



# TrailScout

Madison Buhse | Alana Cope | Antonia Crenshaw |  
Chelsea Mockbee | Jennifer Olave

Tools: Miro, Figma, and Figjam


Additional Materials: [Presentation Slides](#) & [Script](#)



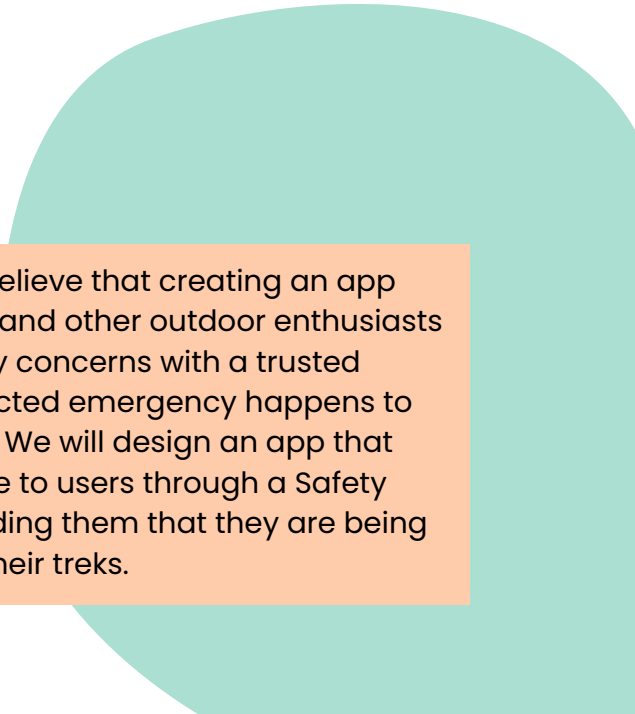
# The Problem

Adults who enjoy exploring the outdoors often feel unprepared when they make their journey on a hiking trail, even after using the information they find online. They also tend to avoid going out alone because it's difficult to prepare for all of the potential dangers on a trail.

# The Solution



*Initial Solution:* We believe that creating an app that connects hikers with other outdoor enthusiasts and provides them with the resources they need to stay safe on the trail will not only provide hikers with the tools they need to navigate trails with confidence but also foster a sense of community among users. We will design an app that inspires users to explore the great outdoors and push themselves to new heights.



*After Iterations:* We believe that creating an app that connects hikers and other outdoor enthusiasts who may have safety concerns with a trusted contact if an unexpected emergency happens to arise while exploring. We will design an app that provides reassurance to users through a Safety Mode feature, reminding them that they are being looked after during their treks.

# Proto-Persona #1

## Name:

Active Adult Andy



## Behavioral Demographics:

- Very outdoorsy person
- Enjoys hiking and adventure
- Practices safety when out in nature

## Goals and Needs:

- Find new areas to hike because he's bored with the usual trails.
- Knowing what nature is around
- Knowing the trails
- Level of difficulty trails

## Pain Points and Solutions:

- Unexpected weather changes when out on an adventure
- Unsure of the wildlife that might appear when on a hike
- Inaccurate maps/trails
- Not knowing when there is a blockage/road closed on a trail ahead of time

# Proto-Persona #2

## Name:

Beginner Betty



## Behavioral Demographics:

Enjoys walks  
Wants to start exercising

## Goals and Needs:

- Wanting to explore nature
- Avoiding being stuck inside staring at screens
- Knowing what nature is around
- Knowing the trails
- alerts for the trails/area

## Pain Points and Solutions:

- Weather
- Not sure about the wildlife present on the trails she would like to walk
- Inaccurate maps/trails
- suspicious behavior from other people in the area







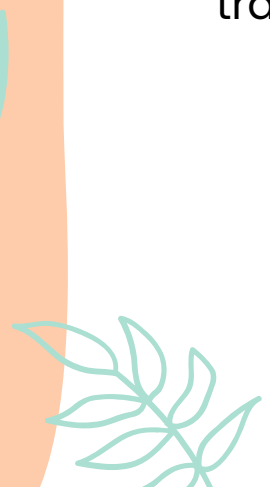
# User Research

Research Plan



# Hypothesis Statement

As user researchers, we want to understand the knowledge and accessibility users have with nature trails in their area.



# Interview Plan

*Uncover people's prior experiences in hiking areas such as community parks, state and national parks.*

- What are some of the factors that influence your decision to visit certain parks or hiking areas over others?
- Have you ever encountered any challenges or difficulties during your visits to these parks, such as navigation issues or unexpected weather conditions?
- Are there any specific amenities or facilities within these parks that you find essential or valuable during your visit?

*Understand what resources people use for hiking or walking a trail.*

- Do you rely on online platforms or mobile apps to find and explore hiking or walking trails? If so which ones do you use?
- Do you seek recommendations from friends, family, or fellow hikers when looking for new hiking or walking trails to explore?
- Are there any other resources or methods you use to discover and gather information about hiking or walking trails that haven't been mentioned?

*Understand what feelings users have when accessing trail information and the risks associated with it.*

- Are there any specific emotions or concerns that arise when you consider the risks associated with hiking or outdoor activities?
- How important is it for you to have accurate and reliable information about potential risks and challenges associated with specific trails?
- Are there any specific safety measures or precautions you always take into consideration before embarking on a hiking or trail adventure?



# Interview Transcripts

**Madison**

[Interview #1](#)  
[Interview #2](#)

**Toni**

[Interview #1](#)  
[Interview #2](#)  
[Interview #3](#)

**Jennifer**

[Interview #1](#)  
[Interview #2](#)

**Chelsea**

[Interview #1](#)  
[Interview #2](#)

**Alana**

[Link to transcript](#)



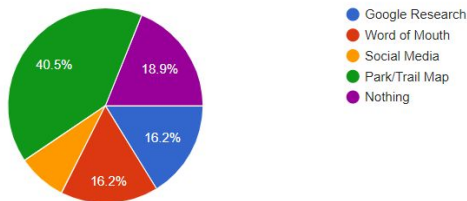
[Link to Survey](#)

# Screeners Survey

A big portion of users used maps on their hikes, tended to group up with at least one additional person, and considered safety important when exploring.

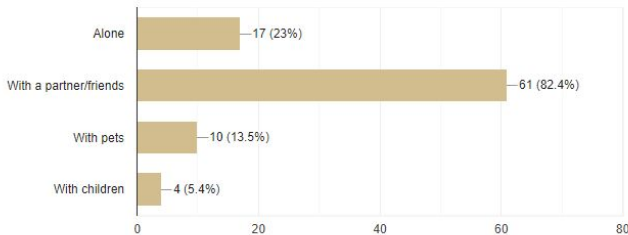
What resources do you typically use to prepare for a walk/hike?

74 responses



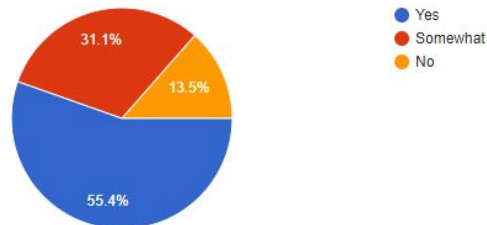
Do you typically go hiking alone or with a friend/group?

74 responses



Is safety a concern when it comes to exploring the outdoors?

74 responses





# Affinity Diagram Highlights



## *Behaviors*

Users love the outdoors and getting the chance to go outside after a long day of work indoors.

## *Amenities & Determining Factors*

Users like to have nice scenery to view, activities to do, and facilities available on hiking trails.

## *Safety Concerns & Measures*

Users are concerned with getting lost and coming face to face with a threatening animal, insect, plant, or person.



## *Hiking Groups/Community Needs*

Users are interested in joining others in their community to go on trails and meet new people.

## *Preparation*

Users usually resort to Google or social apps to learn more about a trail in order to prepare for it.


## *Current Frustrations*

Unexpected change of plans due to trail closures, weather, and unreliable maps.

## *Miscellaneous*

Users would benefit from seeing updates about a trail from someone who is also on the trail—maybe ahead of them or more experienced.

We focused primarily on the users' need for safety and community as we began ideating.



# User Persona



"I go outside to feel human."

## Taylor Brown

Customer Experience Specialist

### ABOUT

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30  
Full-time Employee  
Experienced trail walker, Beginner Hiker

### BEHAVIORS

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- They try to eat healthy, but end up succumbing to junk food.
  - Going on walks counters this behavior for them.
- Spends most of the day inside staring at a computer screen because they work from home.

### MOTIVATIONS

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- They want to go outside more to meet new people and feel connected with the real world.
- Walks are good, but hikes can provide a new challenge and type of workout.

### PAIN POINTS

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- Trail directory info is only accurate sometimes.
- Find too many unexpected obstacles when on a trail walk.
- They never know what type of dangers are on their path; from plants and animals to other people.
- Not enough signage on the trails so they get lost.



# User Insights and Problem Statement

## Insights:

During **user interviews**, we discovered that **our users need a more accurate source of information for the trails they take** because **they often feel unprepared when encountering obstacles in nature**.

Therefore, we believe that **people seeking more outdoor activities often struggle to trust the information they find online** and that we might be able to help if we **promote a community-based app experience that is not behind a paywall**.

We might do this by **allowing app users to share and discuss their trail experiences with others on the platform as well as form hiking/walking groups**. Doing this will allow our users to **feel more confident in their preparation and overall outdoor experience**.

## Problem Statement:

We believe that creating an app that connects hikers with other outdoor enthusiasts and provides them with the resources they need to stay safe on the trail will not only provide hikers with the tools they need to navigate trails with confidence but also foster a sense of community among users. We will design an app that inspires users to explore the great outdoors and push themselves to new heights.

*After Iterations:* We believe that creating an app that connects hikers and other outdoor enthusiasts who may have safety concerns with a trusted contact if an unexpected emergency happens to arise while exploring. We will design an app that provides reassurance to users through a Safety Mode feature, reminding them that they are being looked after during their treks.

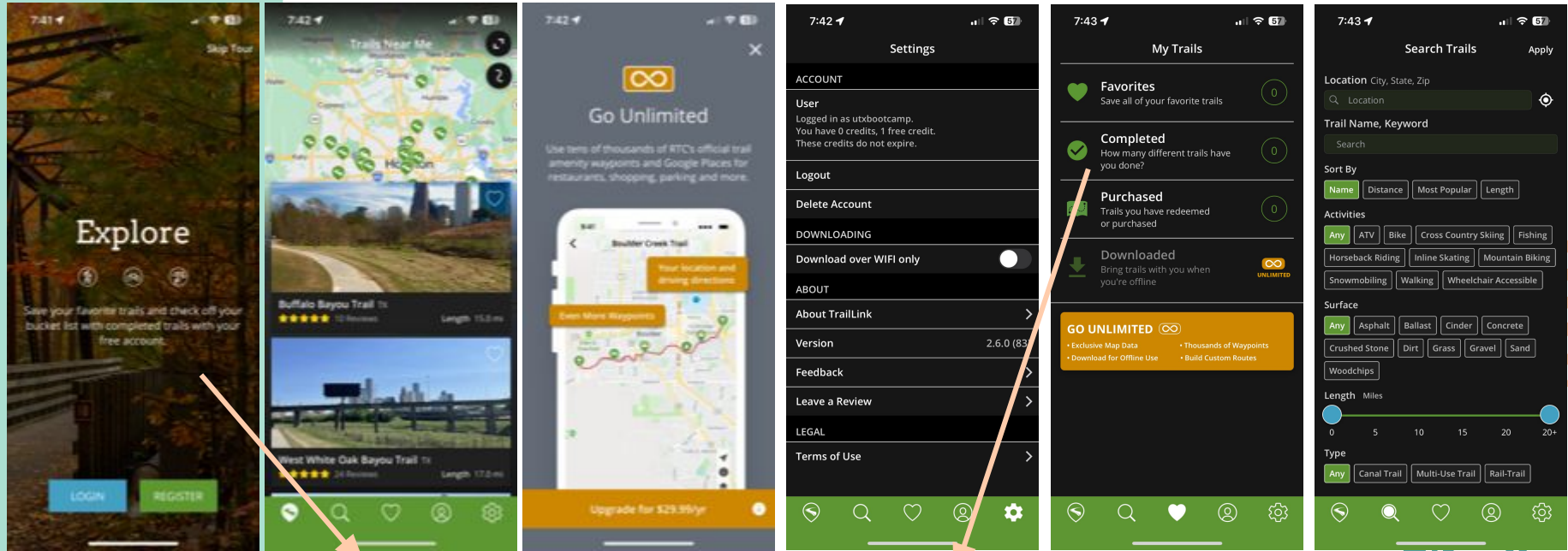


# Competitor Analysis

[Link to Competitor Analysis  
Breakdown](#)

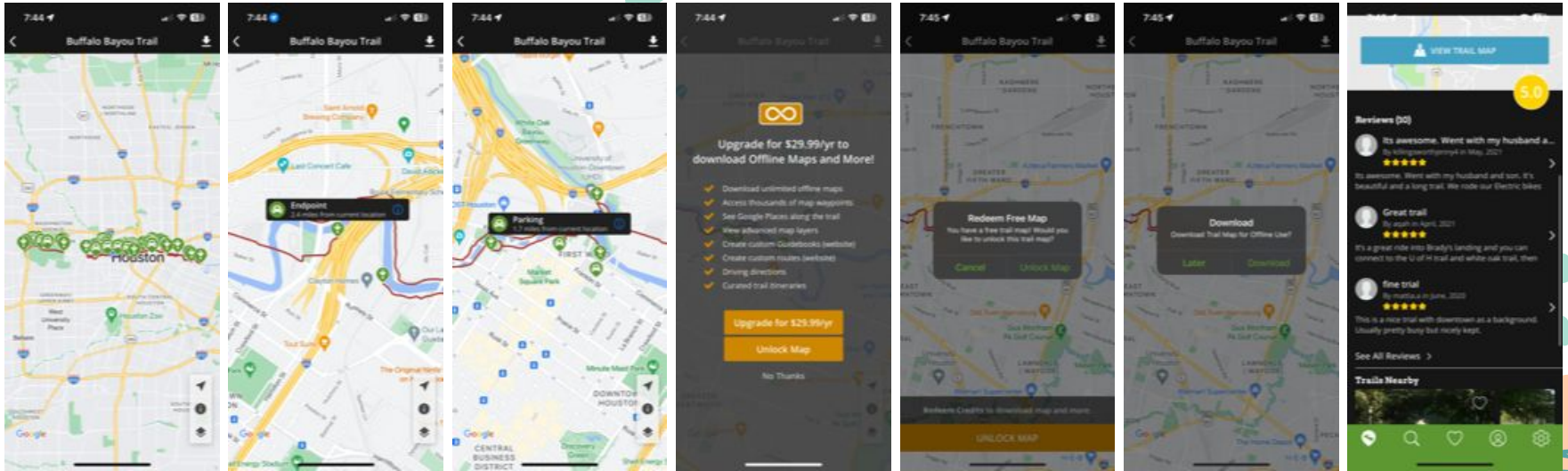


# Competitor Analysis Photos - TrailLink



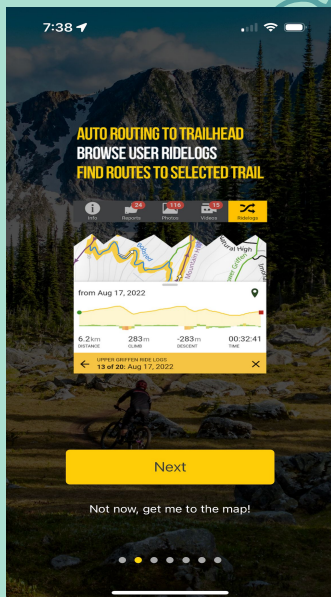
Search features allow a lot of variety depending on area. Completed trails feature is cool, but could be improved to show competition with other users possibly? Aesthetics on splash screen with nature background are visually pleasing, but within the app, the design is not incredibly modern.

# Competitor Analysis Photos - TrailLink

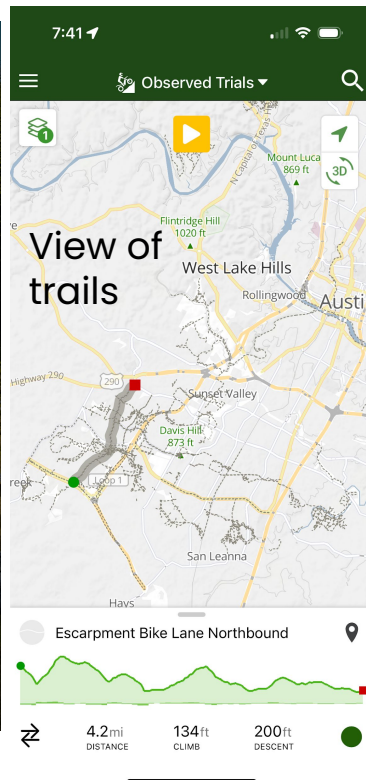
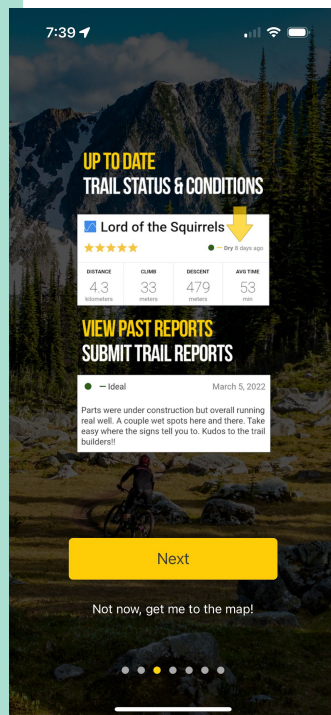


Only one free downloadable map (for offline use) before paywall. Maps are a bit confusing with only a few icons and no legend to be found (have to click to see what they are). Reviews are nice but not very new or regularly updated.

# Competitive Analysis Photos: Trailforks



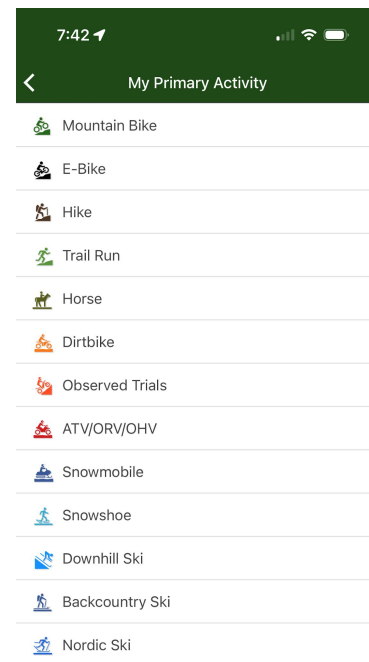
^ Onboarding>



Call 911

Emergency  
button from  
drop down  
menu

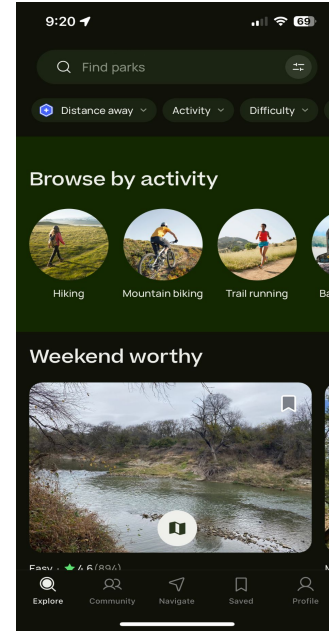
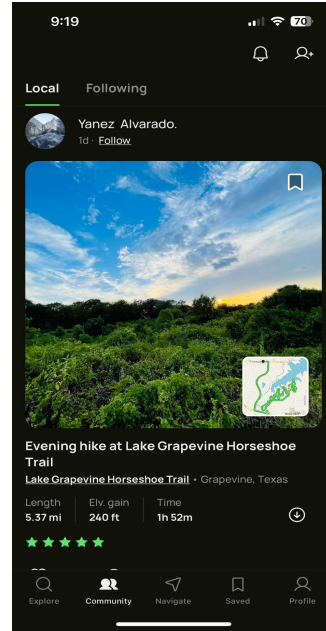
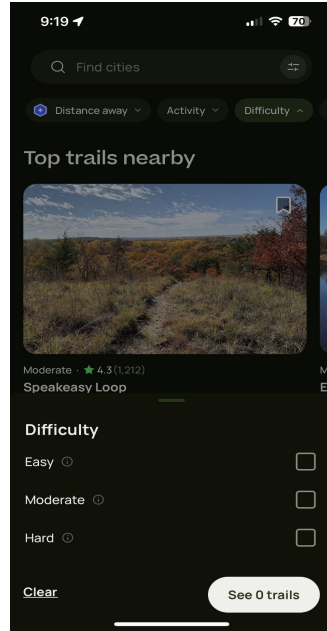
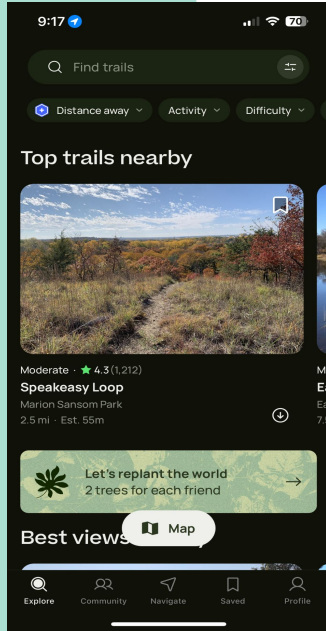
Lat:
Long:
Accuracy: fetching...



List of various  
trail types



# Competitor Analysis - AllTrails



Very competitive app, however it's completely user-generated causing different flaws that present themselves at random times for users. Has a lot of features but users find it very highly priced.

# Competitor Analysis Photos - Austin Parks & Rec: Trail Directory

## Legend

- Mile Marker
- Drinking Fountain
- Pier or Dock
- Boat Ramp
- Restroom
- Rowing Dock and Rentals
- Kiosk
- Fitness Station
- Rest Area
- Ann and Roy Butler Trail
- Shared Use Trail
- Off Leash Dog Area

- Yield to slower trail users and pass on the left with care.
- When approaching congested areas, please slow down.
- No motorized vehicles are allowed on the trail.
- All pets must be on a leash 6 feet or less in length, unless playing in the designated off-leash area at Auditorium Shores.
- Please clean up after your pets.

Trail Miles (Round Trip)	Roberta Greenhaw Bridge (Mopac)	Pittenger Bridge	South 1st (Drake) Bridge	Congress (Ann Richards) Bridge	IH-35 Bridge	Longhorn Dam
Roberta Greenhaw Bridge (Mopac)		3.1	4.23	4.82	6.9	10.15
Pittenger Bridge	3.1		1.56	1.96	4.13	7.21
South 1st (Drake) Bridge	4.23	1.56		1.08	3.25	6.32
Congress (Ann Richards) Bridge	4.82	1.96	1.08		3.22	6.3
IH-35 Bridge	6.9	4.13	3.25	3.22		4
Longhorn Dam	10.15	7.21	6.32	6.3	4	

## Directory

### Legend

- Trailhead
- Trail Mile Marker
- Dam
- Falls
- Swimming Area
- Climbing Wall
- Scenic Overlook
- Restroom
- Kiosks
- Parking Lot
- Shared Use
- Hike Only
- Mountain Bike
- Other City of Austin Parks
- Barton Creek Greenbelt
- Barton Creek Wilderness Park

### Trail Signs Legend

- To Parking Lot
- Water Crossing
- 11 Mile Intermediate Bike Route
- Difficult Feature
- Emergency Information

### Map Legend

- Parking
- Kiosk
- Restrooms
- Pool
- Difficult Feature
- Trailheads
- Emergency Information Intersections
- Walnut Creek Metro Trails
- Arrows suggest direction for Intermediate Route
- Intermediate Route (11 Miles)
- Other Trails and Loops
- Sports Fields
- Overhead Power Lines
- Other City of Austin Property
- Creeks and Drainage
- City of Austin Parks

## Circle C Ranch Metro Park:

### The Veloway



Memorial



Restroom



Parking Lot

### Legend



Shared Use Trails  
City of Austin Parks

Download the [Trail Directory](#) to view a PDF document with additional information about the trails listed below, including surface types. Trails are organized alphabetically.

\*A Yes for ADA Accessible indicates a section of the trail that meets ADA at the time it was constructed. It is recommended the trail be reviewed and compared to user capabilities prior to use\*

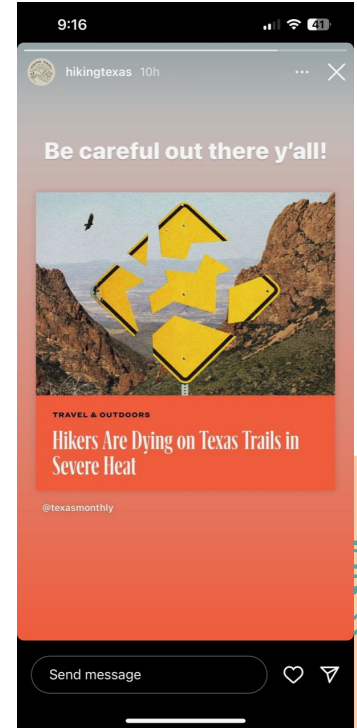
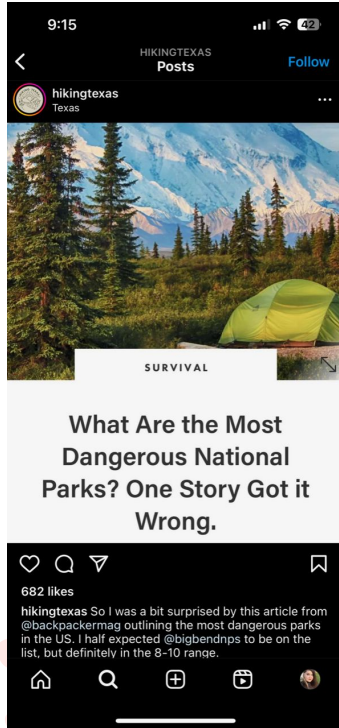
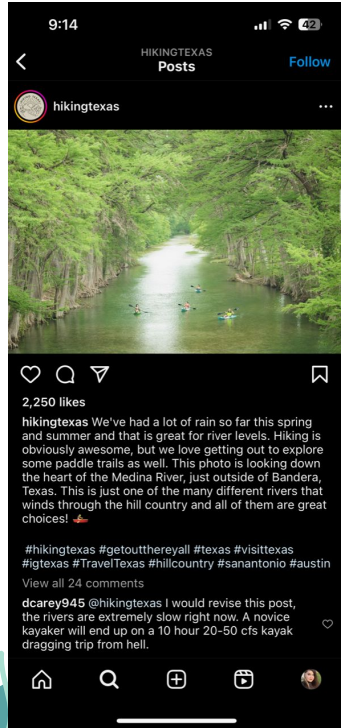
[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

A

Trail Name	Address	Usage Type	ADA Accessible	Area of Town	Trail Distance (in Miles)
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# Competitor: @hikingtexas Instagram Account





# "I Like, I Wish, What If" Ideation

<b>I Like</b> <i>I Like statements can represent what is possible right now.</i>	<b>I Wish</b> <i>I Wish statements can represent what is possible in the near future.</i>	<b>What if</b> <i>What If statements can represent what is possible in the far off future.</i>
<div data-bbox="432 386 513 465">I like knowing the trail before heading out.</div> <div data-bbox="525 386 606 465">I like knowing the possible weather conditions before going on a long hike.</div> <div data-bbox="618 386 699 465">I like when I know how long a trail is.</div> <div data-bbox="710 386 772 465">I like knowing if there are wild animals to look out for.</div>	<div data-bbox="794 386 875 465">I wish I knew if there was sketchy activity on a trail.</div> <div data-bbox="886 386 967 465">I wish I knew about wild animals that could appear on the trail.</div> <div data-bbox="979 386 1060 465">I wish the trail length listed was accurate.</div> <div data-bbox="1072 386 1153 465">I wish there was a bathroom on every trail.</div>	<div data-bbox="1155 386 1236 465">What if I could have help not getting lost on a trail</div> <div data-bbox="1248 386 1329 465">What if a service could help me be aware of what wildlife is in my area</div> <div data-bbox="1340 386 1421 465">What if I could be alerted of storms in the area with updates as they develop</div>
<div data-bbox="432 568 513 647">I like when their's clean restrooms and water fountains at the parks I visit.</div> <div data-bbox="525 568 606 647">I like having human company when I go on a hike or walk.</div> <div data-bbox="618 568 699 647">I like trails that are in loops because I don't see the same scenery.</div> <div data-bbox="710 568 772 647">I like being prepared.</div>	<div data-bbox="794 568 875 647">I wish there was a group I could walk with.</div> <div data-bbox="886 568 967 647">I wish I didn't have to pay for good features.</div> <div data-bbox="979 568 1060 647">I wish there was a guide for the trails I take.</div> <div data-bbox="1072 568 1153 647">I wish I felt confident when approaching difficult trails.</div>	<div data-bbox="1155 568 1236 647">What if I could know the location of all water fountains on a trail</div> <div data-bbox="1248 568 1329 647">What if a service could tell me about all the bathrooms on a trail</div> <div data-bbox="1340 568 1421 647">What if I could have an option to emergency call without service?</div>
<div data-bbox="432 751 513 829">I like seeing reviews I can trust</div> <div data-bbox="525 751 606 829">I like having a reliable app.</div>	<div data-bbox="794 751 875 829">I wish I had updated information on trail closures</div> <div data-bbox="886 751 967 829">I wish I could see reviews and photos from hikers like me</div>	<div data-bbox="1155 751 1236 829">What if I could have updated feedback from users on trail length/difficulty</div> <div data-bbox="1248 751 1329 829">What if a service could give me first aid tips for common poisonous plants in the area?</div> <div data-bbox="1340 751 1421 829">What if a service could give me first aid tips for common poisonous snakes in the area?</div>

A closer look

# Feature Prioritization Matrix

A closer look



# Matrix Highlights

A closer look

- I wish I had updated information on trail closures.
- I like knowing if there are wild animals to look out for.
- What if I could have an option to emergency call without service?

- I like seeing reviews I can trust.
- I wish the trail length listed was accurate.
- What if a service could give me first aid tips for common poisonous plants in the area?

## A closer look

# Initial User Journey Map



**Taylor Brown**

**Age:** 30 **Occupation:** Customer Experience Specialist **Location:** Austin, TX

**Goals:** Finding more of a challenge outdoors / Having confidence in her hikes

### UX Scenario:

Taylor wants to plan a Saturday hike on a nearby trail. After she finishes work on Friday, she begins research to decide on which trail she should visit.

### Motivations:

Taylor is challenging herself with a hike since she's used to walking trails. Taylor wants to find reliable information regarding trail length and difficulty. Taylor needs reliable information to help her feel safe on her hike.

Journey Step What is the user doing?	Searches Instagram for "Hiking in Austin" to see some inspirational photos	Googling hiking trails in the area	Clicking through different sites that are recommended in the Google search	Sees app recommendations in Google results and downloads one	Scrolls through trails and sees length and difficulty	Sees that some information is behind a paywall	Reaches out to her friend for assistance
Feelings and Thoughts What is the user thinking and feeling during this step in the process?	Excited to find and explore new places in her area "These views are gorgeous!"	Struggling to trust "Best Hikes" lists that pop up in search results "How can I be sure these aren't just written for promotional purposes? What about reviews from locals?"	Frustrated that length and difficulty level are left off of many websites "How am I supposed to prepare if I don't know what to expect?"	Intrigued with a new service that could possibly help "It may be nice to have all of the information I need in one place."	Extremely excited to see the information she was looking for immediately "This is what I needed! Now I can see exactly what to expect as a fairly new hiker."	Annoyed that she cannot download all of the material she wants without paying "Well... I guess I may have enough information to go, but I don't want to pay for a service I haven't fully experienced yet."	Tired after spending a lot of time researching. Worried about information reliability. "What if I lose service on the trail and can't access the map? What if the information is inaccurate and something happens?"
Positives & Pain Points Is this step in the journey an overall positive, neutral, or negative experience?	1	2	3	4	5	6	7
Opportunities How can we help? Where are there areas for improvement?	Promote photos from real users	Encourage reviews and feedback from real visitors on the app	Make sure to include length of the trails as well as beginner/moderate/expert levels of difficulty with clear definitions and expectations (possibly from users themselves)	App will show concise blurbs of trails with most important information up front to keep clicks to a minimum		Remove paywall or allow for a trial with free downloadable material first	Have users not rely on cell service / implement safety procedures

## A closer look

# Updated User Journey Map

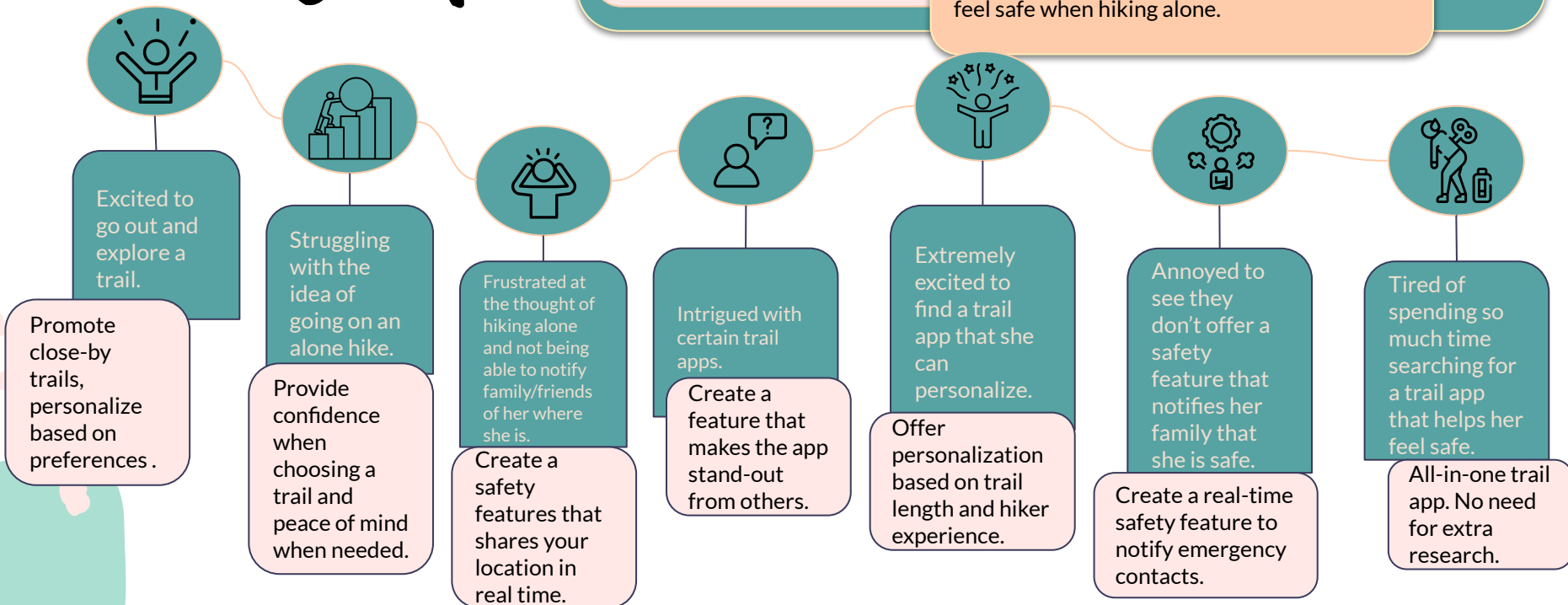


**TAYLOR BROWN**  
**AGE:** 30 **OCCUPATION:** CUSTOMER SPECIALIST **LOCATION:** AUSTIN, TX

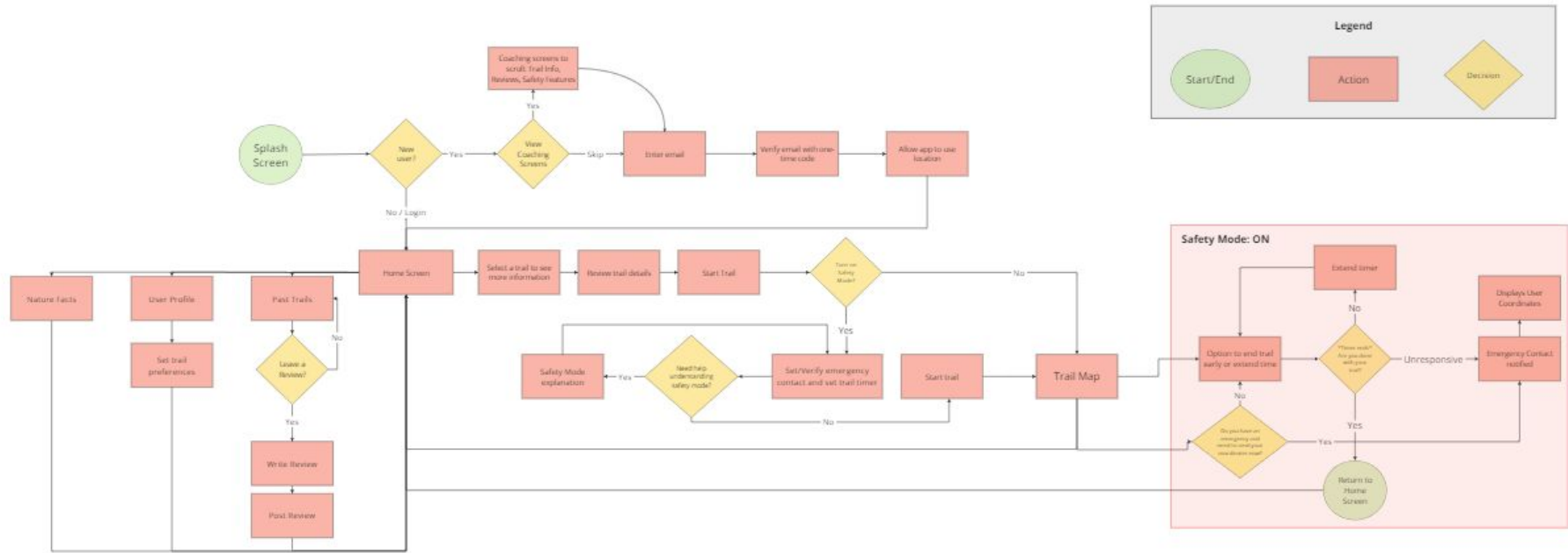
**GOALS:**  
Find the right trail for her & feel safe on her hikes.

**UX SCENARIO**  
Taylor is planning an alone Saturday hike. After work she researches to decide what trail to visit.

**MOTIVATIONS**  
Taylor wants to find reliable info regarding trail length and difficulty. She also would like to feel safe when hiking alone.

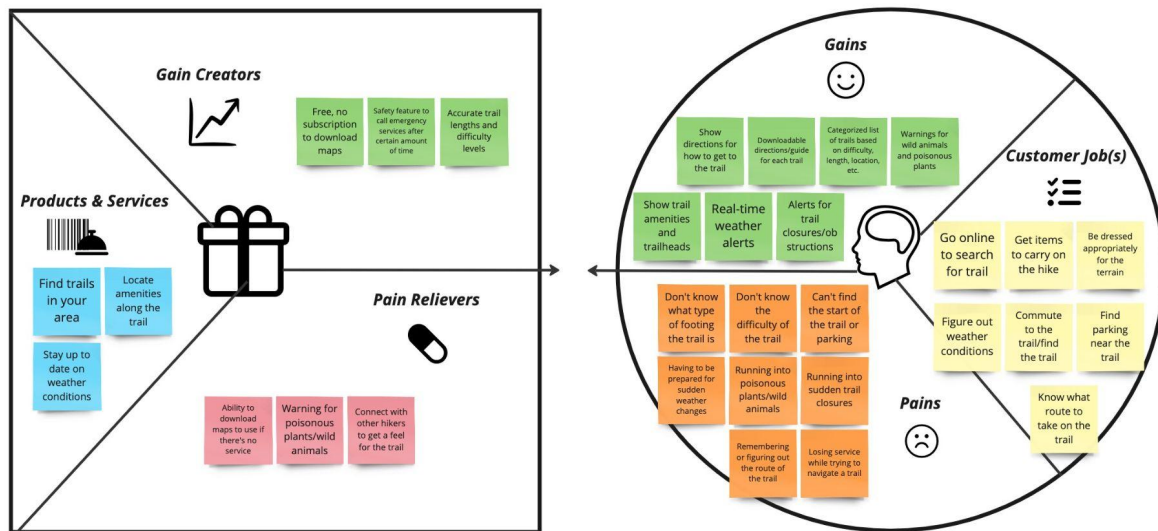


# User Flow



A closer look

# Value Proposition Canvas



My organization TrailScout is developing an app that helps adult hikers solve their safety concerns when it comes to exploring new trails.

We're better because we not only show accurate trail maps, but we also have a safety feature that ensures you make it through your hike safe and sound.

We're believable because our features come directly from the outdoor enthusiasts that need them.



# Storyboard



Taylor is wanting to change up her walking routine and wants to start hiking.



Taylor gets ready for her first hike, but feels unprepared.



Taylor goes on her first hike, and she gets lost. She worries about how to get back and cannot reach anyone on her phone.



Taylor's friend, who is experienced in hiking, showed her the app TrailScout.



Taylor looks into the app and finds a beginner trail that fits her level.



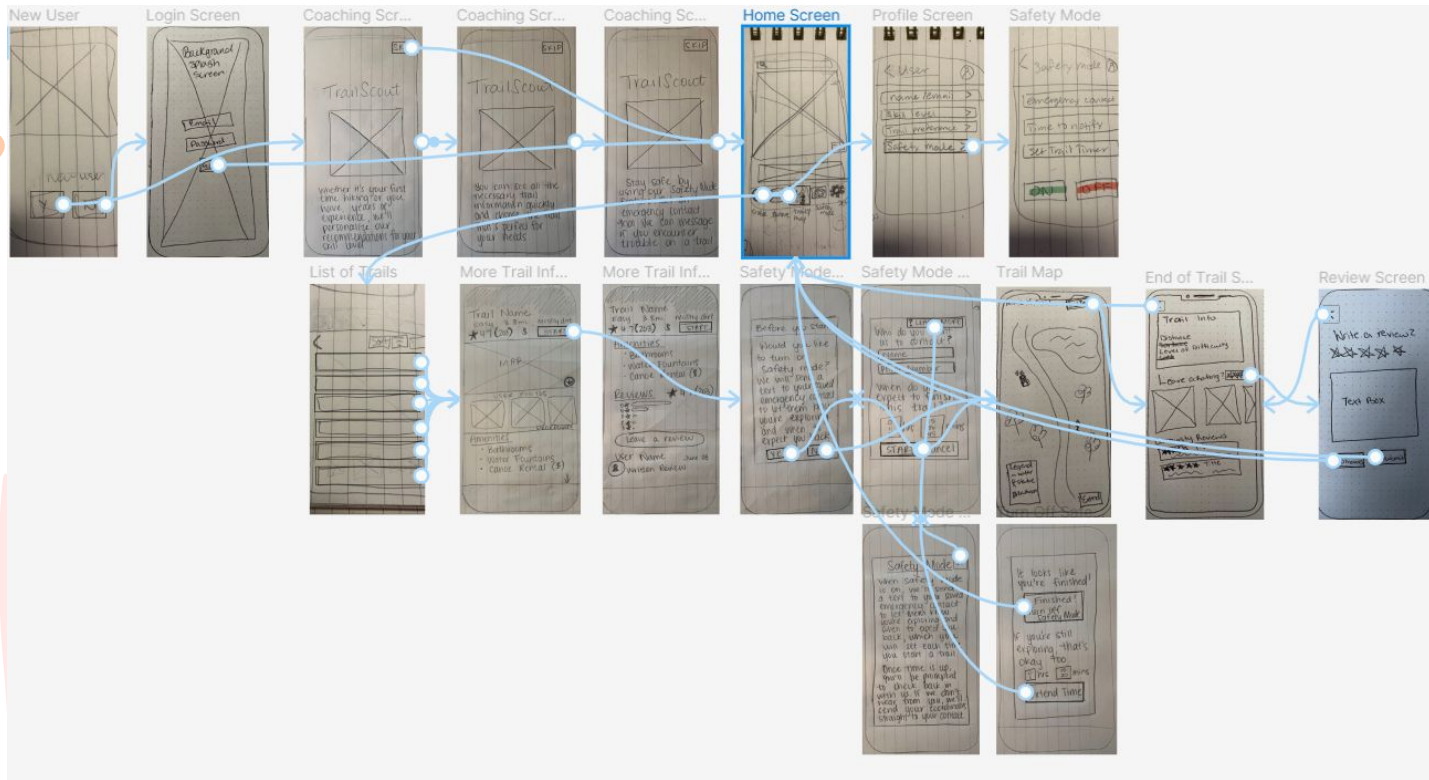
Taylor goes on another hike, using TrailScout app and its Safety Mode, and she has a better experience and feels more confident and safer in hiking.



Taylor is feeling great about her experience and tells her friends about the app.

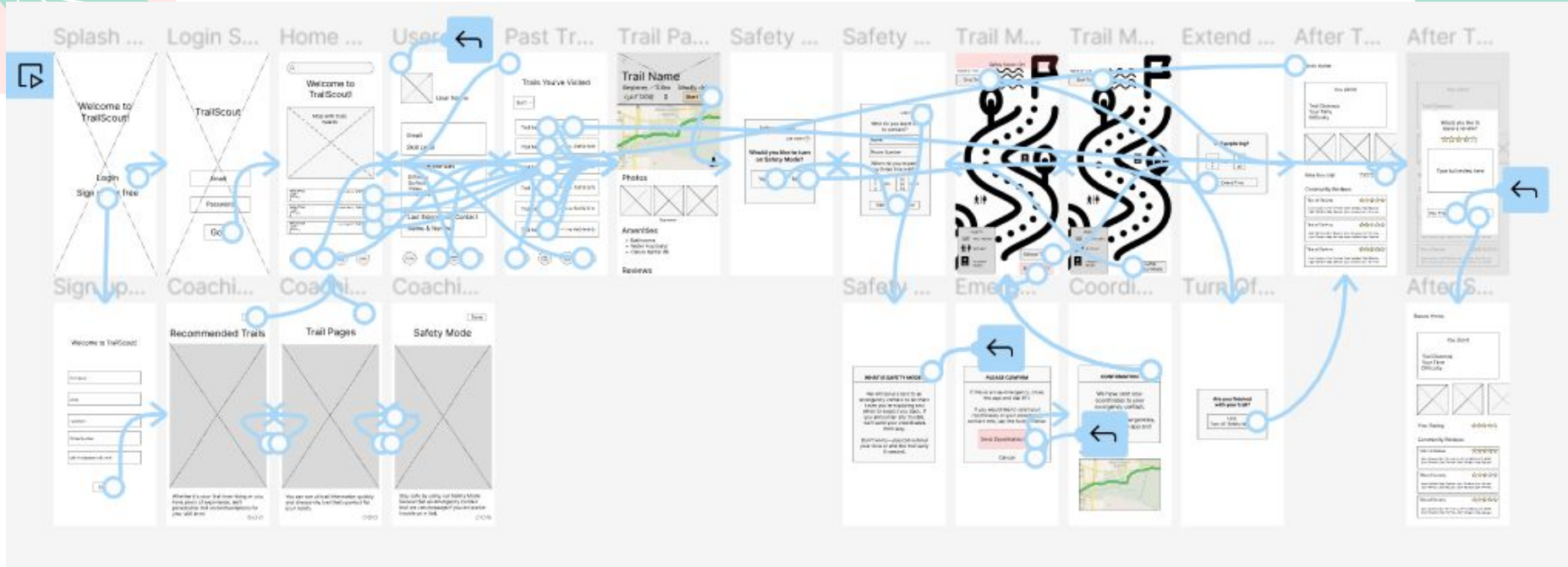


# Lo-Fi Wireframes



[Link to clickable Lo-Fi Wireframes](#)

# Mid-Fi Wireframes



[Link to Clickable Mid-Fi Wireframes](#)

# Wireframing User Testing Plan

[Click for User Testing Plan](#)

A	B
TASK	SUCCESS RATE
Overall Success Rate	62.00%
TASK 1: Consider yourself a first time user of the app and navigate to the home screen.	70.00%
TASK 2: Leave a review for a trail that has been previously visited.	70.00%
TASK 3: Review trail options and start a hike.	60.00%
TASK 4: Utilize Safety Mode while on a trail.	50.00%
TASK 5: Send coordinates to your emergency contact.	60.00%
KEY	SCORE
User successfully completes task	1
User partially completes task	0.5
User does not complete task	0

# User Tests



**Madison**

User Test

**Toni**

User Test

**Chelsea**

User Test

**Jennifer**

User Test

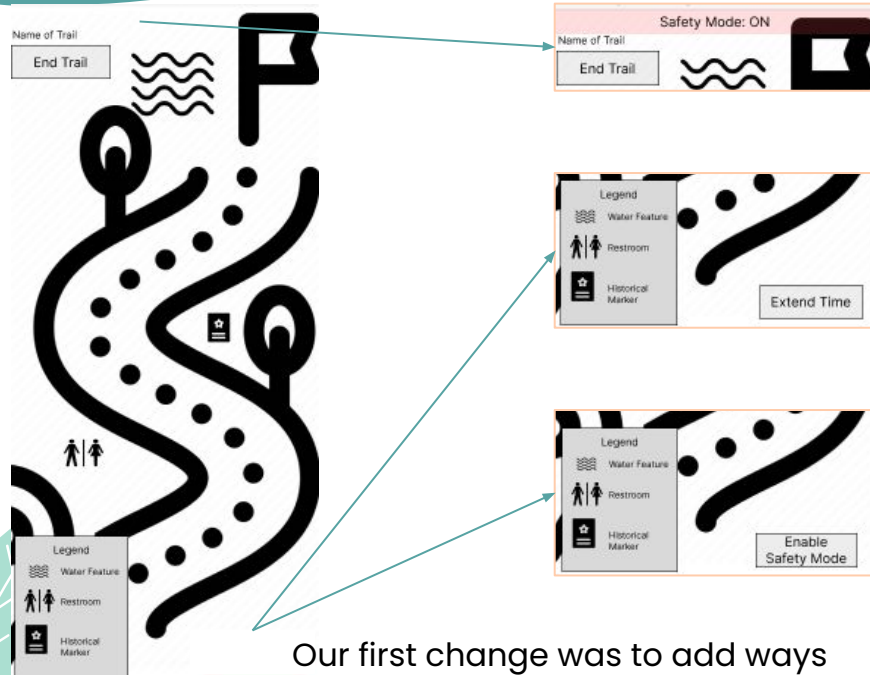


**Alana**

User Test 1

User Test 2

# Prototype Iterations



Our first change was to add ways that users could be sure they were in safety mode or turn it on/off even as they were exploring.

We also simplified a few screens by breaking down information and prompting users to do specific tasks separately.

Are you finished with your trail?

I am!  
Turn off Safety Mode

If you're still exploring,  
that's okay too!

0 Hrs 15 Mins  
1 30 45

Extend Time

Are you finished with your trail?

I am!  
Turn off Safety Mode

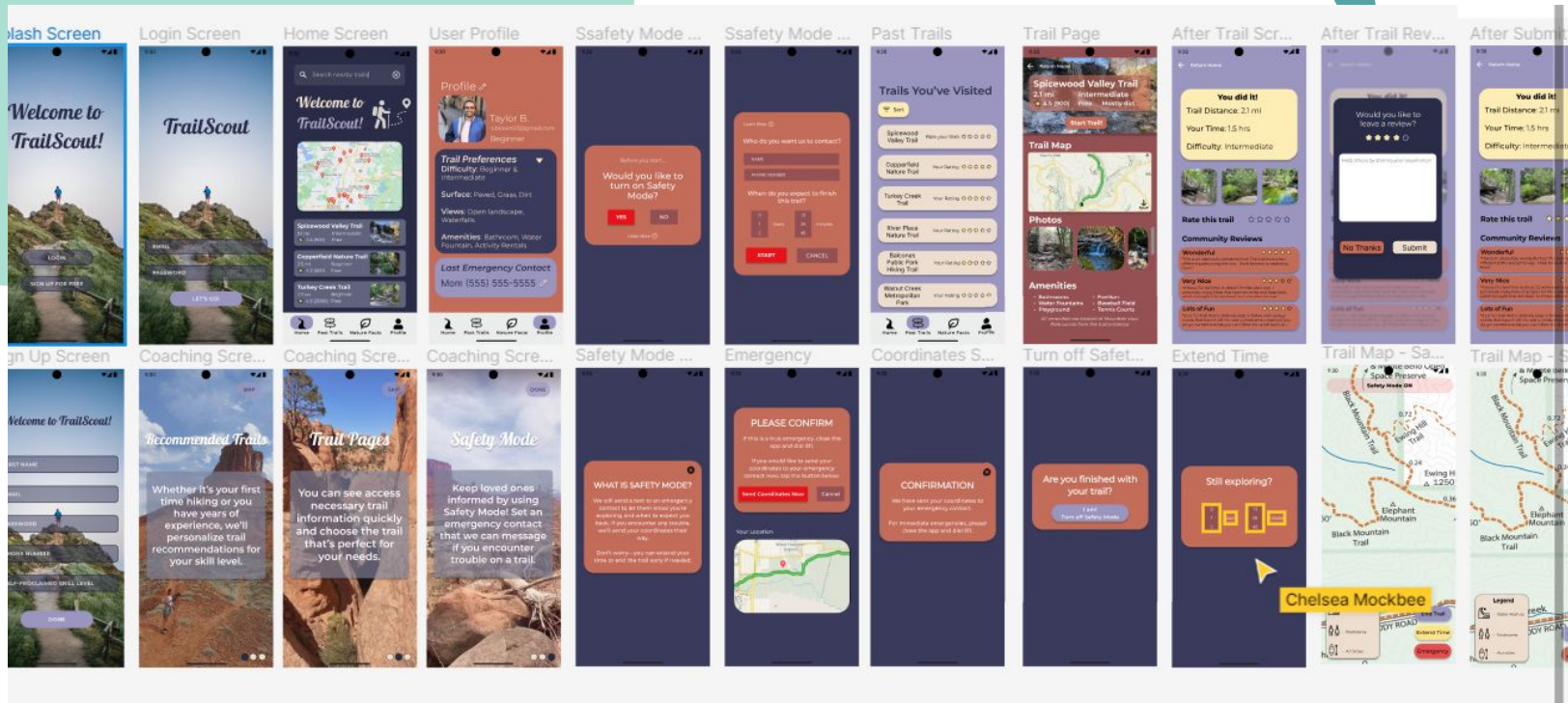
Still exploring?

0 Hrs 15 Mins  
1 30 45

Extend Time

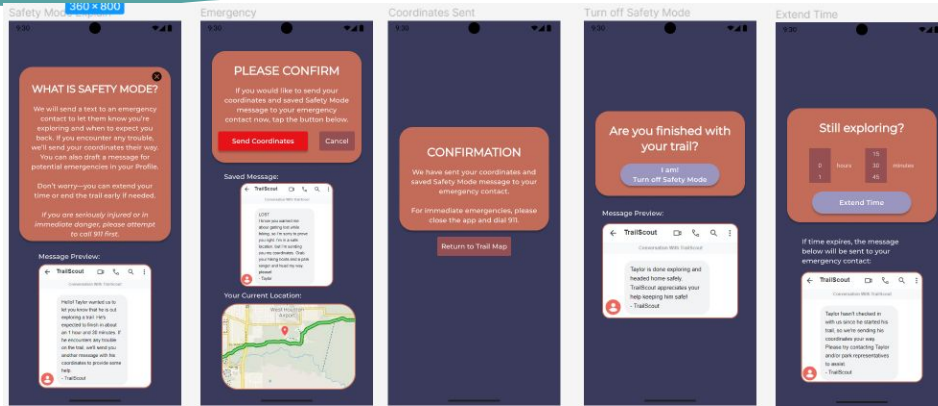


# Initial High-Fi Wireframes (Android)



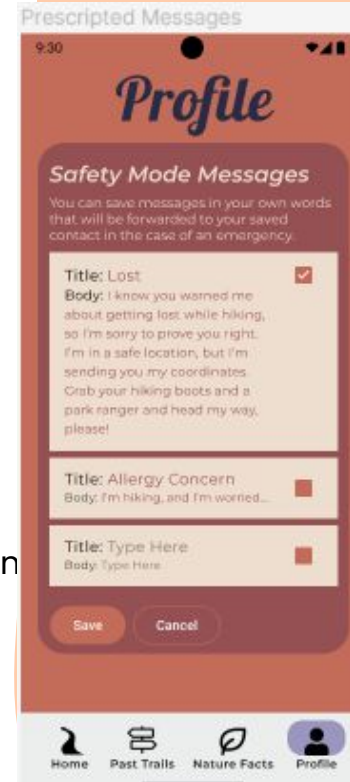
[Link to Clickable High-Fi Wireframes](#)

# Prototype Iterations



After some extremely helpful feedback during multiple rounds of user testing, we figured users would benefit from message previews in order to be sure of the message being sent out at every step.

We also allowed users to draft their own messages to send to contacts so that minor emergencies didn't seem as threatening coming from the app itself and could be worded exactly how they needed. However, they still have the option to send an emergency text if needed.





# Appendix







# Behind the Pitch

"The idea to create **TrailScout** came from my desire to be more in contact with nature. I thought about the problems I was facing or would face as a first time hiker and decided to create an app that would put my mind at ease. Throughout this project I learned that my problems were very general problems when looking for a reliable hiking app, and with the help and collaboration of my team, we were able to bring **TrailScout** to life."

- Jennifer Olave

# TrailScout Reference Images (Linked)

