PORTFOLIO

UI/UX DESIGN

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Verbal

Research, UI/UX

Verbal is a mobile application that provides an interactive way to learn a new language by connecting with native speakers around the world.

Verbal.

Practice any language at your convenience

What is Verbal?

Verbal is an interactive way to learn a new language by connecting with native speakers around the world!

- Learn a language with video, text, chat, and more.
- Join a global community of coaches and speakers.
- Practice the topics of your choice with natives.
- Test your conversational skills with fun games.

Our Design Process

Our product design process consists of three stages: user research, UX design, and usability testing.

USER RESEARCH

Frame the opportunity and understand customers, their context, and pain points.

UX DESIGN

Explore ideas/options and design concepts based upon our research.

USABILITY TESTING

Determine how easy a product is to use and learn and make changes to it.

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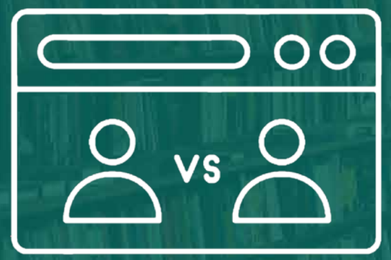
User Research

Understand customers, competition, and the opportunity

Our Research Methods

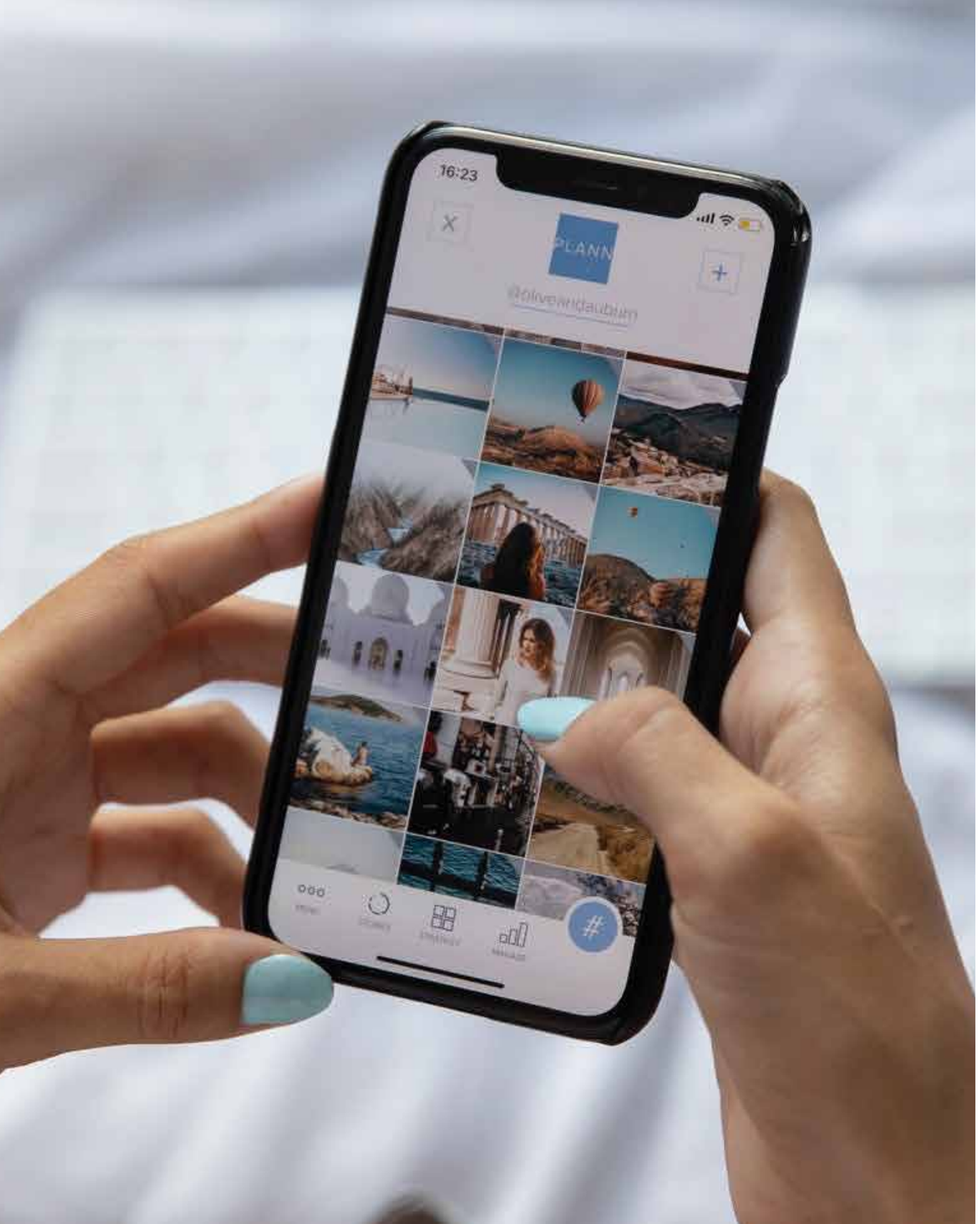
Our research identified key pain points for our users and discovered competitor gaps.



COMPETITOR ANALYSIS

USER INTERVIEWS & PERSONAS

USER JOURNEY MAP



Marketplace Scan

Language learning is either in the classroom or online with an app. This leaves open opportunities for speaking practice and grammar lessons in person.

Most Popular Apps

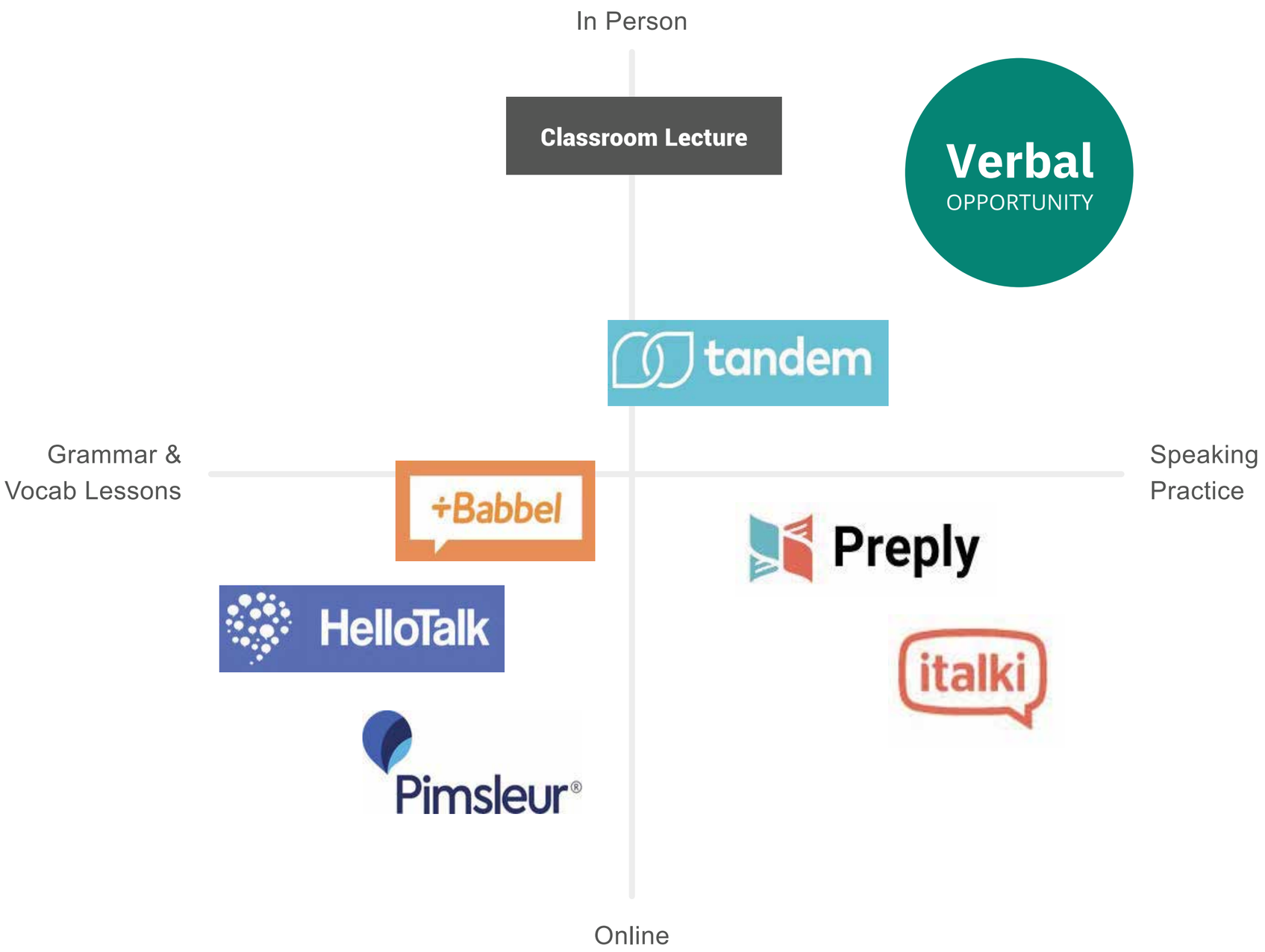
tandem, +Babbel, HelloTalk, Pimsleur®, Preply, lingbe, italki

How We Reviewed Them

- Heuristic inspection to determine opportunities
- Feature-based analysis to identify gaps
- Comparison of learning style options in each app

Competitive Gaps

Most language apps focus on either providing content for language learners or providing a platform for language exchange. They fail to provide language learners with an app that will aid them in becoming fluent and tracking their progress.



Feature-Based Inspections

Verbal can differentiate itself from competitors by closing the gaps found in language apps and be the all-in-one tool people need to reach their fluency goals.

	tandem	lingbe	Pimsleur	+Babbel	HelloTalk	italki	Preply	Verbal.
Vocabulary and Grammar Building			★	★	★			★
Level Proficiency Test				★				★
1-on-1 Online Sessions	★	★		★	★	★	★	★
Dialogue Practice			★		★	★	★	★
Language Proficiency Certificates	★							★
Language Topic Selection		★	★		★			★
tutor Reviews	★					★	★	★
Local in-person sessions	★							★

Learning Styles (VARK)

We looked at secondary research to understand different learning styles or preferences and how to apply them to increase app engagement.

VISUAL

- Learns best with pictures, videos, & graphs
- Take in information best with strong visuals
- Prefers to draw ideas to explain themselves
- Color, shape, and aesthetics are very important to them

AUDITORY

- Learn best by hearing information
- Take in information best with lectures or deep discussions
- Explain their ideas by talking
- Needs to repeat information to remember

READING

- Learns best from information displayed as words or text
- Takes in information by note-taking and categorizing data
- Enjoys making lists and creating presentations
- Prefers learning from textbooks

KINESTHETIC

- Learns best by touching and doing
- Takes in information best with hands-on experiences
- Prefers application over theory
- Needs to take in information with all five senses

Accounting for Different Learning Styles (VARK)

We examined how current features cater to the needs of users' learning styles and how we could further enhance their learning experience and increase engagement.

	VISUAL	AUDITORY	READING	KINESTHETIC
Vocabulary and Grammar Building			★	
Level Proficiency Test			★	
1-on-1 Online Sessions	★	★		★
Dialogue Practice		★		★
Language Proficiency Certificates	★		★	
Language Topic Selection			★	
Instructor Reviews	★		★	
Local in-person sessions	★	★		★
MAKE THE EXPERIENCE BETTER WITH:	Videos	MP3 Notes	Descriptions & Notes	Games

Accounting for Neurodiversity in Learning

Our secondary research also included examining different neurotypes, and how our app could be optimized to account for how different minds process information when learning.

Autistic Spectrum Disorder

NEEDS

- Flexibility or customizability in their learning environment
- A controlled environment with little distractions
- Patience and empathy from instructor

Dyslexia

NEEDS

- Emphasis on auditory information and verbal discussions
- Critical information conveyed in several forms other than print

ADHD

NEEDS

- Topics of interest to help maintain their attention
- Unrestricted movement and freedom to fidget
- Consistent routine

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SOLUTIONS

- Ability to customize sessions to student's desired needs
- Remote sessions so students have control of their learning environment
- In depth one-on-one instruction

Language Learning Stats

ONLINE LANGUAGE LEARNING MARKET IS WORTH ABOUT:

12 Billion USD

AND GROWING...

SET TO GROW TO

25 Billion USD

BY THE YEAR 2025

PEOPLE LEARNING A FOREIGN LANGUAGE RIGHT NOW

1 Billion

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Language Fluency Has Various Meanings

Whether you are a serious or leisure learner, a frequent or seldom traveler, Verbal can help you connect with native or professional tutors to reach your fluency goals.

Key Insights From 11 User Interviews

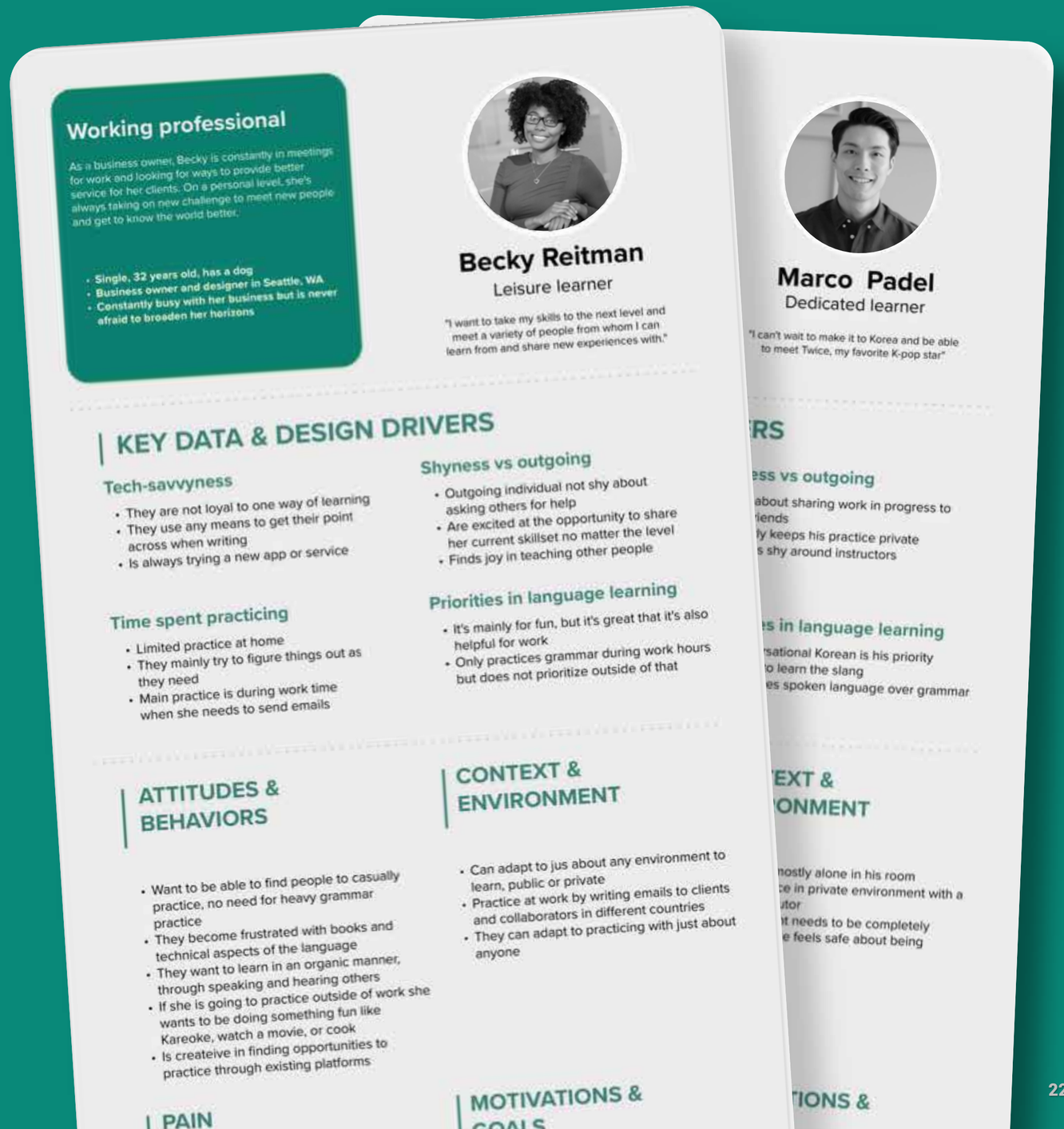
We interviewed a variety of language learners to learn more about their language learning **process** and where their major **challenges** lie. With their insights we built empathy maps and user personas.

- There was a wide range of **shyness and confidence** in learners
- People **immerse in the culture** of the language through social media, music, TV shows and movies with subtitles
- **Expression is the ultimate proficiency**
- **Internal motivation** is stronger than the external nudges from apps
- The classroom approach is not engaging enough for some learners to continue

Key Insights From Our User Personas

ABOUT OUR PERSONAS

- Research based personas distilled from 11 user interviews
- Created extreme users and identified key design drivers for each
- Validated with real users



Working professional

As a business owner, Becky is constantly in meetings for work and looking for ways to provide better service for her clients. On a personal level, she's always taking on new challenge to meet new people and get to know the world better.

- Single, 32 years old, has a dog
- Business owner and designer in Seattle, WA
- Constantly busy with her business but is never afraid to broaden her horizons

Becky Reitman
Leisure learner

"I want to take my skills to the next level and meet a variety of people from whom I can learn from and share new experiences with."

KEY DATA & DESIGN DRIVERS

Tech-savvyness

- They are not loyal to one way of learning
- They use any means to get their point across when writing
- Is always trying a new app or service

Shyness vs outgoing

- Outgoing individual not shy about asking others for help
- Are excited at the opportunity to share her current skillset no matter the level
- Finds joy in teaching other people

Time spent practicing

- Limited practice at home
- They mainly try to figure things out as they need
- Main practice is during work time when she needs to send emails

Priorities in language learning

- It's mainly for fun, but it's great that it's also helpful for work
- Only practices grammar during work hours but does not prioritize outside of that

ATTITUDES & BEHAVIORS

- Want to be able to find people to casually practice, no need for heavy grammar practice
- They become frustrated with books and technical aspects of the language
- They want to learn in an organic manner, through speaking and hearing others
- If she is going to practice outside of work she wants to be doing something fun like Kareoke, watch a movie, or cook
- Is createive in finding opportunities to practice through existing platforms

CONTEXT & ENVIRONMENT

- Can adapt to jus about any environment to learn, public or private
- Practice at work by writing emails to clients and collaborators in different countries
- They can adapt to practicing with just about anyone

PAIN

MOTIVATIONS & GOALS

Marco Padel
Dedicated learner

"I can't wait to make it to Korea and be able to meet Twice, my favorite K-pop star"

LEISURE LEARNER

Marco Padel

"I can't wait to make it to Korea and be able to meet Twice, my favorite K-pop star"

He's made plans to visit places of interest, so he learns on his spare time. He is open to practicing aloud, but only by himself, because of his introverted nature.

DESIGN DRIVERS

- Prioritizes spoken language over grammar
- Is not limited by apps available to learn a new language
- Is hesitant to pay for an app subscription

PAIN POINTS

- Cannot find tutor that caters to his specific needs
- Current apps are limited in what they can teach him
- Cannot find platform that meets his needs at his current level of proficiency

GOALS

- To be able to hold a conversation
- Needs to connect with tutor on demand
- Needs to know material that will be covered

SERIOUS LEARNER

Becky Reitman

"I want to meet a variety of people from around the world and share new experiences with them"

As a business owner, Becky is constantly in meetings for work and looking for ways to provide better service for her clients. On a personal level, she's always taking on new challenge to meet new people and get to know the world better.

DESIGN DRIVERS

- Outgoing and not shy about practicing with others
- Is excited to share her current skill set no matter the level
- Is always excited to find a new tool to practice
- They are open to multiple ways of practicing

PAIN POINTS

- Can't find others to practice
- Does not want to waste time with grammar or textbook information during leisure time
- Values her time since she runs a business

GOALS

- Need to be able to learn at their own pace
- Need to be able to connect with a tutor on demand
- To be able to hold a conversation

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UX Design

Explore ideas/options and design concepts based upon our research.

Uncovering Key Pain Points

We tracked the user journey to identify which areas gave them the most pain points and challenges

STAGE	LEARN A LANGUAGE	SEARCH FOR TOOLS AND METHODS	PRACTICE	ANALYZE PROGRESS
TASKS	• Watching videos • Reading books • Classes • Using language apps	• Online searching • Asking people • App store • Social media	• Pronunciation practice • Meeting people • Watching movies / TV shows • Listening to music	• Teaching / helping others • Performing language activities • Tests and quizzes
CHALLENGES	• Don't know where to start • Boring & too slow • Lack of engagement	• Apps are limited in what they teach • Content is not personalized • Cultural context is not included	• Can't find people to practice with • Apps are not language partners	• Not sure how to track progress or measure fluency • No test to know what level I am at

CONNECTING LANGUAGE LEARNERS

Our first key focus.

Opportunities

After identifying pain points,
we brainstormed potential opportunities
and other ways to take language learning
to the next level.

01 Make real conversations and connections when learning

02 Reward progress and build confidence

03 Keep an easy and not boring process for practicing

04 Incorporate cultural context while practicing

05 Connect local natives and new learners

Market Positioning

We examined how to position our solution in the marketplace and measure our success.

The main monetizing feature is the convenience of the app, much like Uber and Lyft allows users to use it anywhere in the world and connect instantly.

Unique Value Proposition

On demand in person language sessions with native and professional tutors.

Key Metrics

- Number of sessions
- Number of new users
- Satisfaction reviews

Revenue Streams

- 15% of pay from each session
- Advertisement on the app

The Lean Canvas

PROBLEM

- Lack of outlet for people to practice in
- Lack of human interaction
- Lack of personalized lang.
- Content quality
- Inconsistent practice

SOLUTIONS

- Personalized content
- Connecting with native
- speakers
- On demand tutors or learning sessions

UNIQUE VALUE PROPOSITION

- On demand in person language sessions

UNFAIR ADVANTAGE

- Face to face language learning interaction in your local community

CUSTOMER SEGMENTS

- Students
- Tutors (next steps)

EXISTING ALTERNATIVES

- Private lang. tutors
- Language apps
- Language classes
- Immersion programs

KEY METRICS

- Number of sessions
- Number of new users
- Satisfaction reviews
- Income

HIGH-LEVEL CONCEPT

- Verbal is language learning community that achieves fluency through a network of tutors from around the world

CHANNELS

- Word of mouth
- Advertising
- User referrals
- Social media

EARLY ADOPTERS

- Travel bloggers
- Freelance lang. tutors
- Exchange students

COST STRUCTURE

- Product
- Development
- Marketing
- Expenses
- Salaries

REVENUE STREAMS

- 15% of pay from each session
- Advertisement on the app

Our Design Methods

To create our app we developed user epics and storyboards, sketched ideas, and built a clickable prototype.

STORYBOARD & EPICS

SKETCH IDEAS

INTERACTIVE PROTOTYPE

User Epics & User Stories

Taking into consideration our users, we built epics and user stories to satisfy their unique language fluency goals.

Gain confidence

"As leisure learner I want to increase my confidence in learning and speaking a language, so that I can express myself better during my upcoming trip."

Filter tutor profiles

"As serious learner, I want to be able to filter through tutor profiles and practice with the instructor that best fits my need."

Schedule a meeting with a tutor quickly

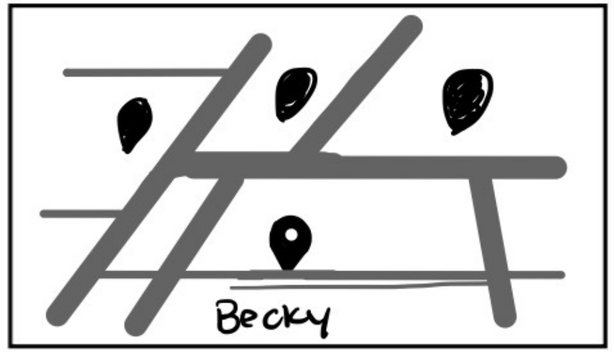
"As a serious learner, I want to be able to quickly find and meet up with an instructor to practice and go over the material that I need to present, for work."

Find language tutors near you

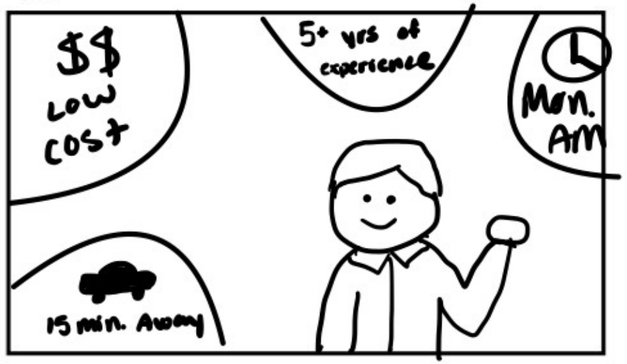
"As a leisure learner, I want to find instructors near me at any given location so that I can practice speaking the language of the region I am visiting."

Scenario: Becky Needs a Tutor

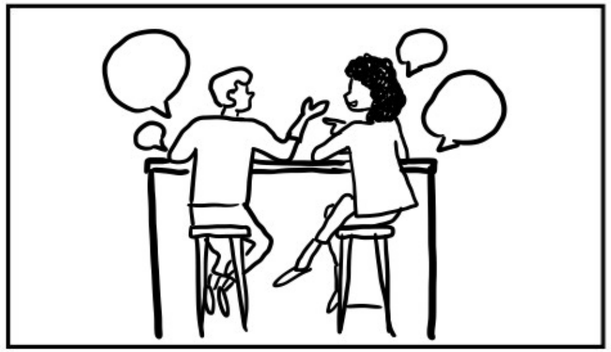
Becky wants an all-in-one app to practice Spanish with natives and get her questions answered to feel better prepared for her upcoming trip to Spain.



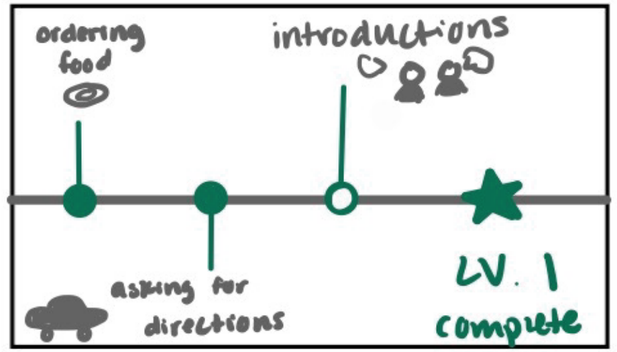
She opens the app Verbal to find language tutors near her.



With the app, she can look over instructor profiles and filter based on their price, availability, and instruction methods.



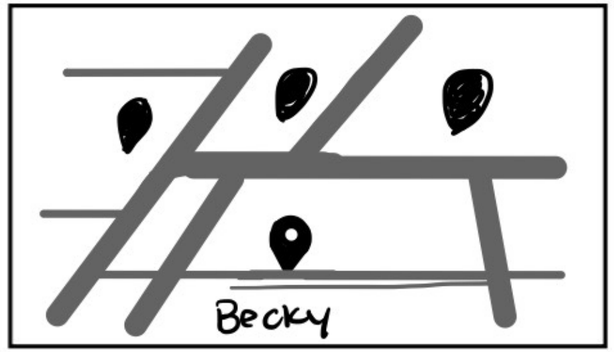
She schedules a lesson with a Spanish instructor just 15 minutes away from her at a local coffee shop. She begins practicing Spanish.



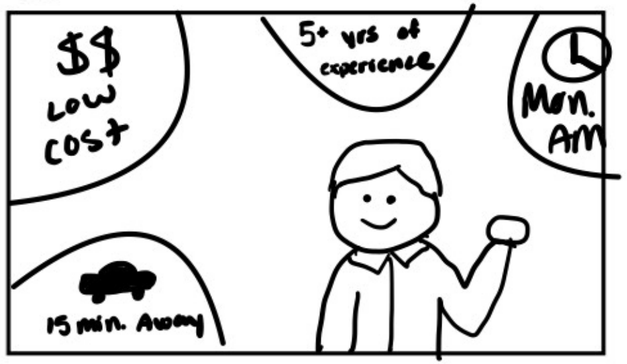
After the session, her tutor uploads the material on the app for Becky to review. Becky can also review past sessions and monitor her progress through the app with badges.

Becky finally has a tool she can use to practice speaking Spanish and monitor her progress so that she can express herself more confidently in her upcoming trip to Spain.

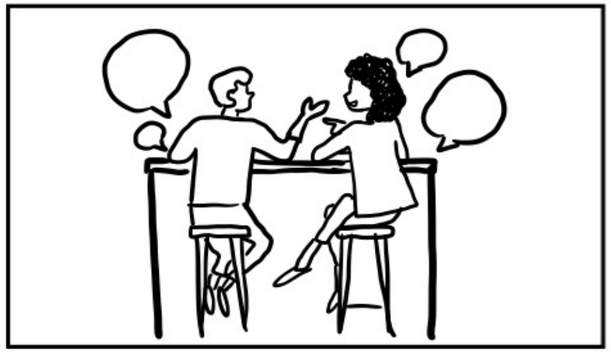
Solutions: Becky Needs a Tutor



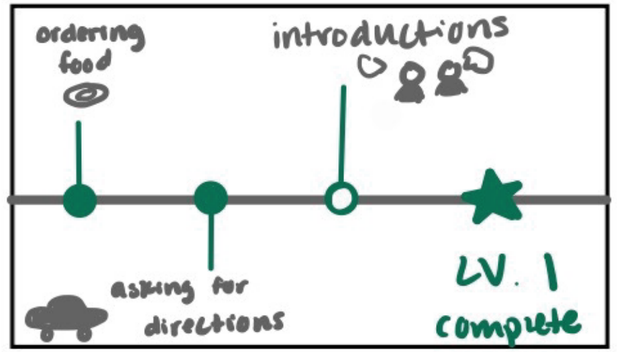
Find tutors nearby or online



Filter through tutors



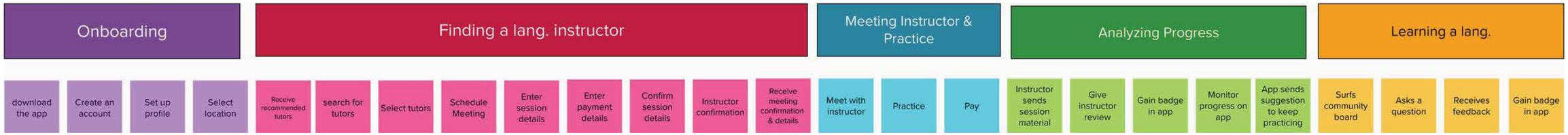
Book meeting with tutor and specify details



Monitor progress and review notes

End-to-End Workflow Progress (V1)

WORKFLOW v1



DETAILS

- Consists of five stages
- Main focus is to connect language learners and provide them with platform to practice at their convenience with native speakers.

CHALLENGES

1. Home screen going directly to search for tutors was overwhelming and with too much information.
2. Unclear if tutors were only nearby or online.
3. Uncomfortable paying up front for session.
4. Make scheduling more concise.
5. Will there be a chance to review tutor after session?
6. How will users interactive with the badge system?

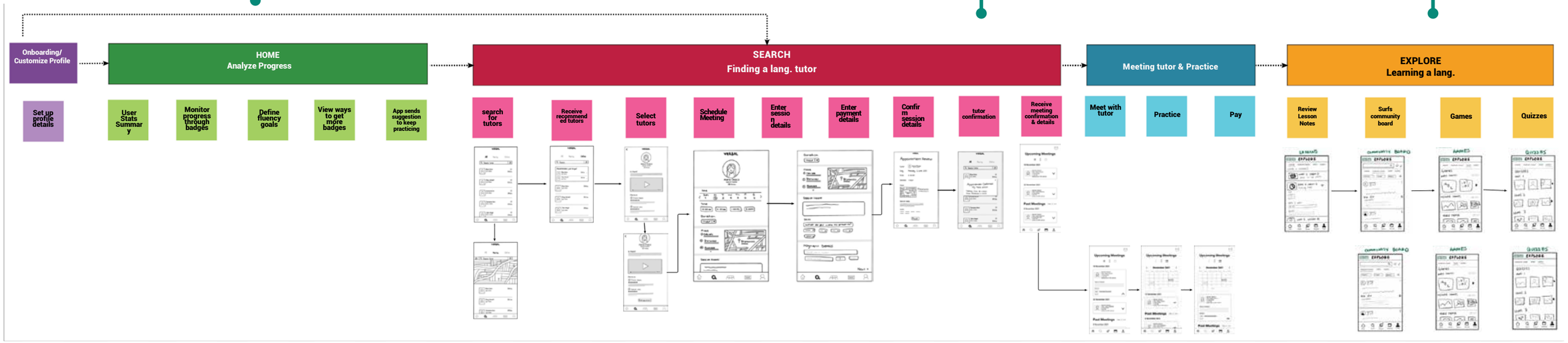
End-to-End Workflow Progress (V2)

WORKFLOW v2

Added a Home Section

Simplified the booking process

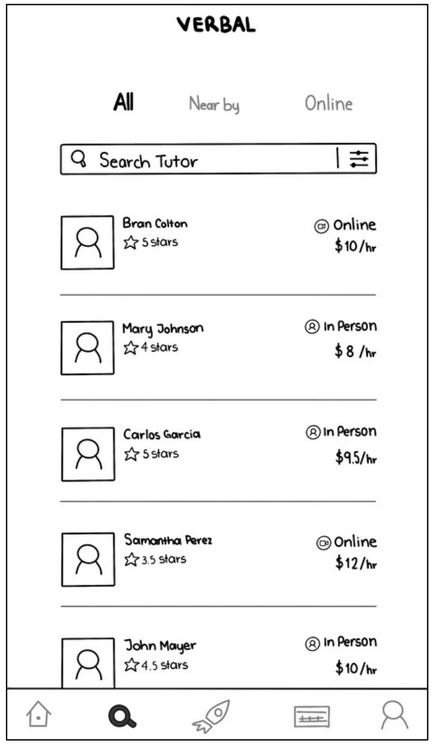
Opened the Explore tab for language learning

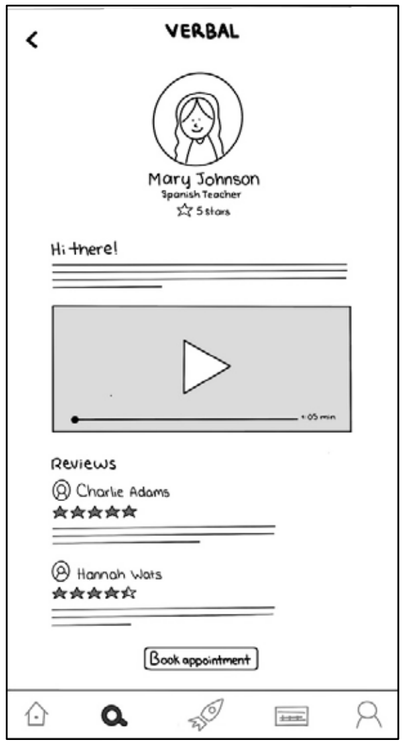


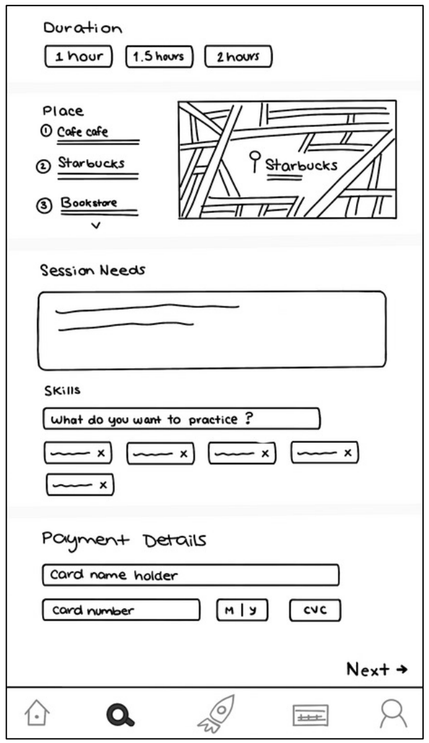
Booking a Tutor

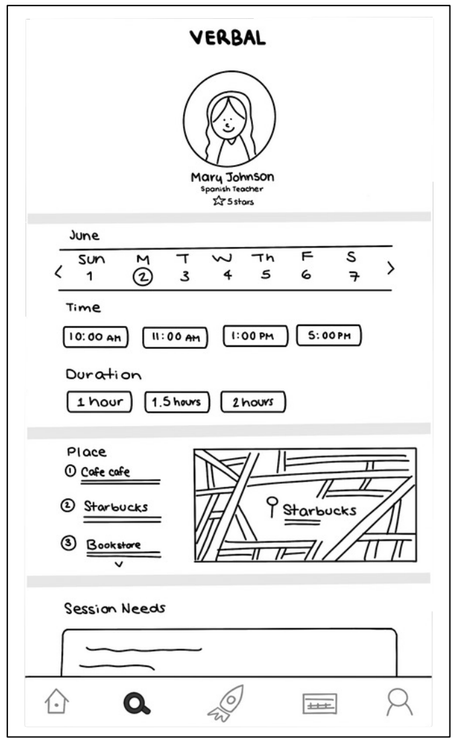
WORKFLOW WITH SCREENS

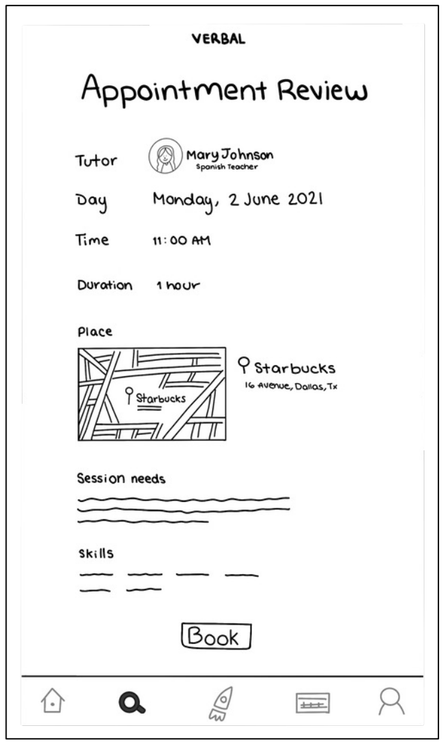
Find Tutor ▶ Review Tutor Details ▶ Book Tutor ▶ Select Availability ▶ Confirm Session







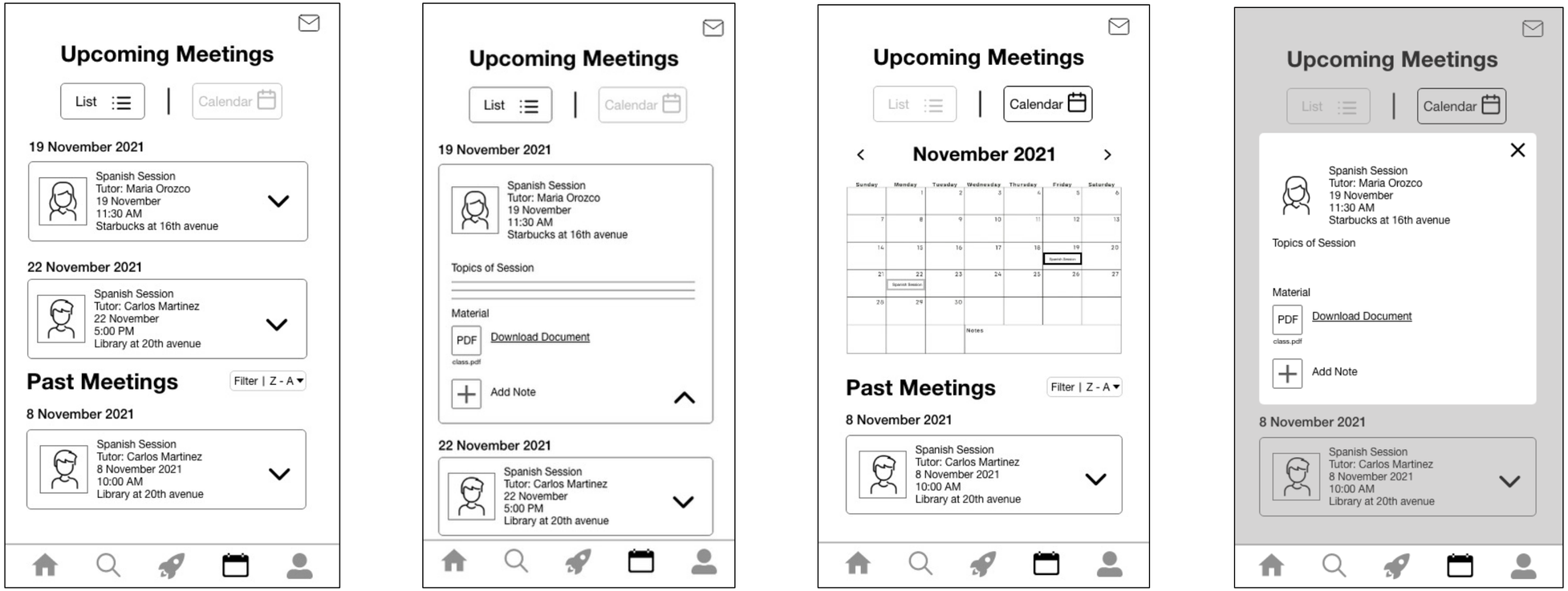




Reviewing Sessions

WORKFLOW WITH SCREENS

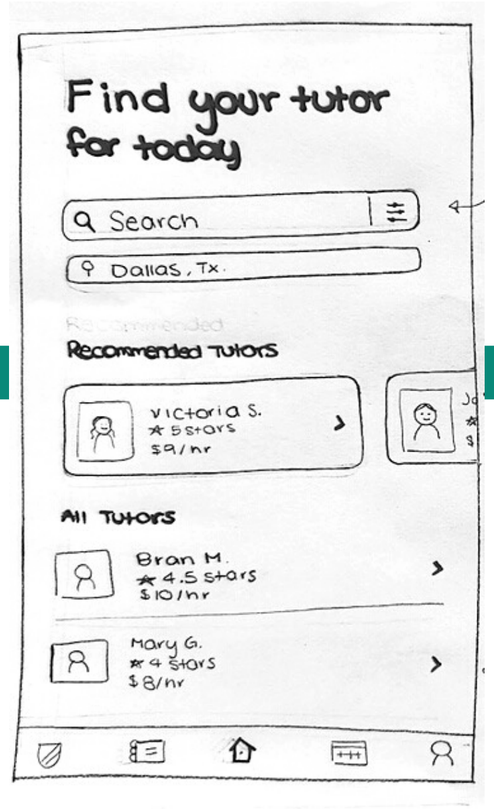
Open Meetings ▶ **View Session Details** ▶ **View Calendar** ▶ **Access Lesson Notes**



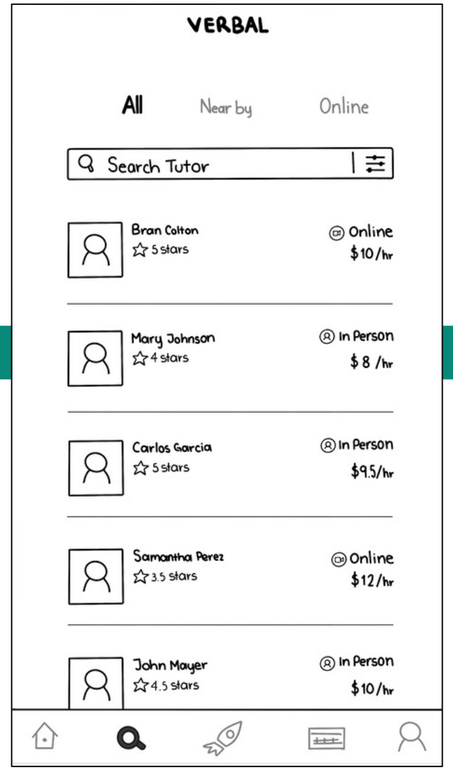
Refining Our Design: Finding Tutors

Our designs went through continuous refinement as we learned more.

1 SKETCHES



2 WIREFRAMES



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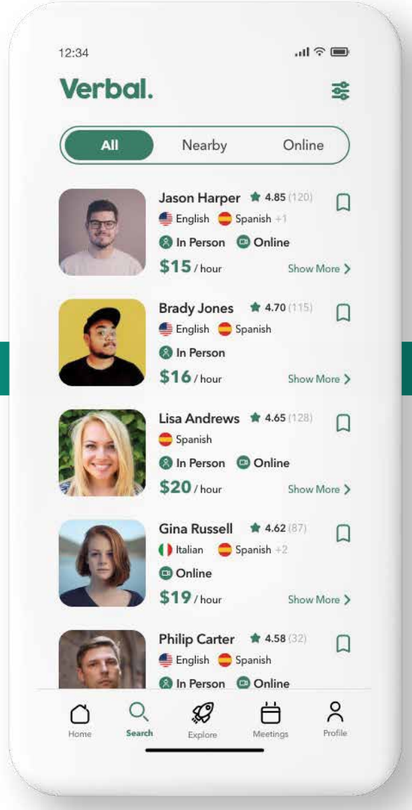
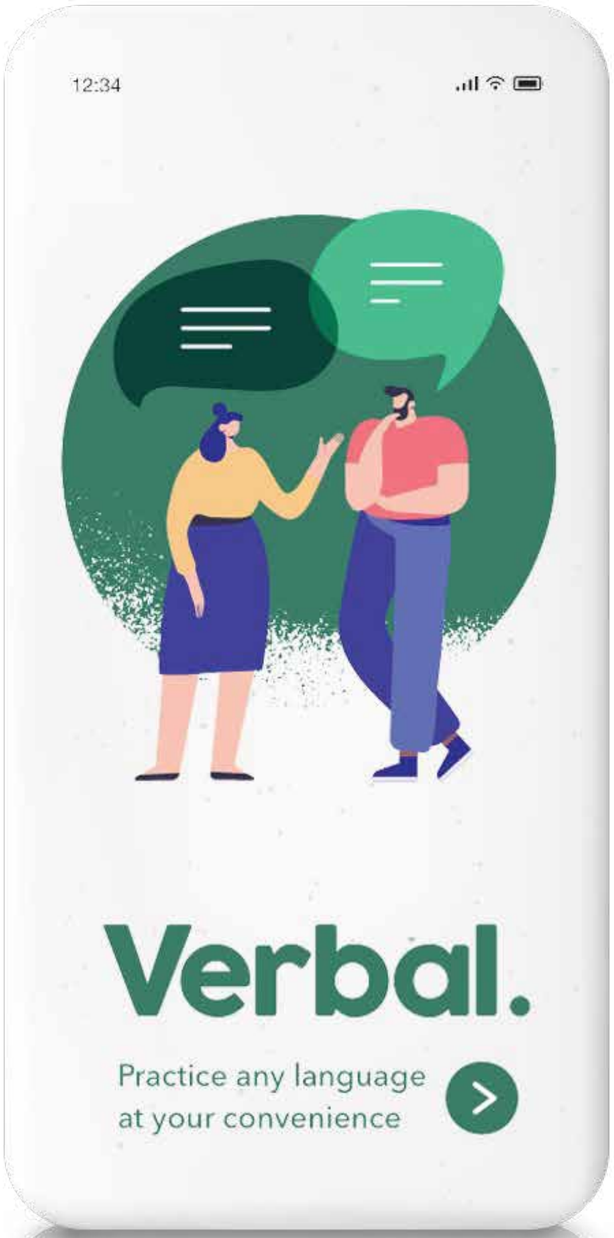


Verbal Prototype

Quick Demo

VIEW



Verbal.

Usability Testing

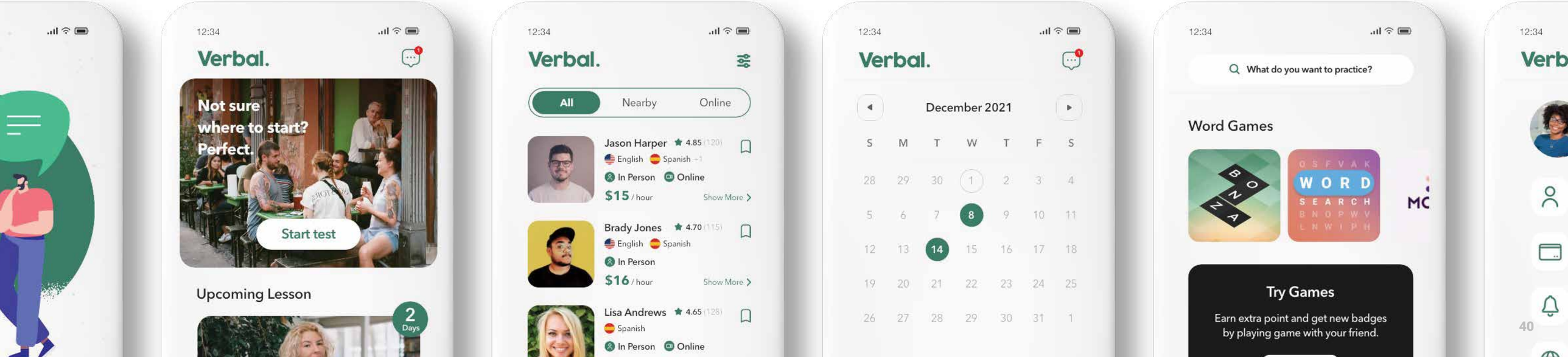
Validate our design with real customers to improve it

Usability Test Overview

The following is an overview of the usability tests conducted to validate our prototype.

HIGH - LEVEL OVERVIEW

- Blink Test
- Initial Impressions Survey
- User Scenario Tests
- Post-Scenario Questions
- SUS Survey
- Post-Test Survey



Usability Test Scenarios

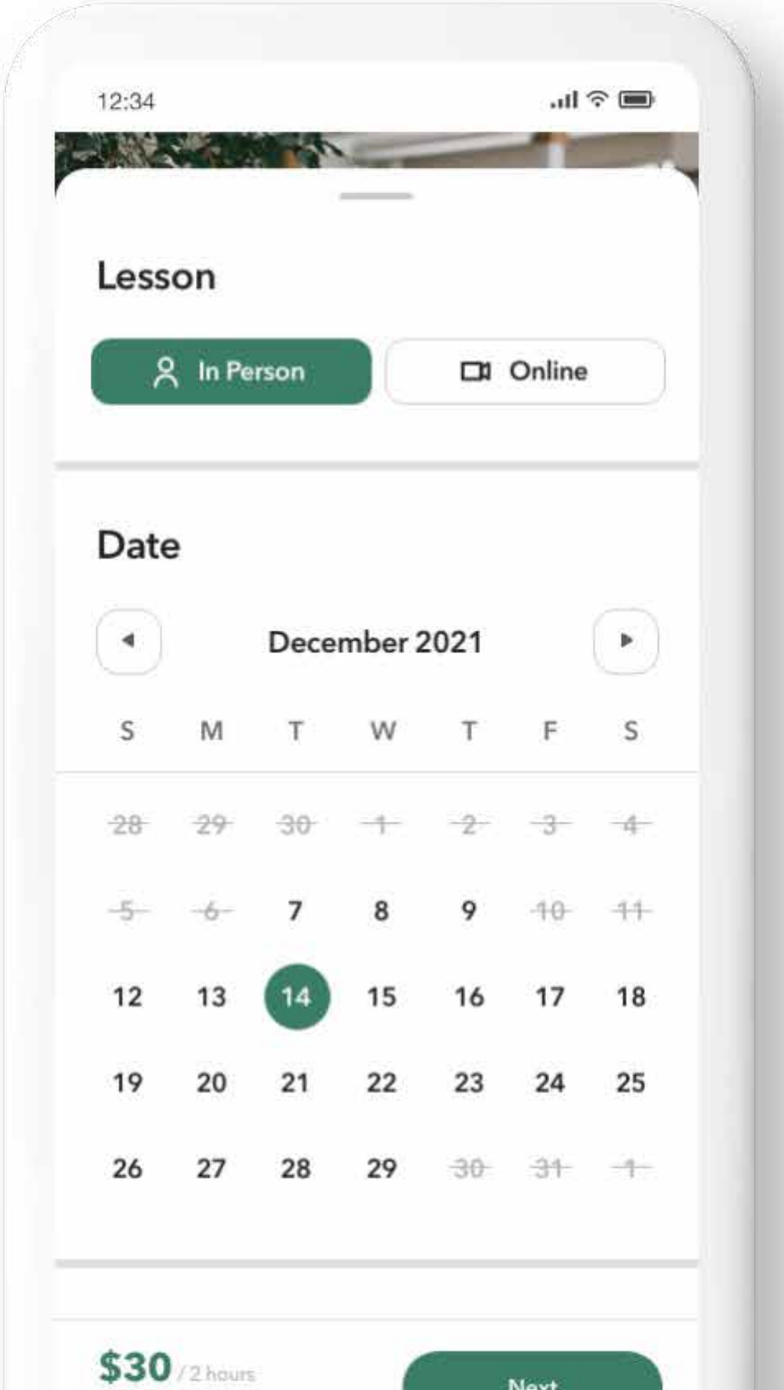
We tested a detailed scenario based on our personas with users to ensure that the usability of our workflows.

SCENARIO

You want to practice your Spanish before a big meeting next week and want to find a tutor that will help you go over your presentation and possible questions. You want to have a 2-hour session.

GOALS

1. You want to schedule a session with a language tutor near you.
2. You want to review your upcoming sessions.



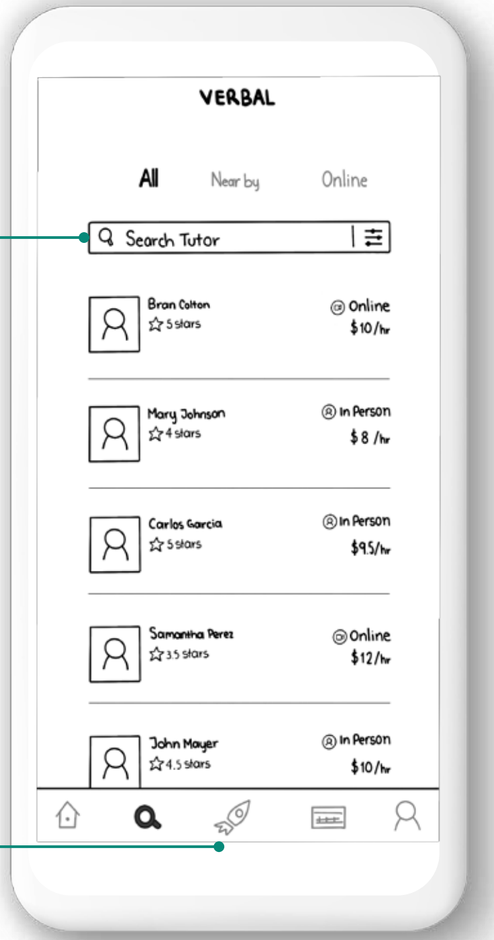
Changes After First Round of Usability Testing

POSITIVE FEEDBACK

- Generally, it was simple to use
- Good use of existing conventions
- Found information they needed relatively quick

CRITICAL FEEDBACK

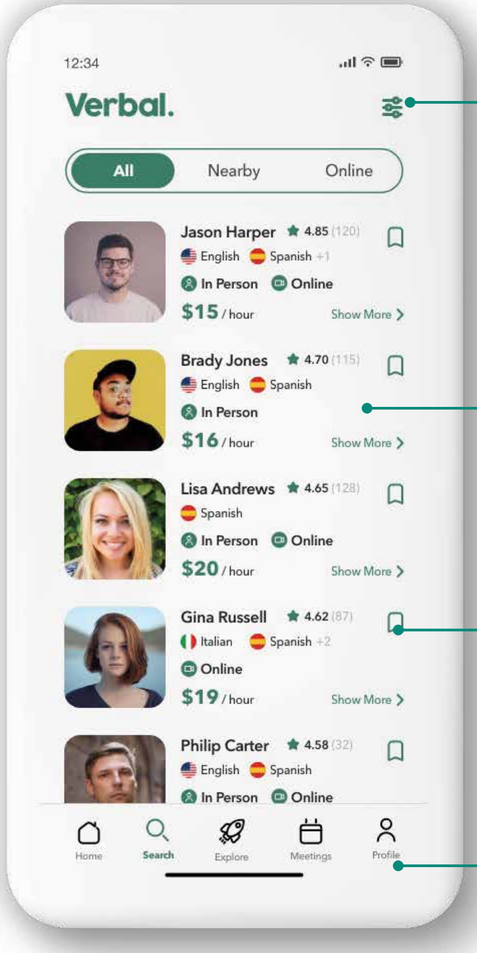
- Filter criteria needed to be defined
- Refined booking process
- Added extra information to tutor profiles



Removed Search

Labeled Explore (future steps)

BEFORE



Changed position of filter

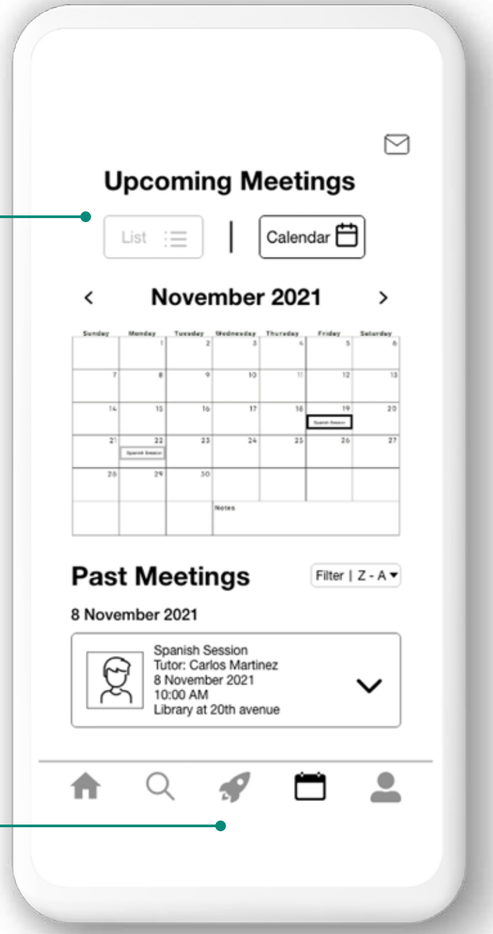
Added more details to tutor profile

Added save feature

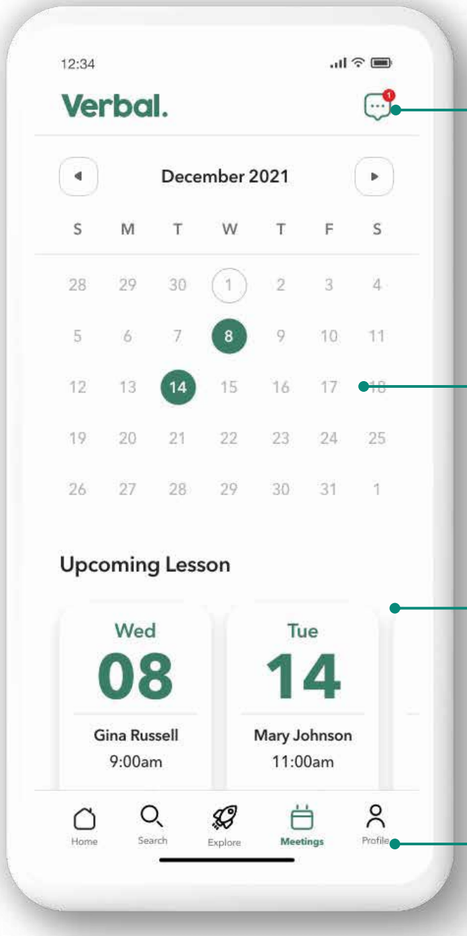
Added name to icons

AFTER

Changes After First Round of Usability Testing



BEFORE



AFTER

Removed list option

Removed Explore (future steps)

Changed icon for messaging

More visible calendar

Added Upcoming Meetings

Added names to icon

POSITIVE FEEDBACK

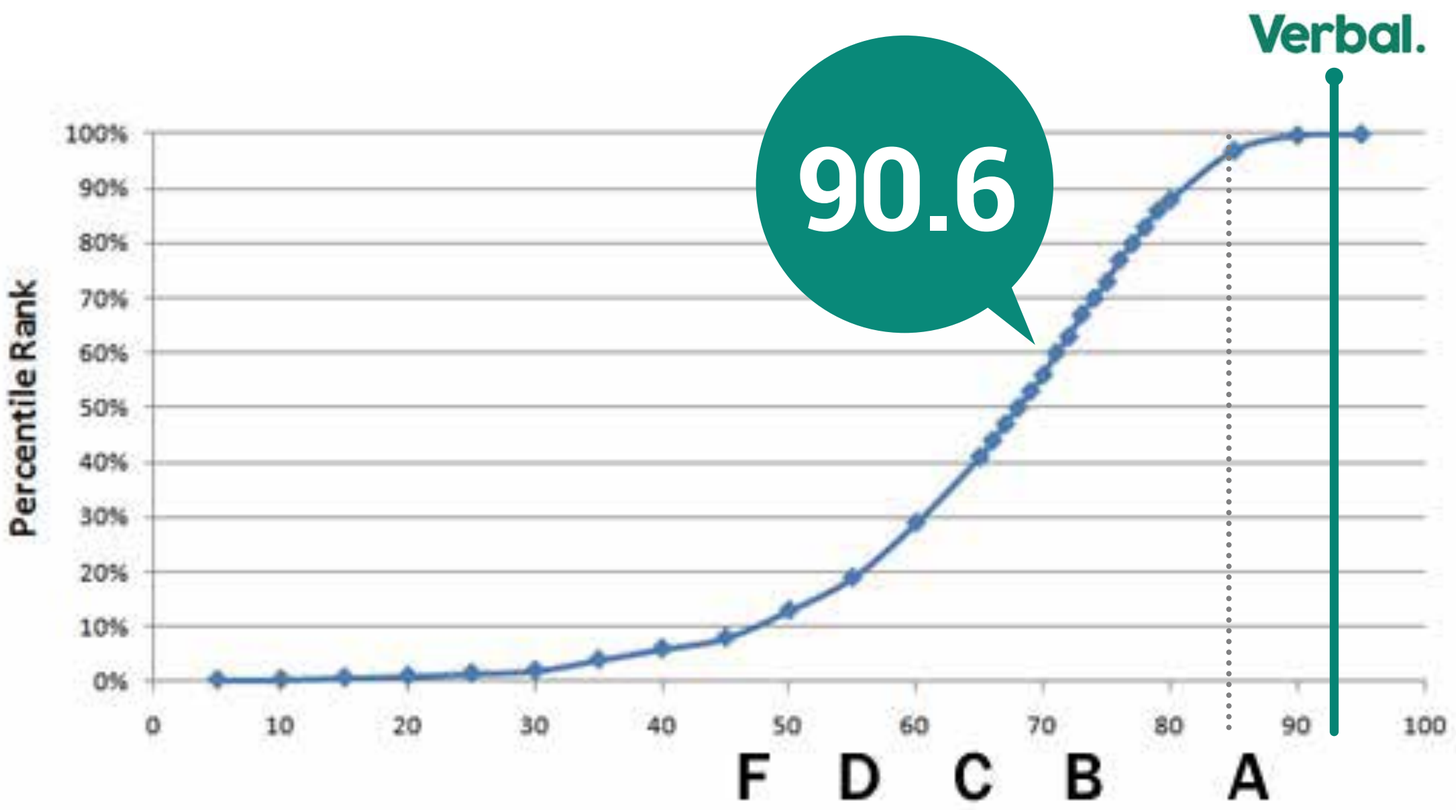
- Visually pleasing at glance
- Liked to see the price upfront
- Easy to complete task

CRITICAL FEEDBACK

- Search bar seemed unnecessary
- Explore icon and function were ambiguous and confusing
- Nav bar needed names

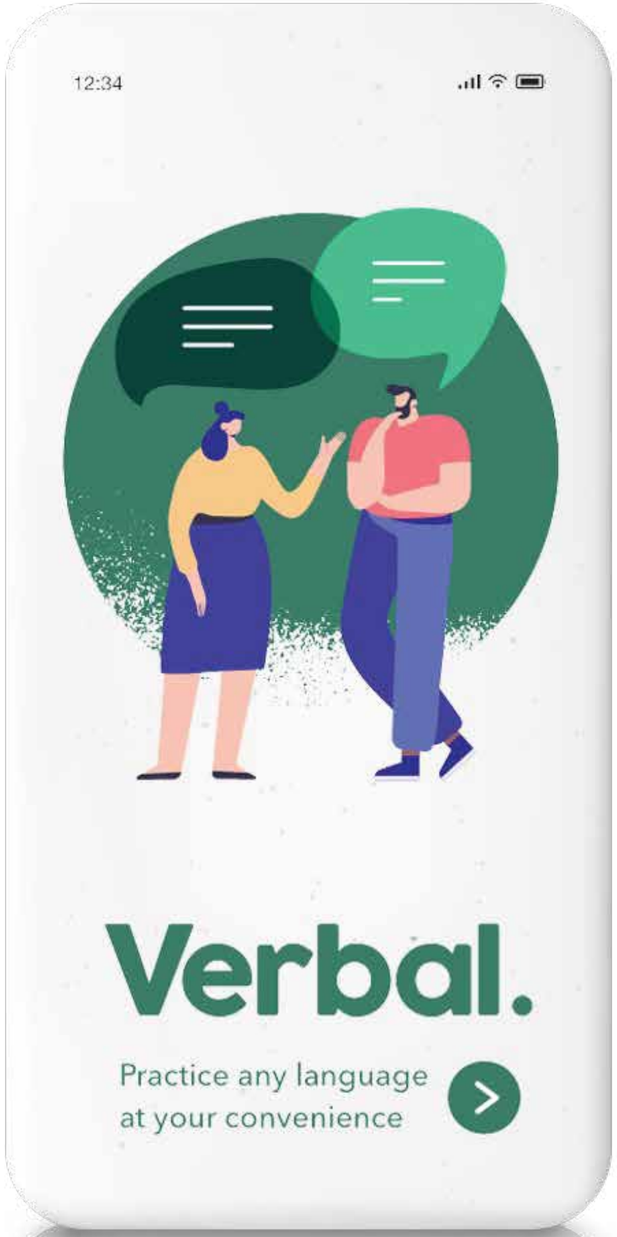
System Usability Scale / SUS

The SUS score for Verbal was a 90.6. This score shows the overall usability and learnability of the prototype. Becky may likely recommend Verbal to a friend.



SUS SCORE

- A score above 82 is where products are recommended to achieve
- Scoring at 68 is a C, and where most products score
- Scoring at anything below 51 is an F, putting you in the bottom 15%



Positive Comments

"Very easy and simple way to help someone learn another language but in a more refined way"

"I really like the concept and how it closes that gap between learning vocabulary / grammar and speaking in real life"

"It looks like a great way to learn language from a more conversational standpoint."

"Clean, serves its purpose without it being too complex"

CONNECTING LANGUAGE LEARNERS

Our first key focus.

Next Steps

We plan to continue to refine our current designs and might include the following features:

01 User Progress Dashboard

02 Community Board

03 Session Notes

04 Games and Quizzes

05 Social Media Integration

02

Sam's Club

Research, UX/Service

Conducted service design process including user research, pain points, personas, user journey maps, opportunities, storyboards to propose new ideas for the Sam's Club exit experience.

Radically Re-imagining the Sam's Club Exit Experience for Members

sam's club

Presented by UNT MA Interaction Design students in Professors Cassini Nazir and Brian Sullivan courses

Our presentation covers ...

Our Process

- Observe
- Interview
- Map
- Build
- Imagine

User Research

- **75 pictures** in our photo journal
- **22 hours** of observing members and associates
- **19 site visits** to different Sam's Club locations
- **30 pain points** identified in the journey map
- **13 stakeholders** identified in stakeholder map
- **4 personas** reviewed (includes COVID impact)

Pain Points & Insights

- **2 maps** built for Scan & Go and Self-Checkout
- **111 steps** in the current-state exit experience
- **30 pain points** identified, validated, and prioritized
- **60 opportunities** brainstormed by the project teams

New Concepts

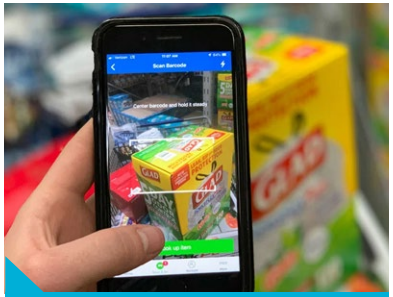
- **20** new concepts
- **20** storyboards

Appendix

- Photo journal
- Persona validation
- Interview scripts
- Service blueprint
- Stakeholder map
- Empathy immersion

1 2 3 4 5

Focus on Two Exit Processes: Increased Digital Adoption



Scan & Go

Self-Checkout

Curbside Pickup

Belted Checkout

- Broad **adoption of digital technology**
- Optimize **members' digital experience**
- Opportunities to **reduce shrink** and **increase sales**

- Future exploration of other checkout methods

Radically reimagining means ...

Orchestration	Ensure **smooth transitions** between Scan & Go, checkout, and exit phases
Experiences	Help shoppers **have a quick, pleasant** checkout and exit experience
Savings	**Reduce shrink** at club locations, during the checkout and exit processes
Service	Provide exit associates with **opportunities to better serve members**

Key Areas

Aid Associates
Improve customer service for Associates.

Empower Members
Members have choices on how they want to exit.

Save at Scale
Refine experiences & processes at scale.

Minimize shrink
Proactively prevent and minimize shrink.

22 graduate students re-imagined the exit experience through various research and design thinking methods

Observe

Interview

Tells us how people actually interact and what pain points they face in the process

- Observe stakeholders
- Visit several sites
- Shop in the stores
- Create photo journal
- Interview stakeholders
- Review personas
- Study COVID impact
- Analyze competitors

Build

Map

Identify gaps and pain points in the current process into insights for transformative ideas

- Built exit journey map
- Highlight pain points
- Determine gaps
- Brainstorm solutions
- Built a service blueprint
- Review interactions
- Identify process issues
- Brainstorm solutions

Imagine

Innovate and improve the current experience

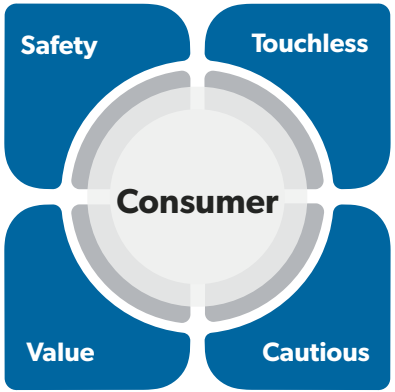
- Built new concepts
- Drew concept storyboards
- Review/update storyboards
- Present new solutions

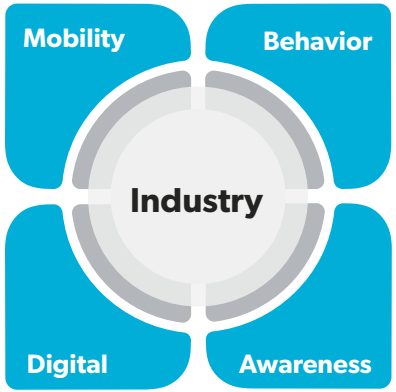
Insights from Site Visits & Interviews

Uncover user needs, goals, and pain points of stakeholders/members during exit

COVID's Impact on Retail: Safety and Digital Adoption

Secondary research revealed additional insights on how COVID-19 has impacted consumers and the retail industry.





Effects on **consumers**

- Consumers are **less optimistic** in the USA
- **Value and quality** are top reasons to try new brands
- People want **touchless** and sanitary experience
- Increase in **digital shopping** with less in-store shopping

Effects on **industry**

- Consumer **habits may not return** to pre-COVID
- **New habits emerged**, blend of home, work, etc.
- Increased **digital adoption** for day-to-day needs
- Mobility patterns changed, with **working remotely**
- Increased awareness on **health, hygiene, and safety**

Insights from 19 Site Visits

Customer Habits: Find a Fast Lane and Avoid Bottleneck at Exit

- Scan & Go and online **shoppers merge into one line,** slowing down the Exit process
- Members with **paper receipts are slower at exit** than those with the receipt on their phone.
- New Now Club members are **confused** by the exit process

Accessibility: Difficult Navigation at Checkout and in the App

- Users need to **easily find an open register**
- Checkout should be **safe, enjoyable, and accessible**
- Scan & Go needs **better navigation** for member help, an in-store map, and other features

NOTE: The photo on the right shows a disabled member struggling to use a mobile scooter

"

"We do catch shrink… Our cashiers get in a hurry. They are engaging with people. They have to sell plus, credit, renewals.

– Club Manager

"We are not doing two people at a time, due to social distancing. So I only have one on a register. Sometimes I will have a supervisor assist, but until people are vaccinated and feel comfortable, I try to keep some separation."

– Club Manager

"If you are blind, you can call in advance with a list and Sam's Club would shop for you. You'd have to pick it up [or somebody for you]."

– Associate Manager

Interview Insights: Intuitive Tech to Reduce Steps

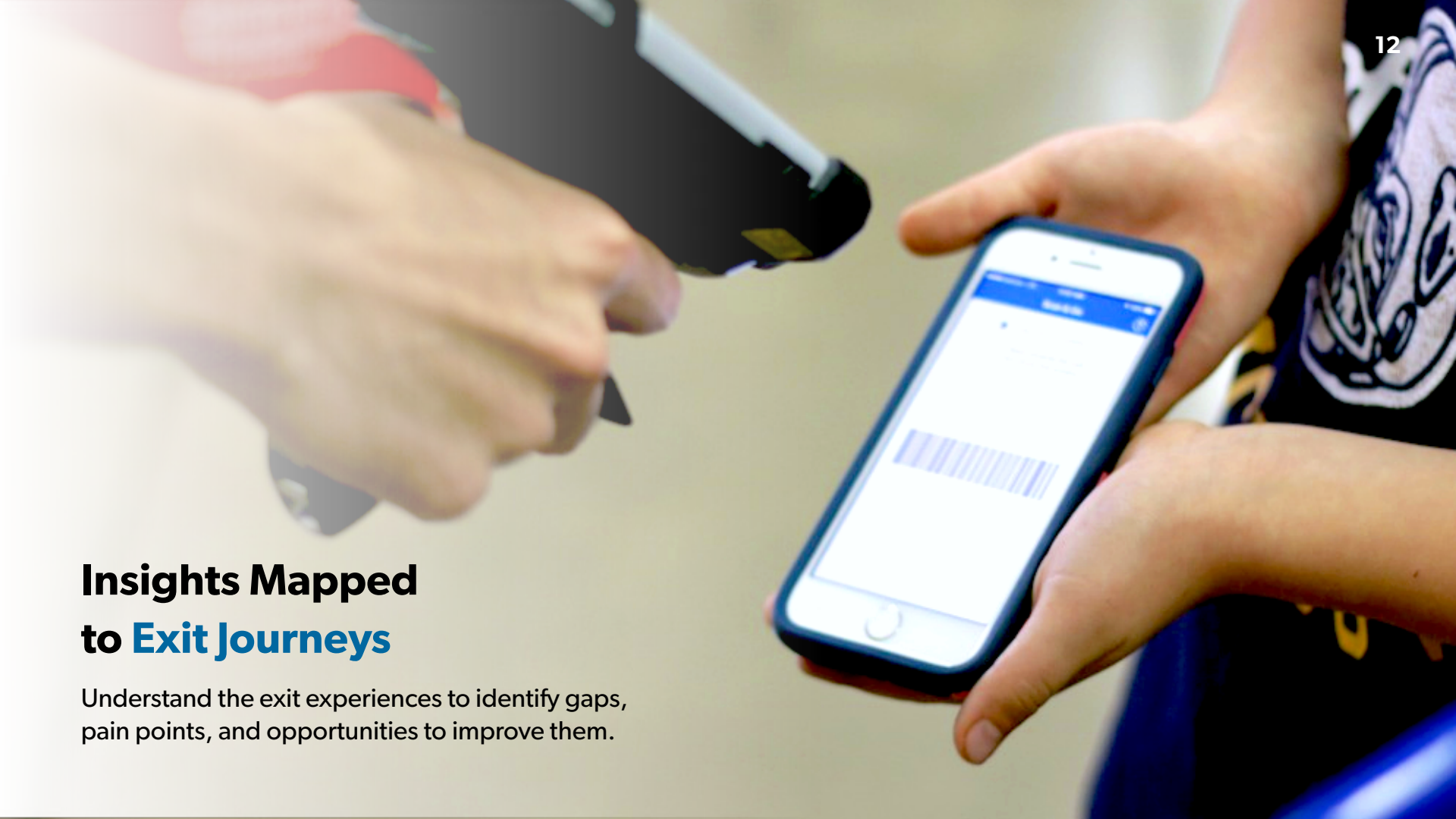
Stakeholder	**Member**	**Manager**	**Associate**
Pain Points	• Double scan at exit is frustrating • Self-checkout screens are too low • Unloading every item in the cart	• Tech is frustrating for members • Shrink happening with associates • Explain app to members	• Need help at exit when it is busy • Find ways to prevent shrink • Slow exits slows everyone down
Motivations	• Exit process to include a single scan • Higher screen to be accessible • Finding items that I want/need	• Make associates confident • Needs user-friendly technology • Needs to reduce shrink	• Quick turnaround for backup support • Better training to prevent shrink • I want the customers to leave satisfied
Implications	**A complicated exit process leaves the customer feeling frustrated, not valued**	**Tech should serve our members and employees not be a hindrance**	**Show how we trust and respect members' time when we excel at doing our jobs**

*This Interview scripts can be found in the Appendix.

Updated Persona Insights: New Shopping Habits

Persona	Elisha	Shane	Otis	Robyn
Pain Points	• Recently unemployed • Had to give up impulse shopping • Long lines in suburban stores	• Needs to invest in his new small business • Varied prices in store vs app • Not enough product reviews	• Club pickup in higher demand • Inconsistent inventory • Hard to find associates	• Her business lost revenue due to stay-at-home orders • Health concerns with COVID-19
Motivations	• Shop for quality and savings • Loyalty Programs • Discounts and coupons	• Research driven • Loves getting the best deal • Business member perks	• Prioritizes saving time • High quality in bulk • Enjoys early hours	• Prefers online shopping • Only buys what's on her list • Reduced spending due to financial stress
Implications	**Shopping priorities shifted for family**	**Efficient and accurate data informs purchasing decisions**	**Ability to save time affects business' outcomes**	**Accurate stock ensures successful online purchases**

*This Persona Validation can be found in the Appendix.

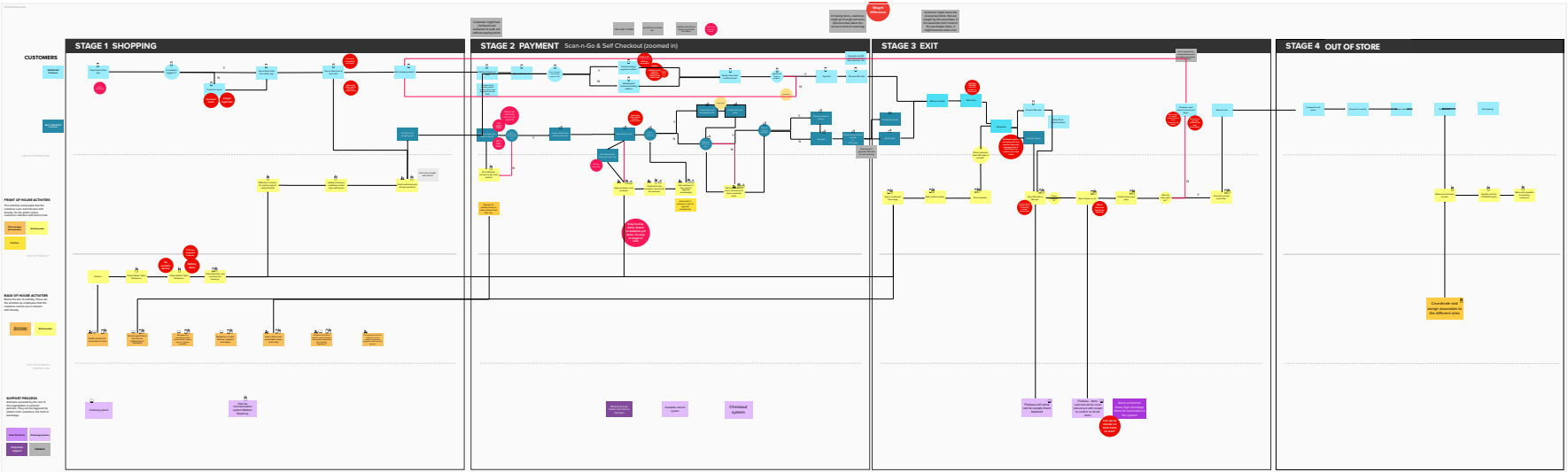


Insights Mapped to Exit Journeys

Understand the exit experiences to identify gaps, pain points, and opportunities to improve them.

Big Exit Picture: Unseen Member Touchpoints

The Service Design Blueprint shows the current exit experience. It highlights pain points and gaps for members, associates, etc. We identified front-of-house opportunities for Scan & Go and Self-Checkout. With these insights, we built storyboards.



*The service blueprint board can be found in the Appendix.

Big Exit Picture: Unseen Member Touchpoints

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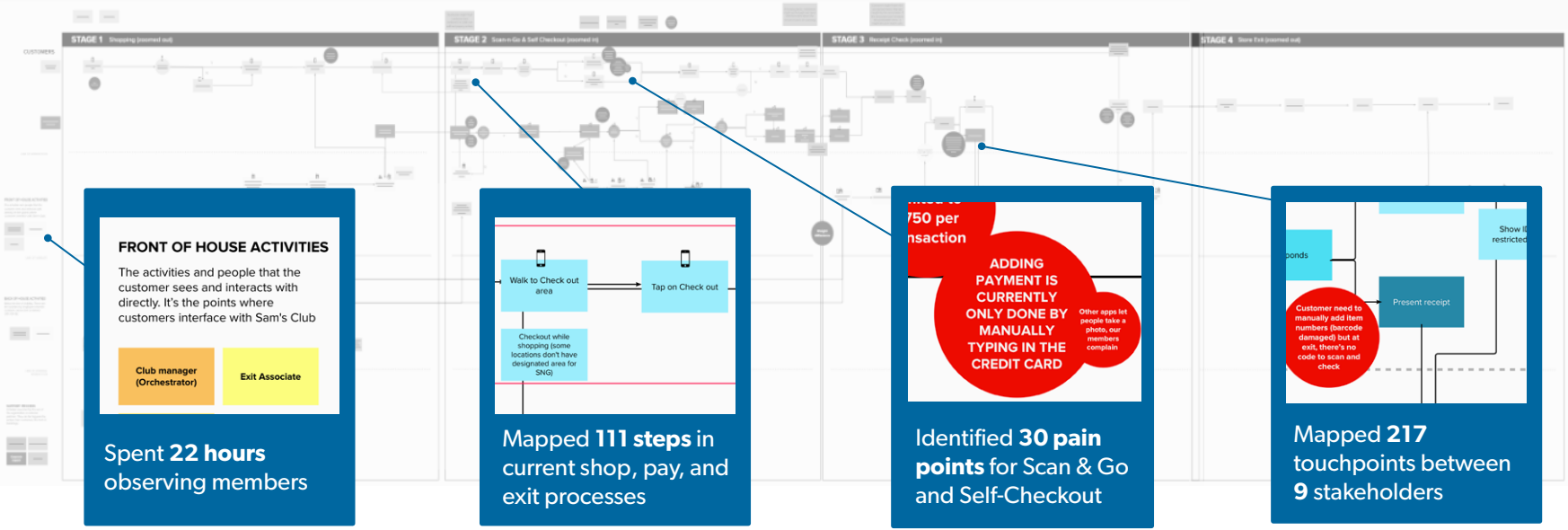


*The service blueprint board can be found in the Appendix.

"Following up with the associate [to make] sure we are doing the processes that the company has set in place"

– Club Manager

"My biggest concern as a manager is talent development and making sure our associates are self-sufficient and can handle issues on their own without needing a manager."

– Club Manager

"If you have any type of glitch that is more an engineering type of subject, it's really difficult, we can't really fix it ourselves. So having to reach out and follow-up… I think that is a challenge too… to make sure we get it fixed."

– Club Manager

Scan & Go Insights: Reduce Workload with Automation

	Shop	Pay	Exit
Experience	• **Accessibility issues** cause **trouble for differently abled members** (eg. No voice prompts)	• **No split payment** causes **issues for group shoppers** • **No dedicated area** for scanning items in cart is **prone to human error**	• **Waiting in line despite using app** leads to **a frustrating experience** • **QR code check** is **not contactless** • **QR code check** can make members **feel awkward**
Process	• **$750 spending cap** may lead to **lost sales of high-priced items** • **Price mismatch** between shelf & Scan & Go **requires associate help**	• **Limited touchpoints** causes **missed sales opportunities** • **No wayfinding** for Scan & Go users may **cause confusion**	• **No back up for associates at exit** leads to **longer wait times** • **Restricted items** requires **ID check at exit** • **Limited training** may lead to **associate and member confusion**
Tech	• **No in-store map** is **missed service opportunity** for members • System can be **difficult to navigate** causes **confusion** • **No feedback after an item is scanned** leads to **human error**	• **Manually adding credit card** is **unnecessary work** • **Damaged barcodes** **increase workload** for members and associates	• **QR code disappears after payment** causes **unnecessary stress** • Payment and exit **requires 2 devices** **complicating exit experience** (ie. member and associate devices)

Self-Checkout Insights: Fear and Frustration at Exit

	Shop	Pay	Exit
Experience	• **Limited availability of hand sanitizer** is **missed service opportunity**	• **No indicator for open kiosks** may be **confusing** • **Two cart system** increases **workload for members** (ie. moving child to second cart)	• **Waiting in a second line** leads to a **frustrating experience** • **Receipt check** is **not contactless** • **Receipt check** can make members **feel awkward**
Process	• **Restrictions on COVID-19 items** may cause **member frustration** • **Lifting bulky or heavy items** poses an **accessibility issue**	• **Scanning Large Orders** is **prone to errors** and **labor intensive** • **Restricted items** requires **waiting for associate's help**	• **No back up for associates at exit** leads to **longer wait time** • **Unpaid items may be abandoned** leading to **waste** and **more shrink** • **Restocking abandoned items** creates **excess workflow**
Tech		• **Touch screen and devices** create **COVID-19 health risk** • **Low height of kiosk** may cause **visibility issues** for members	• Payment and exit **requires 2 devices** **complicating exit experience** (ie. kiosk and receipt check devices) • Items with **damaged barcodes cannot be scanned**, potential for **missed shrink**

Design Principles for Creating an Exit Experience

We created these principles to guide us as we created storyboards. Use these principles create a cohesive experience.

Future State Design Principles

Experience

- End on a High Note
- Service, Not Surveillance
- Honesty, Humanity & Humility

Process

- Member Choice & Control
- Awesome Member Benefits
- Digital Accessibility for Members

Technology

- Automating Experiences
- Unobtrusive, Intuitive Tech
- Smart Inventory Tracking

Key Areas

Aid Associates
Improve customer service for Associates.

Empower Members
Members have choices on they want to exit.

Save at Scale
Refine experiences & processes at scale.

Minimize shrink
Proactively prevent and minimize shrink.

Storyboard.

Introducing Ideas

"I believe we have eight smart carts, but that is all we have for walking impairments or accessibility."

– Associate Manager

"If I focus on associates, what are they going to focus on? Members. And that is what drives our business."

– Club Manager

"I like self-checkout because I can leave everything in the cart. Everything is already organized how I want it so I don't have to take it out and put it back in. That helps me save time."

– Member

Mindsets for reviewing storyboards

Storyboards kindle imaginative sparks and unearth new possibilities.

Imagine

Actively imagine ways the storyboard could work.

Believe

Defer judgment. Suspend disbelief. Like watching a 3D movie.

Be Curious

Ask clarifying questions and analyze proposed solutions.

Focus

Stay topic focused. Don't get distracted by tangents.

Ideate

Encourage wild ideas. Similar to dialog in improv. "Yes, and… !"

Play Jazz

Riff on new iterative concepts. Build on ideas from others.

Tinker

Avoid "problem solving" everything during evaluation.

Critique

Review positives before offering critique. "I like, I like, I wonder…"

Storyboard.

1. Virtual Assistant

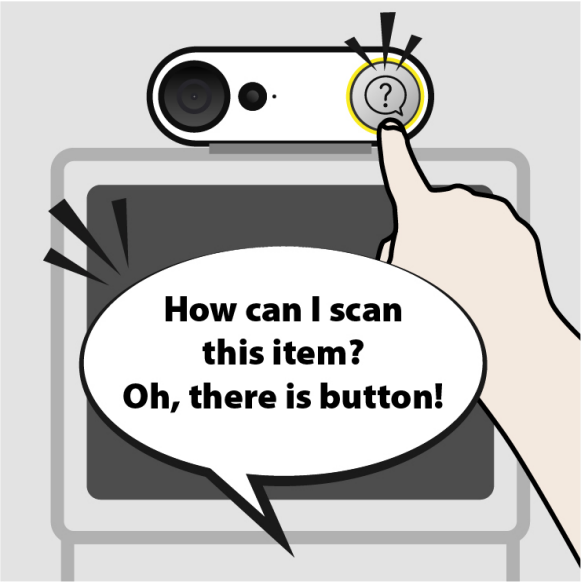
2. Automated Scanning

3. Speed Gate Checkout

#1 Virtual Assistant

A member can receive online help from a Virtual Assistant using a call button.

PAIN POINT
Long wait for members



Jay needs help scanning an item, he calls an associate using the help button at the register.

The associate gets an alert on their mobile and check Jay's call in real-time.

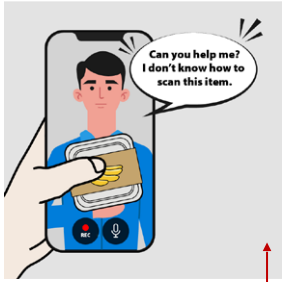
The associate helps him remotely in the warehouse, and Jay can proceed to pay without a long wait for the associate.

Self Checkout

#1 - Virtual Assistant

Long wait for member

Jay needs help to scan the item. He finds the bell on the screen and calls an associate to help.



The associate gets an alert on their mobile and check Jay's call in real-time.

The associate helps him remotely in the warehouse, and Jay can proceed to pay without a long wait for the associate.

This virtual assistant can be available in the Sam's Club app as well.

A member should be able to get help for: finding an item, help to load up their car, lifting heavy items, etc.

Interface can offer help in multiple languages.

Frequent shoppers, such as business owners, can get an upgrade to a higher membership status. This VIP membership upgrade could allow them extra features such as help while they shop, inventory check or request for a second cart.

The manager directs another associate to help the customer in person because of accessibility needs.

Aid Associates

Empower Members

End on a High Note

Member Choice & Control

Awesome Member Benefits

Digital Accessibility for Members

Considerations:

- Associates need a mobile device
- Must have reliable WiFi for a video call
- Re-train existing associates
- Multiple language support
- Might be level 2 support, when needed

Delight Members:

- Face to face member interaction
- Quick video response
- ASL and foreign language support

Differentiate:

- Extra feature not offered by competitors
- Next level customer support
- Predictive analytics for proactive support

Implementation: 1- 3 months

#2 Automated Scanning

A member can scan a full cart in less than 3 minutes using updated scanning equipment.

Self Checkout

PAIN POINT

It's easy to miss items during self-checkout.

Chris decides to use the self checkout since it is convenient for him.

The automated belt can scan 60 items in one minute. Chris can leave the heavy items in the cart and use the wand to scan them.

Chris pays his amount due at the screen. When he gets to the exit gate he will be confident he has scanned every item.

#2 - Automated scanning

Self Checkout

It's easy to miss items during checkout.

Chris decides to use the self checkout since it is convenient for him.

This automated belt service could be incorporated into traditional belted registers and ease the work of associates.

The automated belt can scan 60 items in one minute. Chris can leave the heavy items in the cart and use the wand to scan them.

This is like facial recognition for packaging.

Scanners use computer vision which scan the package and visually identifies the product without needing to scan a barcode.

These scanners could replace traditional scanners

At the exit gate he is very confident he has scanned every item by using the automated conveyor scanner.

Shoppers may need assistance to load up their carts once they are done scanning.

System can sort through items that need further help such as produce

This system can greatly reduce shrink from human error and reduce the exit receipt check

Empower Members

Minimize shrink

Service, Not Surveillance

Honesty, Humanity & Humility

Automating Experiences

Member Choice & Control

Considerations:

- Retro-fit existing registers
- Pilot test to optimize configuration
- Belt runs when activated
- Current database with accurate prices
- Scanner wand replaced each time

Delight Members:

- Wand feels "magical" to people
- Less effort lifting and scanning
- Easier self-checkout for large orders

Differentiate:

- State-of-the-art self-checkout
- Reduces human error
- Like facial recognition for packages

Implementation: 1 - 3 years

- Start with one register in target stores

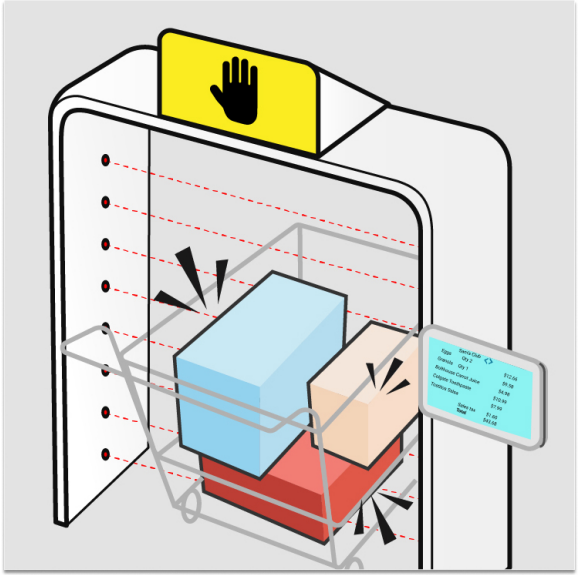
#3 Speed Gate Checkout

Shoppers should be able to checkout in 2 minutes or less.

PAIN POINT

Long wait time to checkout.

Joe pick up items from his grocery list. Then, he puts the items in his cart.He doesn't notice the RFID tag on his items



When Joe is done, he goes to the speed gate to check out, which uses RFID technology. He checks in with his membership card.The speed gate scans the cart in less than one minute.

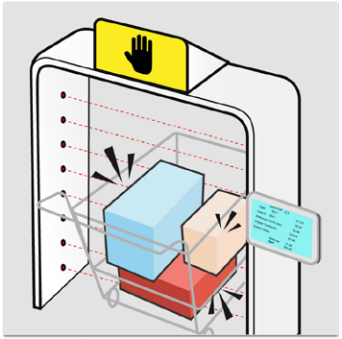
Joe verifies his total amount due and pays using his membership card. The gate notifies Joe that his transaction was successful and the next shopper can now use the gate.

#3 - Speed Gate

Long wait time to checkout.

Joe needs to go grocery shopping, he makes a list on her Sam's app and quickly does her shopping.

Sam's Club app can incorporate a list feature that works together with the RFID Speed gate and make shopping even easier.



When Joe is done, he goes to the RFID speed gate to check out. The speed gate scans his cart in less than one minute.

The RFID Speed gate will need to identify, scan, and cross reference with the list on the Sam's Club app.

Joe verifies his total amount due and pays using his membership card. The gate notifies Joe that his transaction was successful and the next shopper can now use the gate.

Members should also be able to pay using digital wallet, or credit card.

Save at Scale

Empower Members

Minimize shrink

Automating Experiences

Smart Inventory Tracking

Unobtrusive, Intuitive Tech

Considerations:

- State-of-the-art inventory tracking
- Products have RFID stickers
- Print weight stickers with RFID for produce
- Alerts for items with no RFID stickers
- Scan barcode if there's no RFID sticker
- Members pay with mobile wallet
- Must train associates and managers

Delight Members:

- Novel, futuristic experience
- Contactless checkout and exit
- Eliminate receipt check
- Reduce checkout time and queues

Differentiate:

- Pilot test to ensure proper configuration
- Predictive product ordering to follow
- First to market at scale

Implementation: 3+ years

fini.

Next Steps

1 Examine

- Sam's Club identify and explore back-of-house innovation opportunities with these storyboards

2 Explore

- Share report with appropriate business units
- Identify and prioritize experiments / metrics to test storyboards
- Create implementation timeline with metrics

3 Collaborate

- Continue planning and relationship building
- Determine future research opportunities

Appendix

Photo Journal

Service Design Blueprint

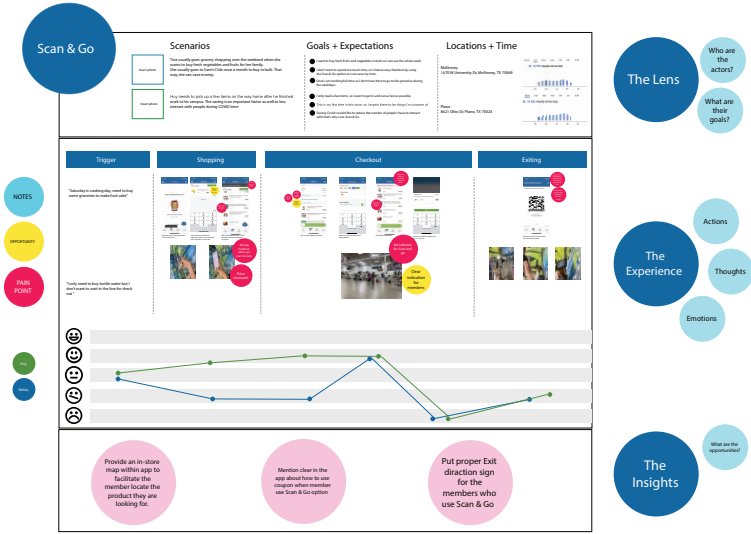
Persona Validation

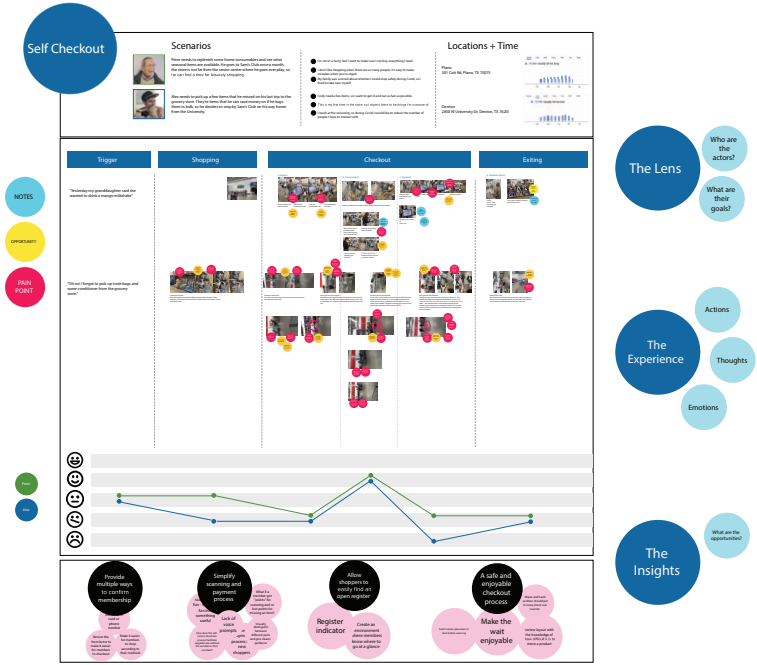
Empathy Immersion

Stakeholder Map

Appendix.

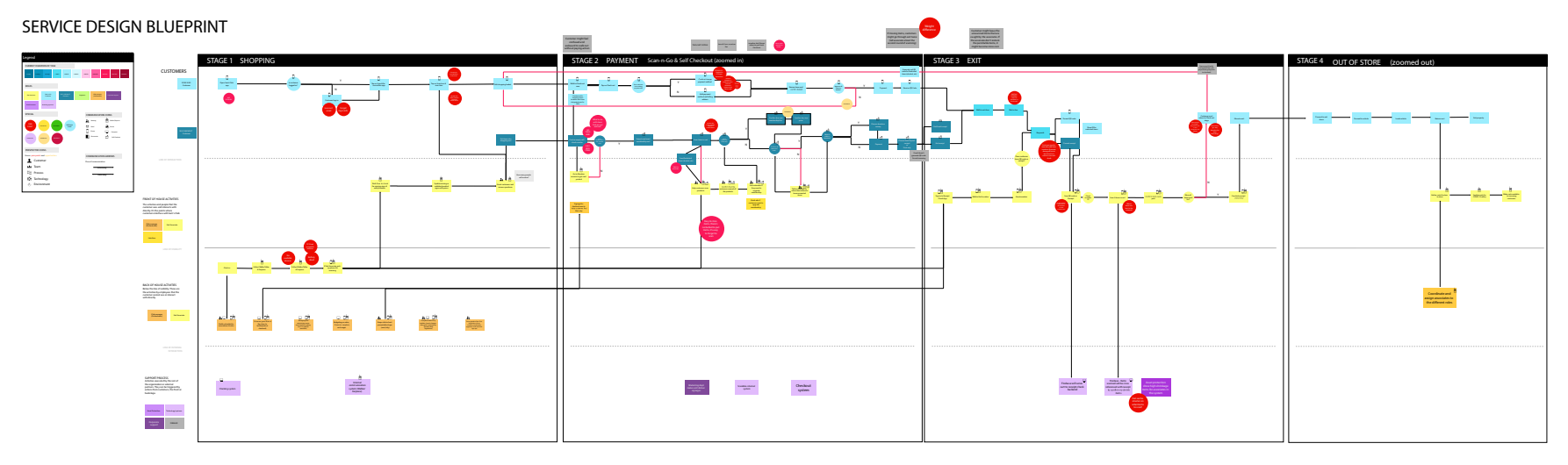
Photo Journal





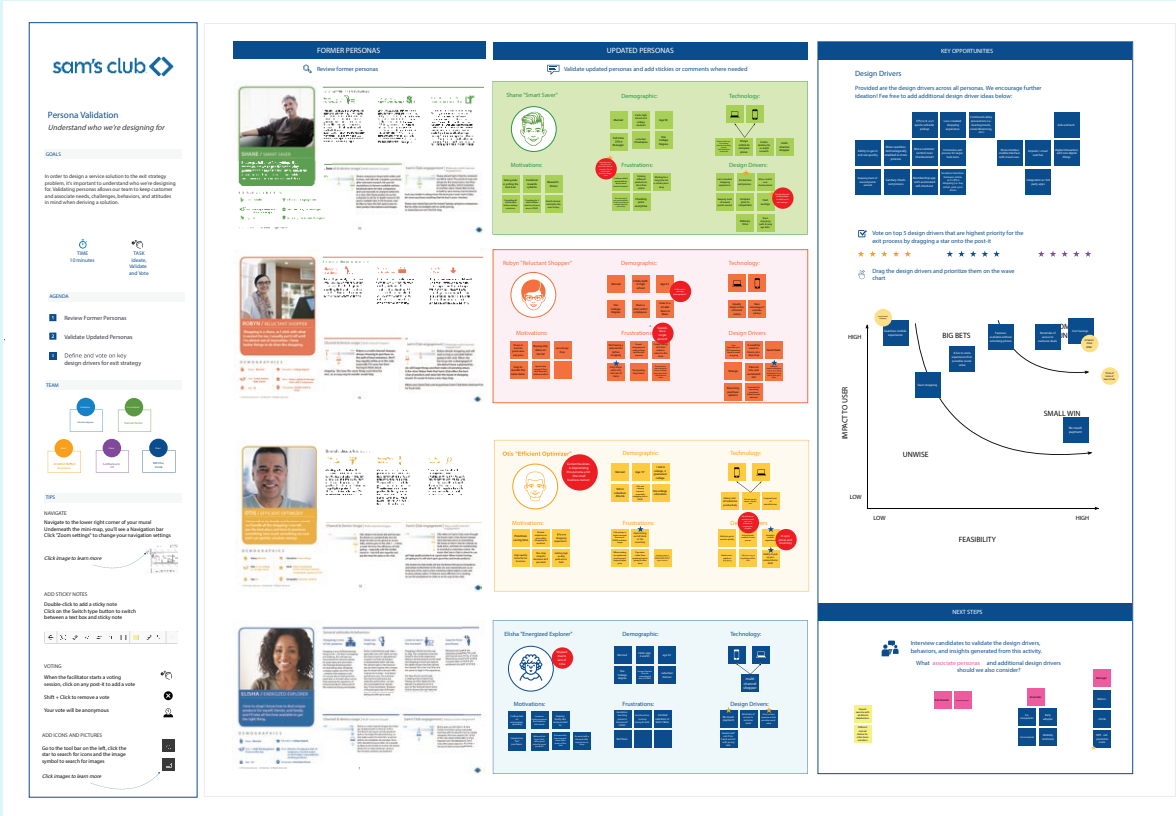
Appendix.

Service Design Blueprint



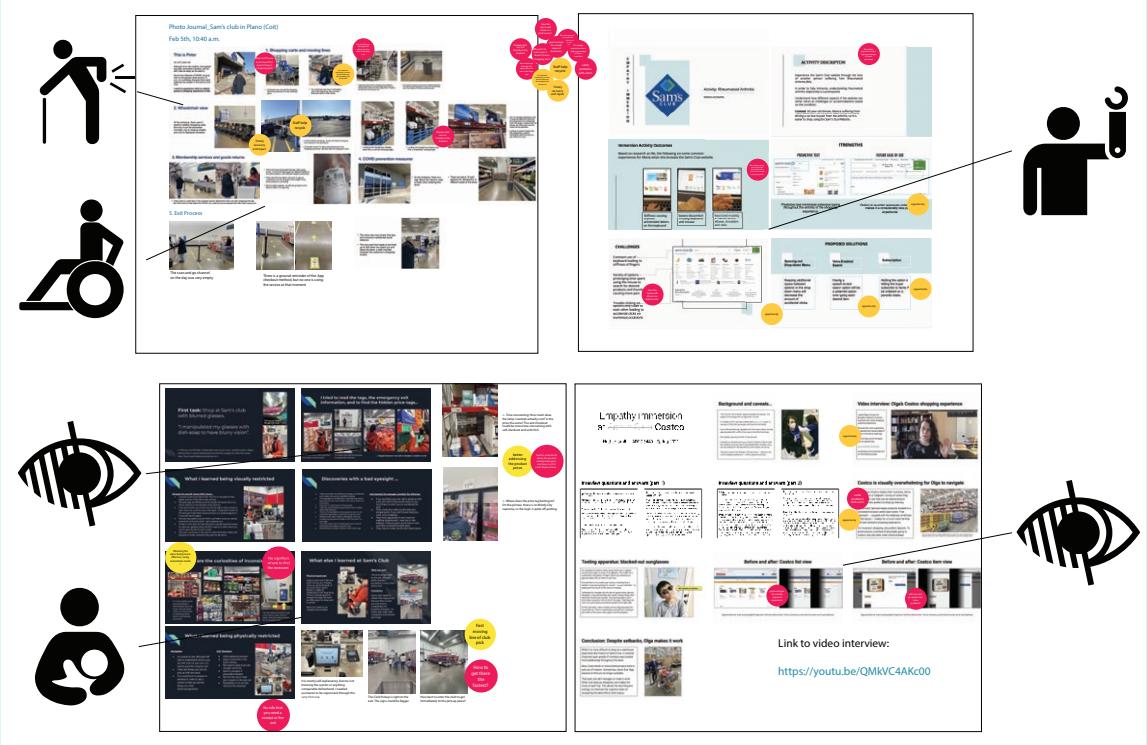
Appendix.

Persona Validation



Appendix.

Empathy Immersion



Appendix.

Stakeholder Map

Sam's Club - Exit process stakeholder map

1. Setup
2. Cluster/Label
3. Draw arrows
4. Annotate arrows
5. Document insights, pain points
6. Quick readout

———

1. Setup

On a sticky, write a stakeholder and their role. Identify all the stakeholders. (One per sticky).

On a separate sticky note, write the goals for each stakeholder and place them on the board. (Use a different color.)

On a third sticky, write a "quote" that relates to the role and place it below the goal for each stakeholder. (Use a different color.)

———

2. Cluster

Cluster stakeholders by roles and goals into similar groups.

———

3. Draw arrows

Use different lines and arrows to note the current strength of the relationship.

———

4. Annotate arrows

Annotate each of the arrows by briefly explaining why the relationship has its current strength.

———

5. Document insights, pain points

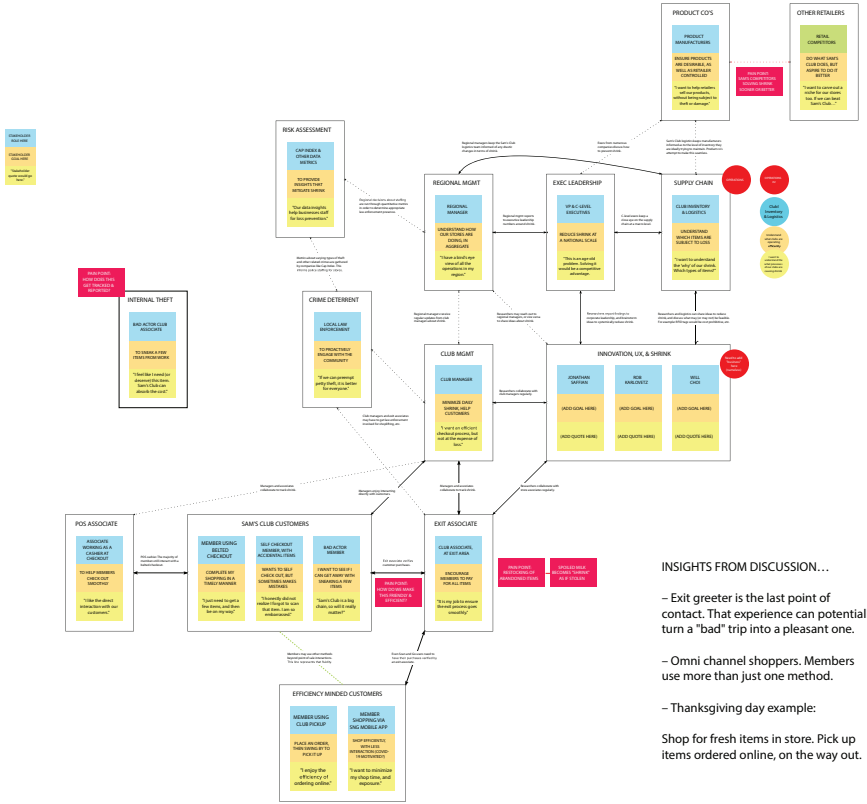
As as group, use pink sticky notes to document any insights and pain points relevant to the subject area you are wanting to explore.

Decide as a group on the top three insights. Write those next to your stakeholder map.

———

6. Quick readout

Who are your main stakeholders? What are the key relationships? What do our users need to get from our stakeholders? Do you need to talk to some stakeholders for more insights?



INSIGHTS FROM DISCUSSION…

– Exit greeter is the last point of contact. That experience can potentially turn a "bad" trip into a pleasant one.

– Omni channel shoppers. Members use more than just one method.

– Thanksgiving day example:

Shop for fresh items in store. Pick up items ordered online, on the way out.

sam's club

UNT UNIVERSITY OF NORTH TEXAS

03

Coin Card

Research, UI/UX

Coin Card is a mobile application that encourages people to donate small amounts of money and was built through an end-to-end iterative design process from research to prototype.

coin card

Encouraging people to take action with small amounts

Overview

Small change can make a big difference.

Often people think that their donations are too little to make a difference. But what happens when many people pile up small amounts of money together? This will be a small component to make a product/service and then flow to part of a system that builds a better community.

J. Chris Jones: Design Methods

How it works

When you go to a coffee shop, you only pay for the coffee price. If you can donate a very small amount of money when you pay for it, and also the coffee shop participates the same amount of money as you did, would you miss the opportunity?

Research

Nearly 2 out of 3 Americans donated in the past year

More than half (56%) of Americans have donated to charity in 2021. While similar to last year's 55%, it's still down from pre-pandemic levels in 2019, when about two-thirds (63%) made charitable contributions.

Why people hesitate?

- **43%** Financial constraints
- **20%** Volunteer instead of donation
- **17%** Donate goods or services
- **14%** Don't trust organization
- **6%** Support on family and friends

Debt is holding back charitable giving

Seventy-one percent of those surveyed said their debt prevented them from donating as much as they would like. And 56% of survey respondents cited a lack of cash as a barrier to charitable giving.

Donations by generation

Unexpectedly, Gen Xers are the least out of the giving age groups ($437) because this is a group likely feeling "sandwich generation" financial strains as they care for both children and parents at the same time.

Analysis

Competitive Analysis

	coin card	ROUNDUP	Transparent Hands	giveitly	gofundme	Charitable
Selective donation based on purchase	✓					
Donation Matching Program	✓					
Donation based on tracking purchase		✓				
One time donation		✓	✓	✓	✓	✓
Monthly donation		✓		✓	✓	✓

Most donation apps focus on either providing one-time with a minimum amount or a monthly donation. They fail to provide donors with an app that will aid them in giving freely from financial constraints. The app Coin Card can differentiate itself from competitors by reducing the financial pressure found in donation apps and be easy for people to reach giving in their daily lives.

User Persona

Michael Jordan
Age: 24
Occupation: College Student at UNT
Major: Nonprofit management
Location: Dallas, Texas

"It's hard to donate a lot of money in everyday life, but I want to send even a small amount of money to those who need it."

Design Drivers

- Give with a low budget but wish to makes a value for someone
- Likes to visit local orphanages for do volunteering
- Wants to help where you need it more easily in your daily life

Pain Points

- Budget is not enough to donate
- Don't know where to start
- Not sure donation will be used wisely

Project Goals

- ☑ Reduce financial pressure for donation
- ☑ Create an easy app to make donations in daily lives
- ☑ Encourage givings with a donation matching program

UX Design

User Journey Map

STAGE	PLAN	DONATION	REVIEW
TASK	• Searching nonprofits or charities • Looking for social medias • Finding local charity communities • Asking people	• Paying one-time donation • Setting up a monthly donation • Engaging to social media fundraising • Direct cash or deposit check	• Searching news and social medias • Receiving letters or emails • Visiting giving place or people
EMOTION			
CHALLENGE	• Feeling anxious about finances • Don't know where to start • Don't trust organization • Overload of apps to find	• Lack of donation options • Too high for minimum donation amount • Unsure payment processing • Not optimized for mobile use	• Not sure donations help the poeple who need the most aid • Donation page is not updated • Not sure donation will be used wisely
OPPORTUNITIE	• Provide a selective donation based on the user's purchase • Provide a filter option for accessible findings charities from local to foreign	• Provide small amounts of donation options like less than $1 • Provide a donation matching program to motivate user's donation	• Provide the fundraising progress bar to get involved in donation • Provide the sync social media posts to check the updated news

User Stories & User Epics

Michael wants a donation app that makes small donations and is easy to use at any time in his daily life.

Find offer cards nearby or category

He opens the app Coin Card to find offers near him and adds it to use in donations.

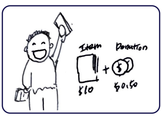
Filter through giving places

With the app, he can receive the giving list and use filters based on his interest area, and look over detailed info about the charity.

Select charity & Scan offer card

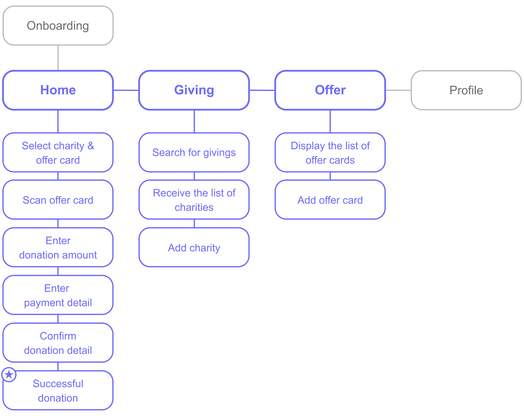
He scans the offer card to pay and donates a small amount of money with his purchasing item.

Make donation with matching program

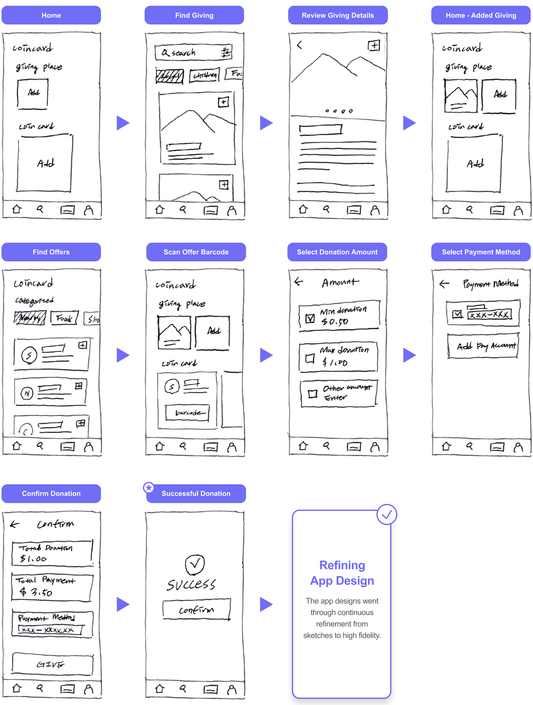


Michael finally has a tool he can donate to small amounts anytime without financial pressure and find easily where need aids.

User Workflow



Sketch Ideas



Coin Card Prototype

Quick Demo

Explore

coin card

Next Steps

- [x] Usability Test & Survey Feedback
- [x] Refine Prototype Design
- [x] Set of Practices Development & Operations

THANK YOU!

04

Immersive Experience

Research, UI/UX

Redesigned the Immersive Experience app to retain user groups and encourage them to continue visiting exhibits by enhancing their experience.

VAN GOGH

IMMERSIVE EXPERIENCE

OVERVIEW

Immersive Van Gogh is a digital art experience that invites audiences to walk through the artist's creative universe. Blending his iconic artwork with immersive technology, the experience allows guests to journey through his creative and experience the works of the Dutch artist in a unique way. Made by the world-renowned master of digital art, Massimiliano Siccardi and his award-winning creative team, the exhibition is Dallas, contains all of the original most-loved works used in the exhibition in Paris with over 2 million visitors. In this report, we will analyze the experience on a macro, mezzo, and micro level for the user group ages 18-24.

MACRO

The Immersive Van Gogh Exhibit in Dallas

Why is the popularity of Van Gogh's work?

3 reasons drawing the 1.7k screening

MEZZO

Lighthouse Immersive Mobile Application

Lighthouse Immersive App's Features & Functions

Contains location, pictorial, and set details

MICRO

Post-Impressionist artwork of Van Gogh

Particular, 3 iconic paintings from Van Gogh's Collection of artworks

DEMOGRAPHIC RESEARCH

General Audience

- 35-44 age group $200K+ income
- Families with kids (only)

Who are they not attending?

- 18-24 age group
- $75K income
- Large families with 2 or more kids

Findings & Trends

- In 2017, 10.28 year old museum attendance is only 5% less than the 35-44 age group
- Drop in attendance since 2019
- Women are more likely to attend more than men
- Museum attendance statistically down. While more than any other racial demographic

The 18-24 Age Group

- Show less enthusiasm towards art museums but attend classic museums at a greater rate than the national average
- 18-24 year olds coming from multicultural backgrounds are more likely to attend museums
- Most attended art museums during a field trip

USER RESEARCH

Young Adults 18-24

Current Trends

Gen Z - Ages 3.23 (1997-2012) / Millennials - Ages 24-40 (1980-1996)

- Technology
- Instant Gratification
- Social Media (TikTok, Instagram, Snapchat) - Selfies, Filters, and Challenges
- Activism - highly politically engaged
- Reforming from within

View of The Arts

- Still young and in school yet they are more active in the workforce
- Location aesthetics and environment
- More places to have certain vibe or mood
- After hours

Want an active experience with the art this includes:

- Personalization and interactivity of content that can be shared digitally
- Instant connections to people and their stories; more connectivity between high culture and love between art, design, and fashion
- They want to post, comment, share, and like

Social media is already a space for them to express themselves:

- Familiar with the processes of creating, curating, and distributing content
- Choose how they want others to view them
- Show their perceptions of the world

Chase Williams

Chase is a college student who enjoys exploring the city and finding new activities to do with his friends. "Whenever I'm bored, I can always find something to do on my phone, but I want to experience something new, fun, and memorable when going out."

★ USER PERSONA

Demographics

- Age: 20
- Occupation: College
- Student at UNT
- Location: DFW area

Goals

- Wants to try out something new and fun for a date.
- Have memorable experiences with his friends.

Frustrations

- Museum are currently not interactive enough.
- Tired of going to the same places

Motivations

- Wants to look more sophisticated
- Wants to also learn from his experiences

SCENARIO OF USE

Chase wants to take his boyfriend on a nice date. He wants the date to be a memorable experience that Phillip and him can reminisce upon for years to come. Chase has been about the idea of art exhibit from a friend, and he's excited to try it a new type of immersive art exhibit. Chase searches online to buy tickets, hoping the Van Gogh exhibit will offer the type of unique immersive activity that will really impress Phillip.

	FEELING	THINKING	DOING	CHALLENGES
BUY TICKETS	Excited	"I can't wait to go to this with Phillip and have a great time."	Buys tickets for the exhibit	When buying tickets, he wasn't expecting the app and email confirmation for tickets
ENTRANCE	Excited	"Let me find our tickets to my phone."	Pulls up ticket information while downloading the app after seeing signs for it	Apps is not used from the beginning of the experience. Phillip thinks it "Ruins our Vibe."
OPENS APP	Annoyed	"Why does the app only need my ticket?	Reads key information in the app's tutorial section in order to avoid missed connecting	Use is trying to figure out how to navigate the app and use the menu
MAKING APP	Confused	"The pictures are nice but I don't know what to do many words..."	Quickly skimming over some content for something that is interesting	User is overloaded with information and content of the app.
SEES EXHIBIT	Entertained	"Wow, this is a pretty cool place. I'm excited to experience art!"	Looking around and taking in the place, preparation for taking photos	Finding the recommended set over discovering the other sets
PICTURES	Frustrated	"I really want to take pictures but I don't want to bother the people in this quiet environment."	Looking around for set to take pictures	The app only offers info about the creator of the exhibition, not information about pictures or Exhibition
SOCIAL MEDIA	Disappointed	"I wish that there's filter or sticker to post on Instagram Stories"	Looks for the app and its exhibition's weapon filter, but disappointed to find out its not.	"The app of the exhibition doesn't integrate well with social media."

LIGHTHOUSE IMMERSIVE APP

REVIEWS

"There's nothing here worth downloading the app for."

"Oh app. Not needed for the exhibition at all."

"Lots of pre-sale info from parking to Van Gogh history"

WHAT WORKS

- ✓ Selection of graphics and fonts
- ✓ Accessibility
- ✓ Location details

WHAT DOESN'T WORK

- ✗ Interactive opportunities with screening
- ✗ Long description of paintings
- ✗ Too much content
- ✗ Lack of interaction with paintings

SOLUTIONS

After analyzing our user research we recommend the best solutions for the Immersive Van Gogh app. We believe these solutions will help our user group navigate, learn, and enhance the overall experience of the app. We have also recommended the most important information when engaging with the Lighthouse Immersive app, because it lacked the functions and features that they are accustomed to from social media.

Information Architecture

- Tutorial & parking information/details Home screen
- Map of exhibit showing zones where the artwork is located
- Reorganized menu into a designated section for videos and music
- All information on artwork has been relocated to the gallery
- Changed navigation menu
- Change names of menu icons

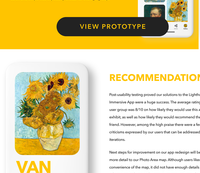
Interactivity

- Revamped interactive section to resemble phone camera UI
- Added Van Gogh's specific filters, immersive backgrounds, & photo effects
- All pictures or videos taken in the interactive section can be shared to social media
- Video and music from the exhibit have been added to the media section of the app
- Change the gallery to resemble being on instagram and artbeat stories

WIREFRAME DETAILS

The app screens were created taking into consideration the current trends among young individuals in the age group of 18-24 years old. Scenario testing was conducted to provide context for the wireframe screens. Test group: 3 persons from the ages 18 to 24.

Wireframe Link: https://www.figma.com/file/qzl7Ttl



First Impressions

- Liked the new features that will help enhance the exhibit
- Easy to understand the layout
- The details added to make the overall experience more interactive.

Likes

- Interactive portion of the app (filters/effects, GIF effects, backgrounds)
- Photoverse filter
- Van Gogh character drawing

Dislikes

- The location of the exhibit map was easy to miss and did not have its own section
- The simplicity of the homescreen.
- Lack of additional info for the paintings

Recommendations

- Connect the app with both the art and their friends
- Ability to buy tickets through the app
- Better visualization of the exhibit on the homescreen.

HI-RES SCREENS

Based on the feedback from a usability test of our wireframe prototype, we created a high-fidelity prototype to test with our user group to address pain points in our prototype and the new design took into account the lack of information and the complexity of the home screen represented by our wireframe.

Test group: 11 persons / Ages 18 - 24

★★★
8/10
Average Rating for how likely the user would use this app

★★★
8/10
Average Rating for how likely the user is to recommend this app to their friends

Key Insights

- The majority of the testers thought the app was neat, pretty, cool, interactive, and adequate for a museum exhibit.
- Areas to improve included: providing more details on our features, especially the Photo Area and Gallery tabs where users wanted more interaction and information. Being able to scroll and swipe was especially critical for this age group.

VIEW PROTOTYPE

RECOMMENDATIONS

Post-usability testing proved our solutions to the Lighthouse Immersive App were a huge success. The average rating among our user group was 8/10 on how likely they would use this app for the exhibit, as well as how likely they would recommend the app to a friend. However, among the high praise there were a few minor criticisms expressed by our users that can be addressed in future iterations.

Next steps for improvement on our app redesign will be to add more detail to our Photo Area map. Although users liked the convenience of the map, it did not have enough details and information to fully satisfy them. Also a couple users felt there was not enough historical information on Van Gogh. So creating a section dedicated to personal information on Van Gogh will be explored in the future.

Lastly, one user mentioned a dislike for the Lighthouse Immersive Although there is only one mention of this, it is worth exploring. Users give the app a more idiosyncratic visual style.

VAN GOGH

IMMERSIVE EXPERIENCE

Get Tickets

MACRO, MEZZO, MICRO ANALYSIS

Before

Currently, the exhibit and the mobile app act independently of each other, sharing only the art and history of Van Gogh. This disconnect is seen in the reviews of the mobile app and the lack of engagement in social media posts for the exhibit. Furthermore, this forces guests to focus on only either the exhibit and the art pieces, or on the app and the artwork details. While the exhibit physically immerses guest in artwork, it does not provide them with a comprehensive immersive experience users can share with others. This is key for the 18-24 year old age group, since it is how they feel most engaged with the experience and recommend it to others.

The app's only relationship with the exhibit is the ability to purchase tickets through the app. The app's only relationship with the art pieces is the ability to see the artwork and artist's information. Since the app's only relationship with the exhibit is the ability to purchase tickets through the app, the app's only relationship with the art pieces is the ability to see the artwork and artist's information. Since the app's only relationship with the exhibit is the ability to purchase tickets through the app, the app's only relationship with the art pieces is the ability to see the artwork and artist's information.

After

After examining interaction opportunities, we designed an app that will be of use to the user throughout their whole experience at the exhibit. From the moment they enter, to the moment they exit the exhibit, the mobile app helps users develop a deeper connection to the exhibit, the artist and his artwork, and with the mobile application. It is designed to engage and answer questions about the experience. The application also considers the interests of the 18-24 year old age group, and how it can leverage that to create an experience they will recommend to others.

After the adjustments of the prototype, our mobile app should be a fun addition to our Immersive Exhibit. Since the app is for Van Gogh Immersive Exhibit, back can be used to improve attendance by 5-10 percent and for other art museums as well. The Friends of Van Gogh section will be extremely useful around in the US, so our team would be the best suited to assist with Gen Z engagement.

CONCLUSION

The Van Gogh Immersive Exhibit in Dallas and other art exhibits have the potential of attracting 10-15 million of age group. However, in order to attain this and grow, exhibitions must be continue to add more activities additional efforts need to be made to integrate that experience. Analyzing the macro, mezzo, and micro components of the Immersive Van Gogh Exhibit, we focused mostly on the mezzo.

The mezzo was a redesign of the Immersive Exhibition app. We explored possible functional and visual aids users have they could enhance their visit to the art pieces that appeal to the Northern Texas. Such aids include ways to learn more about the artwork, artist, and its artist.

03

Nore

Research, UI/UX

Nore is a mobile application that it is designed to increase user traffic for using the karaoke room by improving user experience.

NORE

KARAOKE ROOM APPLICATION

Introduction

Current hook model

Persona

Scenario of use

Prototype

Scan & Pay

Location

Song List

Popular Singer

Expected Hook Model

Karaoke Room

Introduction

Karaoke Room

In this report, I will analyze the karaoke room using a hook model and suggest areas for improvement. The karaoke room is a service place that provides users with entertainment in private spaces. It is sometimes placed in specific locations depending on the needs of customers. For example, it is located in an arcade for individuals to enjoy for a short time. There are also large karaoke rooms for many people to enjoy entertainment in a large space. The user can pay as much as the number of songs they want to sing, or they can set the usage time and pay by the hour. In the room, the user takes a look at the song list book, and they find the song name and code number. Then the user can enter the number on the song machine to start. When it starts, the user can follow the lyrics on the screen and sing in tune. When the song is over, the system evaluates the user's singing ability, and the score is displayed on the screen. While the score is displayed on the screen, the machine's voice announces the score and delivers a congratulatory message to help users know when to finish singing. For this project, I would like to focus on how to improve the karaoke business by increasing customer participation.

Current Hook Model

Karaoke Room

Trigger

Internal trigger - What does the user really want?

External trigger - What brings the user to the product?

- Express emotion
- Want for an activity
- New song release

Action

What is the simplest behavior in anticipation of reward?

- Singing
- Finding Karaoke room
- Finding songs what they have

Investment

What kind of work will increase the likelihood of return?

- Affordable price
- Entertain-ment with others
- Private space

Variable Reward

Is the reward fulfilling, yet leaves the user wanting more?

- Provide celebration effects - voice & lighting
- Provide score about singing skills
- Get reaction from friends

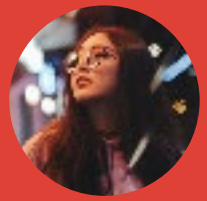
Persona

Karaoke Room

Suzi is a high school student in South Korea and has dreamed of becoming a singer since childhood. She is especially interested in music-related TV programs and has always hoped to become a star. She currently practices singing every week with her peers in the school club as the lead singer, and her team often participates in concerts.

Suzi Kim

Occupation	**High School Student**
Age	**18**
Location	**Seoul, South Korea**
Dream	**Singer**
Hobby	**Song writing**



Goal

She wants to increase her popularity in the media.

She hopes to become a professional singer in a famous entertainment company.

She wants to earn money to buy music equipment.

Frustration

She feels frustrated in her situation because it is hard to spend a lot of time with school to become a professional singer.

She is frustrated that her part-time job takes a long time to earn money to buy a musical instrument.

She has difficulty finding a karaoke room nearby.

She left her wallet at home and realizes it when she gets to the karaoke room. So she has to go back to her home.

When she gets to the karaoke room, someone else is using it and there is no free seat, so she has to wait for the other person to finish.

The song list book has missing pages or is torn, so she can't find the song.

Scenario of Use

Karaoke Room

Suzi is very interested in singing and hopes to work in the music industry in the future. While waiting for a friend, she finds an arcade near the meeting place. She wonders if there is a karaoke room inside or not. If there is a karaoke room, she wants to sing a few songs until her friend arrives. She finds several karaoke rooms that are empty and can sing.

1

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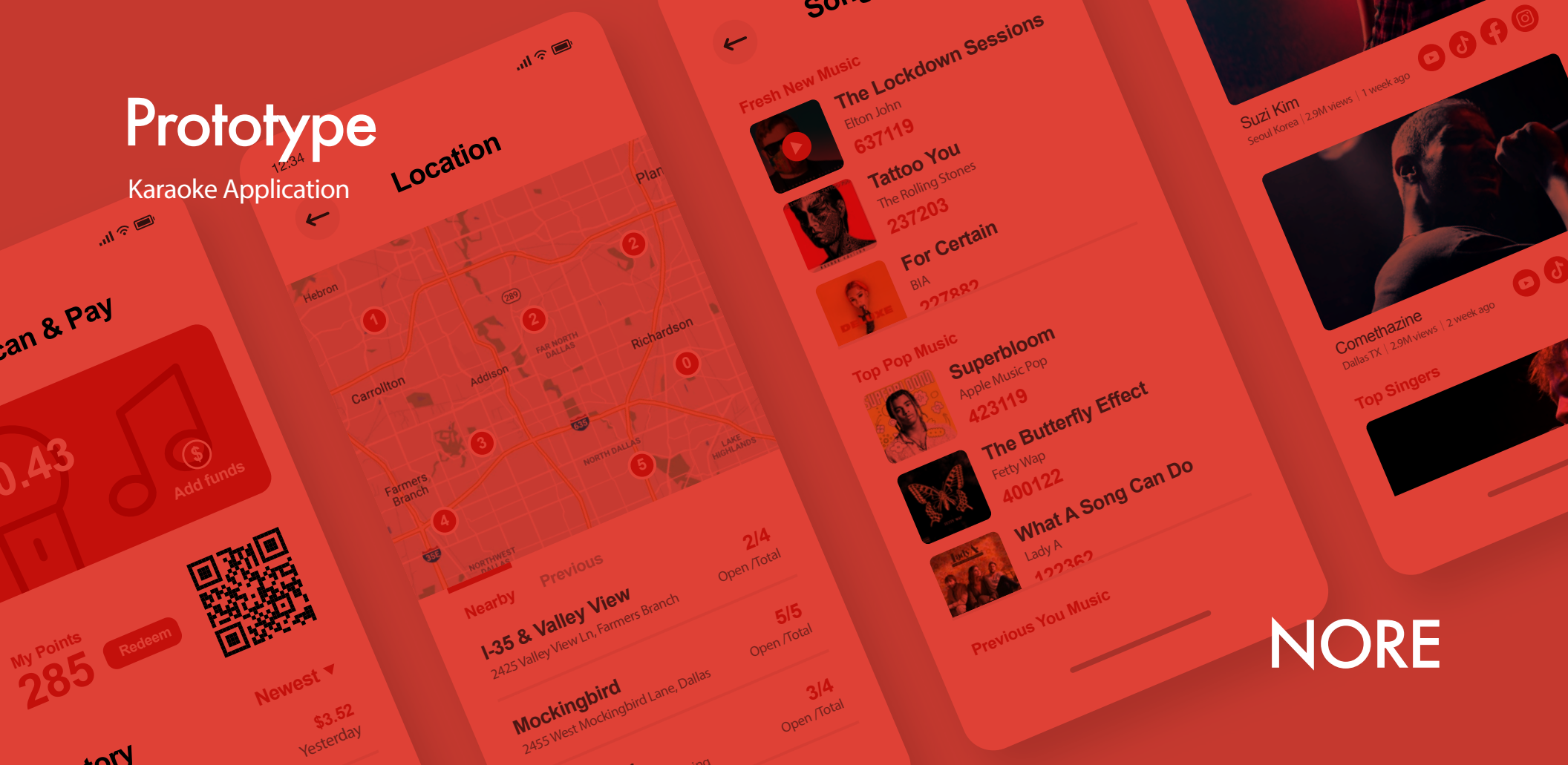
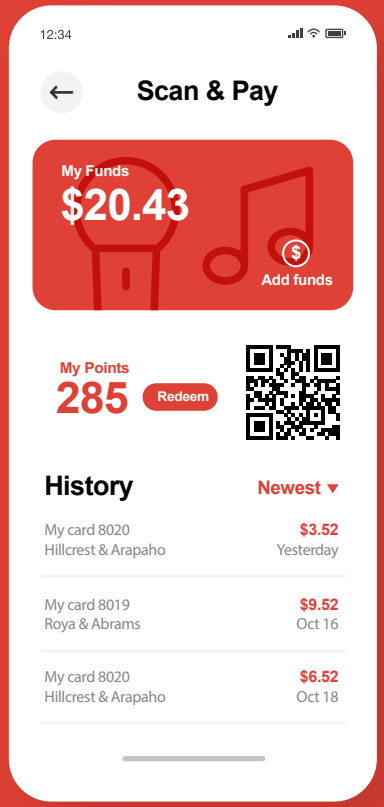
Prototype

Karaoke Application



NORE



Scan & Pay

Nore App

Painpoint

She left her wallet at home and realizes it when she gets to the karaoke room. So she has to go back to her apartment.

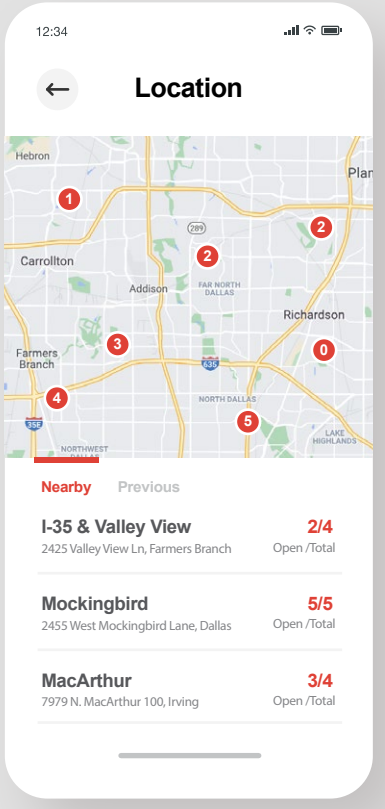
Solution

We provide a Scan & Pay page so the user can easily add money and use the karaoke room by scanning a QR code.

+ Accumulate point system ex. Starbucks

Experience

She no longer needs to bring coins to use the karaoke room. The Nore app allows her to use karaoke rooms anywhere by using her phone.



Location

Nore App

Painpoint

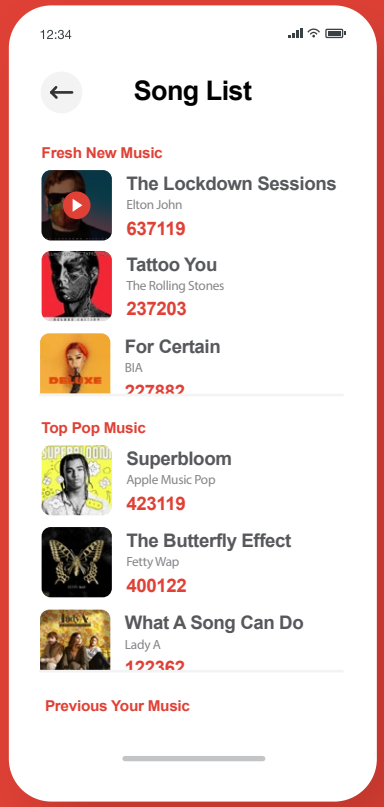
When she gets the karaoke room, someone else is using it and there is no room, so she has to wait until the other person finishes. Also, it is difficult for her to find a karaoke room nearby.

Solution

We provide a location page so that users can easily find the location of the karaoke room and find vacancies in real time.

Experience

She doesn't need to wait or go inside to check if there is an open space in the karaoke room or not.



Song List

Nore App

Painpoint

The song list book is missing pages or torn, so she can't find the song.

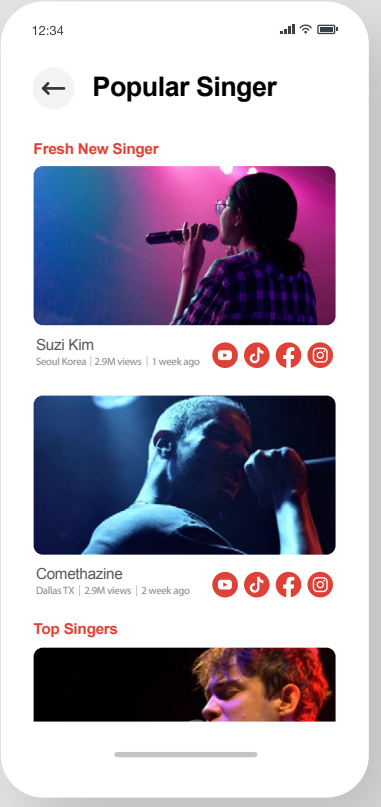
Solution

We provide a song list page so that users can easily find a song number and start playing the music from their mobile phone without touching the karaoke machine.

+ Protection from COVID-19

Experience

She can easily find her favorite songs and check the updated new song and popular songs with the app. She can also start the song from her cell phone without touching the karaoke machine.



Popular Singer

Nore App

Painpoint

She feels frustrated in her situation because it is hard to spend a lot of time with school to become a professional singer, and her part-time job takes a lot of time to earn money to buy a musical instrument.

Solution

We provide a Popular Singer page so that users can upload themselves singing and share it on other social media such as Youtube, Tiktok, Facebook and Instagram.

Experience

She can upload her singing video through the app so other people can see her singing skills and increase her popularity. She can also earn extra money by increasing her views.

Expected Hook Model

Nore App

Trigger

Internal trigger - What does the user really want?

External trigger - What brings the user to the product?

- Keep increasing popularity
- Watching other people sing
- Expressing emotion
- Creating memories with friends in Karaoke room

Action

What is the simplest behavior in anticipation of reward?

- Installing Nore App
- Searching and playing songs through app
- Finding an open karaoke room location
- Watching other people's videos

Variable Reward

Is the reward fulfilling, yet leaves the user wanting more?

- Increasing the user's popularity
- Producing revenue by uploading videos
- Accumulating points
- Easily finding a song and playing the music
- Easily finding an open karaoke space

Investment

What kind of work will increase the likelihood of return?

- Updating videos
- Constantly checking Nore app
- Adding funds to use the Karaoke room
- Watching other singers

NORE

KARAOKE ROOM APPLICATION

THANK YOU

UI/UX DESIGN