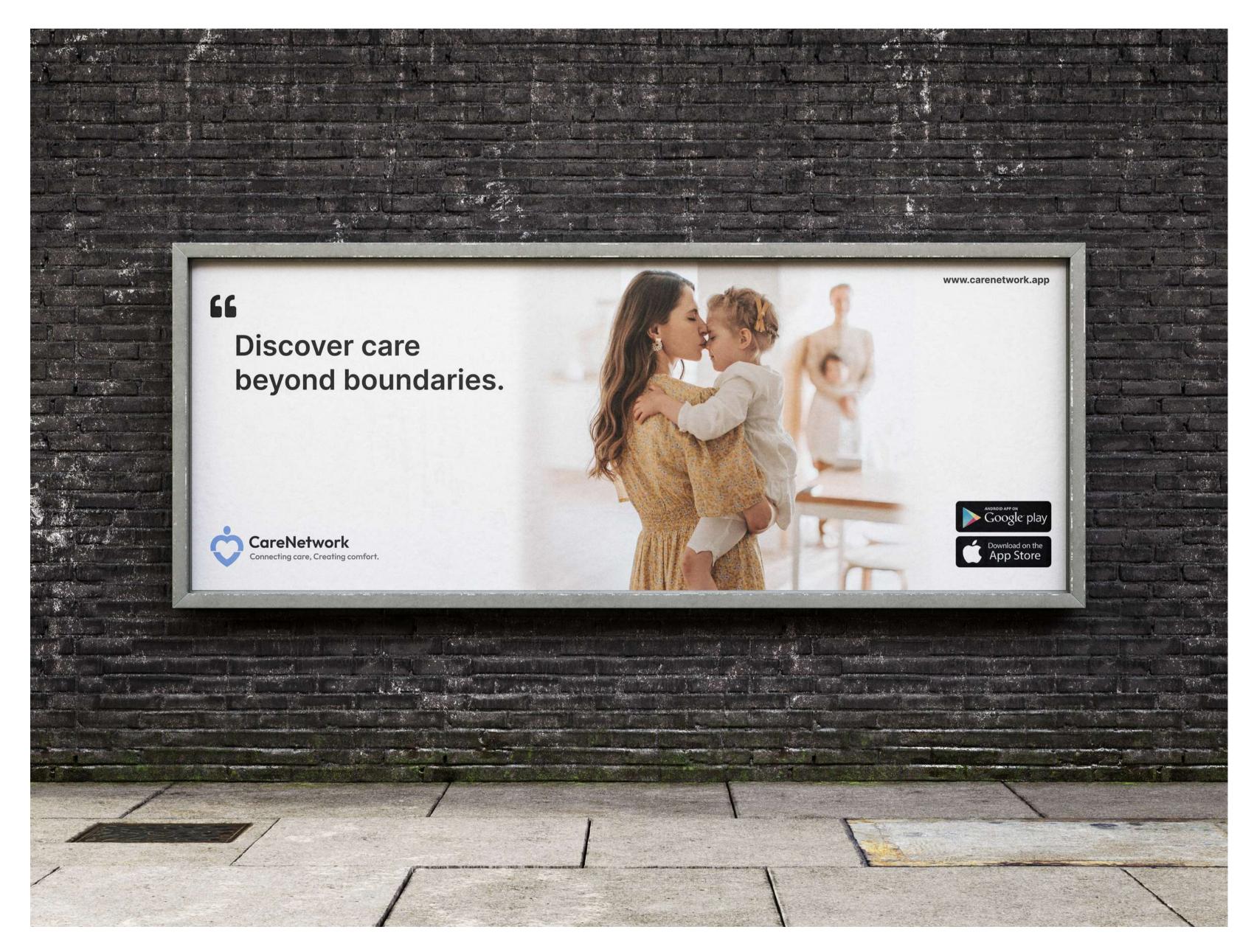


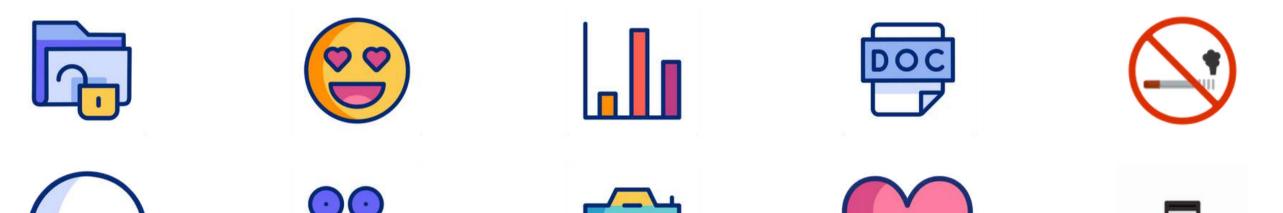
Figure : 31 - Billboard (Mockup 2)

CHAPTER 8: Prototype

8.1 Icons

Icons are essential components of user interfaces. I used outlined symbols to improve user intuition and convey information fast and clearly. These icons provide a clean and modern design while also offering visual indications and adding to the app's overall design appeal. Also, I did integrate animated icons into the design to add a sense of liveliness and modernity. These animated elements give users with dynamic feedback and advice, enhancing the app's aesthetic attractiveness and interactivity.

Micro interactions are little animations that improve the user experience. To properly engage users, I intentionally added micro interactions. These discreet animations might include everything from tabs to loading animations, all of which contribute to a more engaging and userfriendly app design.



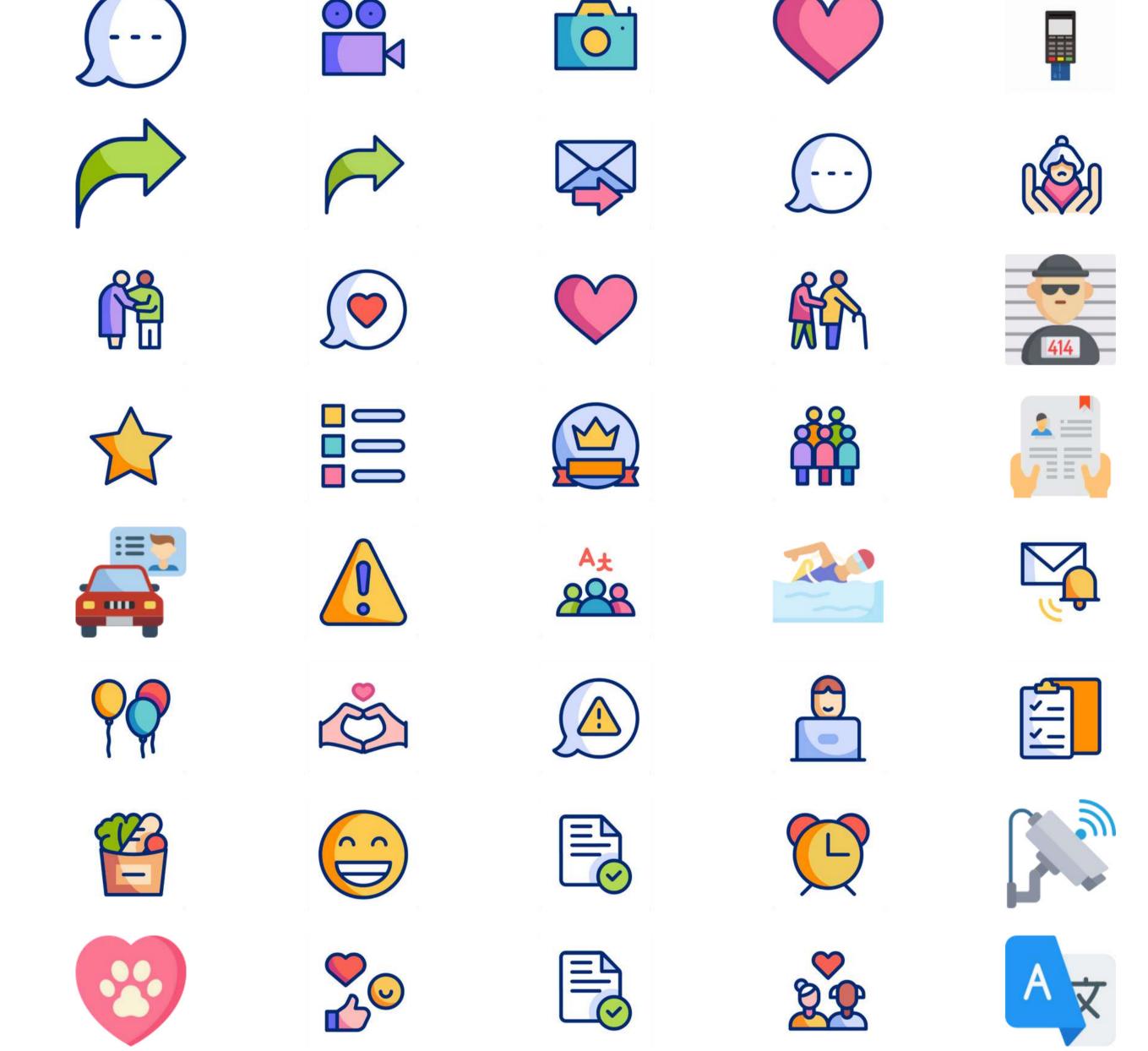


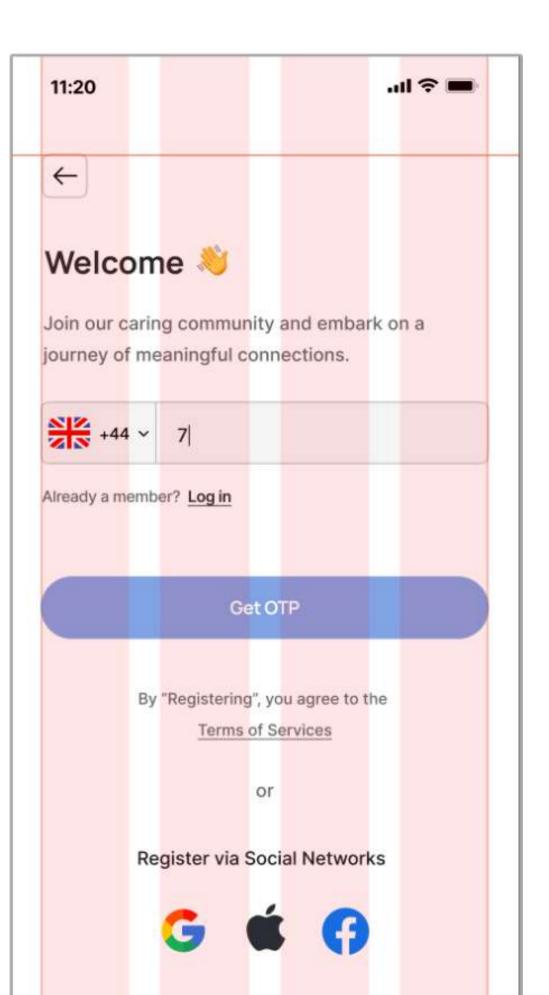
Figure : 32 - Icons

8.2 High Fidelity Wireframes

I used Figma, a powerful and collaborative design tool, during the high-fidelity design phase. The cloud-based architecture of Figma ensured that the design process remained accessible and adaptive, particularly for collaboration and feedback collection.

My major focus throughout the design process was on usercentred design concepts. Every design decision, including animations and interactions, was assessed in terms of its overall influence on the user experience. The objective was to make user navigation easier and to increase engagement.

To construct interactive prototypes, I used Figma's sophisticated prototyping features. These prototypes allowed for realistic testing and feedback collection by providing a live replica of the app's functioning. The app may be interacted with by users as if it were fully functional.

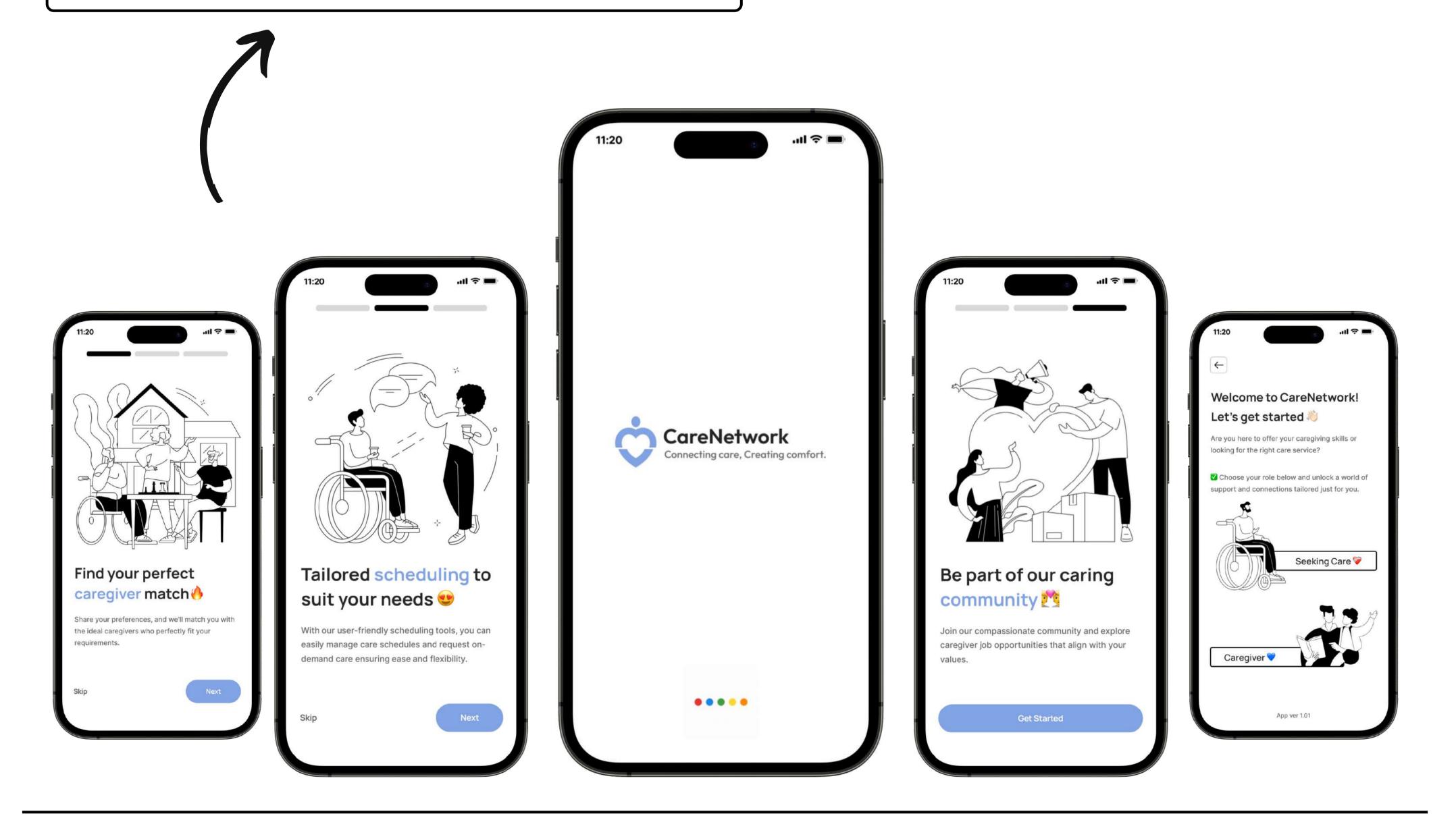


Grid Layout

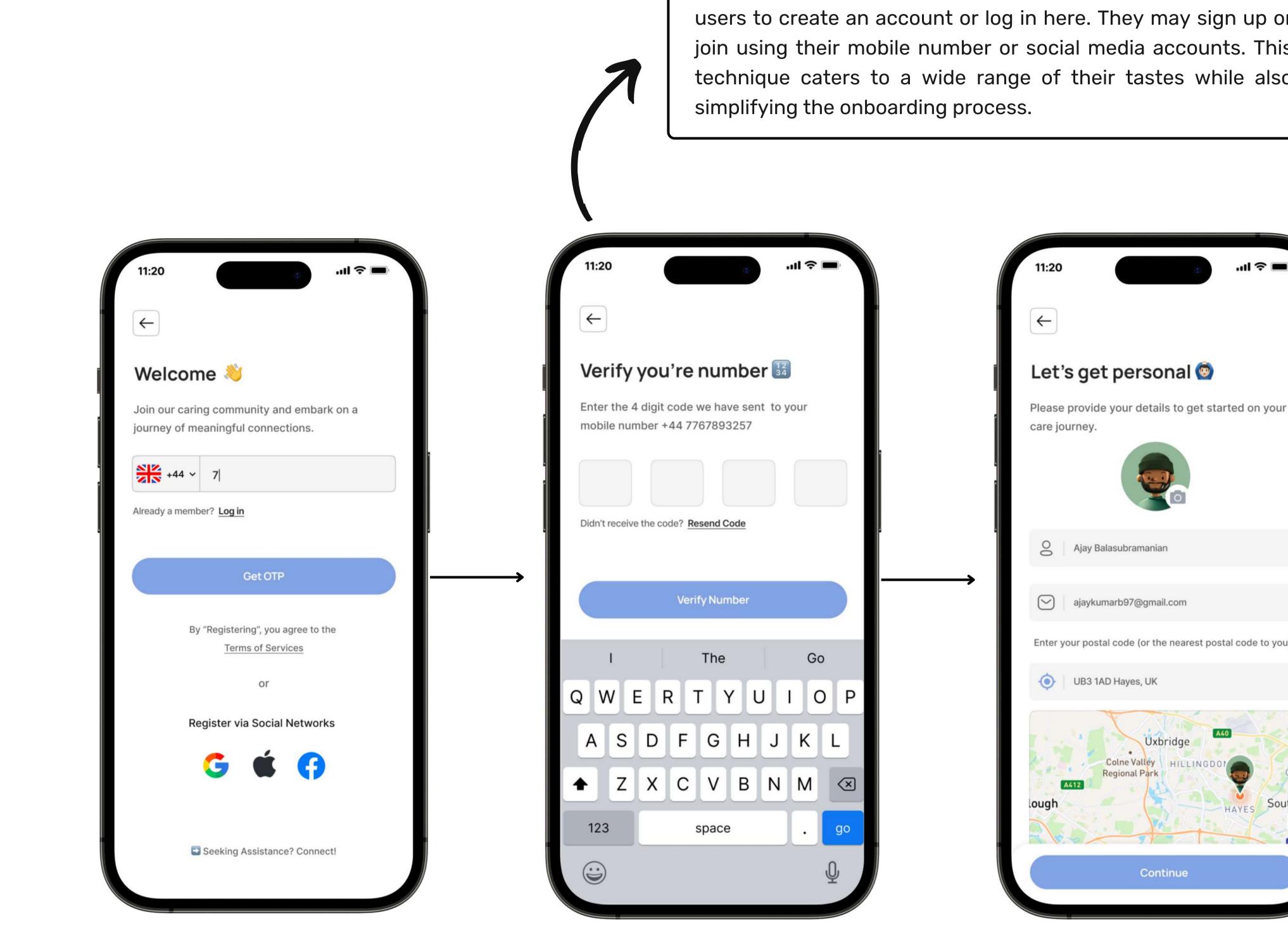
- 4 Column Grid System
- Column Width 68px
- Gutter Width **24px**



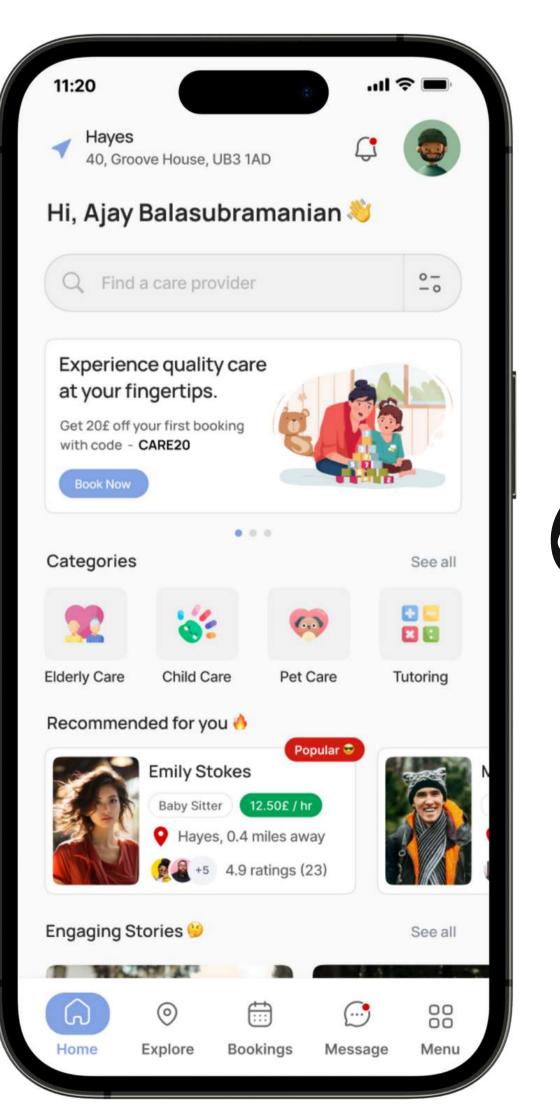
I basically made sure to keep the onboarding process as simple as possible while also providing an overview of the app's primary features. I made certain that an abstract idea vector artwork was used. After onboarding, the user must select whether they want to choose as a careseeker or as a caregiver.

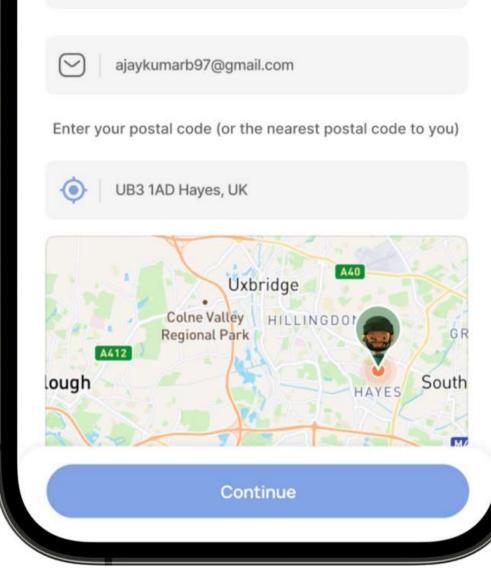


High Fidelity Wireframes



After selecting the preferred flow, users are sent to the signup/log-in screen. I've provided many convenient options for users to create an account or log in here. They may sign up or join using their mobile number or social media accounts. This technique caters to a wide range of their tastes while also





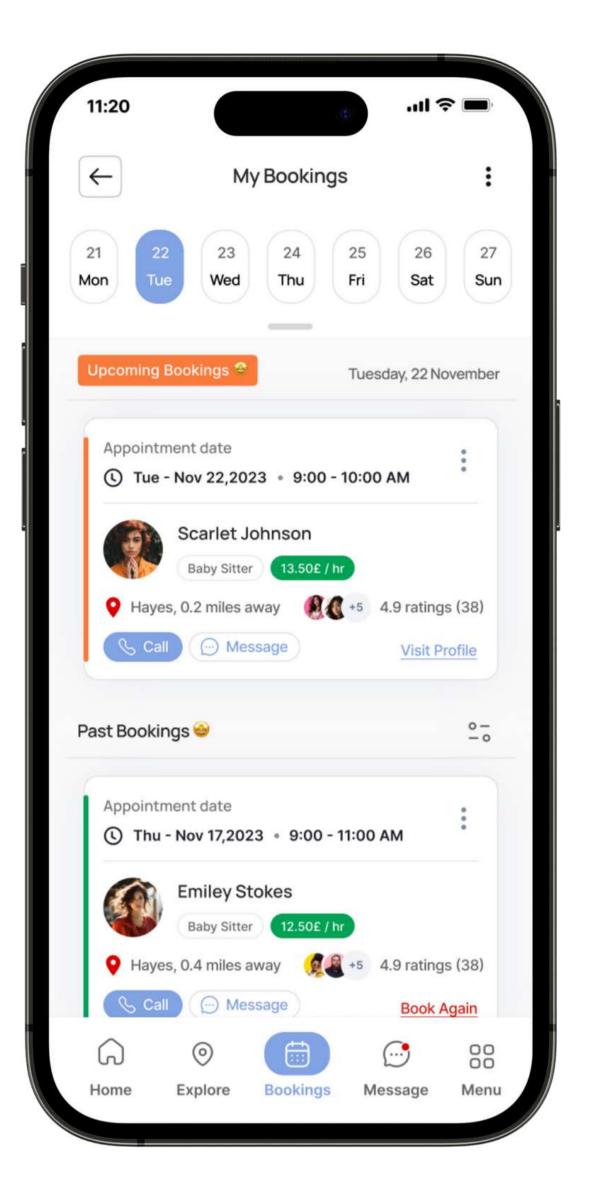
Ajay Balasubramanian

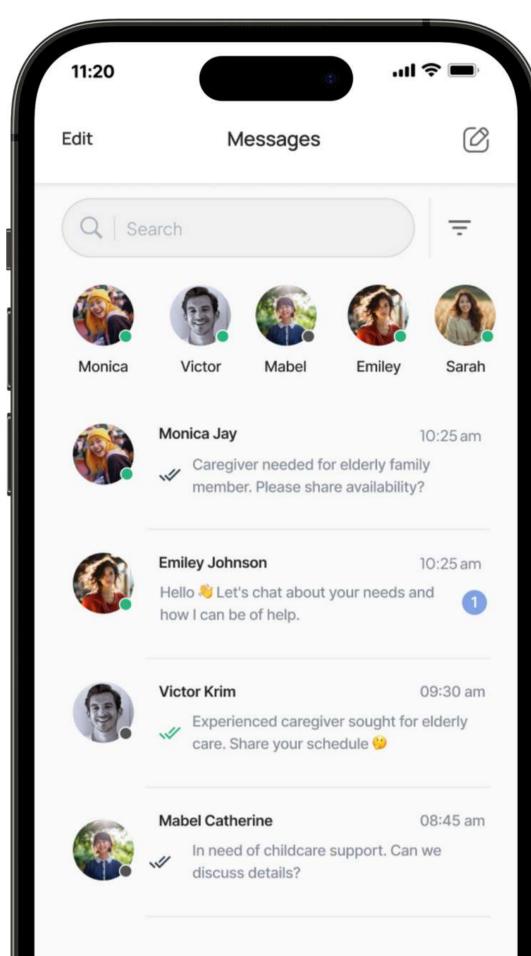
.... 🗢 💻

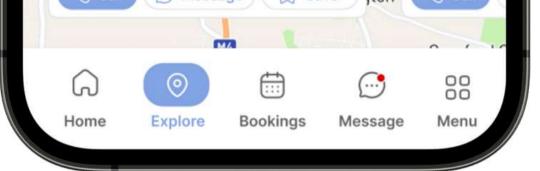
While on the home screen, users have a choice of options for where all category services are put, as well as recommended care providers depending on their proximity to the area. They can also see the caring tales that are shown on the home screen. All of the necessary elements, such as the explore option, bookings, menu, and messaging, have been placed in the bottom nav. I simply made sure that the homescreen isn't too difficult so that anybody of any age can use the app, and that the UI is easy so that users don't have to work too hard to locate it. I attempted to keep things as simple as possible. And there are two flows, which are equivalent to two home screens. This is the screen that appears when a user selects the care seeking role.

Home Screen - Careseeker



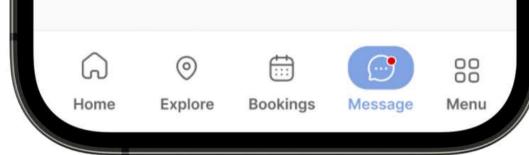




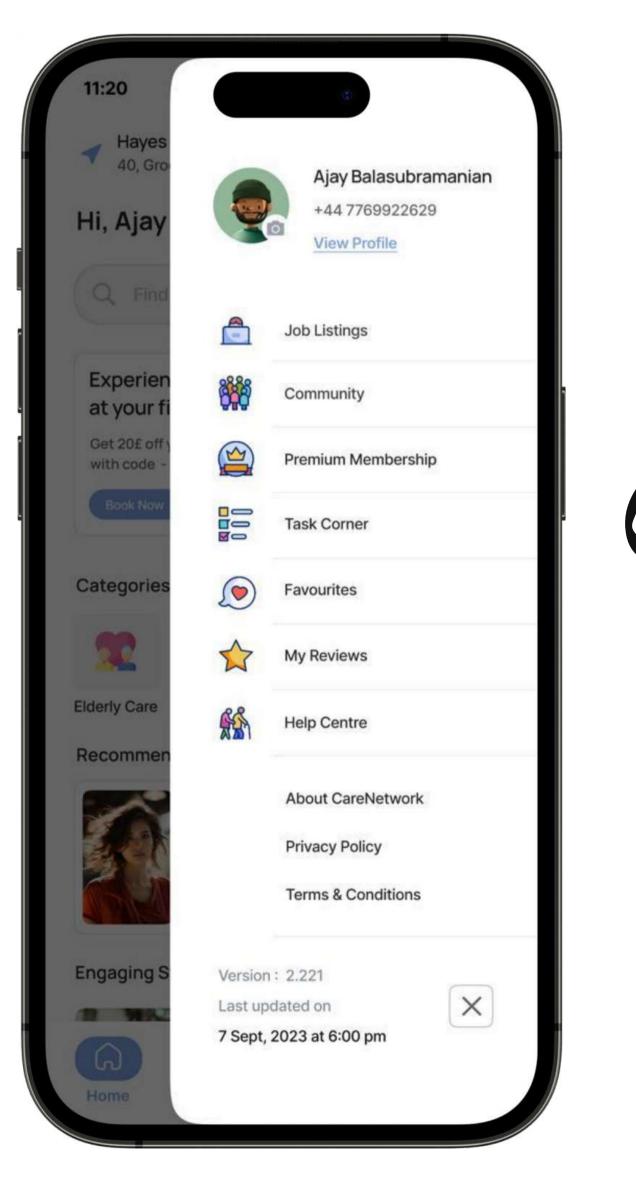


Explore Screen

Bookings Screen



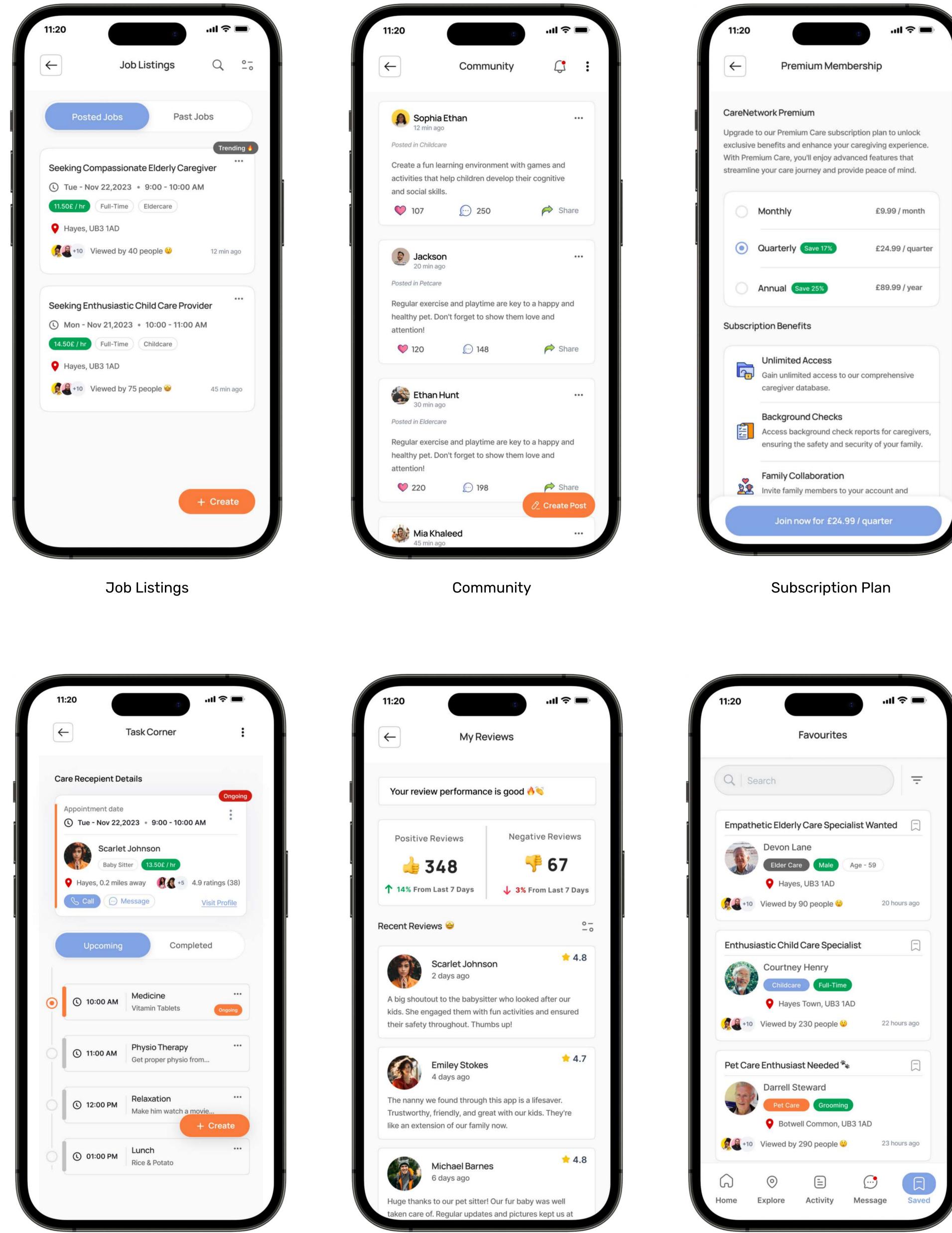
Message Screen



All of the other features, such as job listings, community, memberships where you may access premium services, reviews and favorites, are located in the menu screen. I just wanted to test out a fresh style with the screen as a partial overlay.

Menu Screen

\leftarrow	Job Listi	ngs	Q	0 <u>-</u> 0
Posted	Jobs	Past Jo	obs	
			Tren	ding 🤚
Seeking Com	passionate Elo	derly Careo	jiver	
U Tue - Nov 2	22,2023 • 9:00	0 - 10:00 AN	N	
11.50£ / hr F	ull-Time Elder	rcare		
💡 Hayes, UB3	1AD			
🥵 🕘 +10 Viev	wed by 40 peopl	e 🥸	12 min a	igo
Seeking Enth	usiastic Child	Care Provi	der	
(Mon - Nov	21,2023 • 10:0	00 - 11:00 A	M	
14.50£ / hr F	ull-Time Child	Icare		
💡 Hayes, UB3	1AD			
🕵 🛃 +10 Viev	wed by 75 peopl	e 😂	45 min a	ago

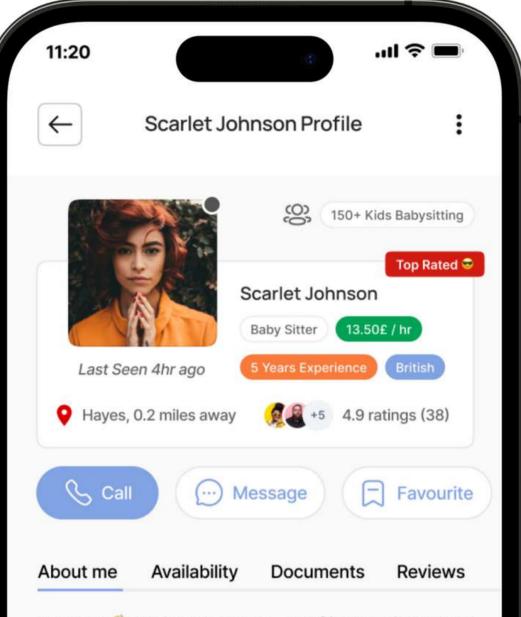


Reviews

11:20		ا ر ار
←	Premium Memb	bership
CareNe	twork Premium	
exclusive Vith Prer	to our Premium Care subscr benefits and enhance your nium Care, you'll enjoy adva e your care journey and pro	caregiving experience. Inced features that
	Monthly	£9.99 / month
۲	Quarterly Save 17%	£24.99 / quarter
	Annual Save 25%	£89.99 / year
Subscri	ption Benefits	
6	Unlimited Access Gain unlimited access to o caregiver database.	our comprehensive
रास	Background Checks Access background check ensuring the safety and se	
	Family Collaboration	

Task Corner

Favourites

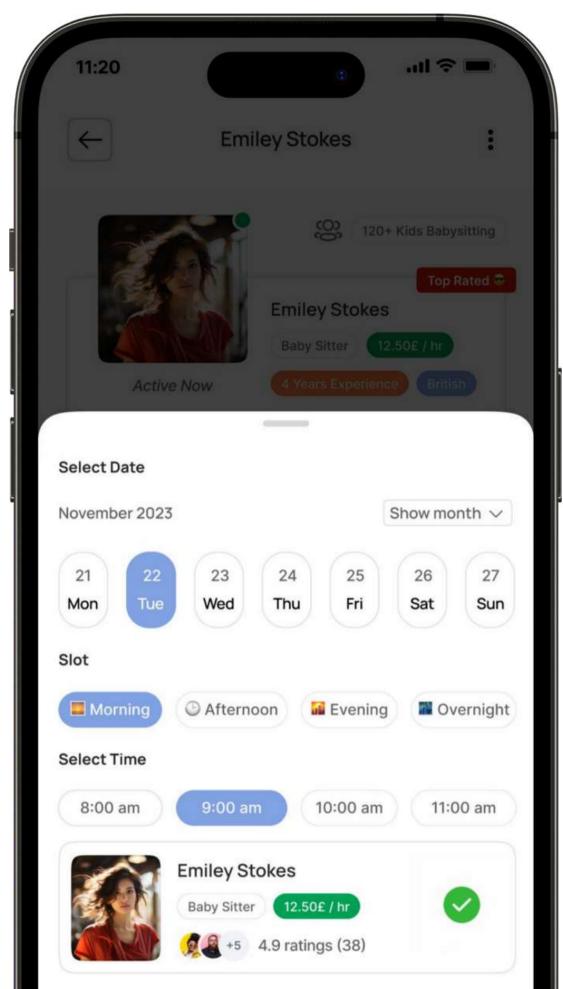


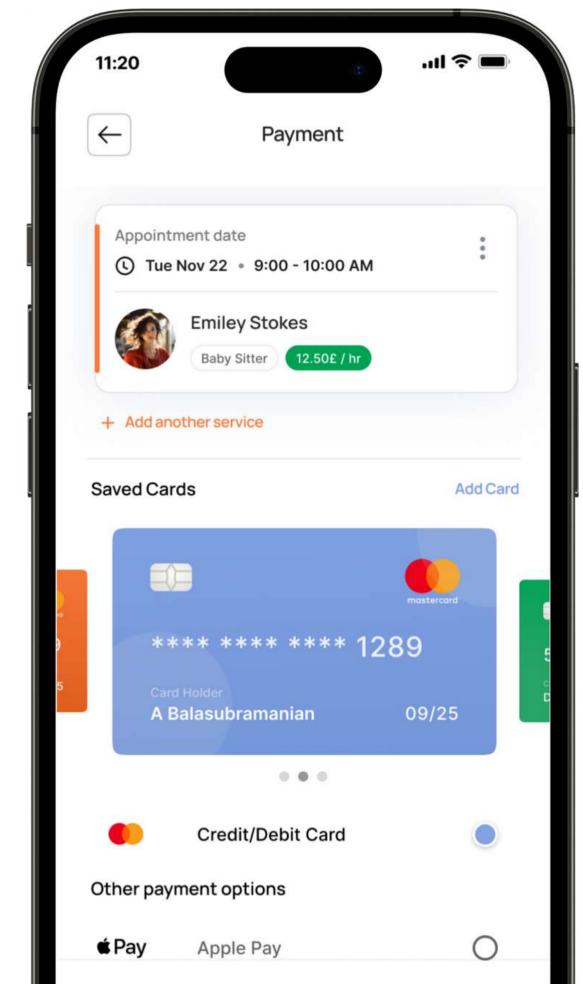
Hey there 👋, I'm Scarlet Johnson, your friendly neighborhood babysitter! With a heart full of warmth and a genuine love for children, I'm here to ensure your little ones have the most joyful and safe experience under my care. I believe in fostering creativity, learning through play, and creating a nurturing environment that feels just like home.

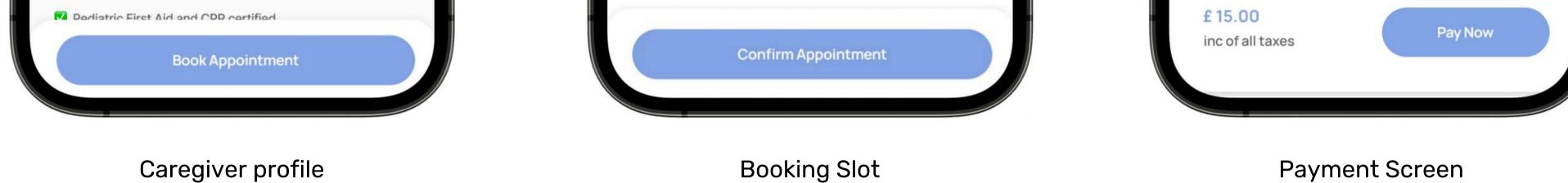
Experience 😂

- Organizing engaging activities
- Helping with homework
- Bedtime routines
- Ensuring their safety at all times

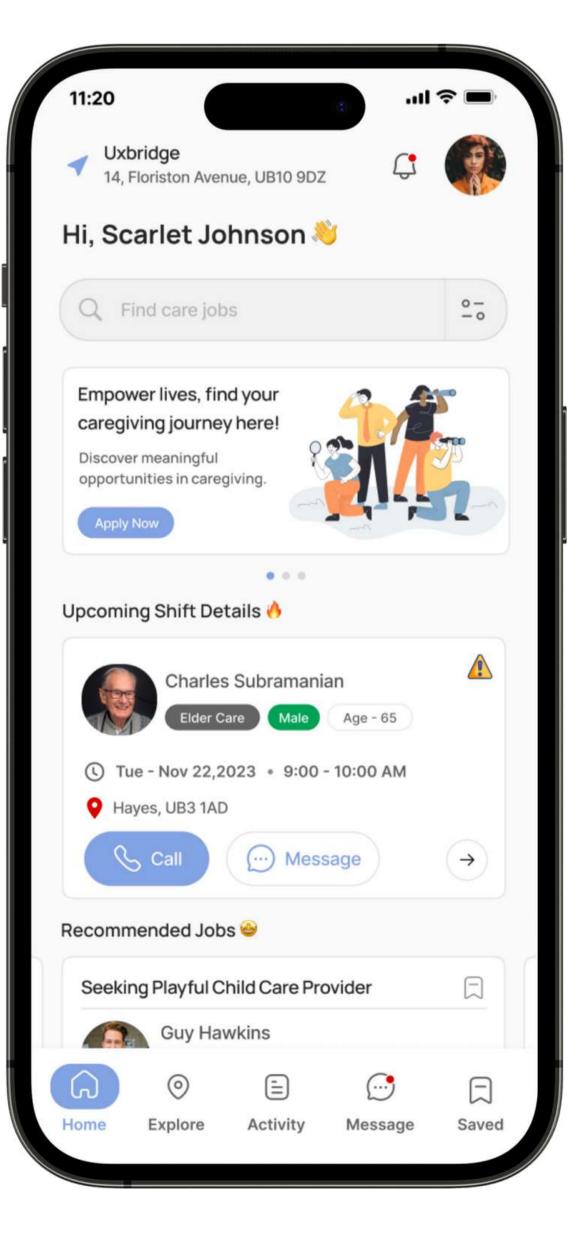
Qualifications

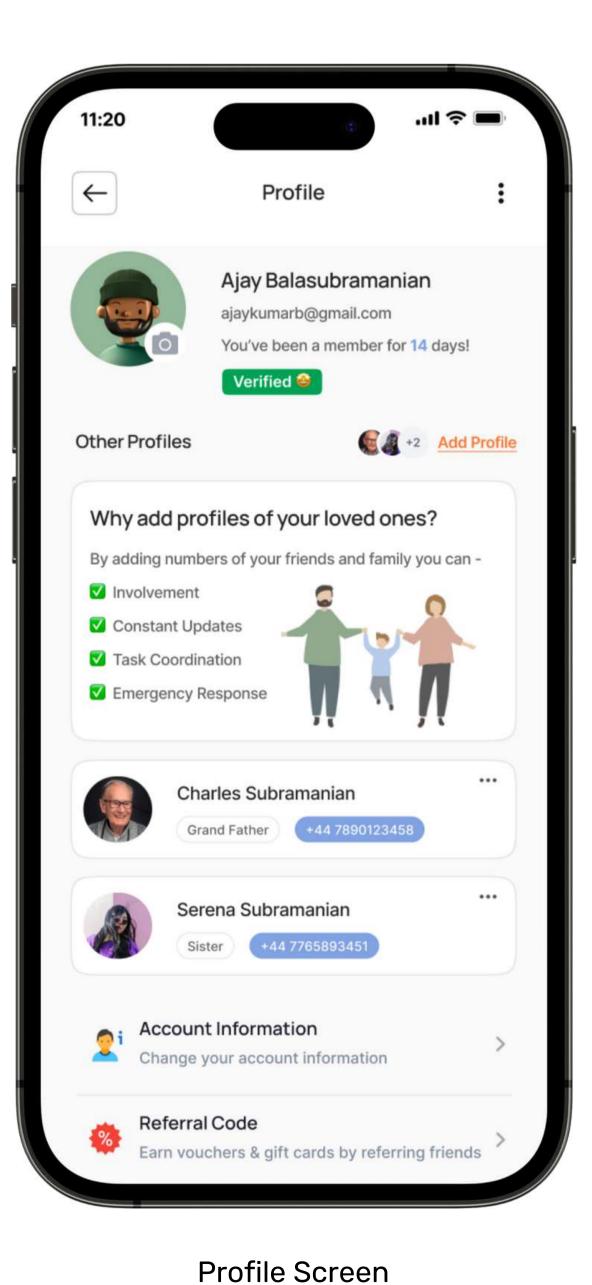


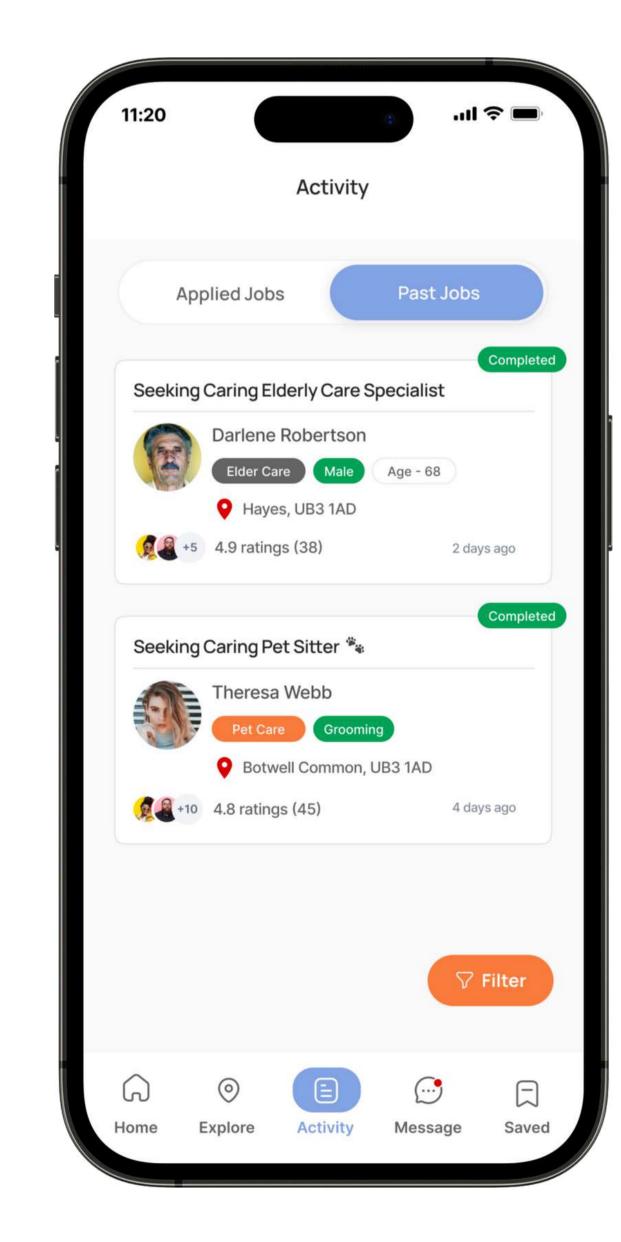




Payment Screen

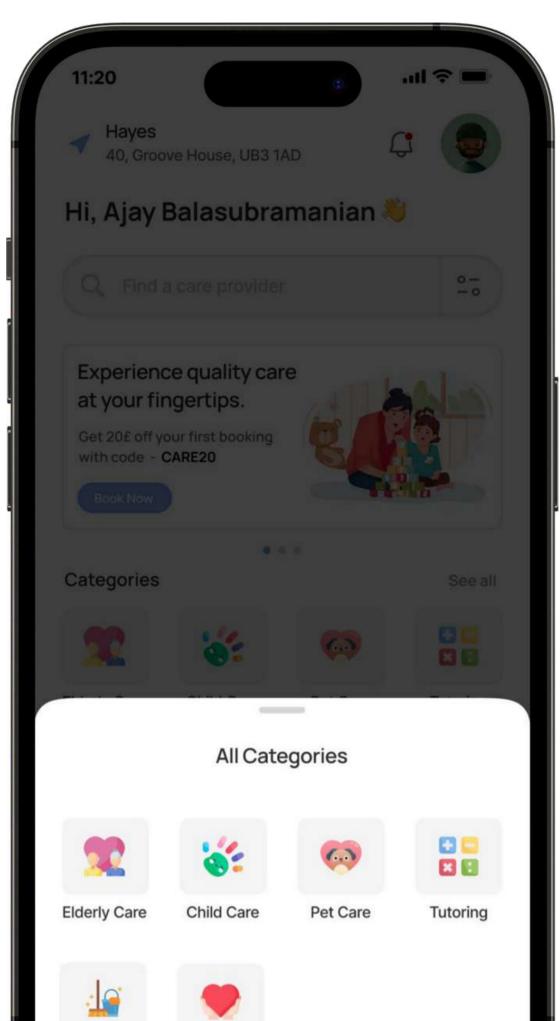


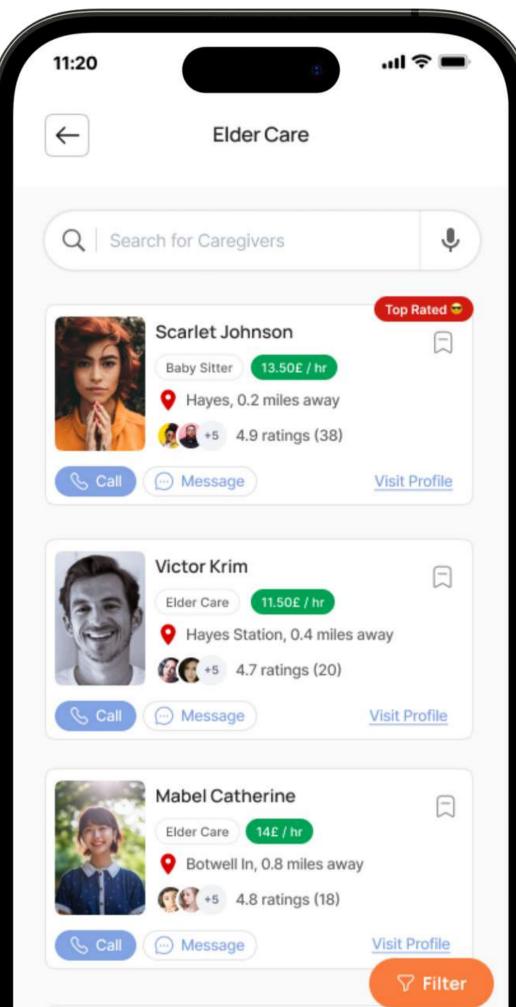


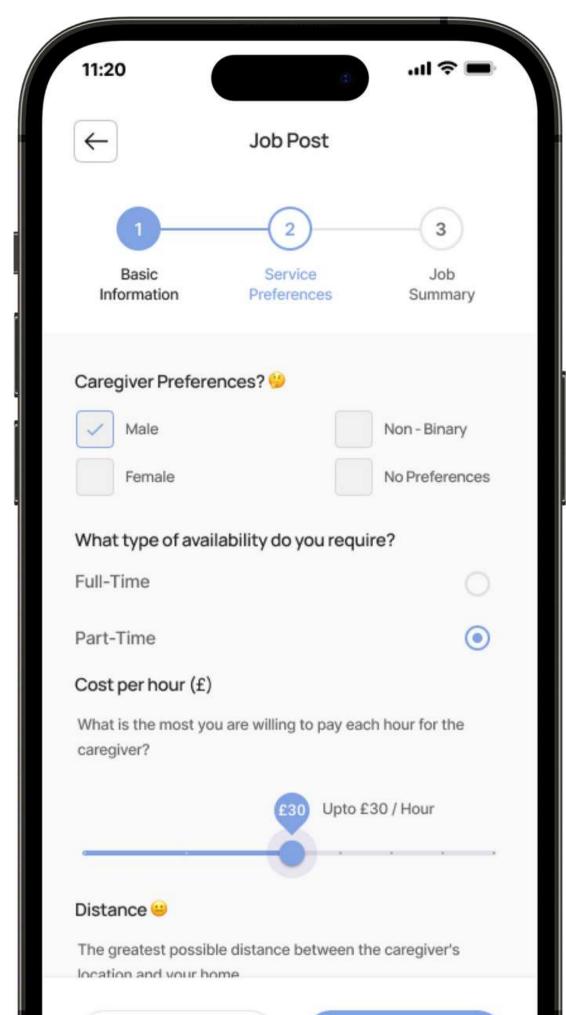


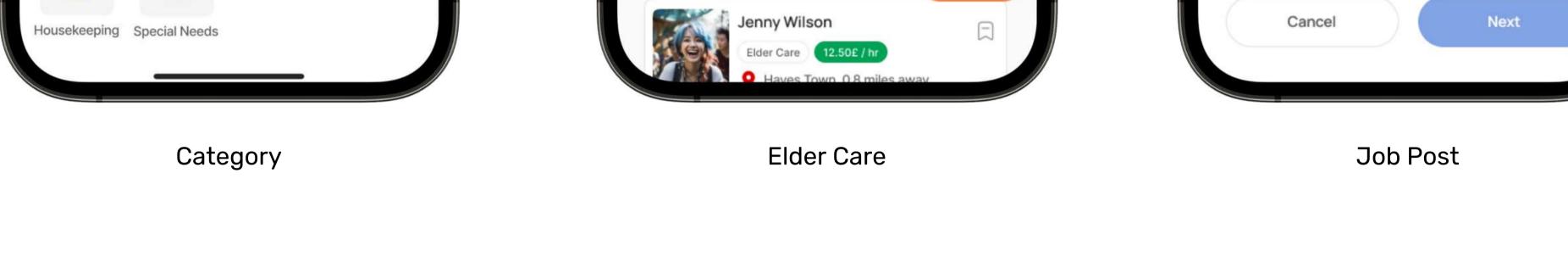
Carer Home Screen

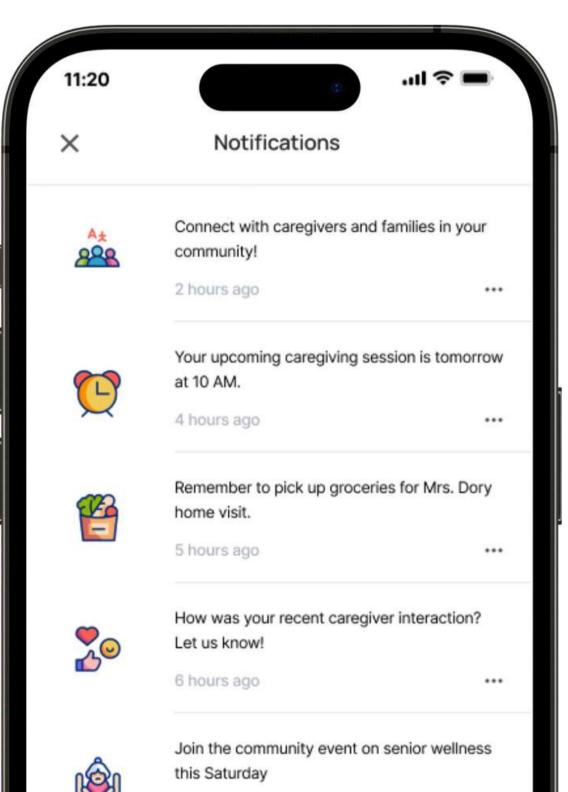
Activity Screen











11:20		e	? •
×	Create Profi	le	
Care Recipien	t Details 😉		
	+	Upload profile	picture
8 Enter r			
Select Gender		Select Age	
Your Relations	hip with the Care I	Recipient	
Select relation	ship status		\sim

11:20	•	I 🗢 🔳
\leftarrow	FAQ	
Q Search		
How does Carel qualification of o	Network ensure the s caregivers?	afety and
	care services on-dem it to a fixed schedule	×
Are caregivers a long-term care a	available for both sho arrangements?	rt-term and
	CareNetwork are availal m care arrangements, de	

7 hours ago	

Medical Conditions 😁

Does the care recipient have any pre-existing medical conditions? If yes, please specify.

Cancel Create

Notifications

Profile Creation

Is there a rating and review system for caregivers to help me make informed decisions?

What measures are in place to protect the confidentiality of personal information and data?

Can I access the CareNetwork platform on both mobile devices and desktop computers?

FAQ

Almost 70 screens were created for the app, and once completed, I utilized Figma to make prototypes. I added a few micro interactions and lively visuals to the prototype to make it more vibrant. After that, I attempted usability testing to gather feedback.

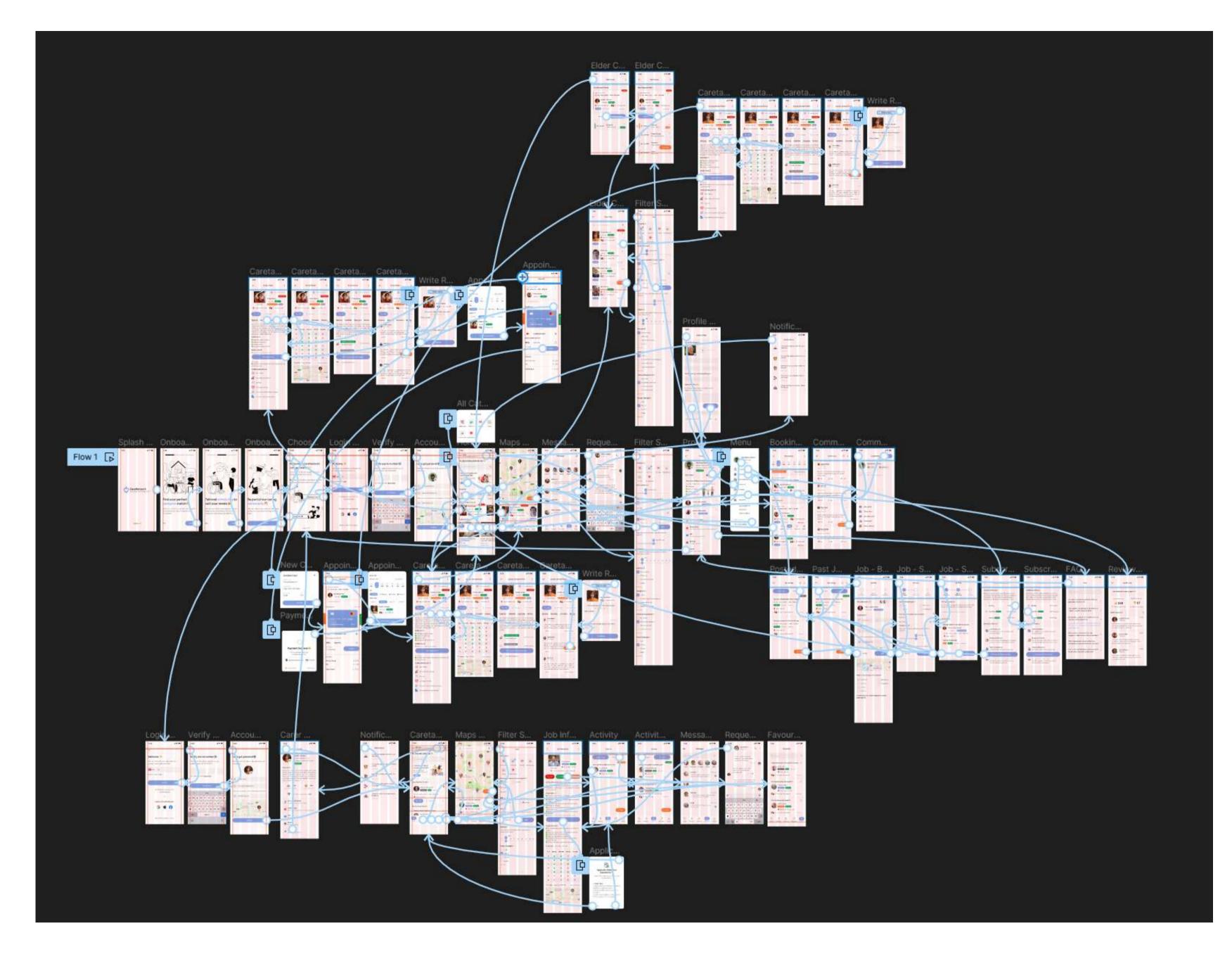
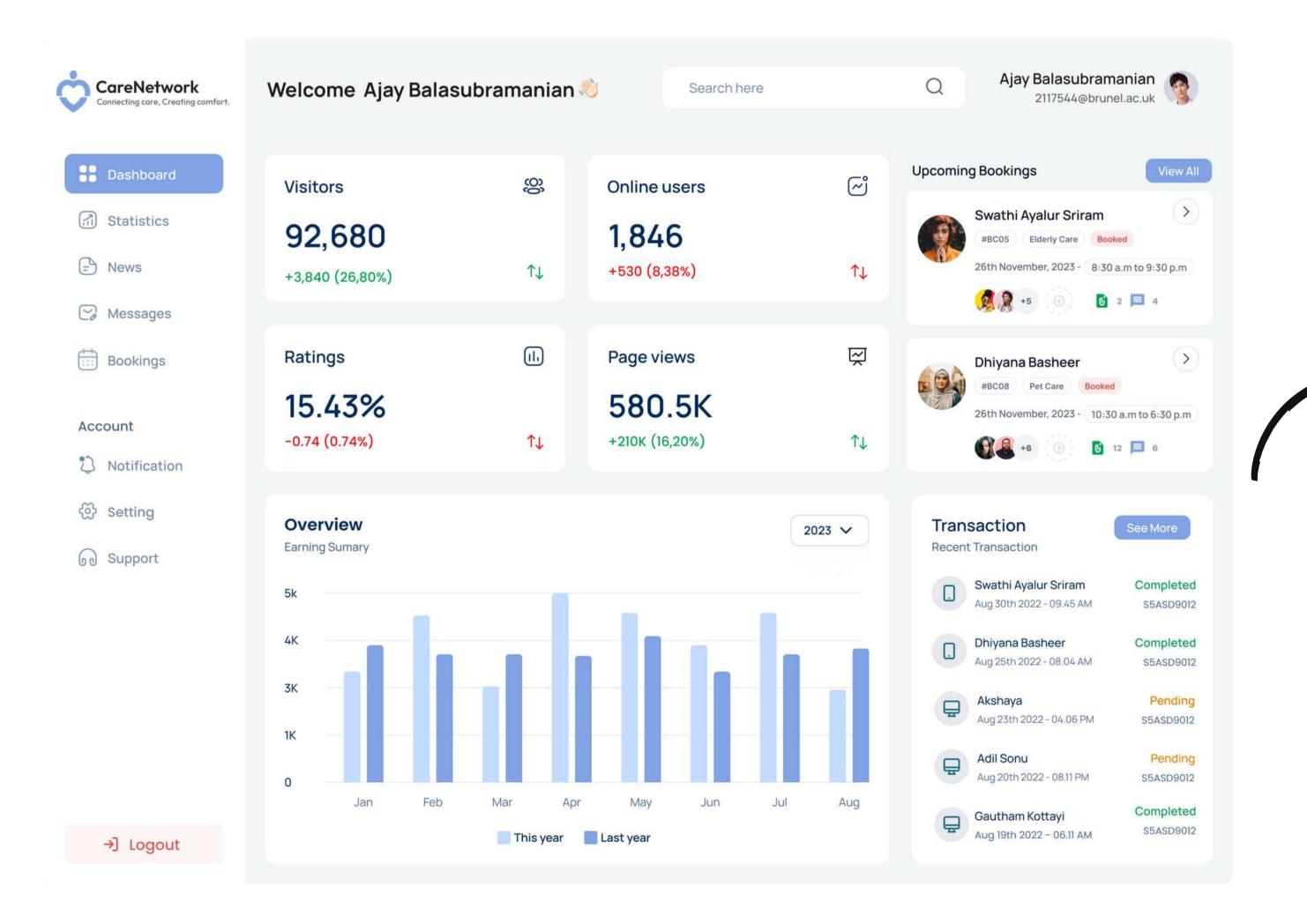


Figure : 33 - Prototype

Click on the button below to view the Prototype







For the website's landing page, the dashboard was created with the figma tool.

High Fidelity Wireframes

CHAPTER 9 : Website Development

9.1 Website Development

I developed a dedicated website to build an online presence for the CareNetwork app in WordPress platform. This website functioned as a centralized hub where users and other stakeholders could quickly access information and interact with my platform. The website served as a complete resource for the app. I could go into great length on the app's features, functions, and benefits. This was critical in assisting potential users in understanding what the app offered and how it may satisfy their requirements. Also used it to educate people on how to utilize the app efficiently. This involved generating instructions and FAQs to help users use the app's features properly. Contact forms and chat assistance, among other communication methods, were integrated into the website. This allowed users to efficiently contact out with questions, offer comments, and report difficulties. The website's 24-hour accessibility meant that customers could get information about the app whenever they wanted. This adaptability appealed to potential customers who wanted to use our application beyond usual business hours. As a result, website proved to be an effective marketing and promotion tool.

Also, I created an engaging 30-second promotional video for the CareNetwork app, providing users with a quick summary of the service's essential features. To assure its quality and aesthetic appeal, the video was meticulously made in Adobe Premiere Pro and After Effects. To increase its visibility, I deliberately placed a link to this promotional video on my website's landing page. Users might quickly click and immerse themselves in a brief but interesting preview of what the app has to offer by placing it prominently in the hero part of the first page. This strategy was designed to catch users' attention and encourage them to explore the app further.

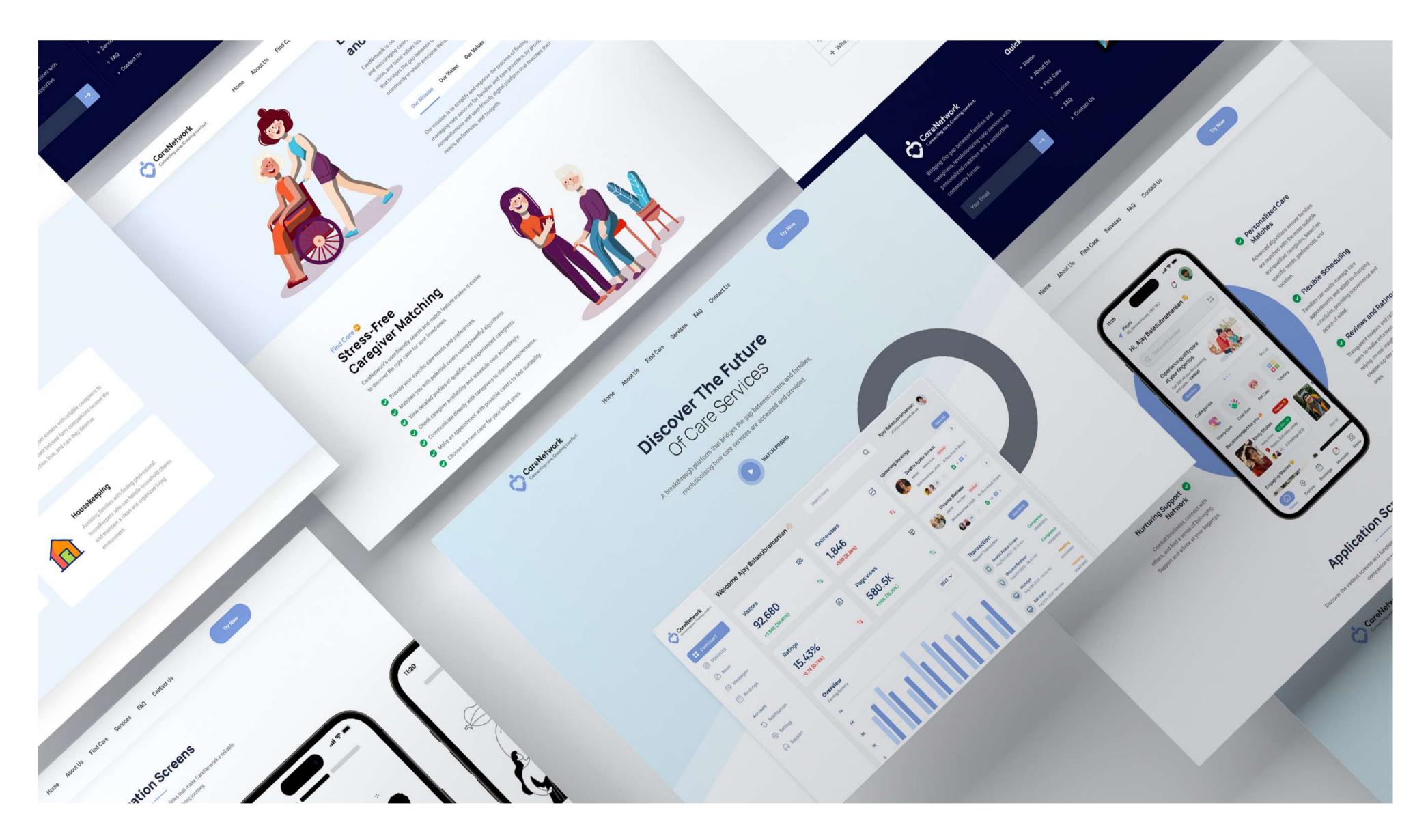


Figure : 34 - Website Mockup

Click on the button below to view the Website



Click on the button below to view the Promo



CHAPTER 10 : Usability Testing

10.1 Results and Findings

I gathered valuable information by testing the app with real users. By simply sharing the URL with users along with a feedback form, I received numerous thoughts on how to enhance the app as well as several future advancements as a result of the usability testing. We are creating the app for the users, therefore genuine user input makes the application more user pleasant.



2. Did you find the app's user interface easy to navigate and understand?

5. Did you encounter any difficulties or confusion while using the app?

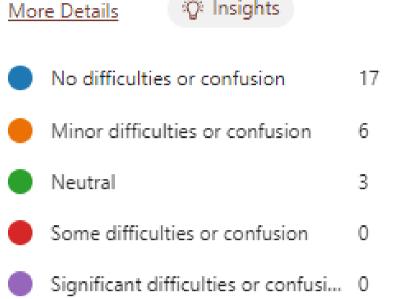


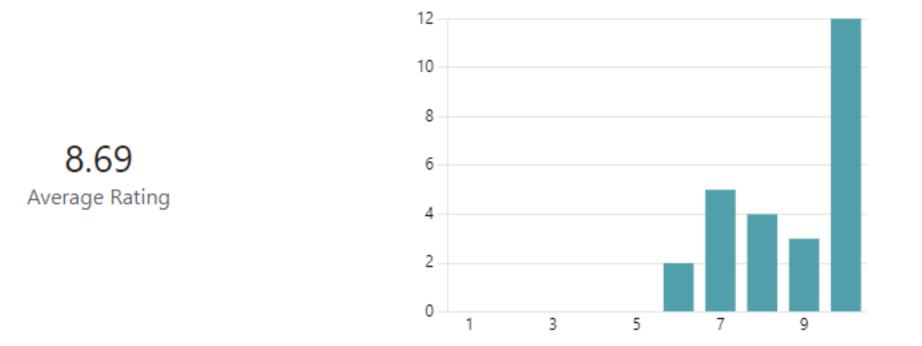


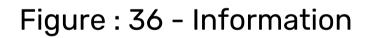
Figure : 35 - User Interface

The majority of respondents stated that the app's user interface is simple to explore and understand.

3. How would you rate the organization of information on the app?

More Details





Almost all users agree that the app's information structure is decent.

4. Were the app's colours and visual elements visually consistent and pleasing?

More Details 🔅 Insights

Yes, very consistent and pleasing 16

Figure : 38 - Difficulty

Although a few users had minor challenges, the vast majority of users experienced no confusion or difficulty.

6. How satisfied are you with the placement and accessibility of important features in the app?



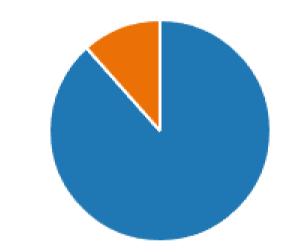


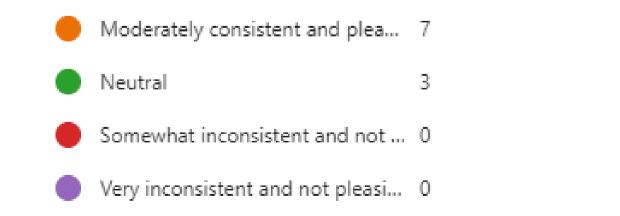
Figure : 39 - Placement & Accessibility

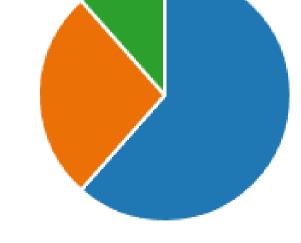
A majority of users are pleased with the app's feature arrangement.

12. What specific improvements would you suggest for enhancing the app's design and user experience?



Latest Responses "Demo on about the about and how it is used would be helpful to understan... "Medication tracking feature " "Multi language integration "





6 respondents (25%) answered App for this question.



Figure : 37 - Colors

Many users find the app's color and design elements to be consistent and appealing.

Figure : 40 - Enhancement

Many people recommended additional features that may be included in the app. It's encouraging to see so many people requesting additions for the app's future growth.

CHAPTER 11 : Conclusion

11.1 Conclusion & Discussion

The entire study was carried out in order to build a platform for both families and caregivers who are trying to locate appropriate care services as well as work prospects for caregivers. This application serves as a solution, and I am confident that it does so to some extent, even if it does not fix all of the difficulties. It's been a long road, and the end result has taught me a lot. This final project enabled me to improve so many talents, including not just design but also many new things, such as how to accomplish a large project on the given time. There were many ups and downs, but I don't think we would have learned as much without them.

Not only that, but I was able to build a knack for conducting in-depth and comprehensive research, which is a necessary ability for becoming a UX designer, which is what I hope to accomplish after my master's degree is completed. I generally wanted to accomplish my final dissertation project as a combination of everything I learned throughout the course, and yes, I felt good by combining my master's final project with branding, developing an app with an interactive prototype, website creation, and also producing a short promo film for the app. So I wanted to put all of my master's course knowledge to work, and I thought that combining it all gave me a better result in the end.

When I saw that individuals in the UK were having a difficult time communicating with the NHS in many circumstances, I decided to create a care service app. As a result, most older individuals who require adequate treatment do not receive it, and they rely on them for minor care

difficulties as well. Though this program does not fix the entire problem, it does assist individuals who need to be treated or offered care services that do not take a lot of labor. Though many caregivers are stressed out because they do not have flexible schedules or a steady income, they may utilize this platform as a freelancing platform to continue employing their care practices through the application.

11.2 Future Developments

I got some future development suggestions from user comments in order to improve the application. Let me list out a few developments which could be implemented in the future.

- Implementing an SOS button in the app would be useful if something went wrong, and it is a smart idea to do so.
- Multiple languages may be a valuable option for folks who do not speak English fluently.
- Claiming insurance and pension payments through the app and preserving it as a feature in future app versions might be beneficial.
- Perhaps incorporating AI into the app as a feature, as it is a very hot and upcoming trend right now.
- Real-time location monitoring may be useful in relieving families' concerns and putting their minds at ease.



References

- Modern Families. (2019). Available at: https://www.workingfamilies.org.uk/wp-content/uploads/2019/02/BH_MFI_Report_2019_Full-Report_Final.pdf.
- Razzouk, R. and Shute, V. (2012). What Is Design Thinking and Why Is It Important? Review of Educational Research, [online] 82(3), pp.330–348. Available at: https://www.jstor.org/stable/23260048.
- Dam, R. (2022). 5 stages in the design thinking process. [online] The Interaction Design Foundation. Available at: https://www.interaction-design.org/literature/article/5-stages-in-the-design-thinking-process.
- Buch, E.D. (2015). Anthropology of Aging and Care. Annual Review of Anthropology, [online] 44, pp.277–293. Available at: https://www.jstor.org/stable/24811662 [Accessed 15 Aug. 2023].
- Daly, M. (2020). The concept of care: Insights, challenges and research avenues in COVID-19 times. Journal of European Social Policy, 31(1), pp.108–118.
 doi:https://doi.org/10.1177/0958928720973923.
- Rodríguez-Dueñas, W.R., Aguia-Rojas, K. and Valencia-Daza, V. (2021). Design and development of a mobile app to support the care of the elderly. [online]
 IEEE Xplore. doi:https://doi.org/10.1109/CI-IBBI54220.2021.9626120.
- AimsHe@Ithcare (2020). A Full Guide to Caring for Elderly Parents. [online] Aims Healthcare. Available at: https://aimshealthcare.ae/blog/a-full-guide-tocaring-for-elderly-parents/ [Accessed 17 Aug. 2023].
- NHS England (2020). Improving Care for Older People. [online] England.nhs.uk. Available at: https://www.england.nhs.uk/ourwork/clinical-policy/older-people/improving-care-for-older-people/.
- Fabio Furlan Ferreira, Flávio Silva Dias, Braz, C., Ricardo Ventura Santos, José, R., Ferreira, C. and Martinho, R. (2013). Protege: A Mobile Health Application for the Elder-caregiver Monitoring Paradigm. 9, pp.1361–1371. doi:https://doi.org/10.1016/j.protcy.2013.12.153.
- Abdi, S., Spann, A., Borilovic, J., de Witte, L. and Hawley, M. (2019). Understanding the care and support needs of older people: a scoping review and categorisation using the WHO international classification of functioning, disability and health framework (ICF). BMC Geriatrics, 19(1). doi:https://doi.org/10.1186/s12877-019-1189-9.
- Wang, B., Zhao, J. and Sun, Y. (2022). Caregiving in Digital Healthcare Setting: Impacts of Data-driven Technologies to Caregivers in Practice. [online] IEEE Xplore. doi:https://doi.org/10.1109/CSCWD54268.2022.9776170.
- CARE, I. (2015). Importance of Elderly Care Services. [online] CARE, Inc. Available at: https://careinc.com/care-blog/importance-of-elderly-care-services.
- Plantenga, J. and Remery, C. (2009). The provision of childcare services A comparative review of 30 European countries European Commission. [online]
 Available at: https://eurogender.eige.europa.eu/system/files/the_provision_childcare_services.pdf.
- Purdy, J. (2022). Importance of Child Care for Working Parents | Jackrabbit. [online] Jackrabbit Care. Available at: https://www.jackrabbitcare.com/blog/the-importance-of-child-care-for-working-parents/.
- Peacock, J. (2021). Why Child Care is Important for Parents. [online] Procare Solutions. Available at: https://www.procaresoftware.com/resources/why-is-child-care-is-important-for-parents/.
- Gan Ai Leen, Shabana Anjum Shaik and Thong, C. (2023). A Development of a Prototype based Mobile Pet Care Application. Proceedings of International Conference on Artificial Life and Robotics, 28, pp.743–748. doi:https://doi.org/10.5954/icarob.2023.os29–3.
- Salmansohn (Founder), K. (2023). Top 4 Challenges Pet Owners Face. [online] NotSalmon. Available at: https://www.notsalmon.com/2023/06/01/top-4challenges-pet-owners-face/.
- Hurst, A. (2015). The 4 Biggest Problems with Pet Sitters. [online] Pet Sitting and Dog Walking in Summerville SC. Available at: http://canebaypetsitting.com/Blog/the-4-biggest-problems-with-pet-sitters/#:~:text=Communication%20Is%20Key.
- Mukundan, B. and Abedin, B. (2018). A Review of Opportunities and Challenges of Carers' Support on Online Social Platforms. [online] opus.lib.uts.edu.au.
 Available at: http://hdl.handle.net/10453/126640 [Accessed 18 Aug. 2023].
- Pursch, B. and Isden, R. (2018). Behind the Headlines: the battle to get care at home. [online] Available at: https://www.ageuk.org.uk/globalassets/age-uk/documents/reports-and-publications/reports-and-briefings/care--support/rb_jun18_-the_struggle_to_get_care_at_home.pdf.
- Gitnux (2023). Two Working Parent Households 2023: A Look at the Statistics GITNUX. [online] Gitnux Blog. Available at: https://blog.gitnux.com/two-working-parents-statistics/.
- Ingraham, L. (2022). 5 Benefits of Hiring a Pet Sitter. [online] wagwalking.com. Available at: https://wagwalking.com/daily/5-benefits-of-hiring-a-pet-sitter [Accessed 19 Aug. 2023].
- Madison (2020). 11 Benefits Of Home Care For Seniors And Family Caregivers. [online] meetcaregivers.com. Available at: https://meetcaregivers.com/benefits-of-home-care-for-seniors-caregivers/.
- Centers for Disease Control and Prevention (2019). Caregiving for Family and Friends A Public Health Issue. [online] www.cdc.gov. Available at: https://www.cdc.gov/aging/caregiving/caregiver-brief.html#:~:text=Caregivers%20provide%20assistance%20with%20another.
- Karl (2020). Insights The Design Thinking Process How does it work? [online] MAQE. Available at: https://www.maqe.com/insight/the-design-thinking-

process-how-does-it-work/

- Fairlie, M. (2022). How to Conduct a Business Competitor Analysis businessnewsdaily.com. [online] Business News Daily. Available at: <u>https://www.businessnewsdaily.com/15737-business-competitor-analysis.html</u>.
- Schreiber, S. (2023). Affinity Mapping: Synthesize User Research Data in 5 Steps. [online] www.userinterviews.com. Available at: https://www.userinterviews.com/blog/affinity-mapping-ux-research-data-synthesis [Accessed 18 Aug. 2023].
- Gibbons, S. (2018). Empathy Mapping: The First Step in Design Thinking. [online] Nielsen Norman Group. Available at: https://www.nngroup.com/articles/empathy-mapping/.
- Gibbons, S. (2018b). Journey Mapping 101. [online] Nielsen Norman Group. Available at: https://www.nngroup.com/articles/journey-mapping-101/.
- Baker, J. (2018). Red Routes Critical Design Paths That Make or Break Your App. [online] Medium. Available at: https://medium.muz.li/red-routes-criticaldesign-paths-that-make-or-break-your-app-a642ebe0940a.
- Koyewon (2022). Identifying red routes in your product. [online] Medium. Available at: https://bootcamp.uxdesign.cc/identifying-red-routes-in-the-product-e944d401c9ca [Accessed 4 Aug. 2023].
- Rojas, J. (2021). Etch A Sketch: How to Use Sketching in User Experience Design. [online] The Interaction Design Foundation. Available at: https://www.interaction-design.org/literature/article/etch-a-sketch-how-to-use-sketching-in-user-experience-design.