

User Feedback and Usability Testing

Methodology | Card Sorting | Allegory Testing | Feature Testing
Physical Testing | Reframed Prototype | Reframed Artifacts



Overview

Introduction	.....	XX
Methodology	.....	XX
Card Sorting	.....	XX
Allegory Testing	.....	XX
Reframed Prototype	.....	XX
Feature Testing	.....	XX
Physical Component	.....	XX
Reframed		
Business Model Canvas	.....	XX
Value Proposition Canvas + Fit Analysis	.....	XX
Value Proposition Statement	.....	XX
Value Pillars, CoreDrivers/Enablers	.....	XX
Zag 17 Questions	.....	XX
Balanced Score Card	.....	XX

User Feedback and Usability Testing

Introduction

“Being adept at concept and artifact early stage testing will help you mitigate risk and uncover early insights. It’s a rarer and more valued skill that avoids the risk of embedded bias and yes/no validation seeking,” said Gabriella Campagna Lanning in a presentation about prototyping and user testing. Inspired by her advice, we set out to conduct multiple rounds of user testing to gather our users’ feedback before moving on to high-fidelity clickable prototypes. After all, what’s the value of a product that doesn’t actually solve the users’ needs?



Before Testing

Who, What, Where, Why & How

How to achieve

Who

Individuals seeking quick, personalized, and culturally immersive experiences within their localities.

our target audience based on their cultural interests and time constraints?

What

Personalized, time-sensitive, and culturally enriching activities delivered through an intuitive platform

personalization of itineraries to meet individual preferences and time constraints effectively?

Where

Online platforms, social media channels, and local cultural events

social media integration to reach and engage with our target audience effectively?

Why

Seamless user experience, personalized recommendations, and meaningful engagement through milestones and community interactions

a sense of community and encourage user interaction to enhance engagement and retention?

How

Subscription models, premium features, and partnerships with local businesses and cultural organizations

diversified our revenue streams while maintaining affordability for our users?

User Testing

Methodology

We decided to undertake user testing with four distinct methodologies: card sorting, allegory testing, feature testing and validating our physical component. The card sorting method was implemented to ensure the prioritization of features, while allegory testing was utilized to gain insights into how to design the features. Once we had refined our prototype based on our findings, we conducted another round of testing to understand what our users wanted to see in the features they identified as most important. In parallel, we also developed concepts for a physical component of our solution, and got feedback from users on them.



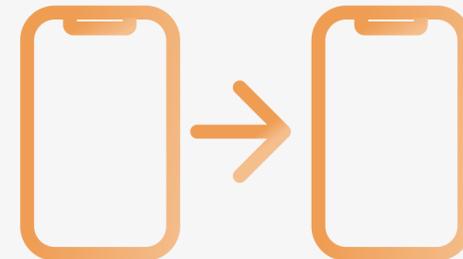
Card Sorting

pg. X



Allegory Testing

pg. X



Feature Testing

pg. X



Physical Component

pg. X

Method 1

Card Sorting

For each feature generated in the ideation stage, we created cards with the feature name and a description. Then, we invited participants to organize the cards into groups that make sense to them, or ranking them according to their preference. The card sorting process revealed which features users prioritize, which will help us create an information architecture that aligns with users' intuition, improving the usability of our platform.

14

Participants



Card Sorting

We used the feature cards displayed on the next two pages for the card sorting activity. The cards are color-coded by type of feature, such as physical component, activity filtering, or buddy system.

Physical Component

Customizable phone cover

Choose from a variety of options that include functional attachments such as a pocket knife,

Connection bracelet

Sleek, wearable bracelet with no interface that would allow you to connect with other users just by tapping.

Bottle collectibles

Water bottle attachment (fits in Yeti, Stanley, Owala, etc.) that allows you to collect pins based on challenges you have completed.

Activity Filtering

Filtering Buoy

filtering buoy on the surface, according to your preferred active or locate.

Calendar Filtering

filtering your free time and same time friends, activities on calendar

Biometric Activity Matching

such as heart rate, exertion levels, and calorie expenditure, to match users with outdoor activities that align with their fitness goals and preferences. Users can filter activities based on their desired level of intensity and physical exertion.

Buddy System

Mentor Connection

Connect to a mentor that can help you and your buddy achieve your goals or objectives.

Time Sensitive Missions

Participate in time sensitive activities as pairs or teams to win some kind of reward if completed within the given time frame.

Mutual Supervision

Let your buddy send you messages or notifications to keep you accountable, rather than automated notifications from the system.

Communication with Mentors

Mentor Recruitment

Feature that allows you to recruit a mentor to help you plan and hold events.

Mentors' Paid Content

Have access to paid courses to learn or develop skills. Individualized attention from mentors.

Community Forum

Be able to leave questions about specific activities (gear, skills, recs.) on a forum and get them answered by mentors

Card Sorting

We printed these cards on thick paper, cut them into rectangles, and distributed them to our participants during testing sessions.

Time Interval Activities

30 min or less feature

Easy to find suggestions for users to perform activities in 30 min or less for people with busy schedules.

Weekly activities

Feature that allows you to sign up for recurring weekly activities to keep you on track to meet your goals. Time can vary per week based on your schedule.

Calendar Integration

Integrate your calendar to receive personalized suggestions on activities you can perform during the periods you are available.

Weather & Conditions Updates

Environmental Data Integration

Insights into air quality, pollution levels, and ecological information about outdoor destinations that helps users make informed decisions and promote responsible outdoor practices.

UV Index and Air Quality Index

in the weather updates to inform users about potential health risks associated with sun exposure and air pollution levels

Seasonal and Weather-Dependent Activities

like skiing or snowboarding during snowy weather conditions and hiking or kayaking during sunny and mild conditions

Location Based Recommendations

Social Integration

Allow users to connect with friends, share experiences, and see recommendations from their social networks. It enhance engagement and provide users with trusted recommendations from people they know

Content Management System

Information about outdoor recreational activities, including descriptions, ratings, reviews, and photos to will serve as the basis for generating recommendations

Localized Cultural Insights

Insights Into the local culture, traditions, and heritage of outdoor recreation destinations, including information about communities, cultural festivals, culinary experiences, and artisanal markets in the area.

Personalized Itinerary Planning

Tools that suggest optimized routes, activity schedules, and nearby attractions based on their preferences, available time, and location. Integration with calendar apps and trip planners enhances trip organization and convenience.

Progress Tracking

Personal milestones

Keep track of personal growth and achievements.

Follow function

Be able to follow other users or mentors to get inspiration and connect with others.

Community sharing

Be able to share your progress with your network.

Timeline Feature

Get a report of activities done during a certain period of time. Have the ability to track your progress over different time periods.

Card Sorting

Testing Results

After conducting card sorting sessions, we gathered our results in a matrix by participant and feature. This revealed the most popular and least features among our users.

To our surprise, the localized cultural insights feature was a clear winner with 11 votes. Initially, we set out to design a platform for outdoor recreation, but it turns out that our users want to go beyond just outdoor activities. Moving forward, we want to prioritize the features that received seven or more votes.

The calendar integration feature was less desired by our our users than expected. Originally, we thought this feature would solve our users' pain point of finding time to get outside. We also found that our users did not favor the mutual supervision feature, which would assist with motivation. As we move into our next phase of prototyping, we will eliminate features that received four or less votes.

11 votes	Localized cultural insights
9 votes	Personalized itinerary 30-min or less activities
8 votes	Social media integration
7 votes	Content management system
7 votes	Personal milestones
6 votes	Crowdsourced weather reports Time-sensitive missions Community sharing Follow function Weekly activities Weather dependent activities Timeline feature
5 votes	Connection bracelet Calendar filtering Community forum UV and Air Quality Index Biometric Activity Matching
4 votes	Mentor connection Environmental data integration Mentor recruitment
3 votes	Mutual supervision Bottle collectibles
2 votes	Mentors' paid content Filtering buoy Calendar integration

Prioritize

Eliminate

Card Sorting

User Feedback

We also received some great feedback from conversations with our testing participants. For example, we found that our platform could also be useful to travelers who want to learn more about their destination. Our tool could prove useful in the planning process by assisting travelers with finding activities they would enjoy.

Some participants also provided us with insights into why the buddy system (or mutual supervision) feature didn't score as high as expected: For the feature to work, there has to be a consequence for failure.



"I'm an organized person, but it was difficult to find information about the places I was traveling to and there were no tools or apps."

"Some features feel great the first time using them, but might become boring later on."

"Personally, the follow feature is a little bit awkward since those people and I lived in a community and we sometimes meet."

"I like the buddy system, but I would like to have an option if my buddy fails."

"I want to see suggestions for activities in my selected area, especially when traveling. I also want information about local restaurants."

Card Sorting

Results + Key Findings

The feature that received the most votes in the card sorting process was “localized cultural insights,” which shows that our users aren’t only interested in outdoor recreation activities but also in cultural events.

“30-min or less activities” also proved to be a popular feature, signaling that our target user group struggles with finding time for activities. Couch Koalas also prefer to be presented with a personalized itinerary based on their current location and preferences.

Lastly, we found that our users want to be motivated with personal milestones that show personal growth and achievements.



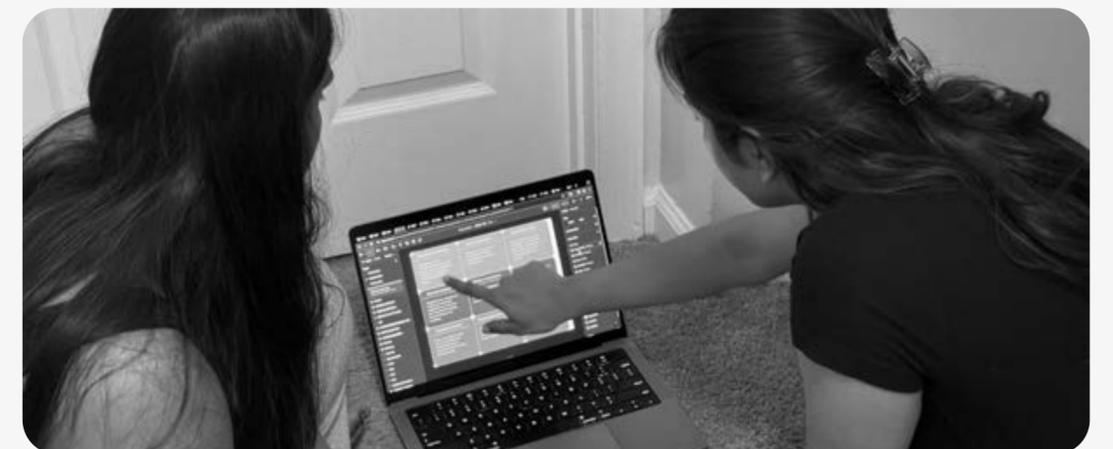
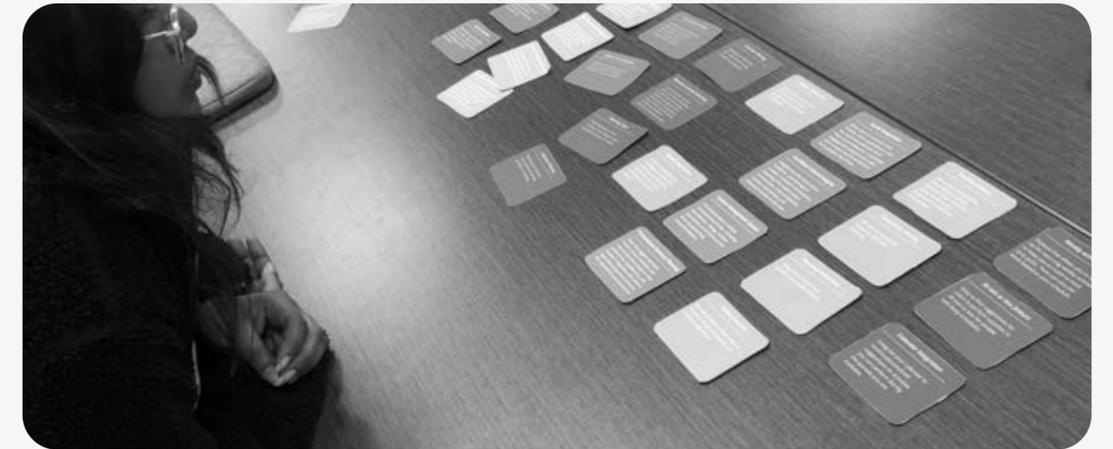
Method 2

Allegory Testing

Our allegory testing included a prompt and four examples of existing platforms, apps, or social networks. Then, we asked them which example they associate most with a particular feature. This helped us understand our users' feelings and perceptions about a feature.

13

Participants



Allegory Testing

For allegory testing, we presented our testing participants with one page per feature. This graphic is a summary of the features and examples we used to learn more about our users' preferences.

We decided to test for features such as activity search, user communication, incentive system, badges and points, and onboarding. The selected examples include well-known apps or brands that offer features or systems that we would like to integrate into our solution.

1 *Activity Search*



Google Flights

2 *User Communication*



3 *Incentive System*



CHASE

4 *Badges and Points*



headspace



5 *Onboarding*

iPhone



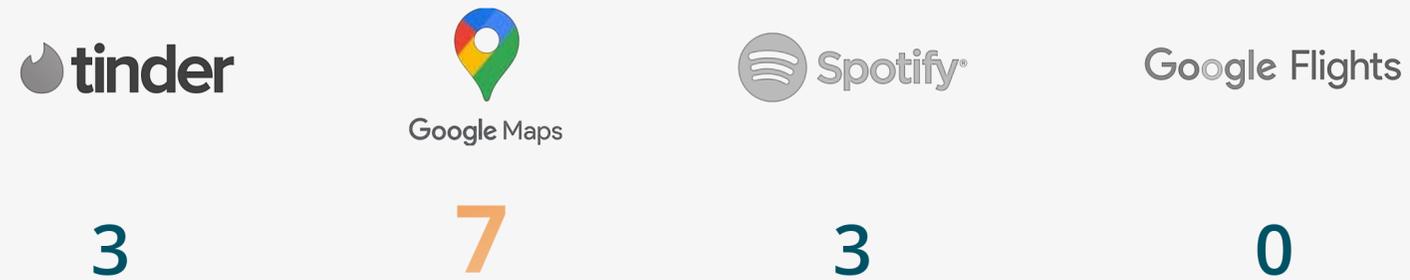
Robinhood

Uber

Allegory Testing Results

Activity Search

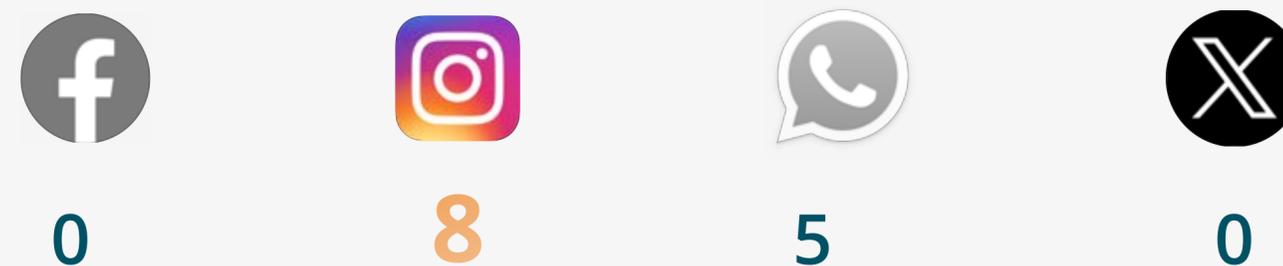
Which of these examples resonate with you for searching for activities?



Google Maps stood out as the preferred search mechanism. Users want to look up activities on a map interface and learn more about the activity through user ratings and reviews.

User Communication

Which of these examples resonate with you for user communication?



Instagram received the most votes in the user communication category, followed by WhatsApp. This shows that users want simple interfaces for communicating, but they also want to stay updated on their friends' activities.

Allegory Testing Results

Incentive System

Which of these examples resonate with you for an incentive system?



5



1



3



4

Lingoda's reward system was slightly favored over Chase. The language course website guarantees users 50% of their money back if they finish a language sprint within 2 months.

Badges and Points

Which of these examples resonate with you for badges and points?



7



2



1



3

Strava was the clear winner when it comes to badges and points. Users want to challenge themselves with climbing up on the leaderboard and completing challenges that sometimes offer prizes as a reward.

Onboarding

Which of these examples resonate with you for intuitive onboarding?



6



7



0



1

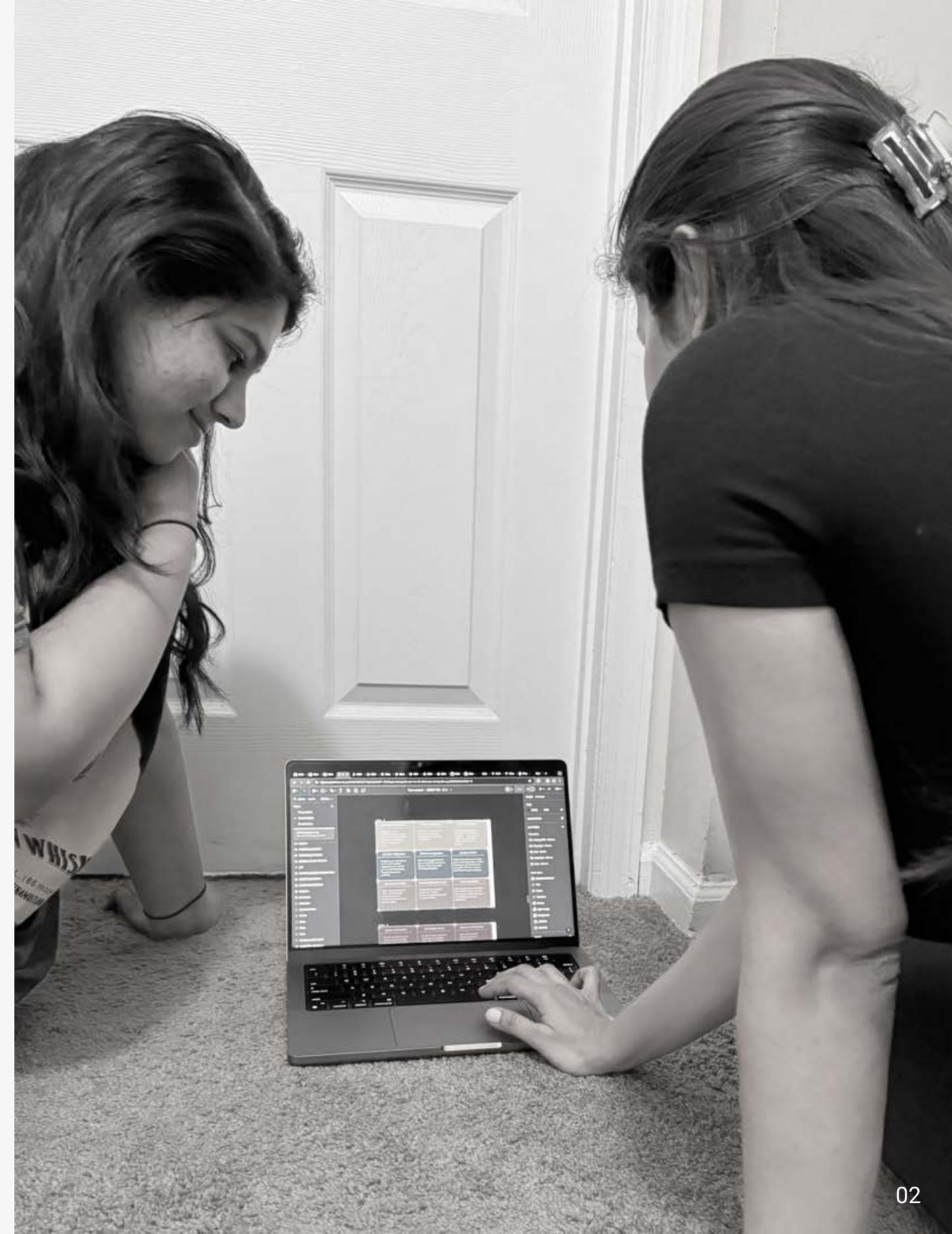
In the onboarding category, Airbnb received slightly more votes than the iPhone. Airbnb's onboarding process is memorable and interactive, which made it stand out among the other options.

Allegory Testing

Results + Key Findings

The **allegory testing** method revealed that users prefer an activity search mechanism that resembles Google Maps. When it comes to user communication, Instagram seems to be the most efficient. Users want to be able to follow their friends and communicate with them through posts, comments, and direct messages.

Although our results for incentive systems are mixed, we found that achieving personal goals is easier when there is a monetary incentive. Strava proved to be the most popular choice for badges and points, even though our previous research showed users aren't interested in competing with each other. Lastly, the Airbnb onboarding process was favored the most.

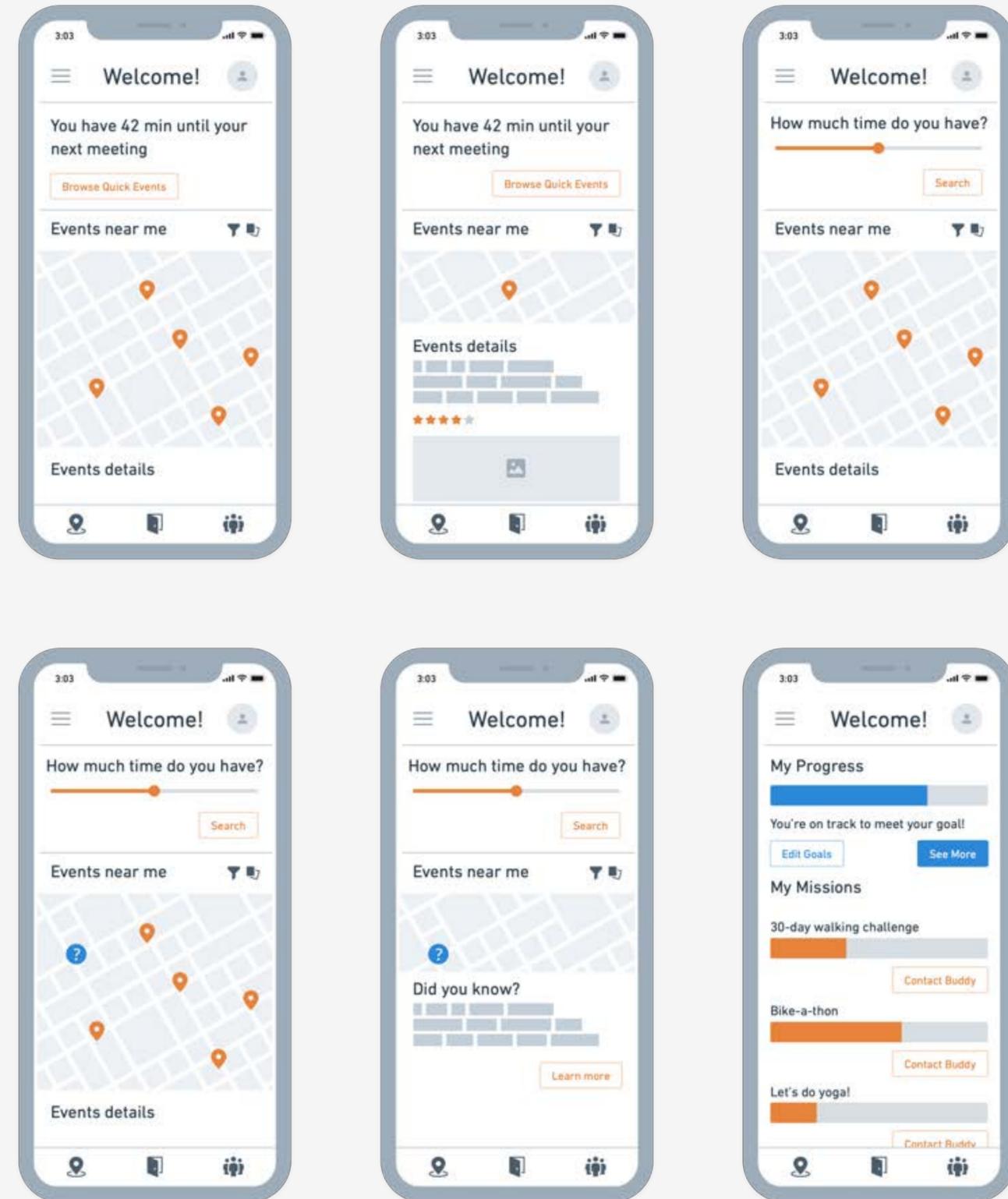


User Feedback

Reframed Prototype

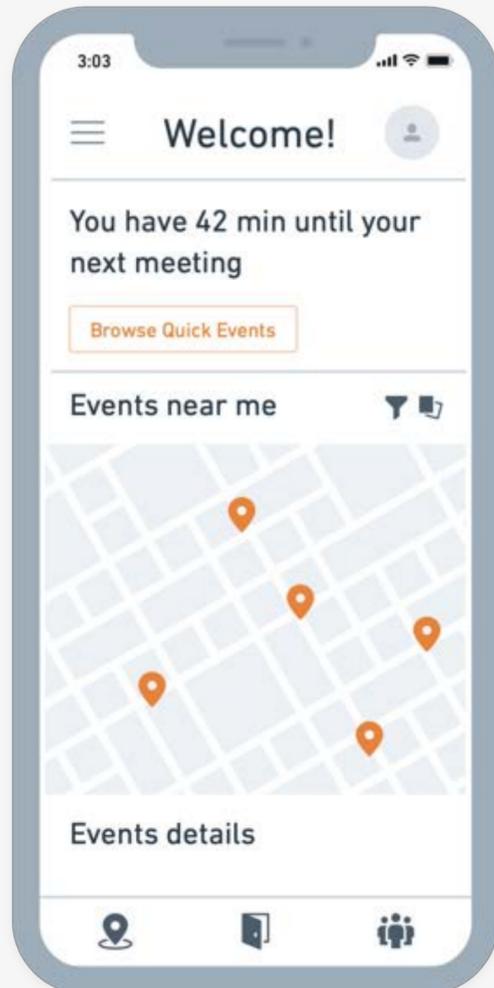
Based on our user testing results, we reiterated our prototype. Thanks to the **allegory testing** method, we learned that users want to find activities on a map interface, so we designed a search mechanism that shows them a selection of events in their area. By clicking on an event, they can learn more about it through user ratings, reviews, and images.

One of the most popular features in the **card sorting** method was “personal milestones,” so we designed a dashboard that shows users’ progress in their personal missions and challenges. It also gives them an update about whether they are on track to meet their goal.



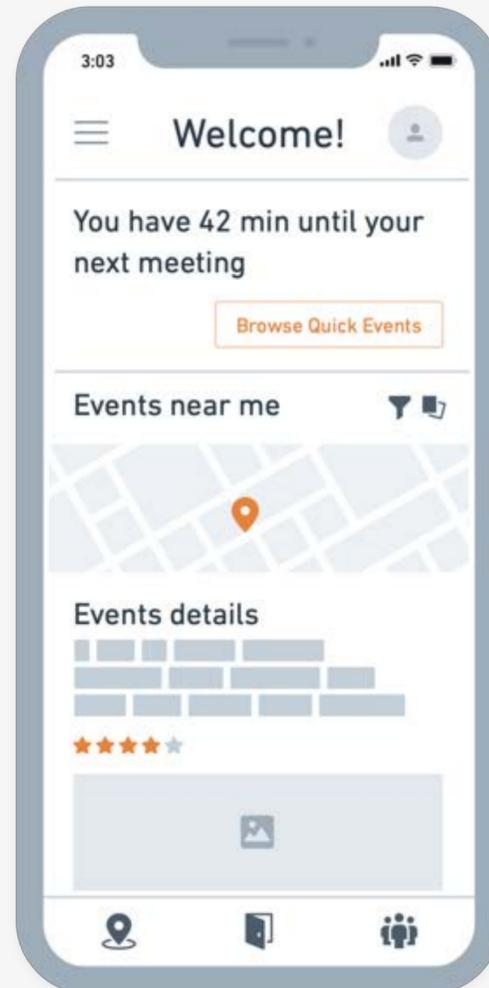
Reframed Prototype

Map Interface



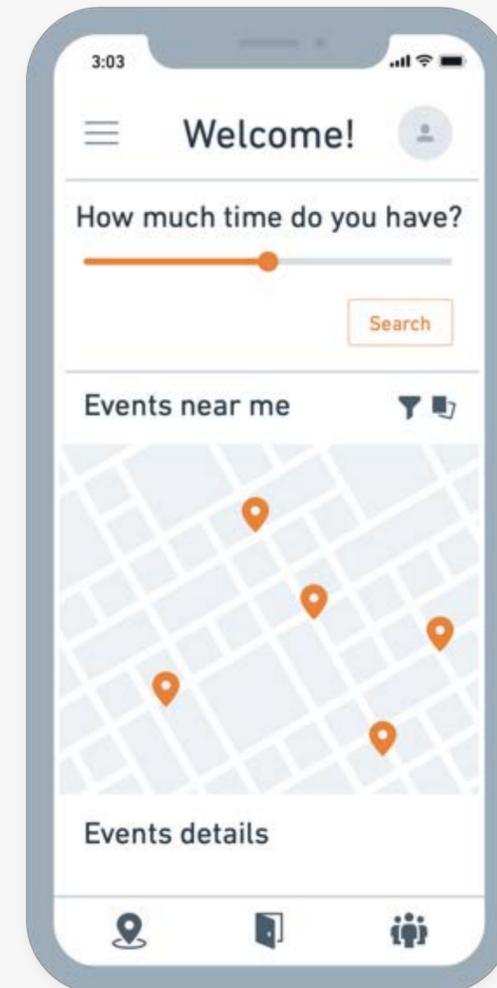
Thanks to allegory testing, we learned that our users prefer a map interface for looking up activities. This feature is especially helpful for travelers who need a tool to orient themselves in a new location.

Event Details/Information



Users can easily access event details after clicking on a pin on the map. User-generated ratings and reviews help users learn more about others' experiences before attending the activity or event themselves.

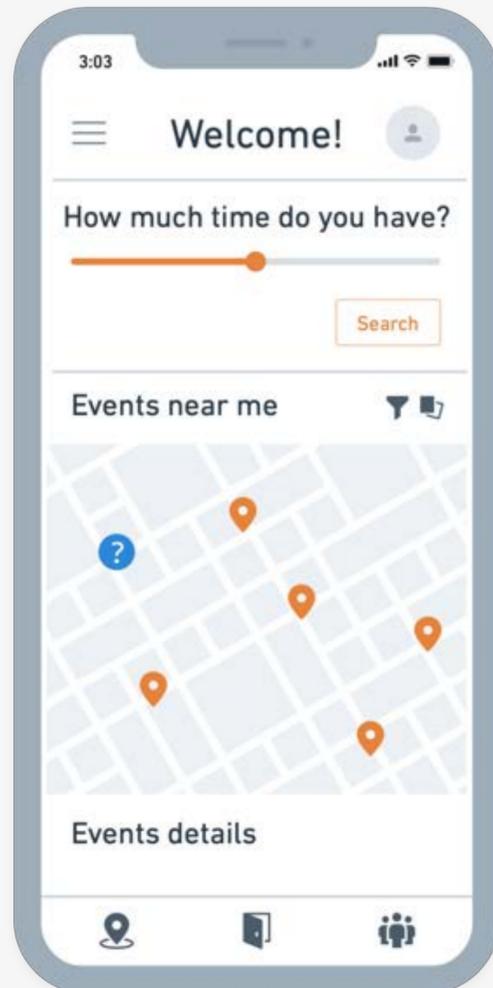
Time Preferences



We found that our users are interested in activities that take 30 minutes or less, so our solution includes a time-based filter, which helps users find activities that fit into their schedule.

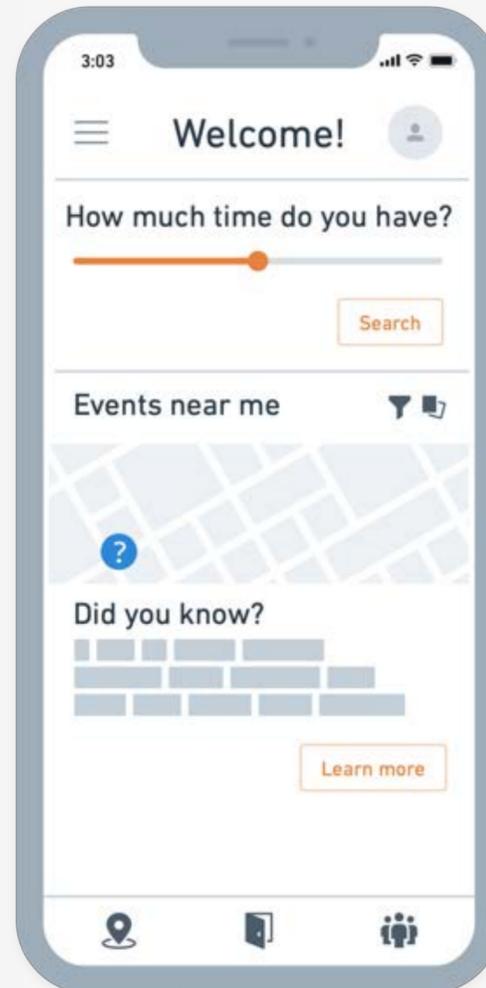
Reframed Prototype

Localized Cultural Insights 1



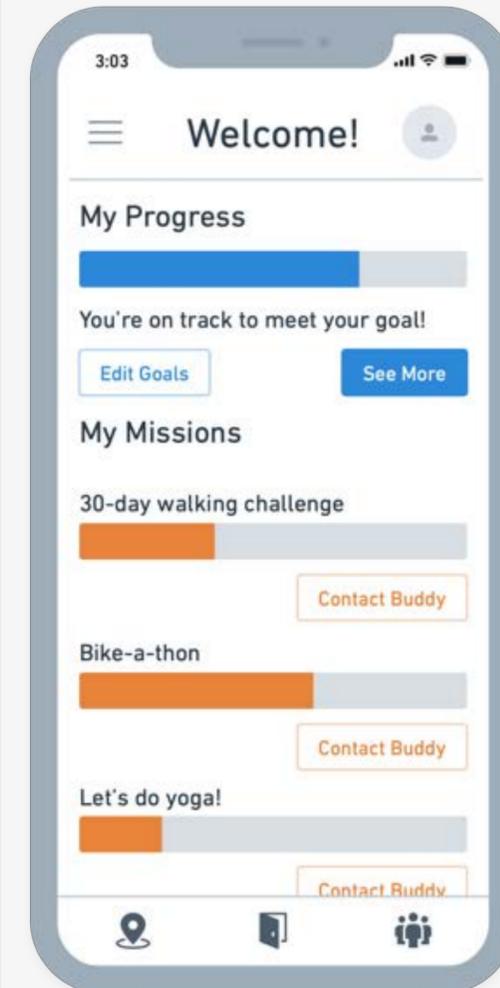
Through user testing, we uncovered that users aren't only looking for outdoor recreation activities but also want to learn more about their surroundings, including culture and history.

Localized Cultural Insights 2



We want to provide users with interesting insights into culture and history through fun facts about the area. Travelers and locals will benefit from this feature, as it integrates educational content in an entertaining way.

Personal Milestones



Personal milestones proved to be a motivating factor for many of our testing participants. That's why our app will include progress trackers for individual challenges and missions.

Method 3

Feature Testing

After reframing our prototype, we wanted to understand how our users pictured the features identified as most important during card sorting. We printed out large format versions of our prototype and asked users to help us understand what they liked, what they didn't like, and what could be improved.

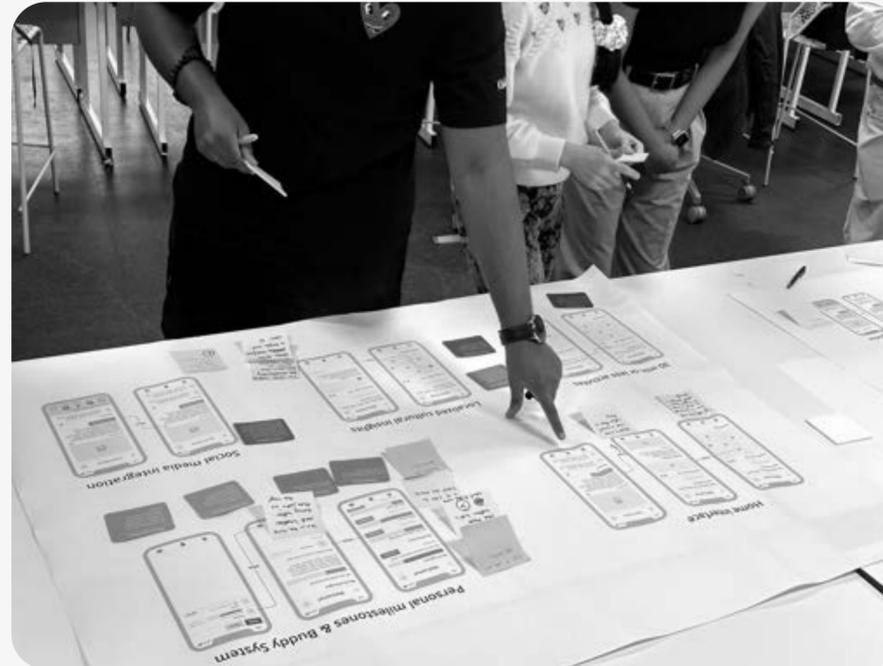
15
Participants



Feature Testing

Process

For this round of testing, we asked participants to consider five different tasks, and think about how they would complete them using our solution. We asked them to list any elements they might find helpful in completing these tasks, as well as noting any questions or concerns that came up. We break down the results of the session over the next few pages.



Feature Testing

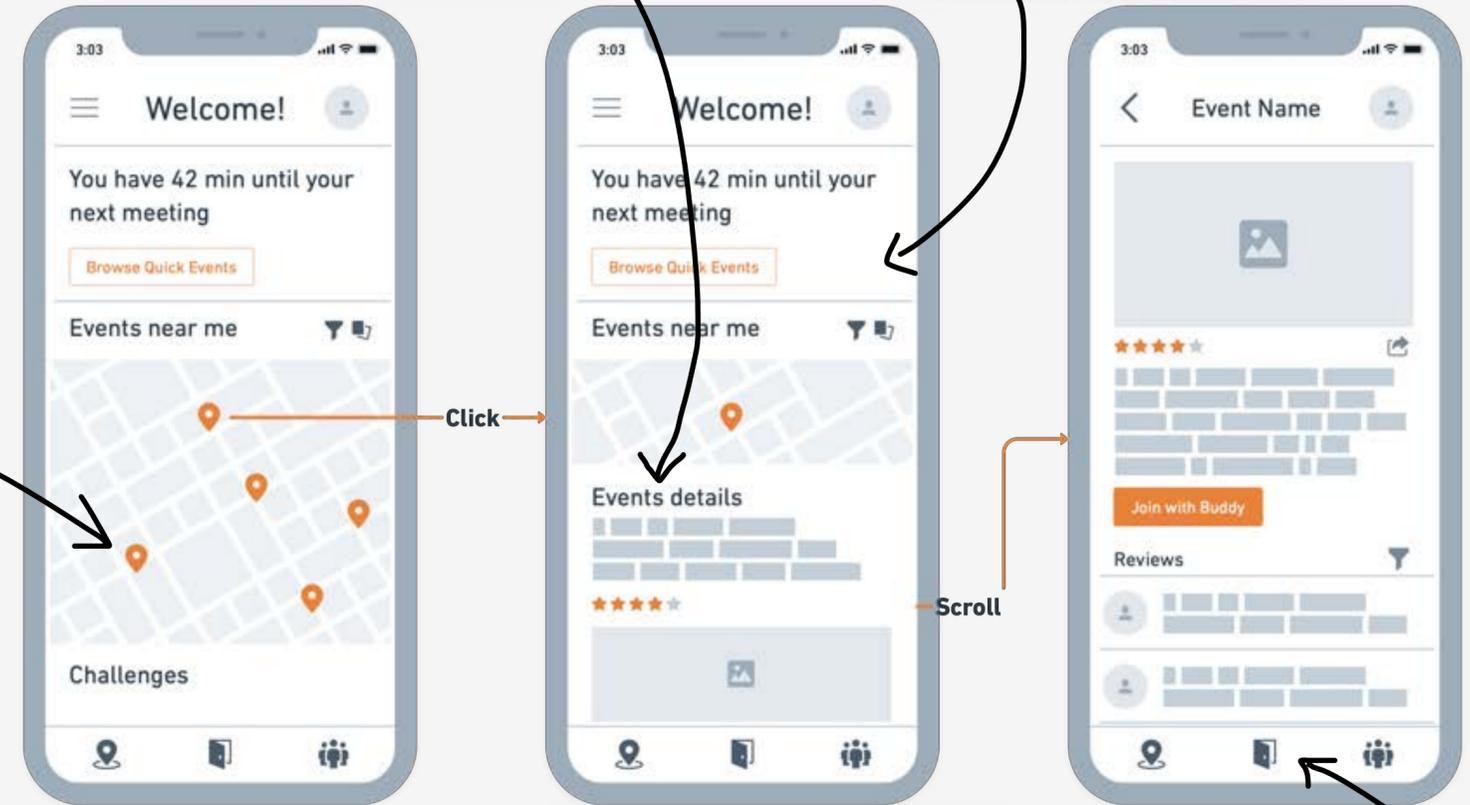
Home Interface

During allegory testing, we found that our users wanted a map interface to search for events. We developed early iterations of how this interface might look like and asked our users to point out what they liked, disliked, and what information they would like to see and how.

Typically the map icon is too small to click, so make it bigger, avoid what Google Maps is doing.

I think it will be better to change event details to event name like hiking or biking.

I'd like to sort the events.



Maybe label the navigation bar instead of putting any ideas.

I'm little confused about the door icon.

Feature Testing

Personal Milestones and Buddy System

For the personal milestones and buddy system, we were trying to understand how communication between buddies would work, as well as the information users need when participating in activities with their buddies. In the case of personal milestones, we found out that our users did not care for data tracking, but they wanted a way to monitor their own progress.

Edit and see more needs revisiting.

My missions look a little overwhelming.

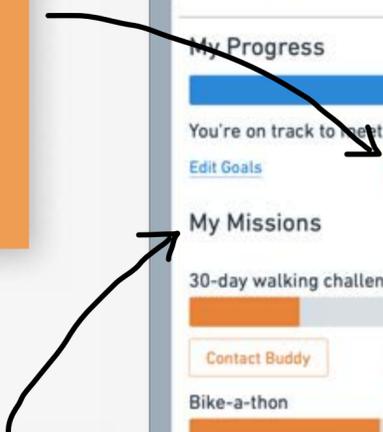
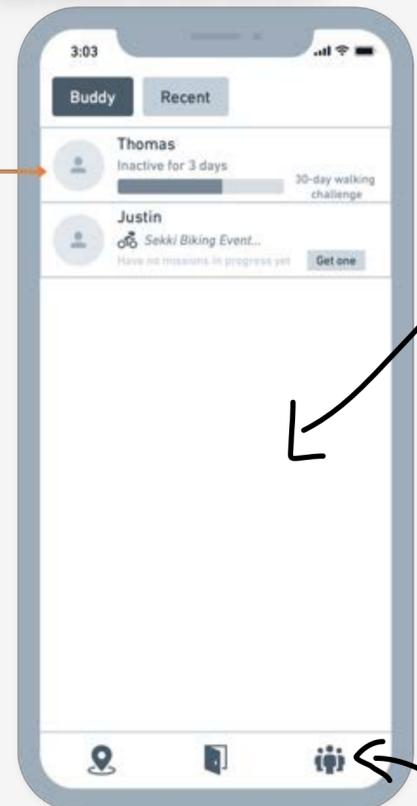
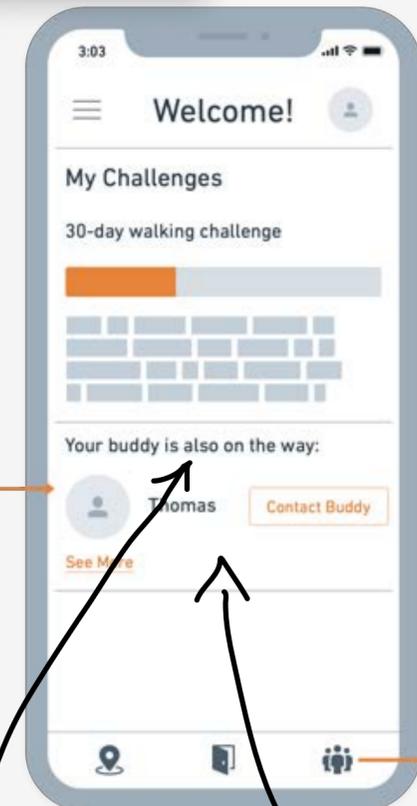
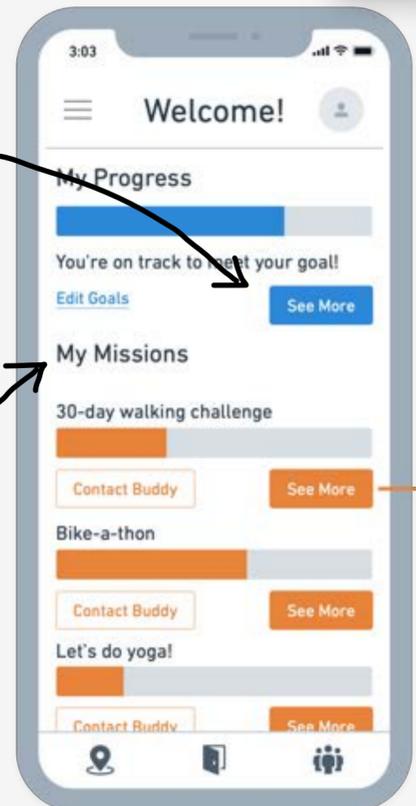
Show the time and location away rather than on the way.

Where do I find this page, how do I scale it lower or higher?

Maybe having a way to rate the buddy.

I want some icon or photos for visual interest.

Icons can be improved to look more relevant.



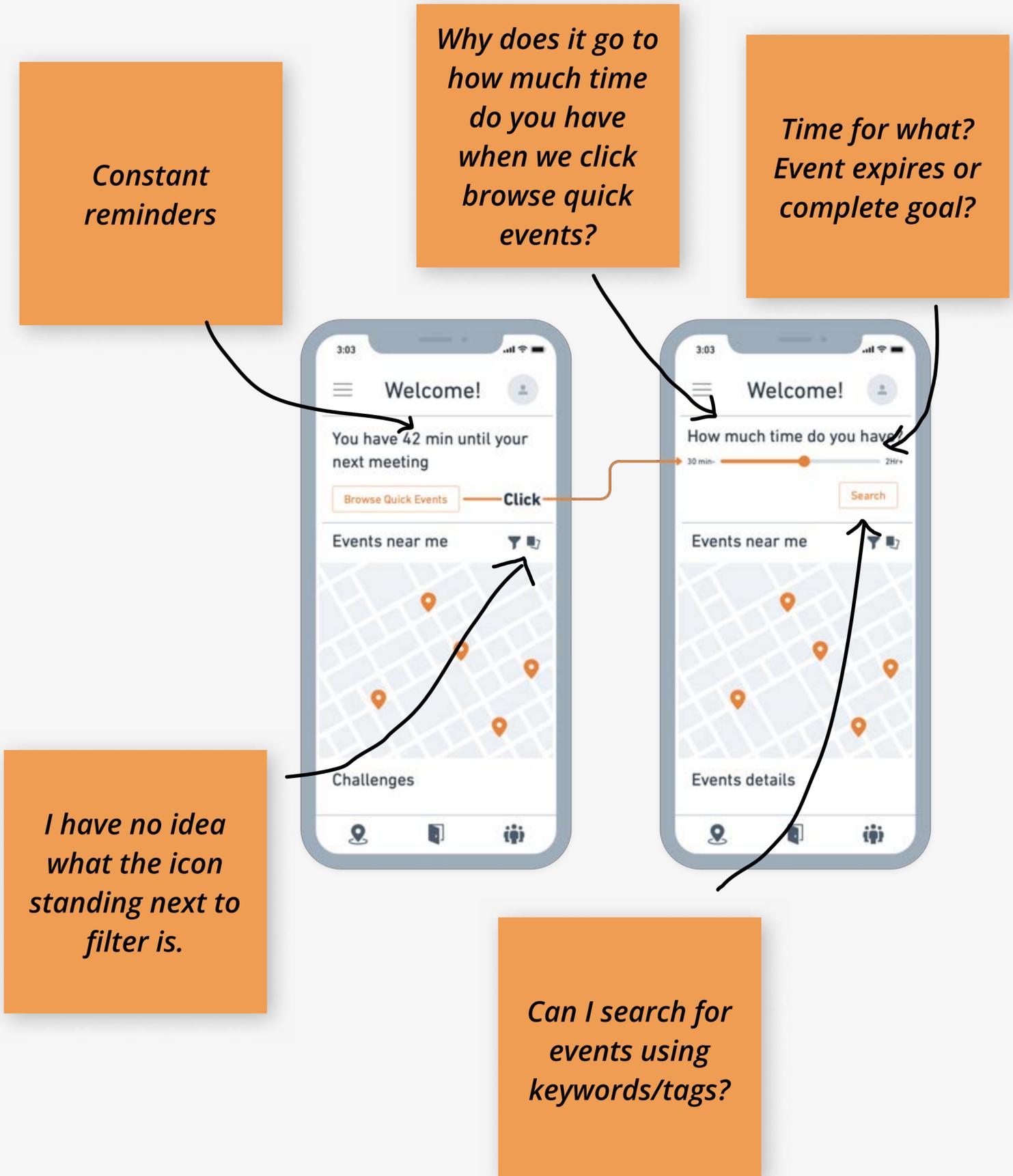
Click

Click

Feature Testing

30-min or Less Activities

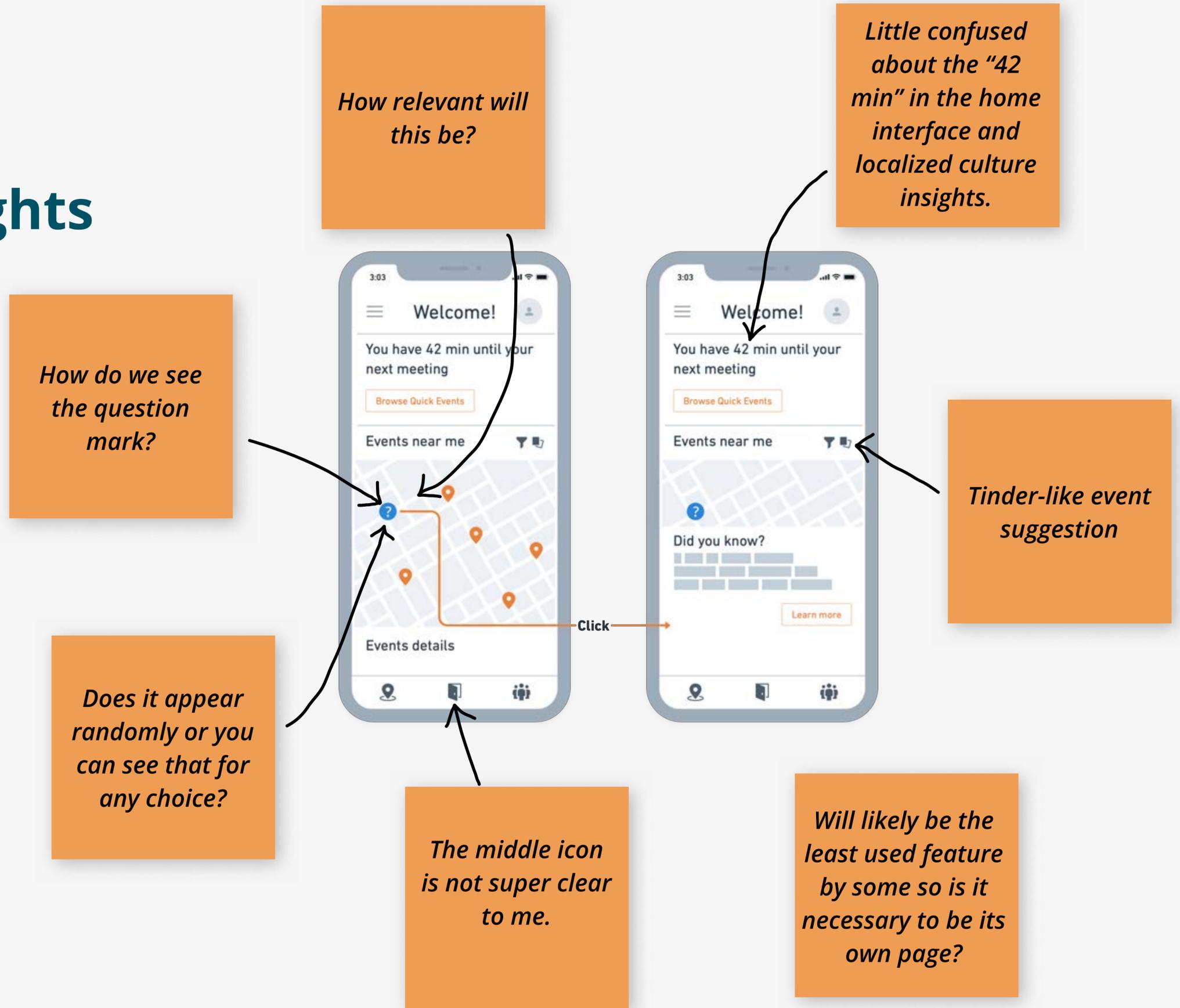
One of the earliest findings we uncovered through our primary research was that one of the main barriers for people to engage in outdoor activities are time constraints. We developed a feature to address this and allow for users to filter activities based on how much available time they have. We asked users what they would want to see in such as feature, as well as how they would like that information delivered.



Feature Testing

Localized Cultural Insights

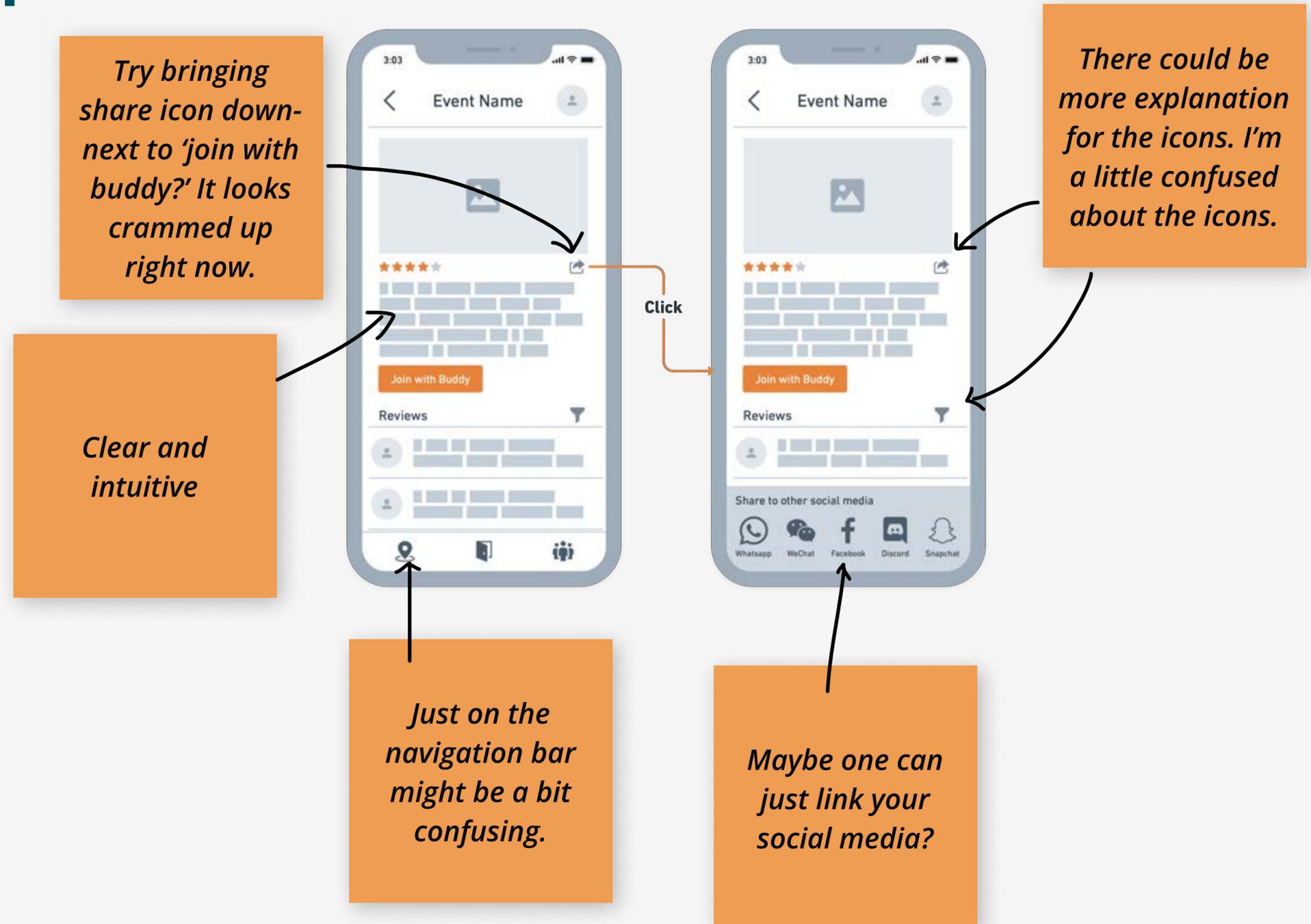
Localized cultural insights were the highest ranked feature during card sorting. Nearly 80% of participants identified it as a feature they wanted to see in our solution. We gathered feedback on what exactly our users want to see, and how they want to interact with that information.



Feature Testing

Social Media Integration

During card sorting, we understood that our users wanted to integrate existing social media to share content across channels. We asked our users how they want this integration to look like, and how it can be as intuitive as possible.



Feature Testing

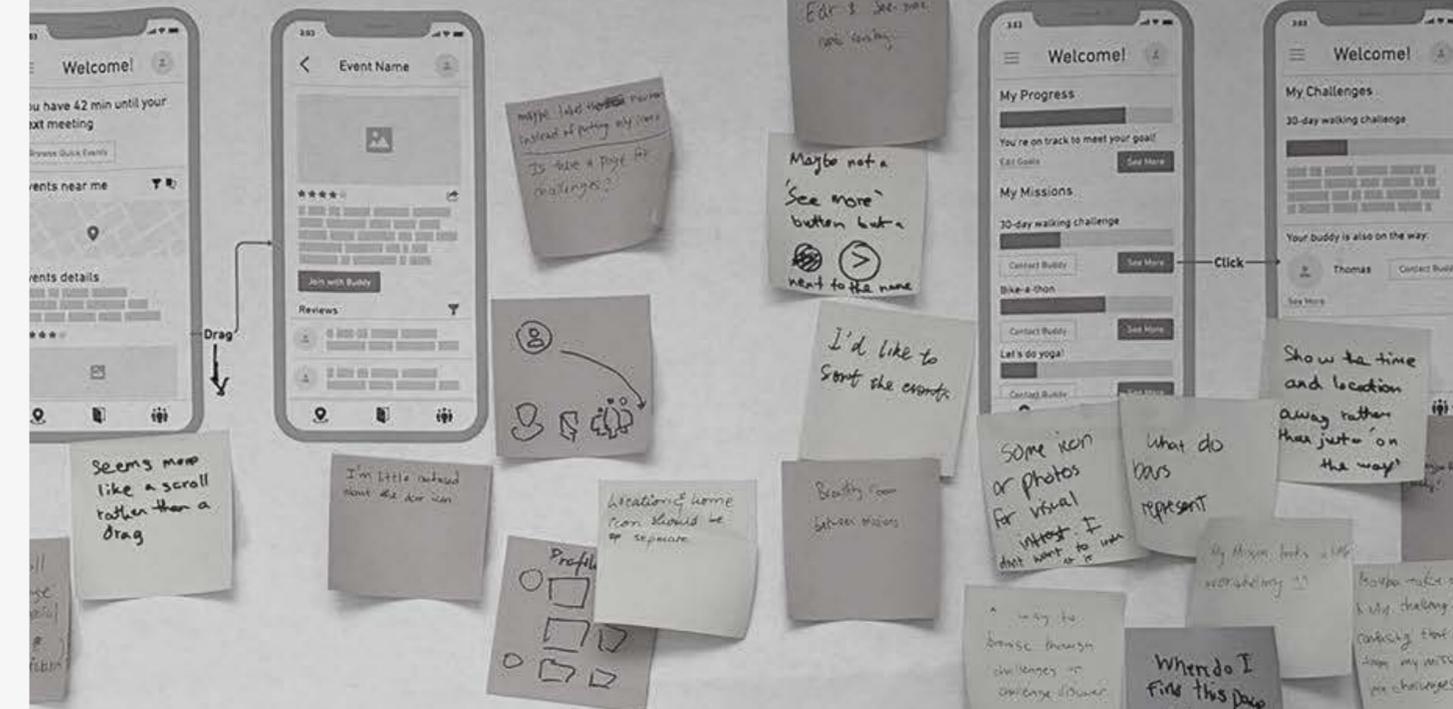
Results + Key Findings

During feature testing, we gained a deeper understanding into how our users want to interact with our solution, and how they expect it to look.

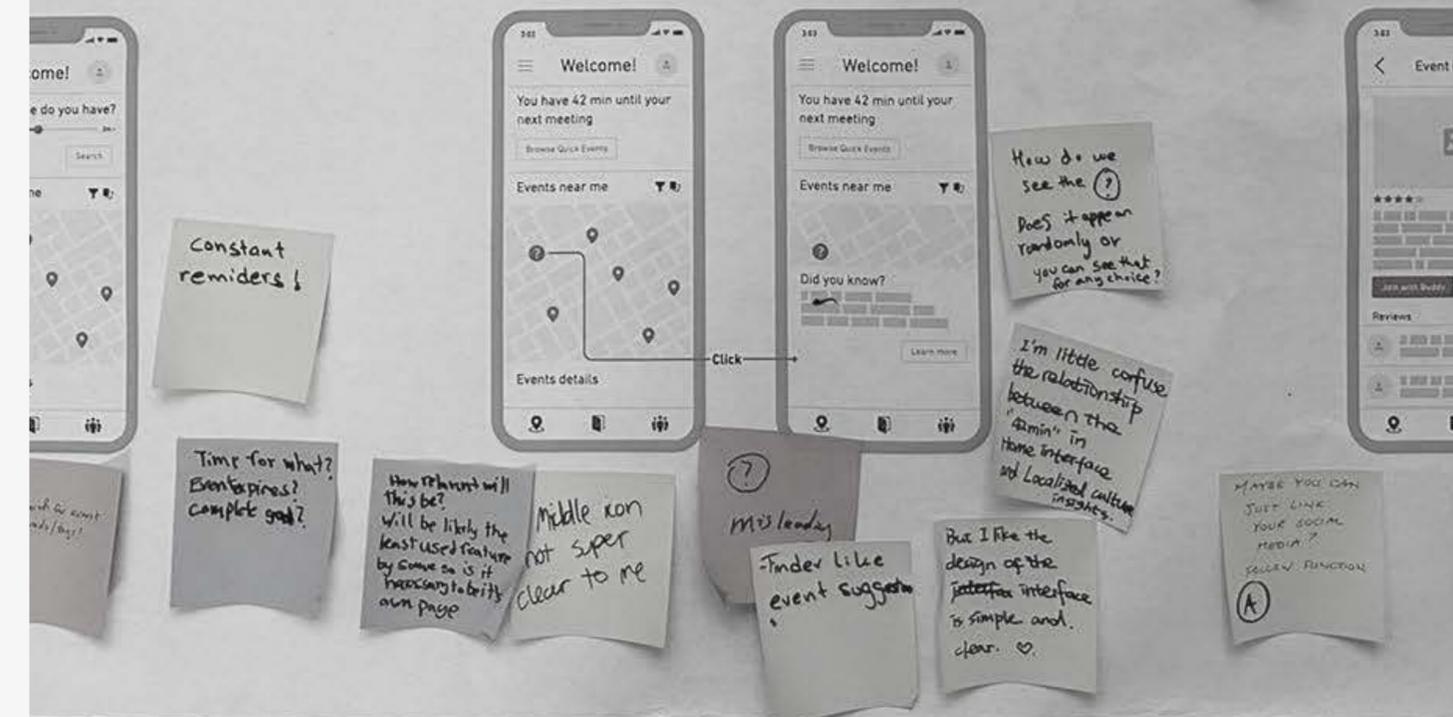
Along with our findings from card sorting and allegory testing, this will help us develop our final prototype and make sure it aligns with what our users truly want.

We discovered broader themes, and also went deeper into the granularity of the different tasks and steps and elements needed to make them possible.

Home interface



Events



Method 4

Physical Component

We wanted to develop a physical product in order to engage our users outside of the platform. We decided to do this with a bracelet or key chain that could be tapped to each other or to another user's phone or and automatically add the wearer to the user's network.

We developed and tested three concepts. We asked users which one of the three they preferred for its intended purpose.

13

Participants



Physical Component

Concepts

1



The Familiar

This was inspired by a watch and incorporates a solar cell that charges a light ring. The more time the wearer spends outside, the further the ring lights up, encouraging wearers to get outside.

2



The Sleek

This was our most simple and streamlined concept, and can be worn everyday with other bracelets the wearer may already have.

3



The Versatile

The body of this concept is designed in a way to be interchangeably worn with or without a strap, meaning the wearer could use it as a bracelet or stick it on their key chain. This feature was appealing to most people, as it gave multiple convenient options for its adoption.

Physical Component

Results



The Versatile

11 out of 13 participants chose our third iteration. This concept was then developed further into a final concept and prototype.

This was our winning concept by a landslide, as its versatility appealed to the majority of people we tested with. It can be worn as jewelry, but if someone already has bracelets or prefers not to wear one, they can attach it on their key chain without having to change anything.

Reframed Business Model

Business Model Canvas

After collecting feedback from our users, we saw a need to reframe our business model canvas. We updated our key partnerships by adding map and social media integration partners and we expanded on the key activities we provide for our users and partners. This also led us to refine our value proposition, adding details where necessary. User testing was also helpful in redefining our customer relationships as we learned more about our users' preferred communication channels.

Key Partnerships

- Local Businesses
- Transaction Facilitator
- Investors
- Developers
- Technology Partners
- Advertising Partners
- Outdoor Brands
- *Google Maps (for activity search mechanism)*
- *Instagram (for user communication)*

Key Activities

- Mentor-led activities
- Social network engagement
- Outdoor activities sponsored by partners
- Rewards system
- Increased visibility strategies
- Exploring cultural events
- Crowd sourced weather reports
- Time-sensitive missions
- Community sharing
- Weekly activities
- Weather-dependent activities
- Content management system
- Personal milestones
- Activity search (Google Maps style)
- User communication (Instagram style)
- Personalized itinerary creation
- Allegory-driven onboarding (Airbnb style)

Value Proposition

- *Building bridges between users and outdoor experiences*
- *Motivating users with personal milestones*
- *Facilitating connections within the community*
- *Providing a sense of community*
- *Increasing customer base through tailored activities*

Customer Relationships

- Community engagement
- Co-creation activities
- *Following friends and mentors*
- *Direct messaging and comments*
- *Personalized itineraries*

■ Updated or added

User Testing

Reframed Value Proposition

Based on our user testing results, we also reframed our value proposition to make it more precise to our user needs. For example, user testing showed us that couch koalas not only lack motivation to get outside but also information, so we refined our target audience in our value proposition.

For *couch koalas,*

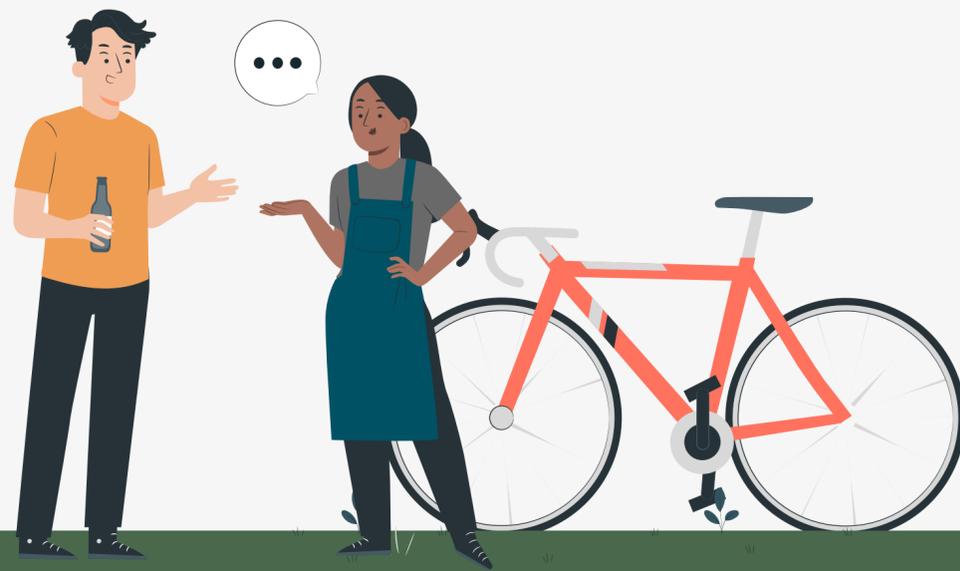
Who *lack information and self-motivation to get outside, want to connect with others, and want to explore new places,*

Our *solution is an incentive-based, community-oriented platform with access to activities offered by certified professionals*

That *delivers personalized experiences and increased visibility for local businesses and events.*

Unlike *alternatives to our platform such as Strava, Alltrails, Pokémon Go, Nextdoor, and Meetup*

Our *solution integrates digital and physical experiences and supports local economies.*

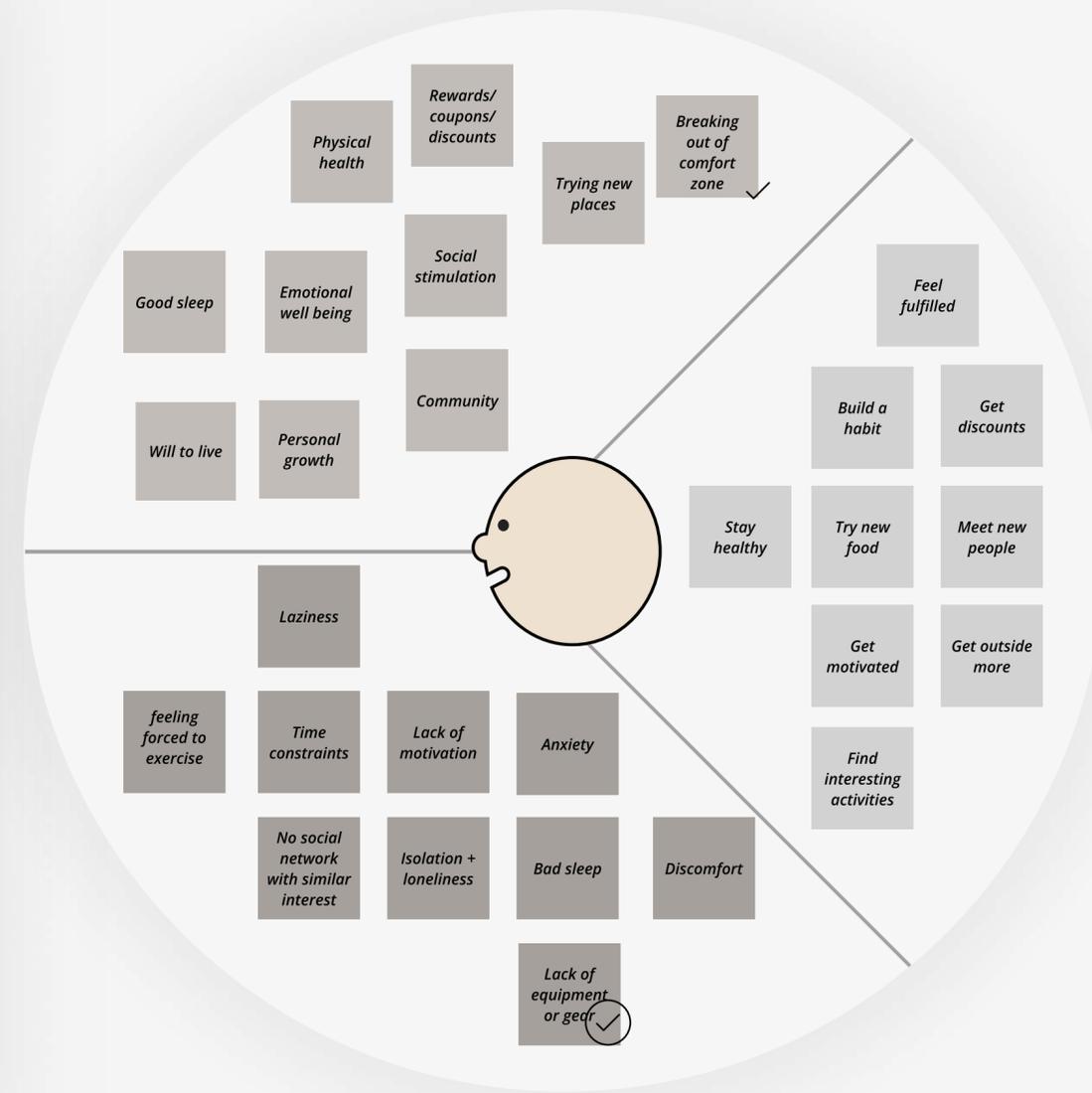
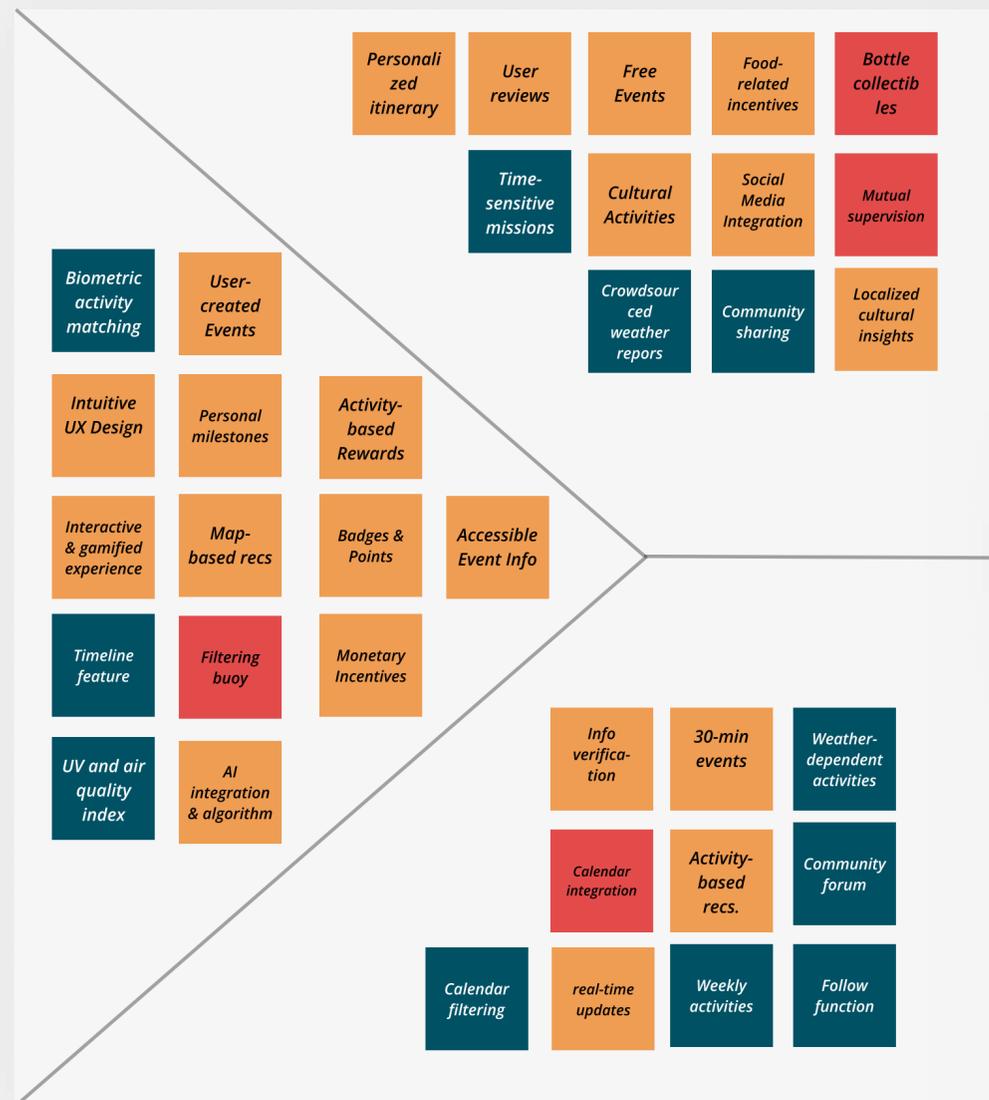


Reframed Value Fit Analysis

Couch Koalas

In previous stages of our fit analysis, we determined that our ideas match our customer's profile. However, based on our user testing results, we reframed the value fit analysis for the couch koalas.

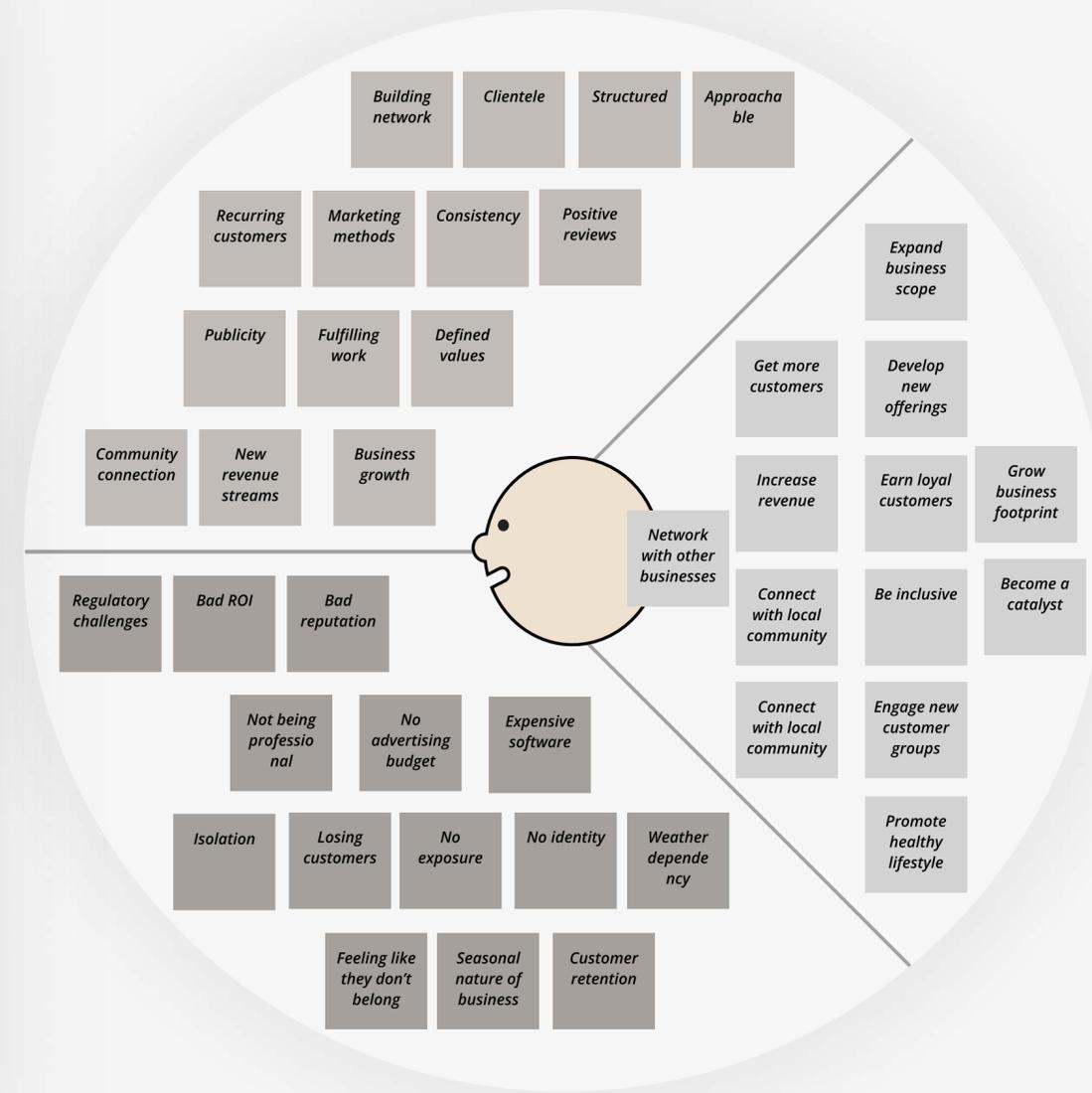
The notes highlighted in red will be eliminated, while the features highlighted in orange will continue being at the core of our platform. Features highlighted in blue are currently of less priority but may be developed in the future.



Reframed Value Fit Analysis

Partners

We also reframed the value fit analysis we originally conducted for our partners. In this case, we only want to eliminate two features: mentor connection and mentor recruitment. Both of them were deemed less valuable by users, so we decided to remove them from our prototyping efforts. After all, if users (who would ultimately provide our partners with value) aren't interested in these features, there is little reason for developing them.



Reframed Zag 17 Questions

Zag 17

We adjusted our statements based on user testing and analysis to better align with their objectives and needs. Our revised answers prioritize Wellness, Exploration, and Community as major motivators for action, as identified during testing

1. Who are you?	a community-driven outdoor activities platform that prioritizes community engagement and mentorship
2. What do you do?	we connect users to a variety of outdoor activities, encourage engagement with the community, and promote outdoor exploration and facilitate mentorship opportunities within local communities
3. What's your vision?	to build healthy local communities of outdoor enthusiasts who share knowledge, experiences, and a strong connection to nature, led by mentors who promote and encourage progress
4. What wave are you riding?	of digital transformation in the outdoor recreation industry, while also championing for community-based initiatives to strengthen and connect local communities
5. Who shares the brandscape?	outdoor enthusiasts, adventure seekers, cultural explorers, local community members and businesses, and mentors passionate about sharing their expertise
6. What makes you the "only"?	we connect users to a variety of outdoor activities, encourage engagement with the community, and promote outdoor exploration and facilitate mentorship opportunities within local communities
7. What should you add or subtract?	continue enhancing our platform by adding features that encourage mentorship connections, community building, and local engagement, while eliminating any barriers to inclusiveness and accessibility

Reframed Zag 17 Questions

Zag 17

8. Who loves you?	outdoor enthusiasts who value community, mentorship, and authentic outdoor experiences rooted in local culture and skills
9. Who is the enemy?	our key challenge is to overcome isolation and disengagement within local communities, as well as competition from platforms that lack a strong focus on community and mentorship
10. What do they call you?	xxxx (under discussion)
11. How do you explain yourself?	xxxx (under discussion)
12. How do you spread the word?	community involvement campaigns, local partnerships, mentorship programs, digital marketing campaigns, and word-of-mouth referrals from engaged community members
13. How do people engage with you?	our interactive platform, local events and meetups, mentorship programs, online forums, and collaborative projects within their communities
14. What do they experience?	a supportive network of like-minded individuals, access to local knowledge and expertise, meaningful mentorship connections, and memorable outdoor adventures tailored to their interests and skill levels

Reframed Zag 17 Questions

Zag 17

15. How do you earn their loyalty?

by developing a sense of belonging, offering essential resources and assistance, making meaningful connections, and promoting personal growth and development within local communities

16. How do you extend your success?

by expanding our reach into new communities, deepening existing connections, scaling our mentorship programs, and continually evolving our platform to meet the changing needs of users

17. How do you protect your portfolio?

by focusing on user privacy and security, creating a culture of trust and openness, adhering to moral guidelines, and maintaining a strong brand reputation founded on integrity and community values

Reframed Balanced Scorecard

Balanced Scorecard

After completing the user testing process, we also decided to reframe our balanced scorecard to better reflect what our users are asking for.

