

User Experience and Interface Designer



### What I'm Looking For:

A full-time role with a collaborative team environment with diverse opportunities to grow.



# Hello, l'm Pedro Zendejas!

am a User Experience and Interface designer. I am skilled at user flows, wireframing, prototyping and visual design. I enjoy practicing empathy to understand a problem and doing research to find a solution.

I love how UX is centered around the user to help them have a more accessible and enjoyable product experience. I get excited about mobile design, gamification aspects, and teamwork.

# A little background...

....to get to know me a little better.





Bachelor's Degree in Graphic Design

User Experience Certificate Program



**Education** 2010 - 2013





# SMU.

immotion studios

> **Print Production** Designer

## **Education** 2020 - 2020

Experience 2013 - 2021

# Some of my work.

These are some of the projects I am proud of that demonstrate my key skills in experience design.



Research to prototype for community generated data, parking availability mobile app

Company: ParKings





Identifying product approach to accessibility and user research

Company: C-Hear

## Research to prototype for community generated data, parking availability mobile app, ParKings

Company: ParKings

## **Project Summary**

This case study was a class project from Southern Methodist University's user experience certificate program. In a team of four people, our task was to create a mobile application experience and product.

## **Shared Responsibilities**

- Conducted quantitative research user survey
- Established key user flows
- Created interactive prototype in Adobe XD
- Designed wireframes, lo-fi, and high fidelity screens
- Oversaw usability testing interviews

## **Interesting Facts**

The Covid-19 pandemic quarantine started in the middle of this sprint. We adapted to the situation by meeting and conducting research virtually.







# **Parkings** *An effortless parking experience*

## It's like Waze for parking, and Airbnb for renting out your parking space.

ParKings is an app that improves the quality of the urban parking experience. Drivers are able to update their status around the city to help feed realtime data into a parking community. Furthermore, businesses and property owners can list their spaces to earn cash through the platform.



### Process

## Discovery & Research

Product Strategy

Decided on a product direction.

Started with an **empathy map** to understand user pains and gains.

Used a **digital survey**, which got 100 responses, to obtain more user data. Created a **persona**. Analyzed market competition using competitive analysis.

Identified critical differentiating feature through an **impact/feasibility chart** and achieved product clarity.



## Prototype, Test, & Outcome

Mapped and designed key onboarding user **workflows** of:

1. A new driver creating a profile and booking a parking spot. 2. A new business owner listing their property.

Fleshed out layout sketches into a low-fidelity wireframe. Applied interface design to finalize into a **high-fidelity wireframe**.

Created interactive prototype to conduct remote usability testing with 5 participants.

Revised parts of the wireframes that were problematic for users.

## Understanding the users and researching our goals.

Currently, drivers struggle to find parking in urban areas because parking is scarce and unpredictable. This urban congestion leads to drivers missing appointments, to them experiencing road rage and even abandoning the trip all together. So we thought to ourselves...

"How might we help drivers have a positive parking experience?"

Using the above question as our goal we utilized an empathy map, with a parking scenario, to start the empathy immersion process. This allowed us to have a deeper insight of what the driver's needs or frustrations could be. The major pain points we seemed to come across the most were: Money, Time, Assistance, Location, and Traffic.



## Research

## Conducting a research survey to better understand user challenges and opportunities.

Due to the pandemic, we had to resort to a digital way of collecting information. We created a Google Forms user survey and distributed it through social platforms. The questions were centered around the 5 pain points we discovered to see if they aligned with the driver's needs. The survey had **25 questions** and received **100 responses** that provided both quantitative and qualitative data.

#### Quantitative data responses:



Do you prepare to find parking or figure it out when you arrive?

) j	37%
t Out	28%
ds	35%

Do you use an app to pay/reserve parking?

> 24% 76%

Have you eve	r been late to an event because you had to look for *
O Yes	
O No	
When going t	o an event do you prepare for parking? Or do you figure it out when yo
O Prepare	
O Figure it o	ut later
O It depends	5
Would you rat you have to w	her pay for parking in a convenient place or find free parking even if alk a little?
O Paid Park	ing
O Free Parki	ng
What factors	do you consider when looking for parking? (price, distance,
Long answer	text
What would b	e your ideal parking
Long answer	text
What tools do	you use to help you look for



## Using qualitative survey results to create a persona.

Based on research, we focused on making a persona to represent the challenges drivers face and what directions to take to make it a better experience for them.



## Timely Tania (\

Location: Dallas, TX, USA Vehicle Type: Car **Age:** 25 Parking Anxiety: High Parking Type Most Used: Street Parking

#### **Personality**:

"I make sure to plan ahead so I'll have my car waiting for me when I return, not a tow truck."

Parking Frustrations: Arriving late Feeling unsafe Parking too far away Needing assistance

Close and short walk

Cheap prices

Feeling of security

Planned ahead of time

#### **Parking Preferences:**

#### Qualitative data responses:

What stresses you out when parking? 86 responses Being late Not finding a spot Other drivers If the other car parks too close or incorrectly Not finding a spot Being late The time to find a spot / Trusting myself car will not get towed for some unforeseeable reason / Will it get broken into ? / Will the person that parks next to me ding/hit my car Tight space What factors do you consider when looking for parking? (price, distance, capacity etc.) 96 responses Distance Distance Price Price and distance Price, distance Price Distance and price Distance and location, if it's safe/ if it's big enough to fit my car as well as other cars who park beside me Price distance safety



## Analyzing market competition for feature opportunities and identifying product clarity.

We continued our product journey by doing competitive analysis on existing parking apps. This was to see what features they were currently using, what they could be lacking or use improvement on.

We found some of their features we could improve on, but we also found out that we did not have a differentiator. Due to this fact, our project actually pivoted direction 3 times until we found the right one. Through the use of an impact/feasibility chart we scaled all of the features we had and brainstormed new ones the competitors seemed to lack. The key factor was adding a parking host platform to create more parking spaces and help alleviate urban congestion.

#### **Direct Competitors**:



### **Indirect Competitors**:







- 1. Parking Information
- 2. Booking

#### 3. Parking Host Platform

- 4. Parking Community
- 5. Data Collection
- 6. Reward System
- 7. Color Coded Map
- 8. Saving Payment Info
- 9. Supply the Tech for Accurate Info





# **ParKings connects drivers and** parking space owners to improve the quality of the parking experience.

**Product Clarity** 

## Feature mapping and product strategy.

With the define phase of the project done, we moved to **epics and user stories**. The app would need two different types of user profiles, the person parking and a listing business owner. Mapping out the steps of the stories by using high level **workflows**.

The user work flow would feature the profile creation, parking search, booking a spot, and adding to calendar. The business owner work flow would be profile creation, setting up a listing, and checking dashboard.

### First time user finding and reserving a parking spot:



## Sketching and low fidelity wireframes.

We started with **sketches** to brainstorm different layouts for the information. Once chosen, **low fidelity wireframes** were created using an existing UI component plug in template.



## Interface design and style guide.

The **design interface** was the next step, establising the look and feel of the app.

The parking experience is a stressful process, to combat that we went with a calming color palette of blue and green hues. We chose Neumorphism, the design style, because of its modern look, rounded elements, and soft shadows.

It was time to create **high fidelity wireframes** following the style decision. While trying to impliment the design to the wireframe, a lot of attention went into making sure all repeating components were consistent. Once done, we moved onto making an interactive prototype.



## High fidelity wireframes.



#### Map option selection





## Accessibility audit.

Finding parking availability should be accessible to everyone. Therefore, ParKings offers the ability to change the colors to accomidate those with color vision deficiency.

Not only have the colors been motified, the small map icons within the map include unique patterns to distinguish them easier.



#### Red/Green









Grayscale









#### Red/Green color deficiency simulation with patterns





# Conducting usability tests and examining user results.

The team conducted 5 **usability tests** where we all played key roles throughout the process. 2 were able to be done in person, while the other 3 were done remotely over Zoom. We rotated responsibilities such as: interviewer, note taker, reaction observer, and time stamper.

We observed the examinees go through 2 major workflows with a scenario for each. One focused on a user searching for and finding parking, the other was for the parking host creating and listing their property.

The interactive protoype allowed us to observe how the users navigated through the screens. It demonstrated if the users were able to complete the scenario with ease or if the workflow needed improvement.



## Outcome

The users did not struggle to navigate the ParKings app to find and reserve parking. It was the parking host scenario that they had a hard time identifying call-to-action elements. Along with the ability to scroll down on screens for more options while listing their property.

## Prototype improvements.

#### **Issues**:

1 tester did not understand what type of action they needed to take

1 tester did not scroll down

3 testers overlooked the save draft option

3 tester failed to add compact spaces to ... their business listing



+ Motorcycle spaces

#### **Improvements**:

The wording changed to give the user instructions on what to do

The text color & weight changed for easier contrast

The wording changed for a more accurate representation of the CTA

The color of the text changed to our main action blue color to indicate the selection success



A scroll indicator is added to better communicate that functionality

The wording changed for a more accurate representation of the CTA



# Identifying product approach to accessibility and user research

Company: C-Hear

## **Project Summary**

This research plan was a class project from Southern Methodist University's user experience certificate program. With a three week timeline and a team of four people, our task was to work with an existent client to help find a more humanitarian approach to expand product accessibility across other industries.

## **Shared Responsibilities**

- Managed group responsibilities
- Qualitative research study
- Conducted digital user interviews

## Results

We found that patients with sensory disabilities struggle to get a high-quality healthcare experience. Utilizing C-Hear's CHIF product features would allow to send medical images and audio of diagnoses, test results, and home-care instructions in a single file. All while being HIPAA compliant, this further expands the client's horizon in offering accessibility for another industry's needs.





## **Company Overview**



An accessible way to share and secure content

## C-Hear Intelligent Format (CHIF) Files are the Future of Data

Our vision is continuous innovation on behalf of our customers and partners throughout all industries. The CHIF showcases more than just audio embedded images. It is delivering data mobility with built-in security unlike anything else available. As a universal data container, we believe that the applications are endless.

Once they are written and encoded, CHIFs cannot be changed or altered. In data science terms, this singular quality can make version tracking and security simple and straight-forward. Every file has its own unique ID making CHIFs almost impossible to be copied without your knowledge, helping organizations maintain the integrity of the files while controlling access to data.





### Process

## Discovery & Research

Researched healthcare accessibility pain points.

Started empathy immersion with user interviews to understand sensory imparied internet experience.

Created a **persona** to complete research artifacts.

Practiced empathy by using an empathy map and journey map to further understand user pains and gains. PS

Assessed elements from journey map to determine opportunities and "big ideas".

Selecting product direction utilizing CHIF product capabilities to best solve healtcare accessibility pain points.

Reaching product clarity.

## Product Strategy

## Experience Design

Illustrated a **storyboard** to explore user interaction with product.

Created **low-fidelity prototype** to help stakeholder visualize a possible adaptation of product interface.

## Discovery

## What happens when people with sensory disabilities enter the healthcare system?

"Persons who are blind or have low vision face special challenges in obtaining care ... [among them] communication barriers ... and information barriers, including receiving written materials in inaccessible formats."

- National Institutes of Health - National Library for Biotechnical Information

"There are four points at which patients experience barriers to access in primary care: finding a doctor, getting an appointment, entering and using the facilities in the practice, and receiving a reasonable standard of care."

- National Institutes of Health - National Library for Biotechnical Information

## The Challenges For Doctors

Best practices dictate that doctors need to allot considerably more appointment time to accommodations when treating patients with sensory disabilities.

- Reference: Icahn School of Medicine at Mount Sinai





# Understanding how users, with a sensory impairment, navigate the internet.

Having no prior knowledge to the experiences of our target users, we had to educate ourselves to truly be able to practice empathy.

Each member of the group **digitally interviewed** two individuals with some sort of sensory impairment. This was to understand what sort of pain points they experience or if they required aid, whether it is from a machine or person.

Gathering this information helped us be able to complete the rest of the research tools, such as **creating a persona**. We based the persona mostly on a specific interviewee as they were considered the kind of "exteme user" we wanted to focus on.



## Research



# Liam

**Age:** 24 Job: Student Location: Dallas, TX

### **Personality**:

"Accessibility is a human right. One day the internet will include everyone automatically."

### **Constraints**:

- Totally blind and receives all his media input via audio or through human intervention (e.g., a friend or relative to read or describe for him).
- Technological limitations of his screen reader.

#### **About Liam**:

### **Frustrations**:

- Videos that don't include additional information for the blind.
- Most infographics don't include the image text in their alternate text.
- Websites with too many images are difficult to understand either because of missing information or too much of it.

Liam is a 24-year-old graduate student living in Dallas. Liam has been blind since birth and has developed a number of special coping mechanisms for dealing with media of every kind.

The university's course management system, Canvas, is a big source of frustration for him, because it can't read his homework if it's in a PDF file. He has to seek outside help to convert the file into a Word document, just to meet system requirements.

His love of documentaries is tempered by the fact that most of them don't have alternate text for images – which means someone has to describe the visuals that go with what he's hearing.



# Understanding the user experience of entering the healthcare world.

Using Liam, the persona, as the user we created an **empathy map** to find out what they would experience finding and booking a new doctor appointment.

### Says

- My screen reader won't pick up the information.
- When will they make their information accessible to me?

### Thinks

- They really don't care about people like me.
- I wish I could just do this by myself.

### Does

- Calls someone over to help.
- Emails the doctor.

### Feels

• Angry, frustrated, dependent, annoyed and helpless.



## Understanding the user experience of entering the healthcare world.

Furthermore, we created a journey map and repeated the same scenario as before. This was to find more pain points throughout the healthcare experience and the **opportunities** to pursue.

#### **Pain Points**

- Screen readers don't recognize certain files.
- Lack of independence when having to rely on abled assistants like friends or family members.
- Websites may not conform to ADA regulations, which slows the process of receiving and understanding information.

### Opportunities

- Make a library to track CHIFs for data purposes with personalized archiving capabilities.
- Collect all of the doctor's notes in a secure, personalized file that can be accessed by anyone with an impairment or disability.
- Deliver easily accessible patient information quickly to minimize healthcare system traffic.



## How might we use CHIFs to communicate better and faster with our patients and their families?

The journey map helped us discover opportunities that utilize our client's product capabilities well. Medical professionals could provide high-quality care while saving time, patients with disabilities could keep more of their independence in managing their health, and hospitals and clinics could help patients get the most from remote visits and home care.

Make a library to track CHIFs for data purposes with personalized archiving capabilities.

Collect all of the doctor's notes in a secure, personalized f that can be accessed by anyone with an impairment or disa

Deliver easily accessible patient information quickly to minimize healthcare system traffic.

	Medical Messenger Includes the ability to share: • DICOM-format medical images
file ability.	<ul> <li>(X-rays, sonograms, MRIs, etc.)</li> <li>Sound AND vision from ECG scan</li> <li>Voice readouts</li> <li>Transcriptions</li> <li>Detailed doctor's notations, including prescriptions and treatment plans</li> </ul>





# A patient with disabilities is now able to see and hear their medical information on their patient portal without someone's help.

**Product Clarity** 



Creating a storyboard to explore and visualize the interaction of the user with the CHIF Medical Messenger.



Liam is blind. He broke his leg when he was involved in a car accident.

leave home for physical therapy.





Fortunately, his doctor uses C-Hear. With the CHIF Manager, she can create a secure, personalized image file to describe Liam's injury and prognosis, in her own voice.

Creating a storyboard to explore and visualize the interaction of the user with the CHIF Medical Messenger.



Liam can hear the doctor describe his X-Ray in detail on his patient portal without anyone's assistance.

Additionally, he can access the details of his prescribed physical therapy regimen, so he can do it at home, independently.



Liam takes charge of his own recovery. His doctor provides high-quality care in a shorter time frame. And the hospital helps a patient stay home to recover.





## Low-fidelity prototype.

Although healthcare facilities use patient portals that differ from each other greatly, the CHIF file would provide the needed accessibility each time.

This prototype showcases a possible look of the structure of the CHIF Medical Messenger.

Shown is an example of an ultrasound result that a patient would receive. Normally screen readers would not be able to read the image of the ultrasound.

This file would include a doctor's voice explaining everything or alternatively provide text, including image alt text, that a person or screen reader could access.





#### TM

# Get in touch!

I'd love to have the opportunity to chat and answer any questions you might have!

Here are the best ways to reach me:





## Give me a call\*:

(956) 346 - 4363

#### \*

Due to currently living in a metal barndomini home not all calls actually make it to my pho while inside. For now, please reach out via e to make sure I do get your message!

## Linkedin:

www.linkedin.com/in/pedrozendejas

	•	
nun		
em	ail	