



UX/UI CASE STUDY MOBILE APP/STREET SCREEN



PROJECT OVERVIEW



Street Life Hub is a ground breaking platform designed to empower the homeless community by providing access to vital support services. With Street Life Hub, individuals facing homelessness can easily connect with shelters, food banks, healthcare services, and employment resources all in one convenient platform, either by mobile app or a street screen. Street Life Hub uses face and finger print recognition technology, and assigns each user a unique support ID, ensuring efficient and personalised assistance. By streamlining access to essential services, Street Life Hub aims to uplift the homeless population, offering them hope and a pathway to a brighter future.

PROJECT DURATION:

March 2024 - May 2024

MY ROLE:

UI/UX Graphic designer

RESPONSIBILITIES:

Conducting user research, paper and digital wireframing, low and high-fidelity prototyping, iterating on designs and branding.

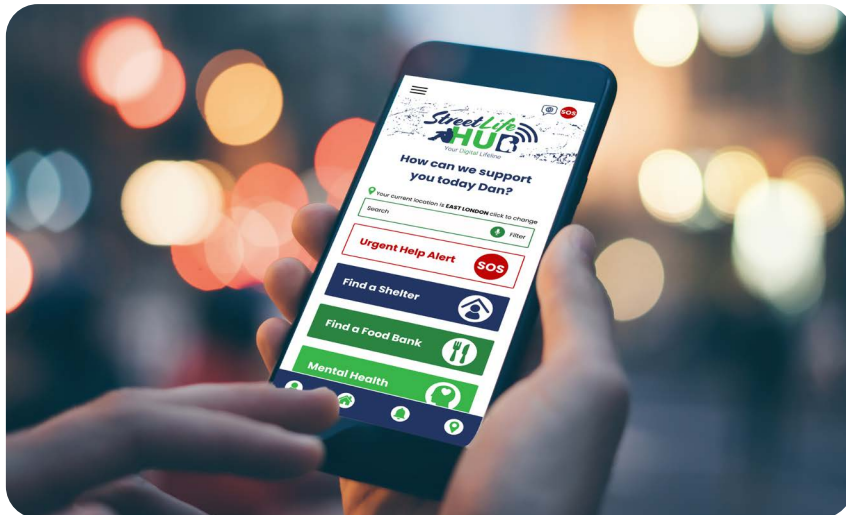
SOFTWARE:



PROJECT OVERVIEW

THE PROBLEM:

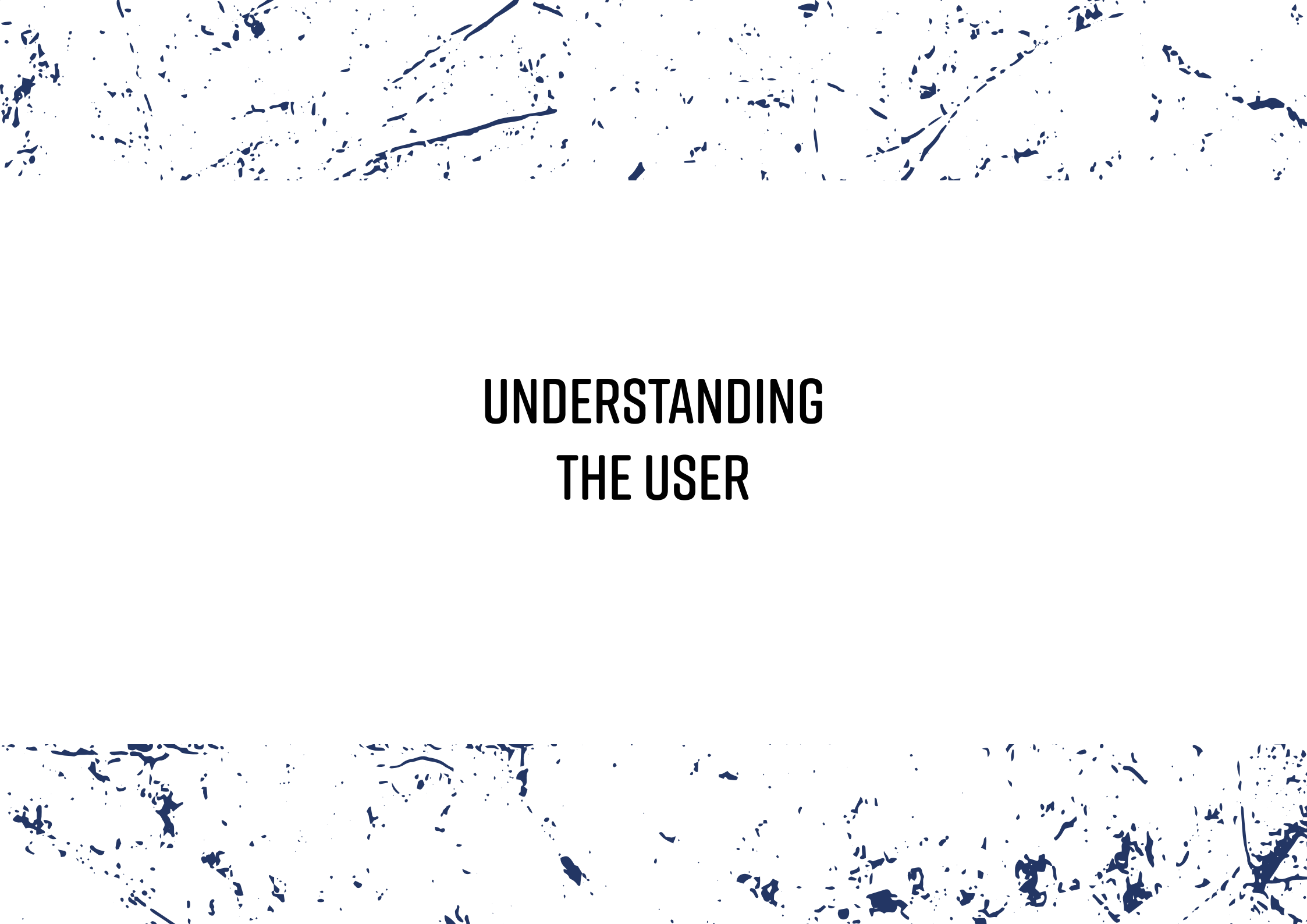
Many homeless individuals lack access to reliable information about available support services. They may not know where to find shelters, food banks, healthcare services, or employment opportunities. This can be daunting and overwhelming, especially for those who are already in vulnerable situations. Without a fixed address or consistent means of communication, staying connected with support networks becomes even more challenging.



THE GOAL:

To bridge the gap between the homeless population and the vital support services that they need, the Street Life Hub app will allow individuals to easily access information, resources, and support through their mobile devices. My Initial research indicated that approximately 70% of homeless individuals in the UK possess mobile phones, but there were limitations due to reliability issues such as battery life, the risk of theft or damage and whether they had smart phones with access to apps.

Recognising these challenges, I also wanted to explore an alternative solution, a street screen. This innovative approach would ensure access for every homeless individual, regardless of mobile phone ownership as these would be centrally located within a town and city. The street screen not only offers access to essential services but also provides free phone calls, WiFi, and charging docks, catering to the diverse needs of the homeless community. Ultimately, a solution for connecting the homeless population to the digital world and the support they urgently require.



UNDERSTANDING THE USER

USER RESEARCH

To understand the user, I did secondary research into homelessness and took away key points from previous studies and observations regarding the struggles of accessing services and support.

*"Research by **People Know How** found that while the majority of homeless people had mobile phones, they couldn't rely on them – phones depend on battery power and there's a risk they'll be broken or stolen"*

"I don't have a phone, smart phone or access to IT and making an appointment is not always easy." – Story shared with Healthwatch Derby

"Why does everything have to be about accommodation? Full-time job? Help with mental health? Can't get that because I'm not in full time accommodation, I can't get accommodation because I'm not in a full-time job. It is always back and forth. And I've got to the point where I'm like, what's the point?" – Patient story, Healthwatch West Berkshire

Shelter's comprehensive analysis of official homelessness figures and responses to Freedom of Information requests reveals 1 in 182 people in England are homeless today. The charity's research shows homelessness has risen rapidly in just 12 months: over 3,000 people are sleeping rough on any given night (26% increase) and 279,400 are living in temporary accommodation (14% increase) - most of whom are families. There are also 20,000 people in hostels or supported accommodation. – Shelter website

Difficulties navigating the health and care system, due to a range of different factors including low literacy skills, language barriers, complex administrative processes and lacking means of transportation

"Poor health was highlighted by most participants, with ongoing health issues present amongst 90% of participants. Although varied, the main issues were mental illness (72%) and addiction (69%)"- How Do People Who Are Homeless Find Out about Local Health and Social Care Services: A Mixed Method Study

USER RESEARCH

'chaotic' lifestyles, in which health and care needs are often not an immediate priority – service users can have difficulties keeping to appointments and can be difficult for services to contact

"reluctance to engage due to expectations of rejection or stigmatisation, or distrust of institutions, often based on negative past experiences" - Delivering health and care for people who sleep rough

You try to register [with a dentist] and the first thing they ask you is [your] address and you say you haven't got an address and they say, 'Well, we can't help you', because that's the first question they ask you, 'What's the address? What's your postcode?' 'I haven't got one.' - Focus group participant, Delivering health and care for people who sleep rough

Participants felt that although there were many services offering support for homeless individuals in the local area, they were not signposted well enough. *'It's there, but unless you know where things are, it's kinda pointless.'* (P7, male, interview)

- How Do People Who Are Homeless Find Out about Local Health and Social Care Services: A Mixed Method Study

"participants were asked what services they would most want information on, if they had an open access technological device. A variety of services were highlighted; the most sought-after services included food banks (78%), benefit information (64%), soup kitchen location (62%) and addiction services (58%). Other services highlighted as desirable were those that offered shelter, support, a social outlet and general health and hygiene services". - How Do People Who Are Homeless Find Out about Local Health and Social Care Services: A Mixed Method Study

COMPETITIVE ANALYSIS

For my competitive analysis I researched competitors who already had apps and organisations that were aimed at the homeless using their services. I found a lot of the larger organisations were heavily advertising towards the general public for donations. Surprisingly I could only find 3 apps aimed at the homeless population for them to find help and services.



Unique Value Proposition

Access to vital resources and support services for individuals experiencing homelessness.

Advantages

Chat bot, location maps, large directory of services. Real-time availability updates and personalised recommendations.

Disadvantages

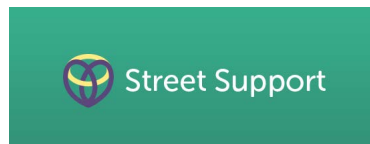
Only USA based. Thought the layout was a little too straight forward and uninteresting, just felt like long lists of information.



Comprehensive and compassionate support tailored to the diverse needs of individuals experiencing homelessness.

App was easy to use, great use of icons for different services and a clear map indicating where they were located. Option to report a homeless person in need.

Is available in the UK, but a lot of the locations for different services were scattered all over the country. Not many in the same location.



Platform connecting homeless individuals with essential resources and fostering community engagement.

UK based. Large directory. Good and extensive list of services available.

Slow performance. No map. Didn't really like using it, felt it was lacking a great user experience.



Connecting people sleeping rough to local services.

Make an alert for someone sleeping rough. To be honest I didn't rate this website at all, little info and a bit pointless.

Only website based. When you click to find services takes you to another website. I found the search option to find services complicated and not very helpful.

USER PAIN POINTS

These were the main user pain points that stood out the most in the research.

1

Difficulty accessing services

Users find it difficult to access services due to not having a permanent address or ID.

Information for support can be out of date and they are not directed to the right channels for their needs.

Feel discriminated against in healthcare environments.
Need a dedicated service and understanding of their circumstances.

2

Poor Health

Most users are suffering from poor health the main ones being mental health and addictions.

Users need to access support services that can address these and other health concerns.

To make an appointment easily or to find a case worker.

3

Finding Food

A users most sought after service if they have access to a digital device would be to find a food bank and its location.

4

Not having digital access

Most services are generally now found online with the most up to date information.

If users don't have access they struggle to find the help that is available in their area and have to rely on word of mouth.

USER PERSONAS

From analysing the research, I created 4 personas whose needs, goals, motivations and frustrations represent the potential users of the Street Life Hub app. I've added 2 examples to this case study.



MEL

Age: 32

Education: High School

Family: Single

Location: Leeds

Occupation: Previously in retail

"I FEEL OVERWHELMED AND UNSURE WHERE TO FIND HELP"

GOALS

- Regain stability and independence
- Find a stable place to live
- Access necessary healthcare services
- Secure employment
- Establish a supportive network for empathy and practical assistance

PAIN POINTS

- Lack of access to essential support and services
- Difficulty navigating the complex system of assistance programs
- Feelings of shame and stigma hindering her to find the help she needs

Mel is a 32 year old woman who has been experiencing homelessness for the past six months. She lost her job as a cashier due to the COVID-19 pandemic and struggled to afford rent after her savings ran out. Sarah has been couch-surfing and staying in shelters when she can, but she feels overwhelmed and hopeless about her situation.



DAN

Age: 45

Education: College

Family: Single

Location: Urban London

Occupation: Unemployed

“I’M SEEKING HELP WITH MY MENTAL HEALTH, ITS HARD WHEN YOUR ON THE STREETS ”

GOALS

- Receive consistent and effective mental health treatment to stabilise mood swings and improve overall wellbeing
- Find safe and stable housing where he can feel secure and focus on managing his mental health

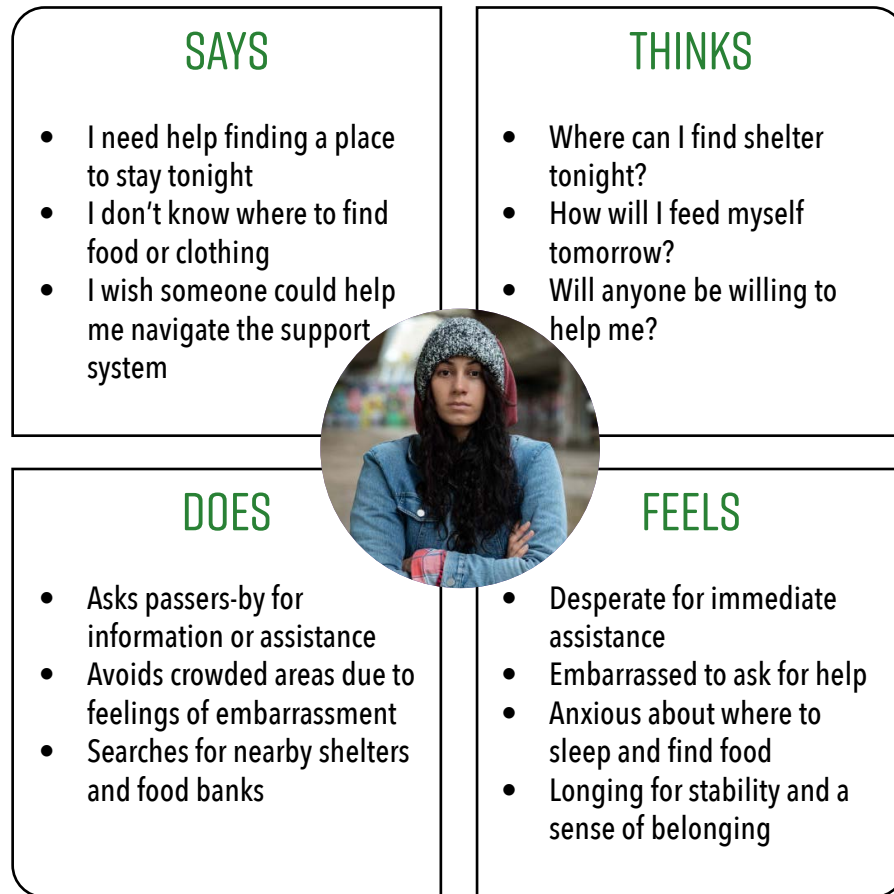
PAIN POINTS

- Inconsistent access to mental health treatment and medication due to financial instability and lack of support
- Feeling alienated and misunderstood by society, particularly when experiencing manic or depressive episodes

Dan is a 45 year old man who has been trying to cope with bipolar disorder since his late teens. Despite his intelligence, managing his mental health has been a constant struggle. Growing up in a dysfunctional family environment made his condition worse, and he lacked access to adequate mental health support. He became homeless after a manic episode which led to him losing his job and unable to afford rent. He often seeks refuge in public parks or abandoned buildings whilst trying to cope with his illness.

USER EMPATHY MAP

I used empathy maps to get a deeper understanding of my users. Here are 2 which I created for Mel and Daniel.



PROBLEM STATEMENTS

User problem statements to consider when designing the app



MEL

MEL IS CURRENTLY HOMELESS AND NEEDS TO FIND HER WAY IN LIFE AGAIN WITH THE RIGHT SUPPORT AND GUIDANCE BECAUSE SHE IS OVERWHELMED AND FEELS LIKE GIVING UP



DAN

DAN IS CURRENTLY HOMELESS AND NEEDS HELP WITH HIS MENTAL HEALTH TO OVERCOME CHALLENGES BECAUSE HE WANTS TO NAVIGATE HIS LIFE IN THE RIGHT DIRECTION AND GET HIMSELF OFF THE STREETS

USER JOURNEY MAP

To understand the problems and experience a user would go through, I created user journey maps. Here is the one for Mel, the maps reveal areas where we can make improvements for a better user experience.



MEL

Browsing the services available

ACTION	Opens the app	Selecting a Shelter	Receiving Assistance	Providing Feedback	Continued Engagement
TASKS	A. Browses through the list of shelters, food banks, and support services B. Filters search results by location, availability C. Reviews information	A. Chooses a shelter based on proximity B. Checks shelter details such as opening hours C. Uses the map feature to get directions	A. Arrives at the shelter and checks in using the app's provided information B. Welcome from the shelter staff and is directed to her assigned accommodation C. Utilises additional resources or services offered	A. Leaves a positive review and rating for the shelter on the app B. Shares her experience with other users through the app's community forum	A. Continues to use the app to access support services, find assistance, and stay connected with the homeless community. B. Receives timely notifications about new resources, updates, and events relevant to her needs
EMOTION	Hopeful	Apprehensive	Gratitude	Satisfaction	Supported
IMPROVEMENT OPPORTUNITIES	Simplify search and filtering options to make it easier for users like Mel to find relevant services	Implement real-time updates on shelter availability to prevent disappointment and frustration	Offer resources and guidance for accessing additional services or support beyond shelter accommodation	Streamline the process for leaving reviews and feedback to encourage more user engagement	Offer additional resources and tools for long-term goal setting and progress tracking to support users like Mel on their journey towards stability and self sufficiency

USER JOURNEY MAP

To understand the problems and experience a user would go through, I created user journey maps. Here is the one for Dan, the maps reveal areas where we can make improvements for a better user experience.



DAN

Finding mental health support

ACTION	Discovering Mental Health Support	Selecting a Therapist or Support Program	Engaging in Therapy or Support Groups	Providing Feedback and Tracking Progress	Continued Engagement and Support
TASKS	A. Explores the app's sections dedicated to mental health resources and support services B. Searches for therapy options	A. Reviews therapist profiles, including specialties, qualifications, and availability B. Considers peer support groups and counselling options for additional support	A. Attends therapy sessions or support group meetings scheduled through the app B. Seeks guidance from peers and professionals C. Utilises app features such as journalling or mood tracking to monitor progress and manage symptoms	A. Provides feedback on therapy sessions or support group experiences through the app's rating and review system. B. Tracks progress and milestones using app features such as mood tracking, journalling, or goal setting.	A. Continues to engage with therapy sessions, support groups, and app features for ongoing mental health support and management. B. Receives timely notifications and updates about new resources, events, and community initiatives relevant to her mental health needs.
EMOTION	Hopeful	Relieved	Validated	Grateful	Supported
IMPROVEMENT OPPORTUNITIES	Integrate a feature for users to bookmark or save their preferred mental health resources for future reference	Implement a feature for users to schedule appointments or join support groups directly through the app for added convenience and accessibility	Offer additional resources and tools within the app for coping strategies and mindfulness exercises, to supplement therapy or support group sessions	Implement a feature for users to set and track mental health goals within the app, with the option to celebrate achievements and milestones along the way	Provide ongoing educational resources and events on mental health topics, self-care strategies, and wellness practices to support users' continued growth and development.

VALUE PROPOSITIONS

Features that would appeal to the user from my research

RESOURCE DIRECTORY

REAL TIME UPDATES

HOUSING AND SHELTER ASSISTANCE

APPOINTMENT BOOKING SYSTEM

SUPPORTIVE SERVICES

LANGUAGE AND ACCESSIBILITY OPTIONS

COMMUNITY CONNECTION

OFFLINE ACCESS WITH DOWNLOADABLE RESOURCES

EMERGENCY ASSISTANCE BUTTON

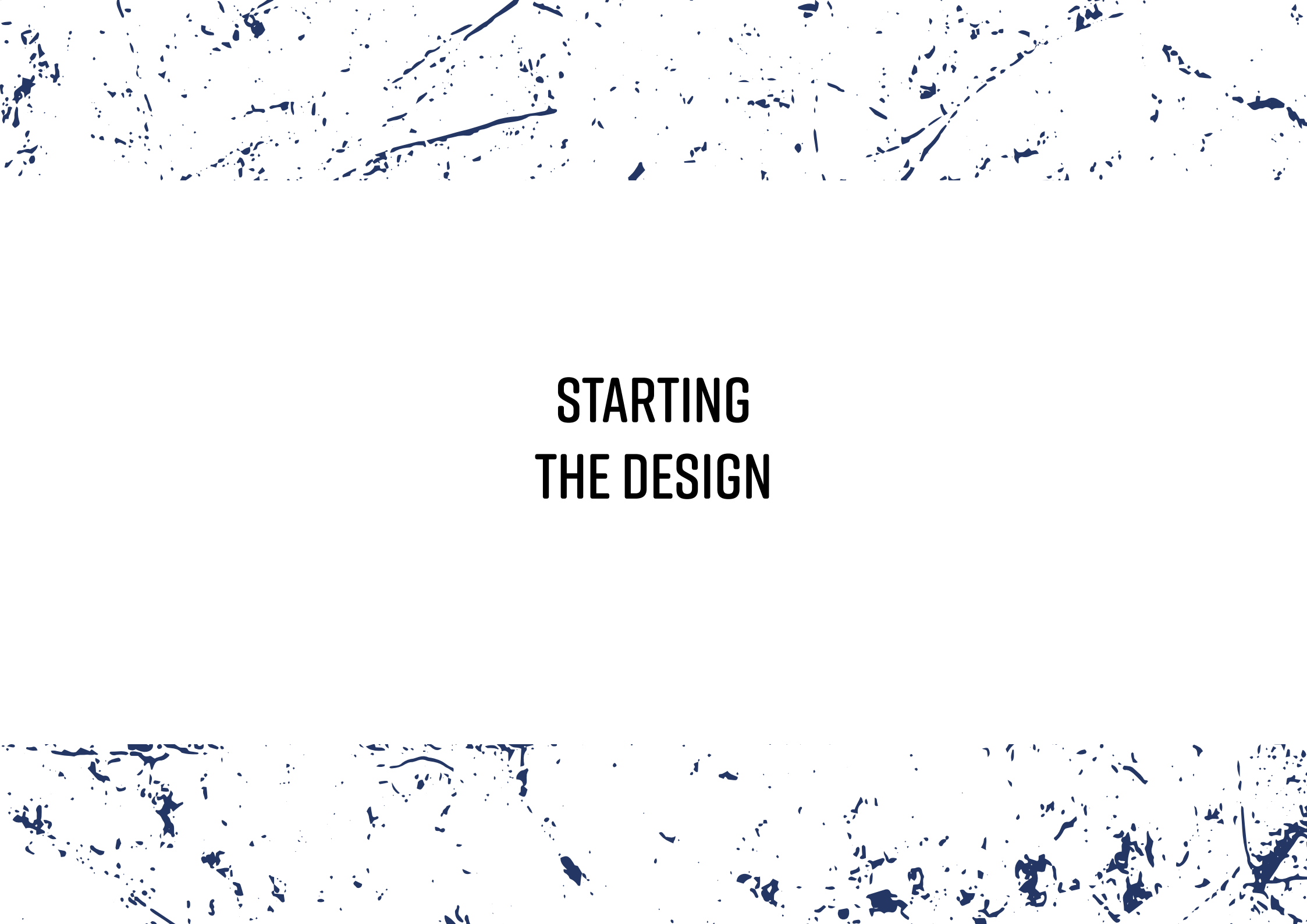
PERSONALISED PROFILE

**LOCATION ALERT FOR TRUSTED
CONTACTS**

ICONS TO EASILY UNDERSTAND SERVICES OFFERED

MAPS AND NAVIGATION

**ALERTS ABOUT AVAILABLE RESOURCES OR SERVICES
IN THE USER'S AREA**

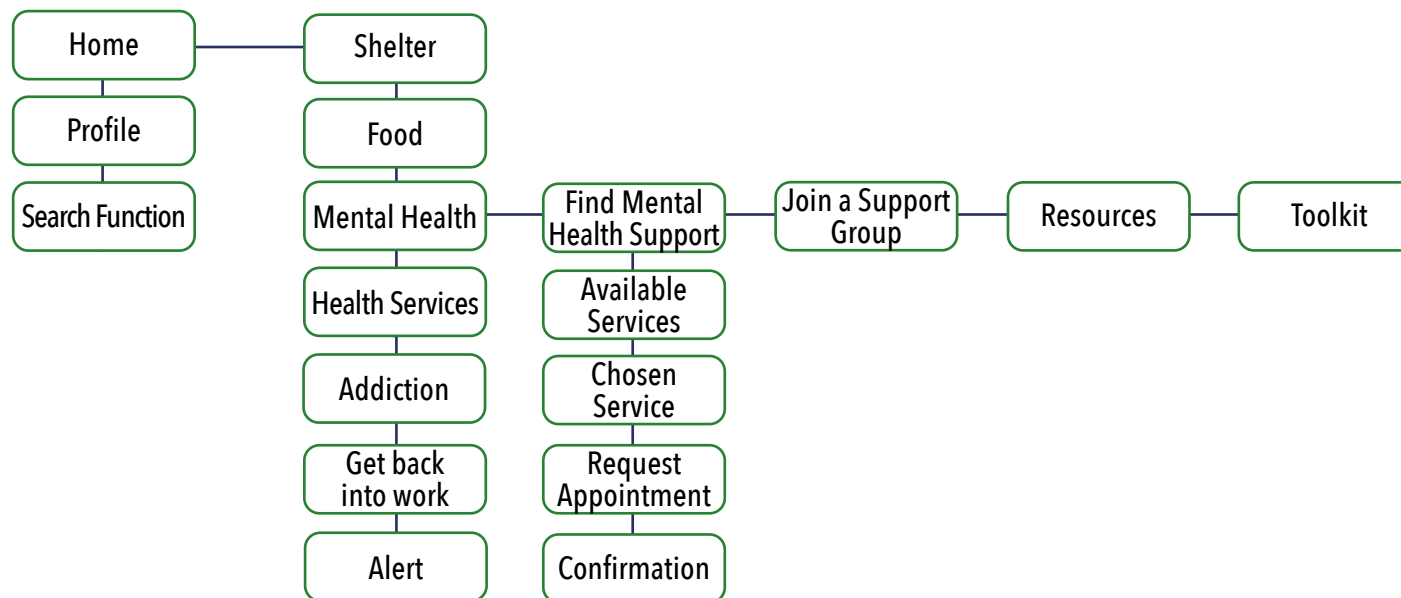


STARTING THE DESIGN

INFORMATION ARCHITECTURE

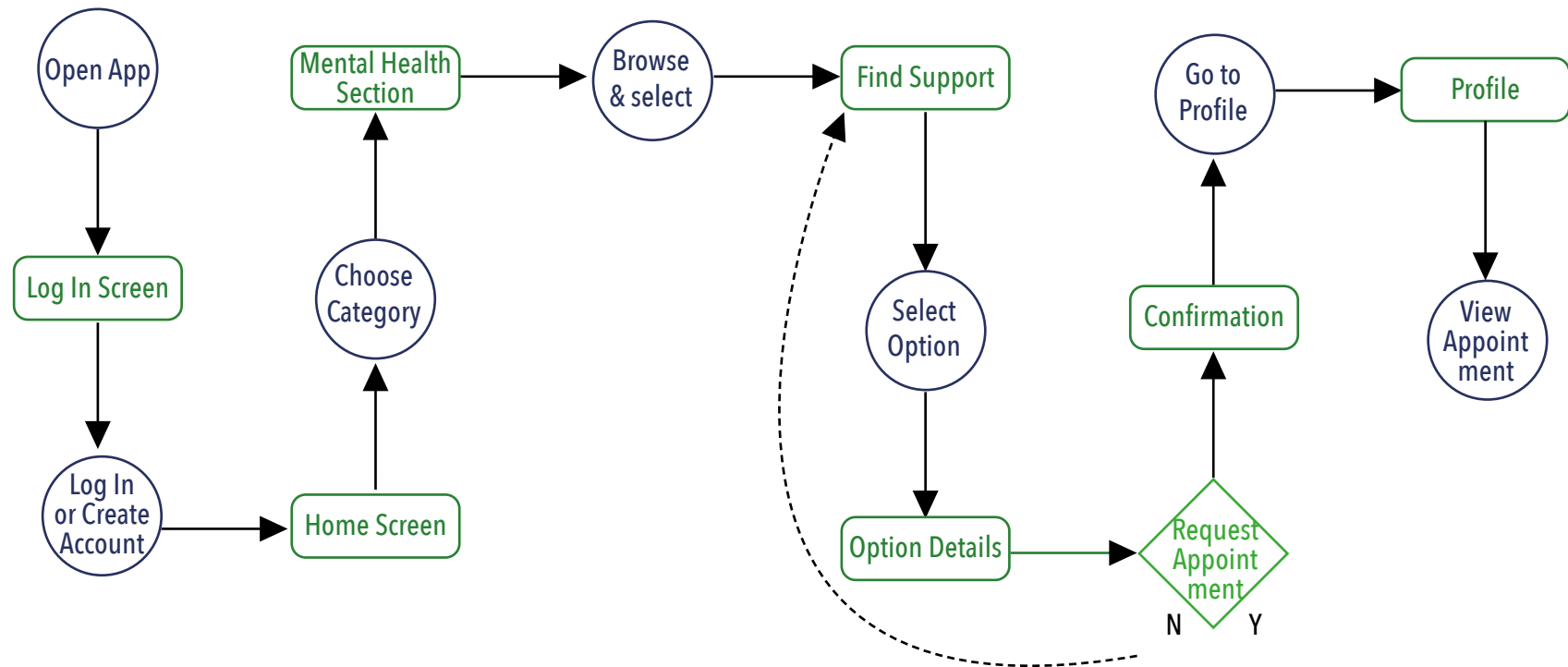
The mobile app and street screen will work in the same way to avoid confusion to the user. Although there would have many different services available for a homeless individual, I am going to look at the mental health aspect. Research showed mental health was a common problem within the homeless community as many don't get help or support with it. This hinders their chances of getting off the streets altogether, as they can't focus on other things that need addressing .

Here is the site map for this below.



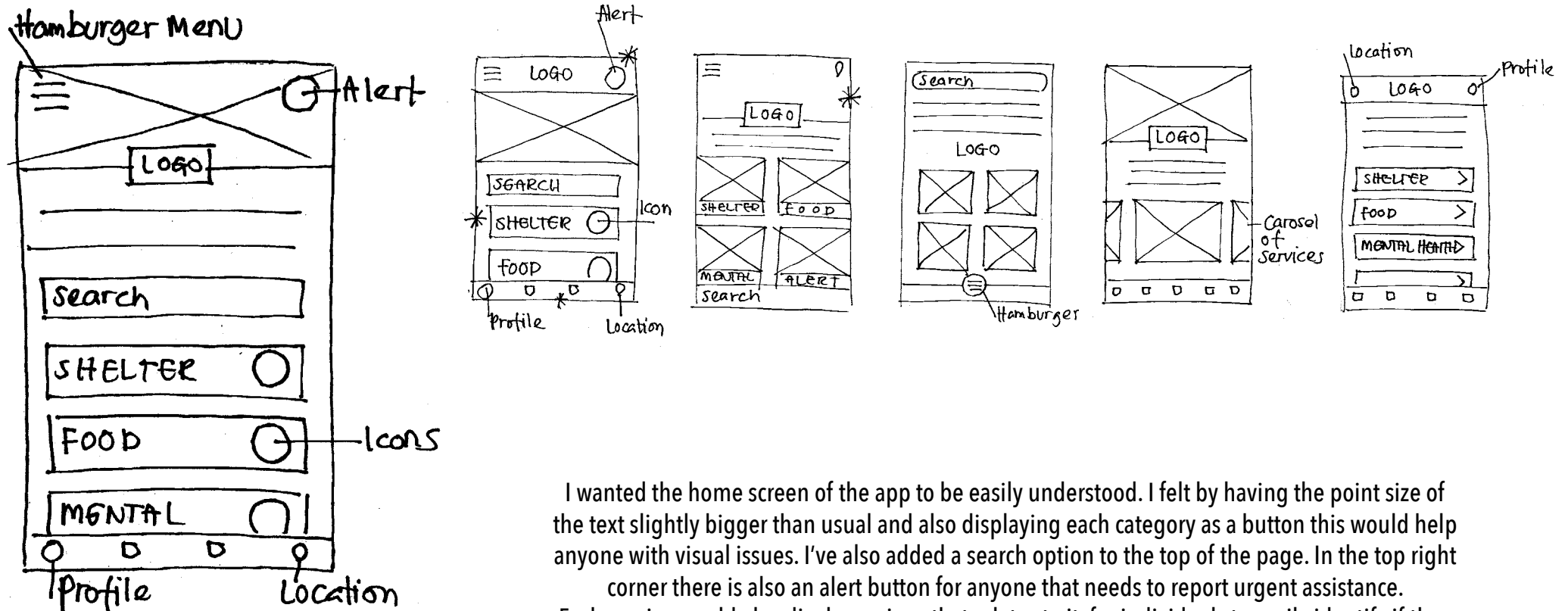
USER JOURNEY

This is an example of a user journey, using the app to find mental health support and to request an appointment.



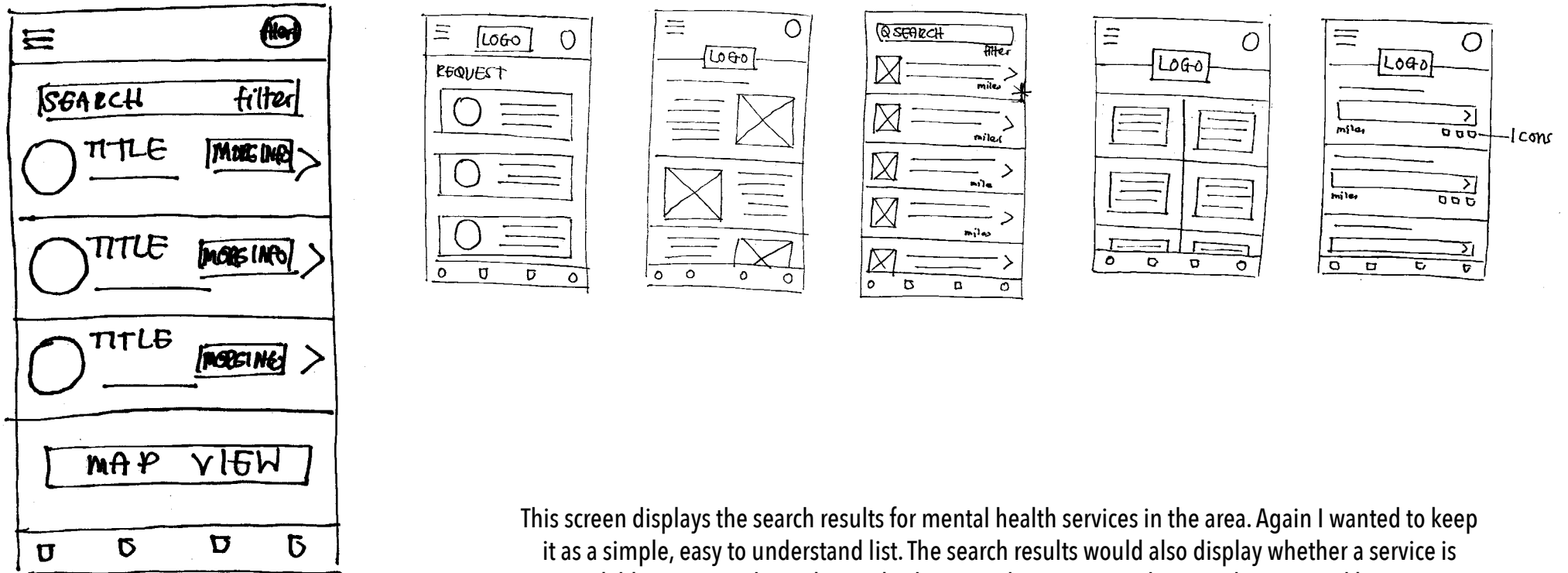
PAPER WIREFRAMES - EXAMPLE I

With the user journey mapped out, I started on the paper wireframes for each of the different screens. Sketching a few different designs for each one and then putting the best elements together as a finalised screen.



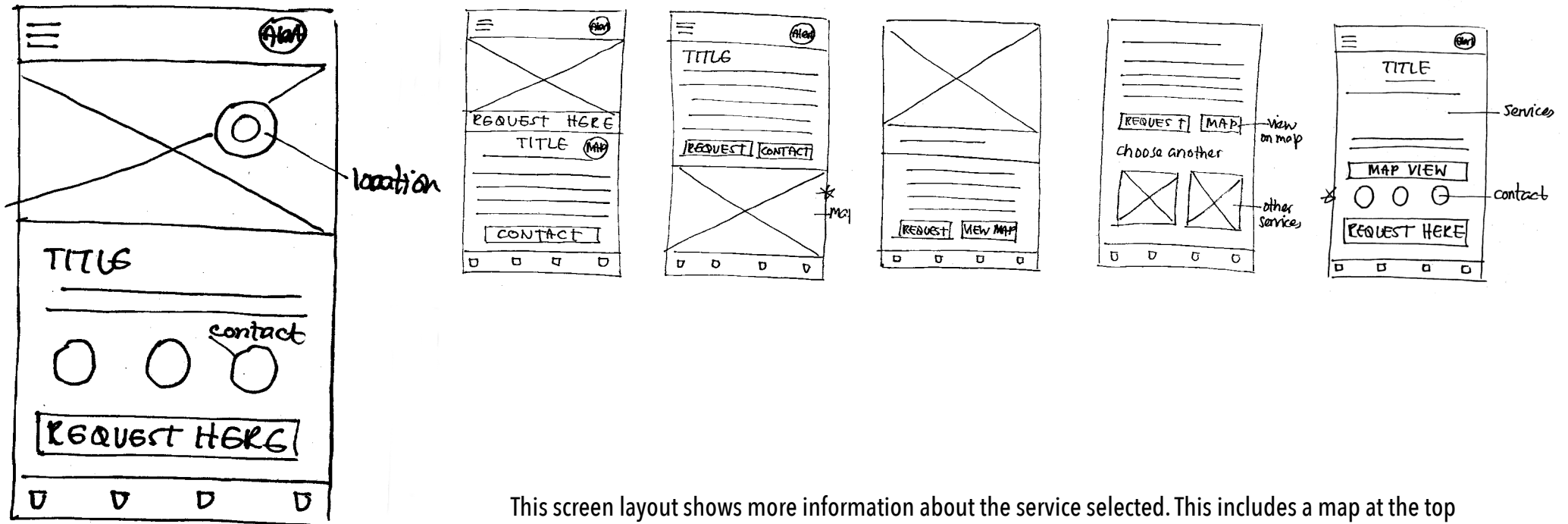
I wanted the home screen of the app to be easily understood. I felt by having the point size of the text slightly bigger than usual and also displaying each category as a button this would help anyone with visual issues. I've also added a search option to the top of the page. In the top right corner there is also an alert button for anyone that needs to report urgent assistance. Each service would also display an icon that relates to it, for individuals to easily identify if they struggle with reading.

PAPER WIREFRAMES - EXAMPLE 2



This screen displays the search results for mental health services in the area. Again I wanted to keep it as a simple, easy to understand list. The search results would also display whether a service is available or not. Each result can also be viewed on a map to show it's distance and location.

PAPER WIREFRAMES - EXAMPLE 3



This screen layout shows more information about the service selected. This includes a map at the top to show the location. Then details of the service and contact icons below with a big button for the call to action for requesting an appointment.

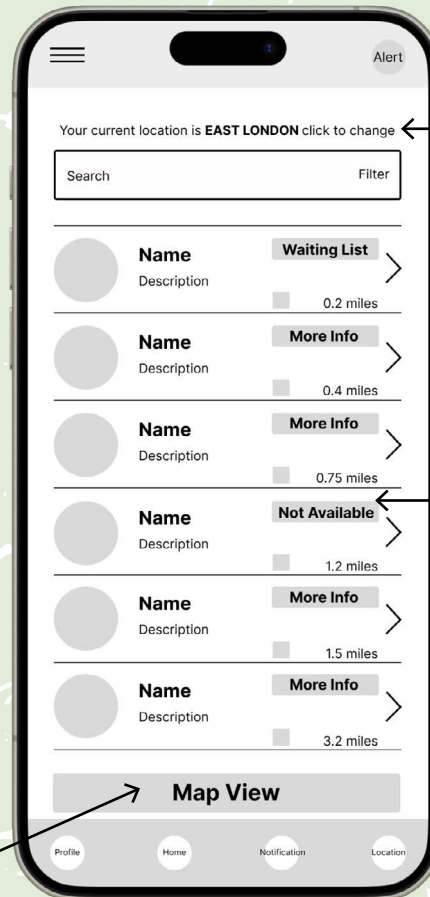
DIGITAL WIREFRAMES - EXAMPLE ONE

I then moved on to the digital wireframes for each of the screens to start bringing the design to life.

This example shows the mental health support options for the specific area searched. This can be viewed in either a list or map format, which would help the user decide which location would be better for them to reach.

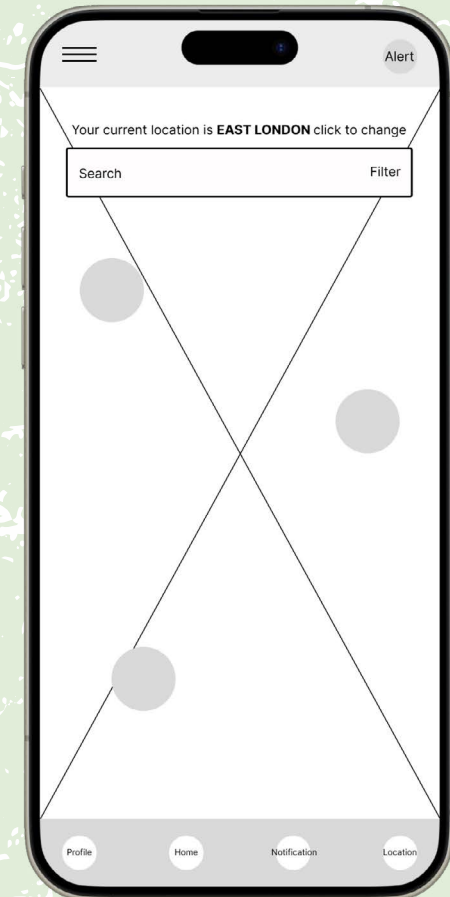
Each listing also shows the distance from the users current location. There are also options to change the location towards the top and also a search function for the rest of the app. This screen also shows real time updates, to show whether a counsellor is currently available for taking appointments.

Option to show as a map



Option to change location

Real-Time Updates

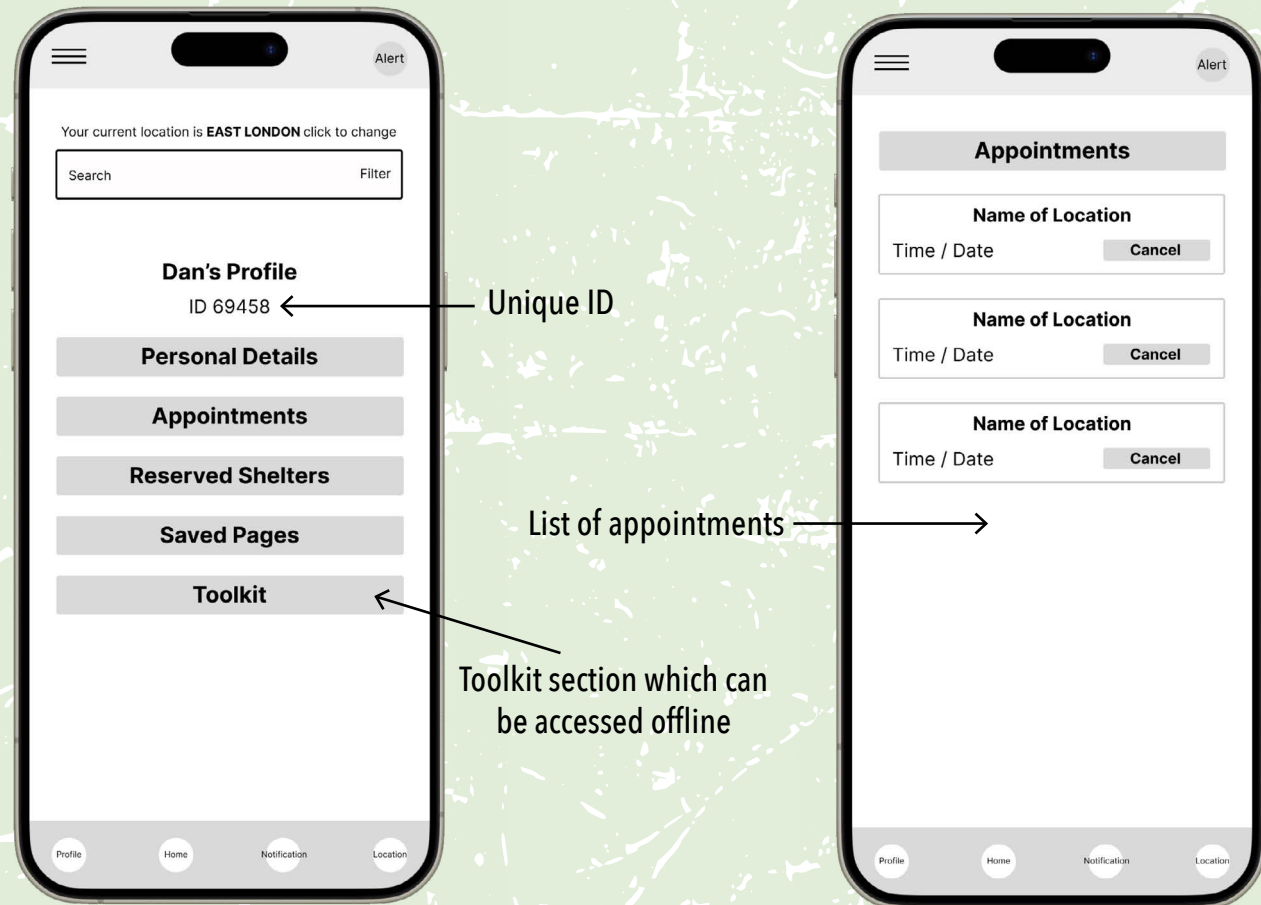


DIGITAL WIREFRAMES - EXAMPLE TWO

The profile for each user would be assigned a unique ID. This ID once verified, can then be used for every service or booking that the user requires within the app, to prevent identification issues.

The profile also records everything that the individual requests and saves.

There is also the option of a tool kit, which provides extra resources related to their specific problems.

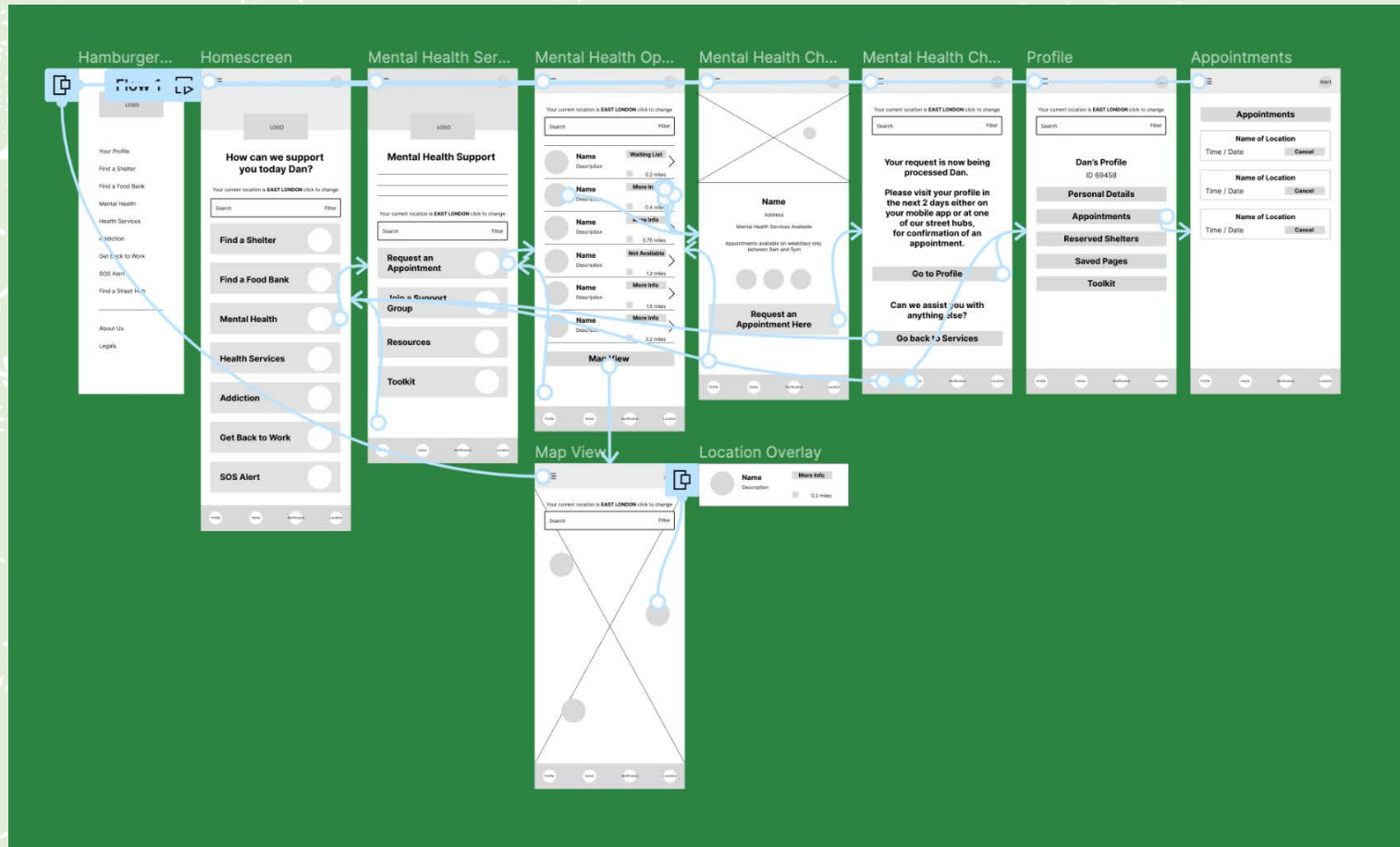


DIGITAL WIREFRAMES SET



LOW-FIDELITY PROTOTYPE

The digital wireframes then made up a low fidelity prototype for testing.
The primary user flow of this prototype was to request a mental health appointment in the users chosen location.



USABILITY STUDY: ROUND ONE FINDINGS

Study Type: Moderated usability study

Location: UK

Participants: 5

Length: 10 minutes

Overall the users observed with the low-fidelity prototype, found the app ok to use but felt it needed slight improvements.

1

Users wanted to know whether they could talk into the search option rather than write.

2

Users felt opening times also needed to be displayed on listings.

3

Users thought the booking system was a little confusing, with waiting list displayed on some options and not on others. They felt the button should say either book now or not available.

4

Users thought there needed to be a notes section to add any special requests or worries when requesting an appointment.

5

Users wanted to be able to book in real time and not have to wait for confirmation in a few days time.

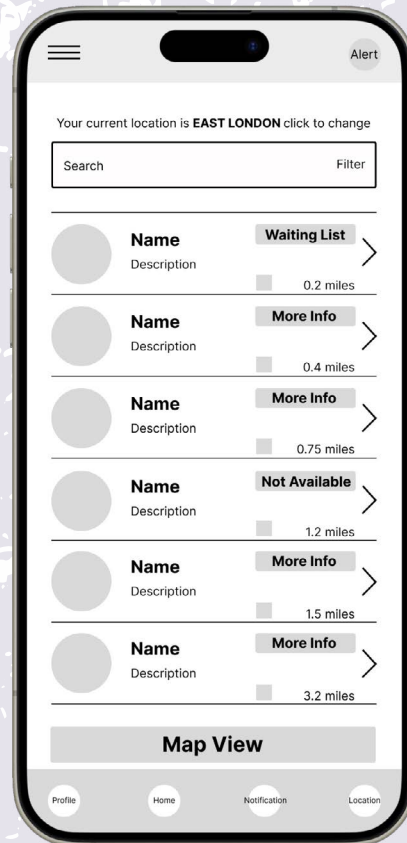


REFINING THE DESIGN

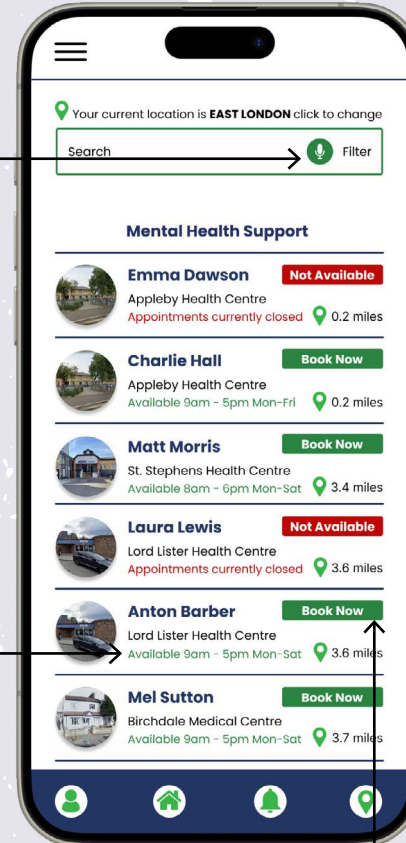
MOCK UPS

Based on the insights obtained from the usability study I updated my digital wireframes and then went on to create the mock ups.

Before Usability Study



After Usability Study

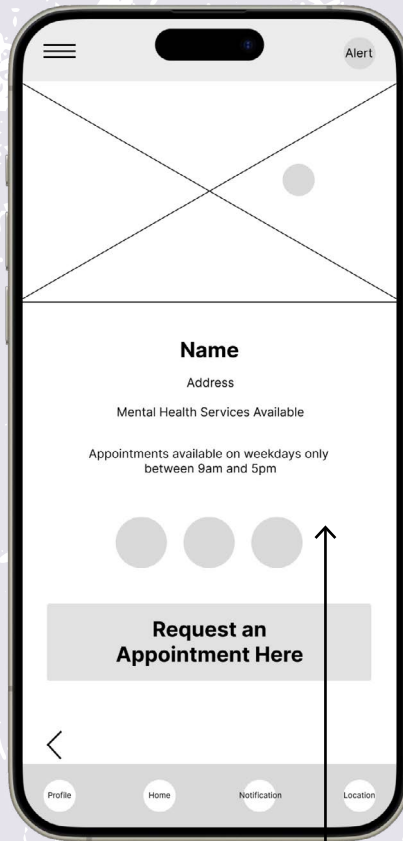


Speech option now available on search bar

Open times displayed

Buttons now changed to either display book now or not available

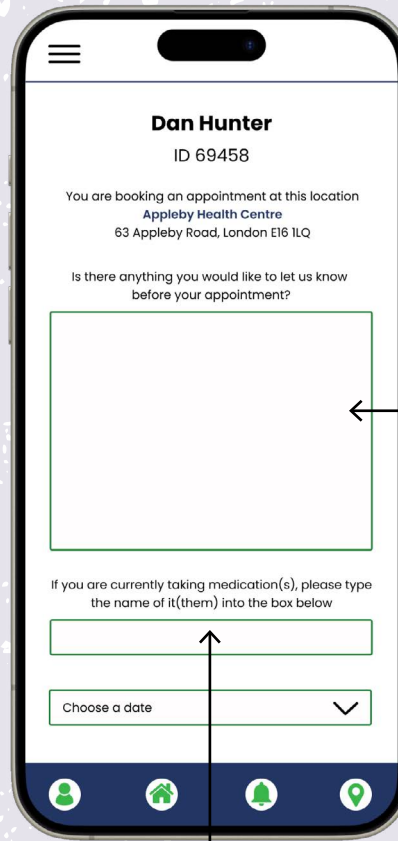
Before Usability Study



A mobile app mockup showing a simple appointment request screen. At the top, there's a header with a menu icon, a status bar, and an 'Alert' button. Below this is a large placeholder area with a diagonal 'X' and a small grey circle. The main content area contains the following elements: a 'Name' label, an 'Address' label, the text 'Mental Health Services Available', and a note 'Appointments available on weekdays only between 9am and 5pm'. Below these are three grey circular buttons. At the bottom of the main content area is a large grey button labeled 'Request an Appointment Here'. The bottom of the screen features a navigation bar with four icons: Profile, Home, Notification, and Location.

Before the usability test it was just this screen to request an appointment

After Usability Study

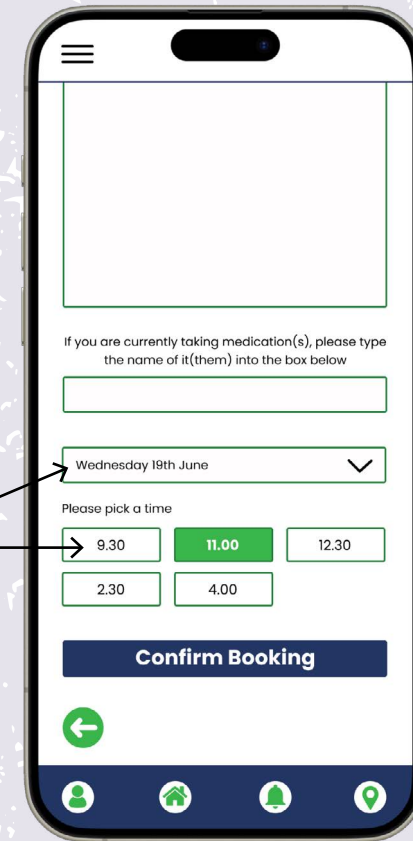


A mobile app mockup showing a more detailed appointment request screen. At the top, there's a header with a menu icon, a status bar, and a user profile section for 'Dan Hunter' with ID 69458. Below this is a location section: 'You are booking an appointment at this location', 'Appleby Health Centre', '63 Appleby Road, London E16 1LQ'. A text prompt asks 'Is there anything you would like to let us know before your appointment?' followed by a large text input area. Below this is a section for medication: 'If you are currently taking medication(s), please type the name of it(them) into the box below' followed by a text input area. At the bottom of this section is a date picker labeled 'Choose a date'. The bottom of the screen features a navigation bar with four icons: Profile, Home, Notification, and Location.

Plus a section to add any medications they are currently taking

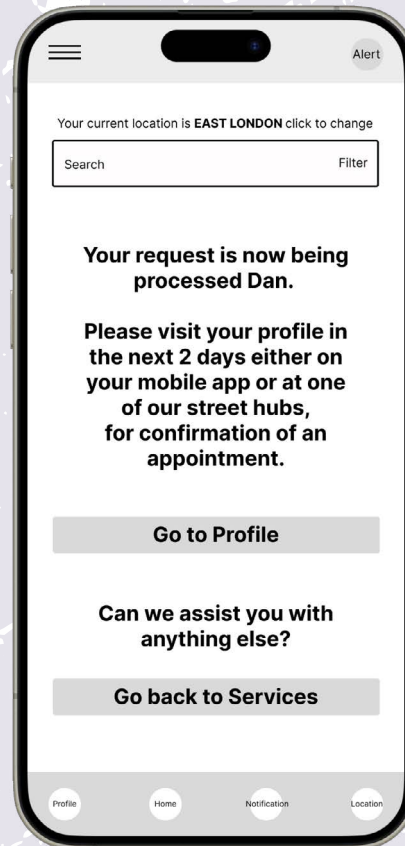
Now i've added an extra screen so the user can write in any concerns before their appointment.

I've also added date and time options for them to choose from rather than just a request.

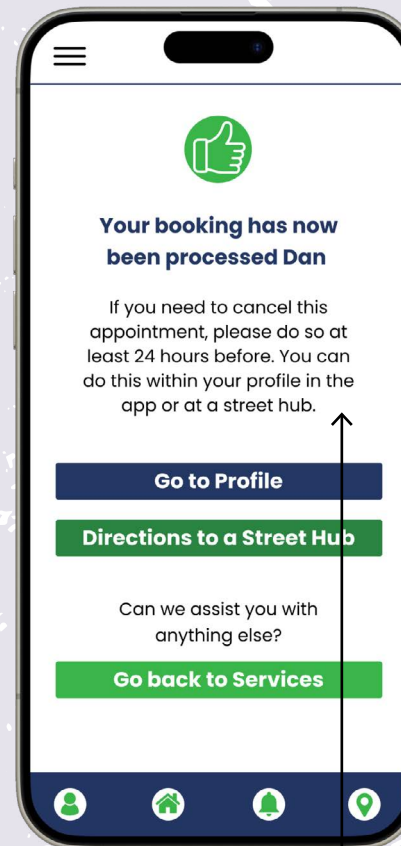


A mobile app mockup showing a confirmation screen. At the top, there's a header with a menu icon, a status bar, and a large text input area for concerns. Below this is a section for medication: 'If you are currently taking medication(s), please type the name of it(them) into the box below' followed by a text input area. Below this is a date picker showing 'Wednesday 19th June'. Below the date picker is a section for time: 'Please pick a time' followed by a grid of time slots: 9.30, 11.00, 12.30, 2.30, and 4.00. The 11.00 slot is highlighted in green. Below the time slots is a large blue button labeled 'Confirm Booking'. The bottom of the screen features a navigation bar with four icons: Profile, Home, Notification, and Location.

Before Usability Study

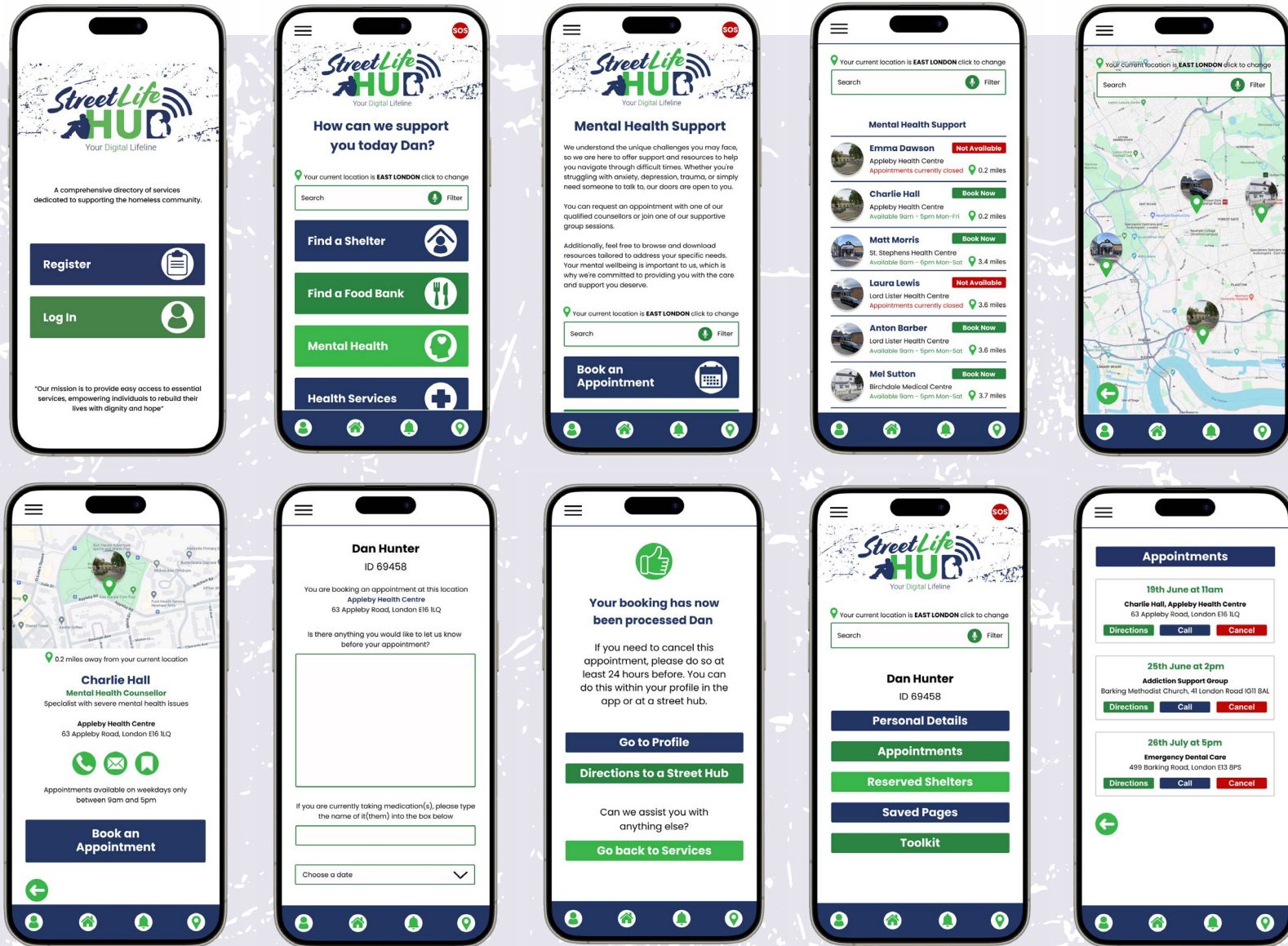


After Usability Study



The confirmation screen isn't a request anymore,
it's now an actual confirmed booking

MOCK UPS BEFORE 2ND USABILITY STUDY



USABILITY STUDY: ROUND TWO FINDINGS

Study Type: Moderated usability study

Location: UK

Participants: 5

Length: 10 minutes

Overall the users in this study found the app easy to use. However there were a few more points that they observed.

1

Users thought the SOS alert option needed to be more prominent on the homepage and not at the bottom of the list.

2

Users thought the appointment section needed to be clearer. Section headings relating to the service that they had requested.

3

Users felt there needed to be language options.

4

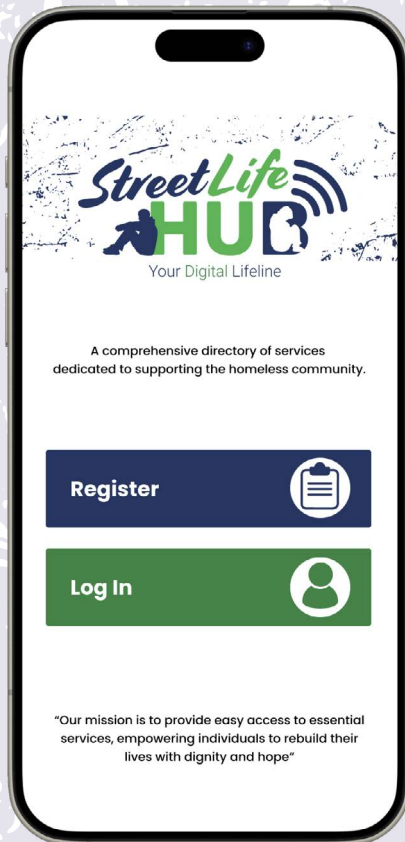
Users thought the mental health section was too text heavy, and the options needed to be further up the page. The map option also needed to be made more obvious on the directory.

5

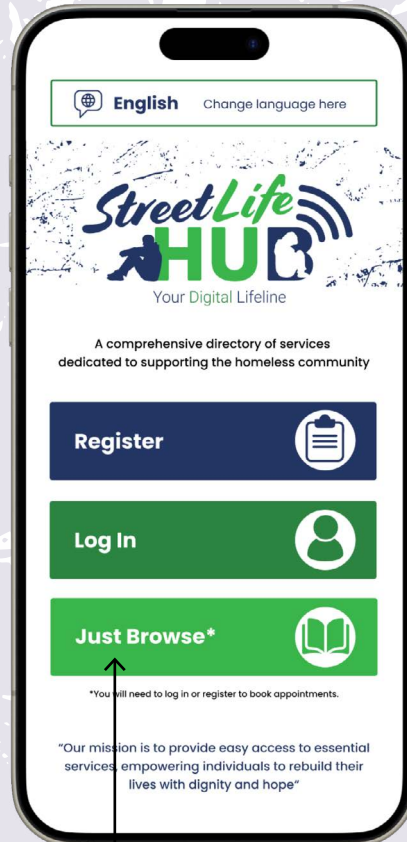
Some users felt that not everyone would want to log in or register with the app and would just like to search the directory to find out information.

MOCK UPS

Before Usability Study

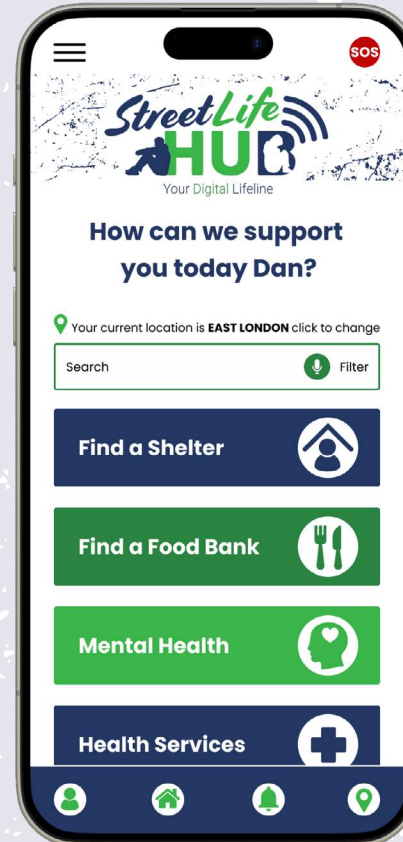


After Usability Study

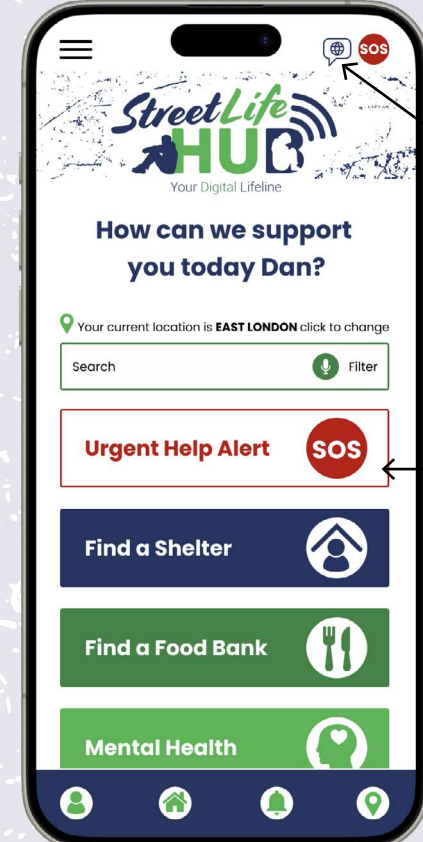


Option added so that users can just browse the directory to look for information, without having to log in or register

Before Usability Study



After Usability Study



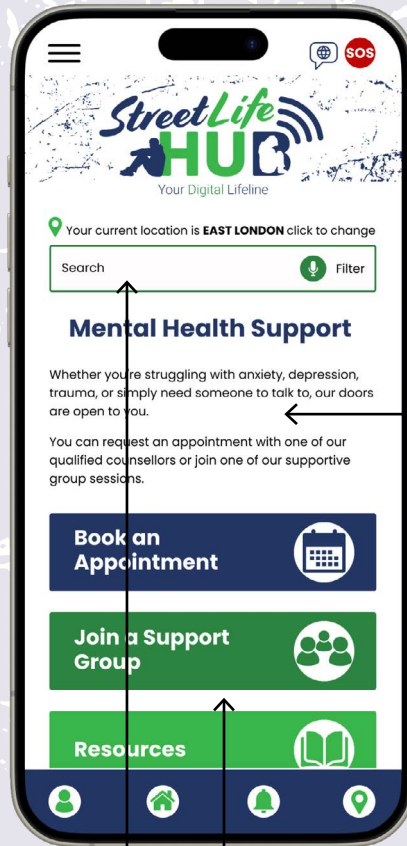
Language option added to top right on every screen

Alert moved to the top of the list. I've changed the colour round as well as it was overpowering on the screen

Before Usability Study



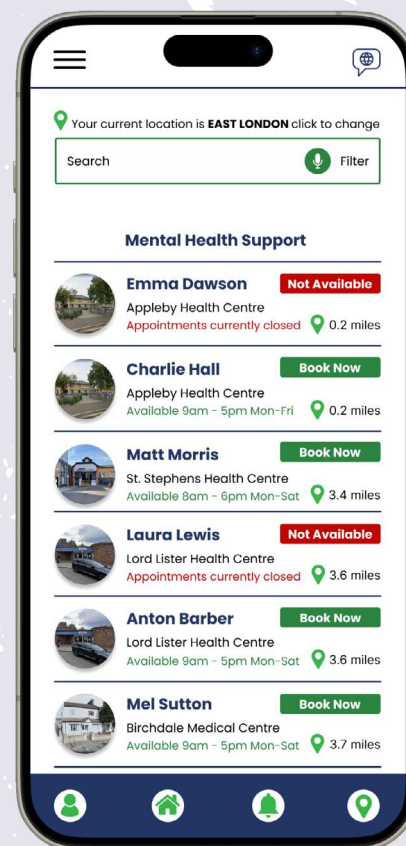
After Usability Study



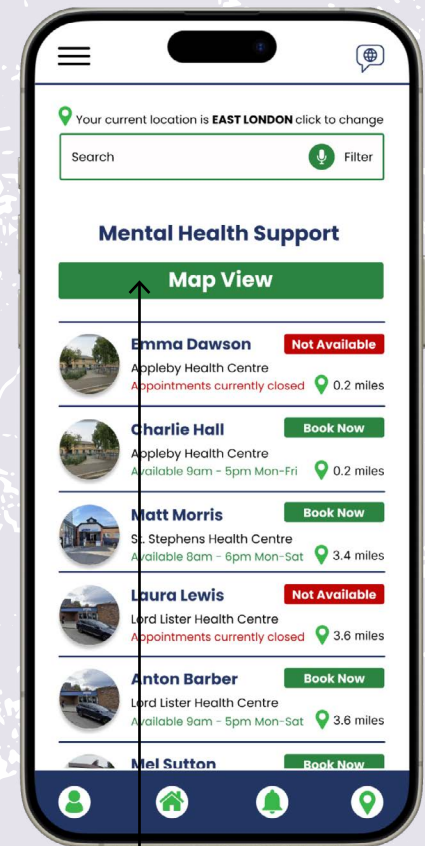
Less text heavy

Layout changed slightly to make it easier to navigate

Before Usability Study

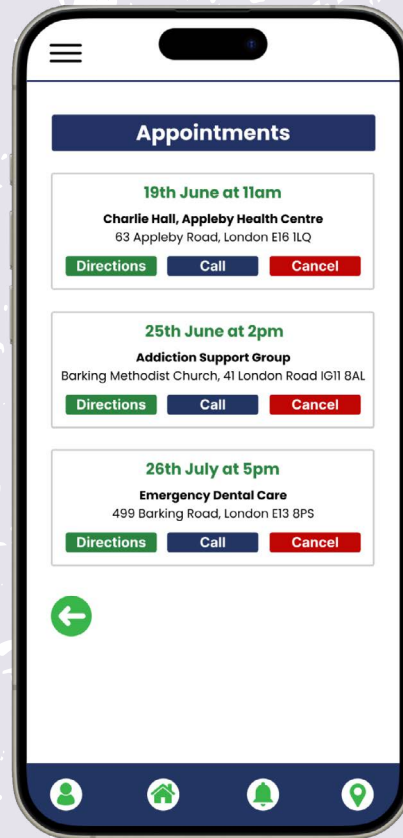


After Usability Study

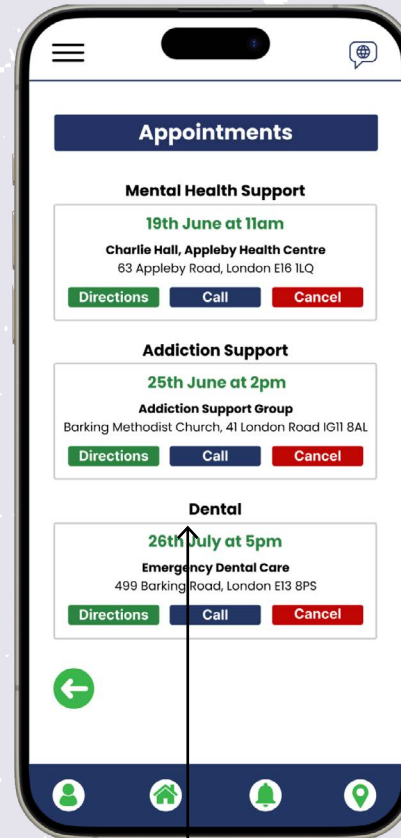


Map view now at the top of the screen

Before Usability Study



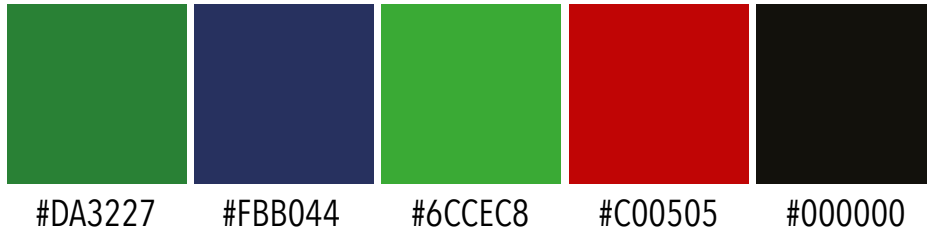
After Usability Study



Titles added to show different sections

STYLE GUIDE

Colour Palette



Icons



Typography

Poppins Regular
Poppins Medium
Poppins Bold

Search Bar

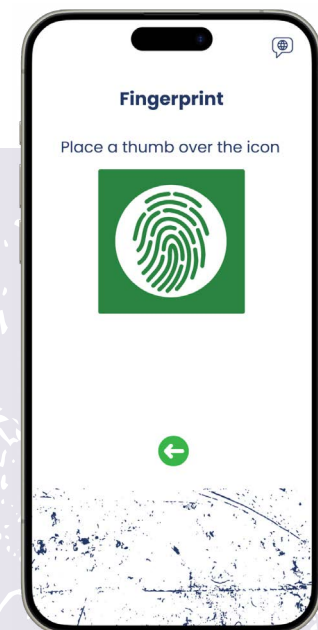
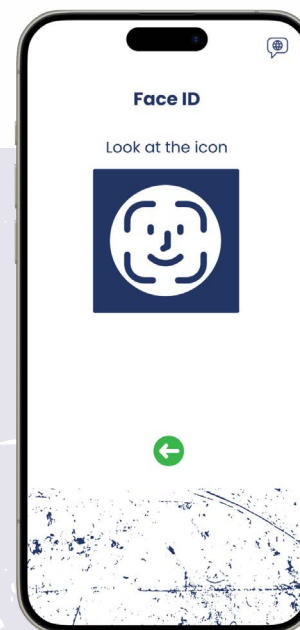
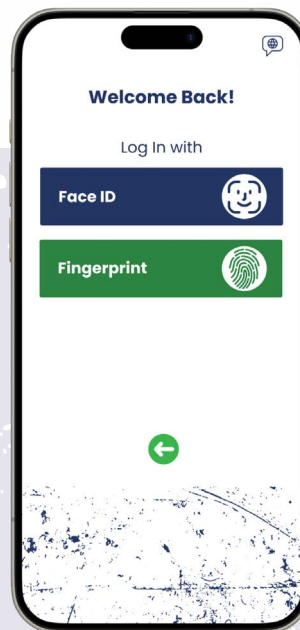
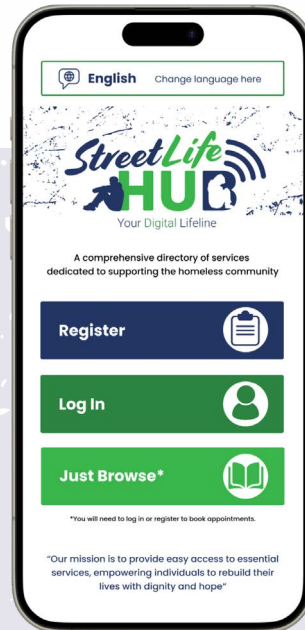


Buttons

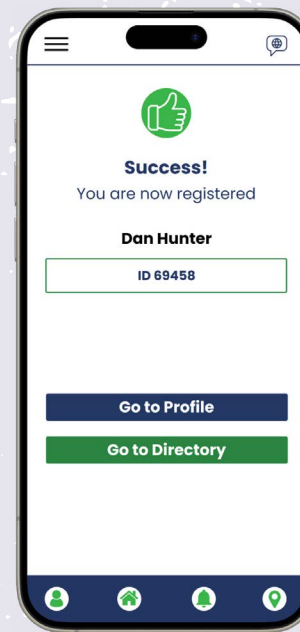
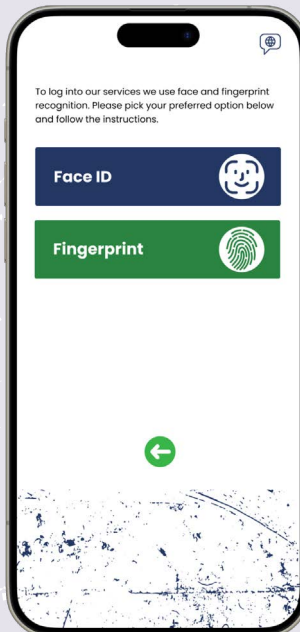
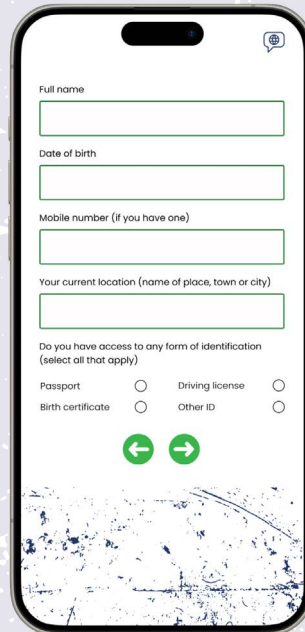
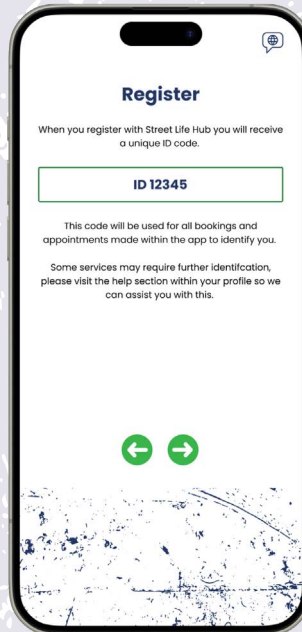


HIGH-FIDELITY PROTOTYPE

Onboarding Logins

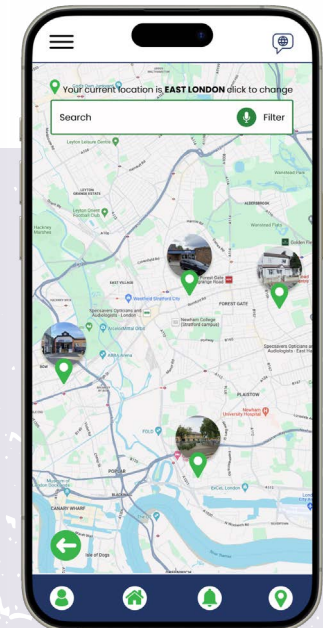
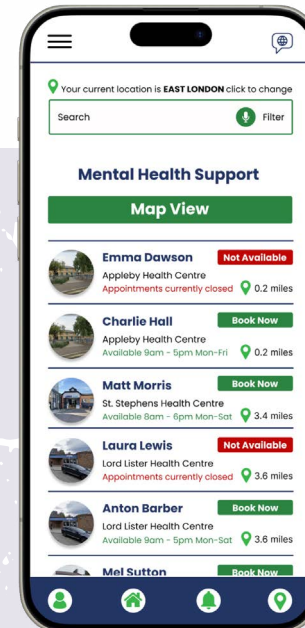
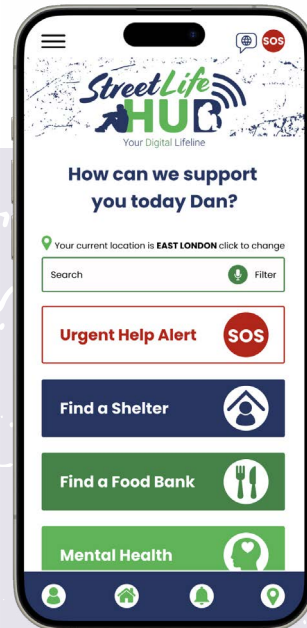


Register

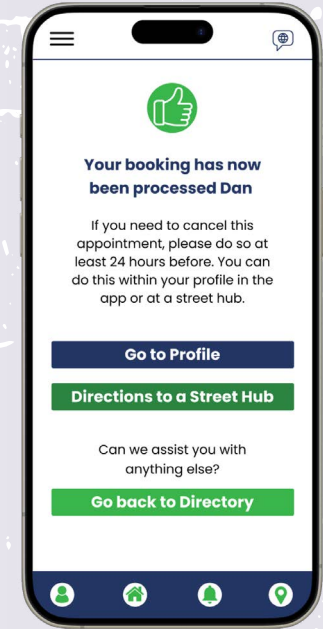
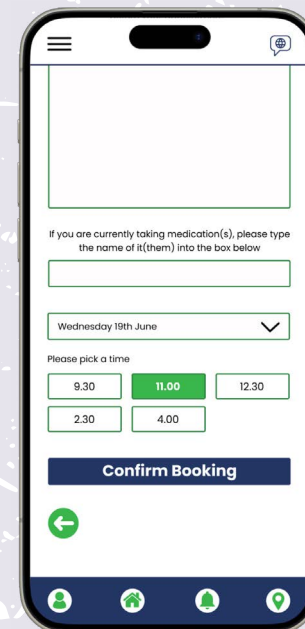
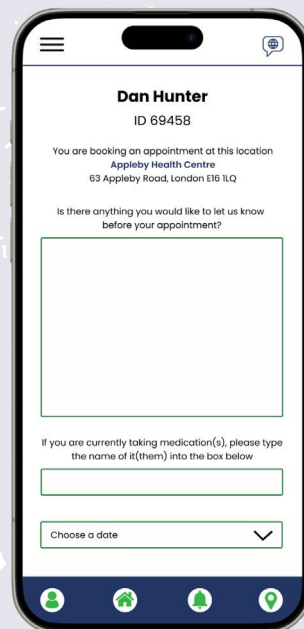
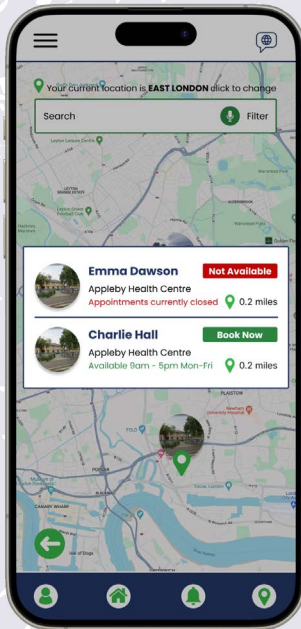


HIGH-FIDELITY PROTOTYPE

Home Screen Mental Health Section Mental Health Directory Map View

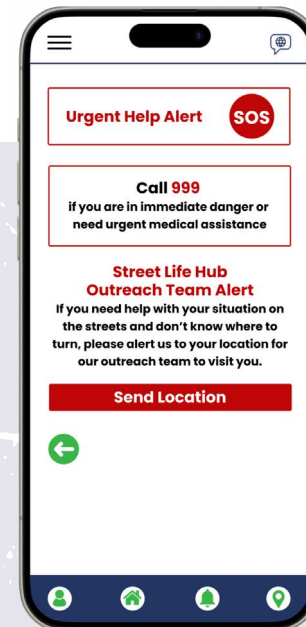
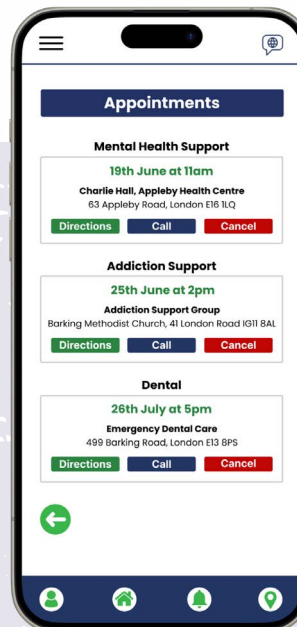
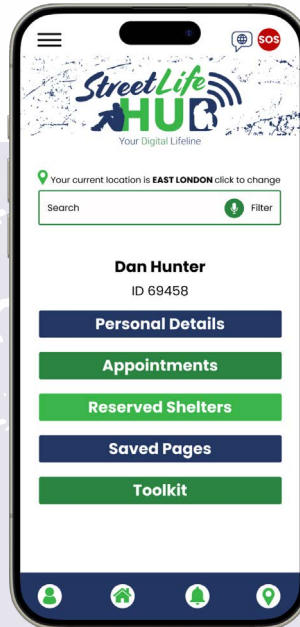


Map View with Info Chosen Selection Booking Screen Confirmation

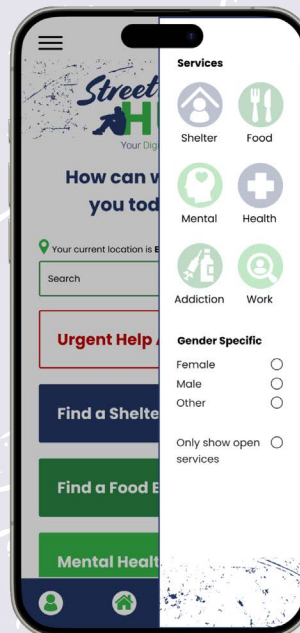
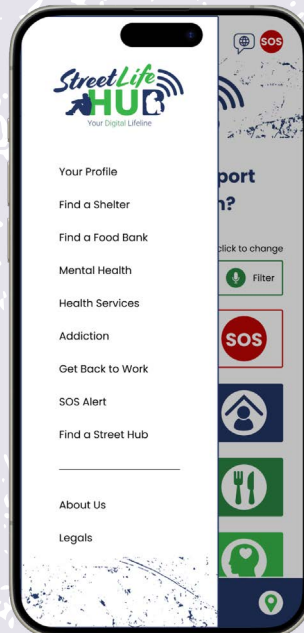


HIGH-FIDELITY PROTOTYPE

Profile
Appointment
Urgent Help Alert



Menu
Filter Menu



CLICK HERE
to view the
high-fidelity
prototype



HIGH-FIDELITY PROTOTYPE

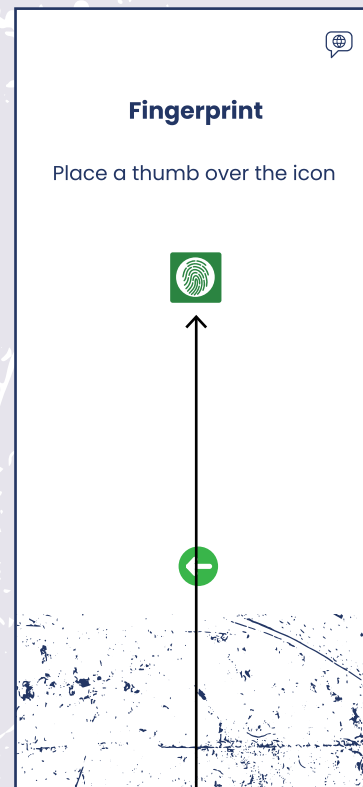
The Street Screen would be a scaled up version of the mobile app.

Keeping consistency so the user doesn't get confused and the large icon buttons make it easy to navigate.

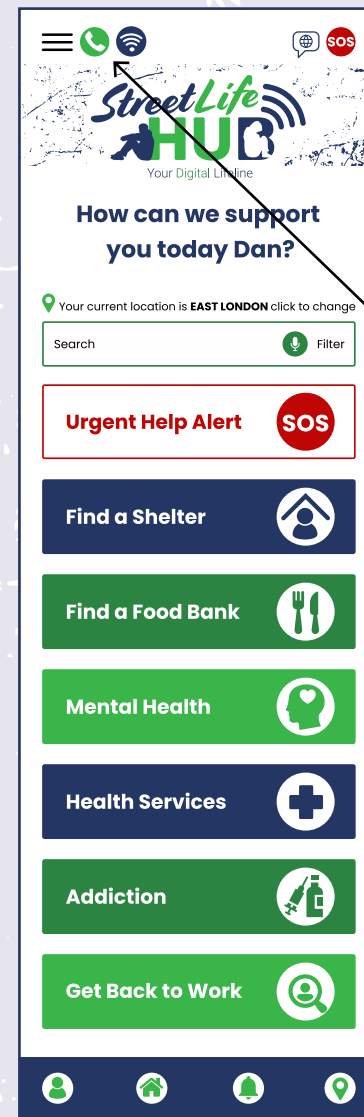
I've just added some small tweaks to the Street Screen.



On a street screen the user would be able to make free calls and connect to the wi-fi. So i have added in these icons on the first screen, as well as the SOS button.



On the log in and register screens I've made the thumb icon much smaller.



On all screens i've also added in the phone and wi-fi symbols to the top left.

HIGH-FIDELITY PROTOTYPE

Visual of the Street Screen



ACCESSIBILITY CONSIDERATIONS

1

Using large buttons and icons so users can distinguish sections easily.

2

Using a clear typeface for the majority of the text to make it easy for the user to read and navigate.

3

Adding in a search tool with a voice enabled searching option.



**GOING
FORWARD**

TAKEAWAYS

IMPACT:

The Street Life Hub Mobile App and Street Screen enable users to easily search for vital services. For mental health support, users can now locate suitable clinics, access detailed information, and book appointments, with confirmations visible in their profiles. Those who prefer not to register can still use the directory and resources to find out information, without sharing any personal information. The Street Screen provides a crucial lifeline for users without digital access, ensuring they can find the help they need.

WHAT I HAVE LEARNT:

Designing an app for homeless individuals emphasised the need for simplicity and prioritising the user in every aspect of the design. This project highlighted the importance of empathy, inclusivity, and practicality in creating a helpful and empowering tool.



NEXT STEPS

1

Would be to launch the app and street screen in one location and test how users get on with using it.

This would also be on a wider scale for testing, so more insights would be gained into how users perceive it.

2

Add in the other sections of support, such as shelters and food banks.

Record what sections are getting used the most.

3

Possibly introduce a chat bot so the user can interact with it to answer any questions they may have.

THANK YOU FOR VIEWING THIS CASE STUDY



GET IN TOUCH

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