Accessibility options available to users when visiting a street food vendor

Salt & Pepper Food App

Overview

The product designed was specifically for Salt & Pepper, a local street food outlet that does not offer great accessibility to people with any sort of disability. The goal was to offer an app that would be useful to users with accessibility needs.

The Problem

Ordering food can be difficult at the best of times, now imagine having the challenge of mobility, this can be very time consuming.

The Goal

The overall goal of the Salt & Pepper food app is to make it easy for anybody with a disability to order, collect and enjoy a bit of Chinese street food.

My Role & Responsibilities

I am the sole designer on this project, doing everything myself from user research, competitive audit, wireframing, prototyping and usability studies

Project duration

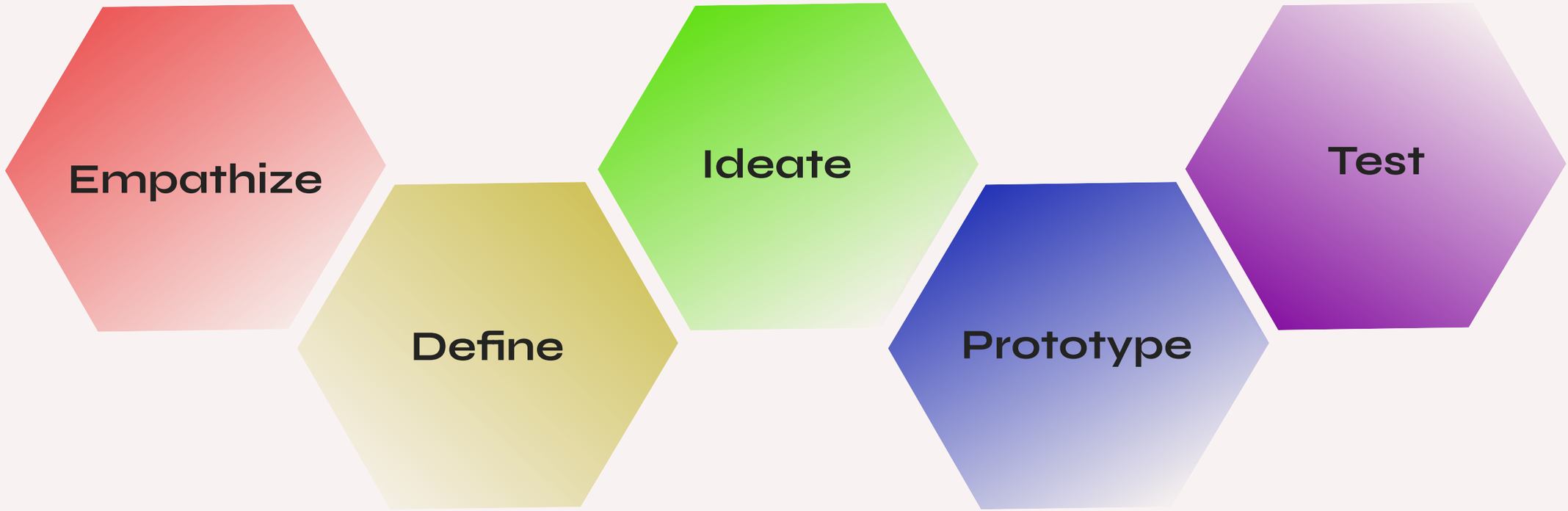
This project is part of my self-taught user experience journey, currently studing the Coursera Google Certificate.

Work commenced 02/10/21 and was completed on 19/06/22.

The Design Process

This was my first attempt at putting everything I learned from the course so I naturally used the Design Thinking approach.

I will give a brief expanation on the choices made during this process



Empathize

To understand users needs and how they think and feel.

*Observation *User research *Interviews

User Research

My user research began as I queued for food on Saturday and noticed the queuing area was quite narrow and I wondered how someone with a pram would navigate the area. This lead me to think about the needs of people who may or may not have a disability but would still find it challenging to queue for food.

I conducted some initial user interviews to understand the needs of users already using the service who don't require any additional support to get an idea of what potential challenges people who are disabled may face.

User pain points

From the initial user interveiws I was able to understand what pain points users had to deal with:

1

Queuing

Users often find it frustrating having to queue up and wait to place an order.

2

Time

Users can find the time it takes to place an order and collect food can be time consuming.

3

Accessibility

Users with accessibility needs would find it incredibly difficult as there are no such facilities available.

4

Communication

Some users find the way the orders are communicated difficult to understand and may miss the call for an order.

Define

Create a clear problem statement or clear user needs the design will address based on research.

*Problem statement *Persona *User journey map

Problem statement

Sunny who is deaf and has trouble speaking in public needs a clear and simple way to order food as placing the order with the staff and listening for the order to be called would cause great difficulty, so a food app focusing in accessibility would be ideal.

Persona

Using findings from the interviews, I created the following personas to better understand the target audience.

Key findings

- The app would potentially increase the number of customers who visit Salt N Pepper.
- Cusomers would have the opportunity to look for seating instead of waitng for the food to be prepared
- All customers would benefit from having an app available regardless of their ability.

User journey map

This user journey map was created to highlight the challenges faced by Sunny who at times can feel uncomfortable about being in certain situations that require him to communicate with strangers. I wanted to create a simple food app which would offer true accessibility to users who have those needs.

ACTION	Arrive at Food Market	Browse menu	Place order	Wait for order	Pick up order
TASK LIST	Tasks A. Queue up with other customers	Tasks A. While queueing have a browse of the menu B. select menu items	Tasks A. Tell the cashier your order B. confirm and pay contactless	Tasks A. Wait to be called by a server and collect food B. Collect napkins and eating utensils	Tasks A. Pick up food B. Go look for a table to eat in the market
FEELING ADJECTIVE	Overwhelmed by the popularity of the street food spot Excited to try the food everyone raves about	Surprised by the simple menu full of visuals of the food	Anxious of having to speak due to disability	Frustrated at having to wait around the service hatch with other customers	Eager to get stuck in to the tasty looking food
IMPROVEMENT OPPORTUNITIES	Create a dedicated app for Salt & Pepper	Include images of the meals similar to the menu at the store	Ensure the app has a simple checkout flow	With the app the customer will have a chance to find seating as this is limited depending on the time of day	App will notify customer when food it ready. No need for customer to talk they can show the notification and collect food

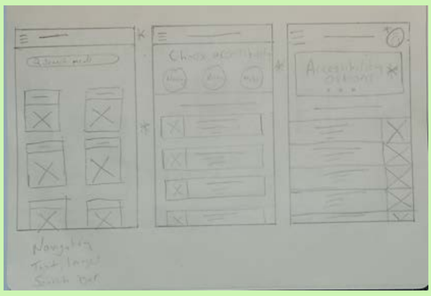
Ideate

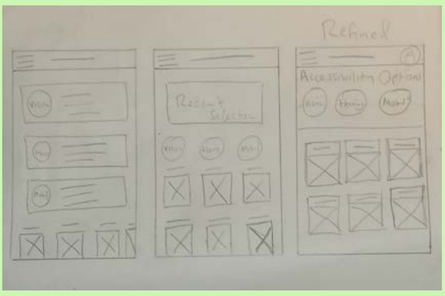
Come up with design solution once a user problem is identified.

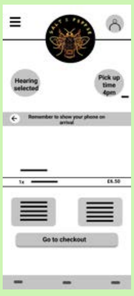
*Paper wireframes * Digital wireframes * Low-fidelity prototype *Usability studies

Sketching & Low-Fidelity wireframes

Here are some examples of the sketches and early low-fidelity digital wireframes that fleshed out the initial sketches.







Low-fidelity prototype

I created this low-fidelity prototype to show the user flow and give the digital wireframes some life. The idea behind the user flow was to get the user through to the menu as soon as possible so they can start to pick their meals.

Usability study

With the low-fidelity prototype complete, it was time for the usability tests to begin. I decided to use both moderated and unmoderated studies, with the majority using the unmoderated approach. I sent out my lo-fi prototype to 4 participants to conduct the unmoderated study with a list of questions. I used the same questions for the moderated study that I conducted with one participant.

Usability study: findings

The insights gained from the usability studies really helped me focus on specific areas to improve on.

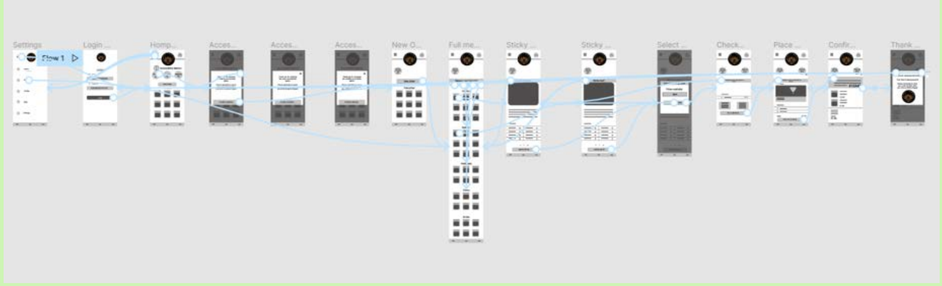
Round 1 findings:

- Users felt more secure if a welcome and create account page was present.
- Users wanted a quick guide on how to navigate the accessibility options.
- Users wanted to be able to select the pick-up time they wanted and see what other times were available.

Round 2 findings:

- Users mentioned that the startup animation should take them start to the login screen.
- Users were confused they could not change the accessibility option once selected.

After the usability study I made some important changes which are shown in the image below and here.



Prototype

Early model of the digital product showing functionality

*Mockups * High-fidelity prototype * Accessibility consideration * Design system

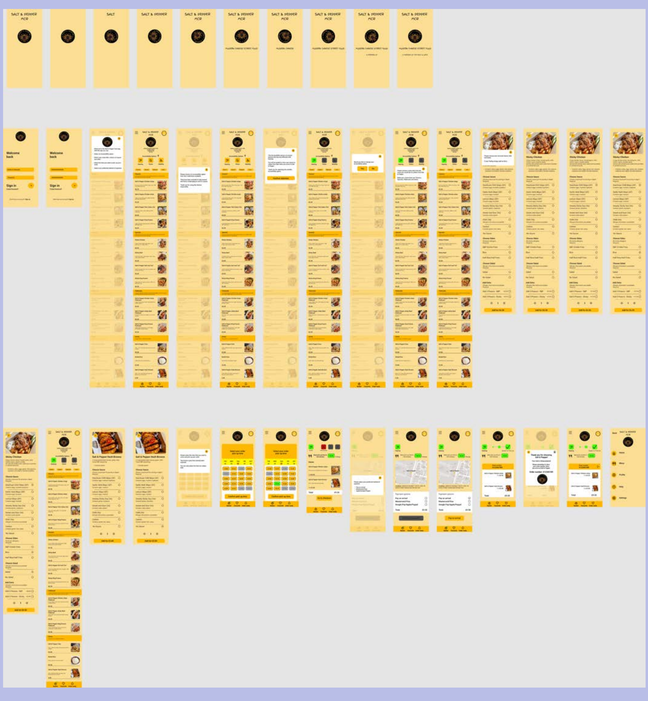
Mockups

The focus of the mockup was to make it clear to every user just what the purpose of this app was, rather than leaving the user unsure on how to navigate this app.

High-fidelity prototype

After a few iterations the high-fidelity prototype was complete.
The full user flow includes login, selecting an accessibility option, selecting a meal and check out.

Try the high-fidelity prototype here.



Accessibility considerations

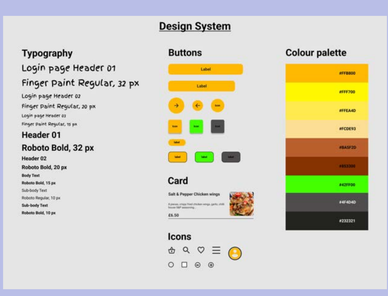
- The core focus behind the design of this app was to provide dedicated accessibility. Three are available to be used they are hearing, vision and mobility.

- Users like familiarity and simplicity when using apps to order food, the idea was not to make this difficult and put users off with unusual navigation.

- Improve the time users spend going through the step to complete an order.

Design System

This design system was created to document the fonts, elements and colours used in the creation of the Salt N Pepper food app. I learned about the importance of a design system as it allows people not familiar with the concept to understand certain design choices made.



Test

Users give feedback about the designs before it is built, use feedback to make changes and improvements

* What I learned * Next steps

What I learned

What I learned and gained during this project was revealed after completing the usability studies. During the affinity map, themes and insights stage, it really came to light the areas that needed focus. I appreciated the participants feedback as it has helped tremendously with the development of this app.

Next steps

- Conduct more interviews to see if users need additional accessibility options to be added to the app.
- Add additional language options to really expand the accessibility for users.
- Work on the user flow to assist the user getting the very best out of the app.