

# User Experience Portfolio

## - Ben Almen -

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# SideTrack

Project Management Tool for Musicians & Recording Artists

Once our research revealed musicians' need for an online project management system, there was an obvious list of must-haves: a calendar, to-do lists, third-party app integration, user profiles, and sharing capabilities. But introducing a system built specifically for musicians to bring order to their beautiful chaos, our platform needed features specifically designed for musicians. For inspiration, we decided to look no further than the classic analog workspace - the studio. We asked how we could bring a little "studio magic" into the online collaborative space.

To help creators coordinate with a real-time edge, it was important to include a feature that brings the freedom of vocal expression and suggestion to an online space. Our musicians needed time-stamped voice memos. So we included time-stamped audio commenting on tracks that can be used to lay down alternate takes, sing their way through comment and critique, and hear it all in sync, just like the studio.

## Project Overview

We set out to design an online system for musical collaborations that integrates popular 3rd-party apps with innovative project management features designed after key elements of in-person studio sessions, bringing more fluidity and "studio magic" to remote musical collabs.

### **Role:**

Lead User Researcher and Feature Developer of 5-member team;  
primary responsibilities included leading interviews, competitor  
analysis, data synthesis, and ideation.

### **Timeline:**

Two-week sprint, January 2021

### **The Problem:**

Musicians find it challenging to coordinate remotely; existing music-sharing applications are numerous, but collaboration is limited by a lack of "studio feel", or real-time elements that allow for creative freedom and steady project flow.

### **Tools:**

Figma, Trello, Miro, Zoom, Illustrator, Bootstrap, & GitHub

### **Final Deliverables:**

Feature-focused high-fidelity desktop prototype

### **The Solution:**

A product that integrates existing music-sharing applications into one platform while addressing creative barriers with tools inspired by studio sessions.

# User Research

To learn more about the musical creative process and the current landscape of remote collaboration, our team:

- collected data with surveys targeted at musicians,
- completed competitor analysis of existing tools and features,
- built a proto-persona to start defining potential users
- conducted three interviews with working musicians facing challenges during the 2020 quarantine.

### Proto-persona

**Demographics:**

- Age: 27
- In a Relationship
- Soundcloud Singer
- Pasadena, CA

**Interests:**

- Life: Guitar
- Music: Donate
- Healthy: Production
- Piano: Soundcloud

**Social Media:**

- Facebook: ●●●●○
- Guitar: ●●●●●
- Music: ●●●●○

**Hashtags:**

- #LA
- #sing
- #single
- #positive
- #workhard
- #aliciakeys

**About:**  
Renae is living in Los Angeles, CA trying to start a career in music. She has a platform on SoundCloud but does not have many people to do her music with. She wants to create a hit single and grow her platform more and eventually land a gig with a product company in LA.

**Goals:**

- To create a hit single where she is a lead vocalist
- Get signed with a product company in LA

**Pain Points:**

- She doesn't know how to meet people who want to sing background music with her
- She doesn't have a lot of time to network on different platforms

**Wants:**

- Someone to collaborate with
- To make a hit single
- Meet people in the organization

## Important Findings:

- A shared sense among musicians of the need to be highly self-motivated and highly skilled at project organization. Even when musicians said they met both of these demanding standards, many were still struggling to complete projects to their satisfaction without access to studios during quarantine.
- Multiple affirmations to confirm that coordinating between existing music-sharing platforms can be tricky and sometimes not worth the effort.

# Competitor Analysis

Company	Value Proposition	Direct Competitors		Strengths	Weaknesses
		Feature Analysis	Strengths		
JamKazam	<ul style="list-style-type: none"> <li>Platform for live and in-sync music collaboration</li> <li>Best for remote music rehearsal, music education, concert broadcasts, playing along with songs</li> </ul>	<ul style="list-style-type: none"> <li>Ability to collaborate in real time</li> <li>Ability to create sessions and invite others</li> <li>Can host public sessions, participate or listen</li> <li>Information on video latency</li> <li>Record music</li> </ul>	<ul style="list-style-type: none"> <li>Rooms are organized by genre</li> <li>There is an ability to discover new people</li> <li>You can also see musicians in the area</li> </ul>	<ul style="list-style-type: none"> <li>Product is only for experienced musicians</li> <li>No user profiles</li> </ul>	
Drooble	<ul style="list-style-type: none"> <li>Social network for musicians</li> <li>Broadcasting music to people - self promotion</li> </ul>	<ul style="list-style-type: none"> <li>Virtual currency to purchase tools and promote music</li> <li>Collaboration (earn Karma points)</li> <li>Ability to receive feedback from others</li> </ul>	<ul style="list-style-type: none"> <li>Gamification keeps users engaged - can also be used for in-app purchases</li> <li>A tool to help users improve their skills</li> </ul>		<ul style="list-style-type: none"> <li>Targeted to solo artists/people who make music for a living</li> </ul>
SoundStorming	<ul style="list-style-type: none"> <li>An iOS app specifically for collaborating with other artists</li> </ul>	<ul style="list-style-type: none"> <li>Record &amp; share ideas/WIPs</li> <li>Record music to add to other artists' tracks, find &amp; follow other artists</li> </ul>	<ul style="list-style-type: none"> <li>Seems intuitive, made for musicians</li> </ul>		<ul style="list-style-type: none"> <li>iOS only (limited audience)</li> </ul>
Trackd	<ul style="list-style-type: none"> <li>Artists can collaboratively create and share music</li> </ul>	<ul style="list-style-type: none"> <li>Artist profiles</li> <li>Ability to view track information</li> <li>Featured artists on homepage</li> </ul>	<ul style="list-style-type: none"> <li>Ability to support artists by donating to them</li> </ul>		<ul style="list-style-type: none"> <li>Website (desktop) is clunky and not aesthetically pleasing</li> <li>Cannot scrub through song</li> </ul>
Company	Value Proposition	Indirect Competitors		Strengths	Weaknesses
		Feature Analysis	Strengths		
HilfRecord	<ul style="list-style-type: none"> <li>A site for general artistic collaboration including music, movies, photography, and writing</li> </ul>	<ul style="list-style-type: none"> <li>Offers daily prompts/warmups, allows you to follow fellow creators, allows creators to team up to make art</li> </ul>	<ul style="list-style-type: none"> <li>Able to filter for just musical interests, can upload or record then and there</li> </ul>	<ul style="list-style-type: none"> <li>Not technically made for musicians only, briefly confused on how to contribute to projects</li> </ul>	
Instagram (Instagram Live)	<ul style="list-style-type: none"> <li>A social media platform primarily for sharing images &amp; videos</li> </ul>	<ul style="list-style-type: none"> <li>Instagram Live allows users to follow creators, post temporary videos/pictures, livestream (recently able to livestream with other users)</li> </ul>	<ul style="list-style-type: none"> <li>Very popular, intuitive design due to being so well known</li> </ul>	<ul style="list-style-type: none"> <li>Recent redesign has gotten negative reviews, not intended for musicians collabing</li> </ul>	

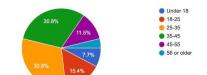
# Survey Results Analysis

Sample Size = 26

Musician Type = Hobby (30.8%) Side Hustle (46.2%) Career (23.1%)

Skill Level = Intermediate (34.6%) Advanced (50%) Expert (15.4%)

Age Breakdown



### Popular Collaboration Tools & Habits



### Impacts of the COVID-19 Pandemic



### Challenges with virtual collaboration



### Challenges with virtual lessons

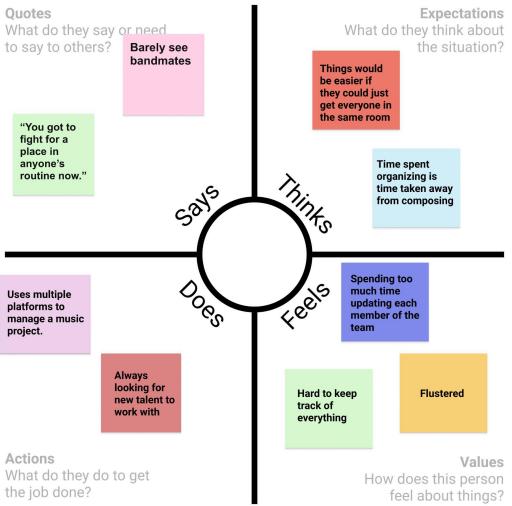


# Definition & Synthesis

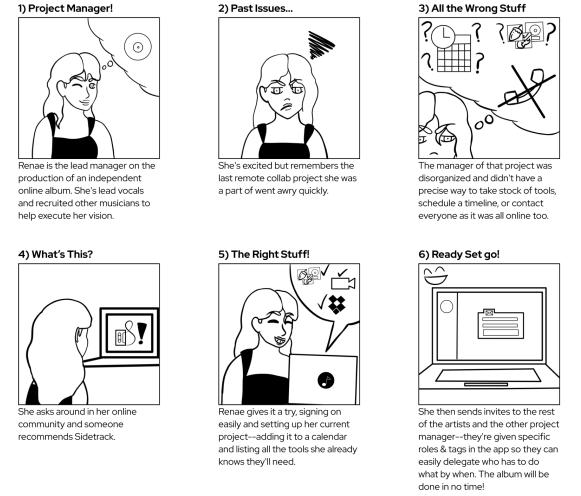
## Affinity Diagramming



## Empathy Mapping



## Storyboarding



## Results:

Using Empathy Mapping, Affinity Diagramming, and Storyboarding we defined specific user needs and prioritized needs based on frequency.

From this, we iterated our Proto-person into a fully-fleshed User Persona, which we then were able to refer to for inspiration and direction throughout the rest of the project.

## User Persona



**RENAE MASKEY**  
Musician

Renae is a talented lyricist who recently moved to Los Angeles to focus on her music career. She wants to collaborate with other artists and make a hit album. She has a 10k+ follower audience on Soundcloud, but hasn't had much success collaborating with musicians she meets on the platform. Her projects fall through partly because she's a bit disorganized, which doesn't help when trying to navigate all the different tools she uses to make music. It's been especially hard during the pandemic, but she's determined to adapt and make remote collaboration work for her.

### Demographics

- Age: 27
- Engaged
- Singer/Songwriter
- Los Angeles, CA

### Goals

- Make an album
- Get signed to a music label
- Grow her SoundCloud platform
- Build a network of musicians and producers

### Pain Points:

- Her online assets are scattered across multiple platforms
- She struggles with time-management
- Communicating about music remotely is super challenging

### Favorite Brands



### Personality



### Needs

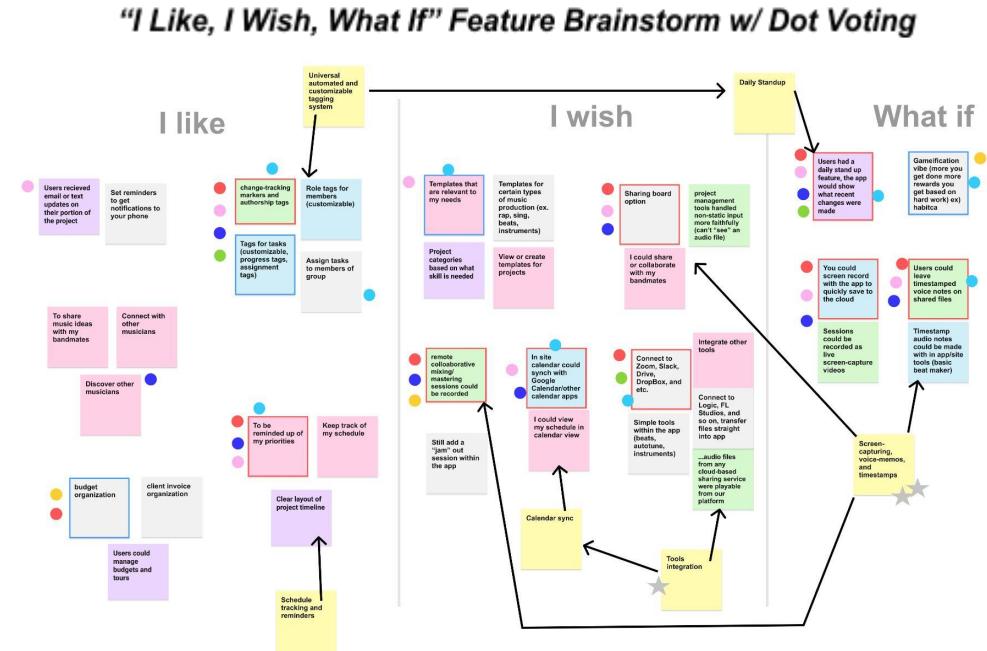
- Ways to make remote work feel more like a studio session
- Collaborating with multiple people on a singular platform
- Efficient project management
- Quick note taking and recording

## Ideation

In the ideation phase, we decided that a project management tool would be most effective in delivering organizational features to users.

Based on our definition and synthesis, we brainstormed potential features aimed at addressing the most pressing needs of our user. The “I like, I wish” method helped us define the top features to implement in our design.

In this stage, we formulated our creative edge: the timestamped audio commenting. It was developed through the integration of several different desired features.



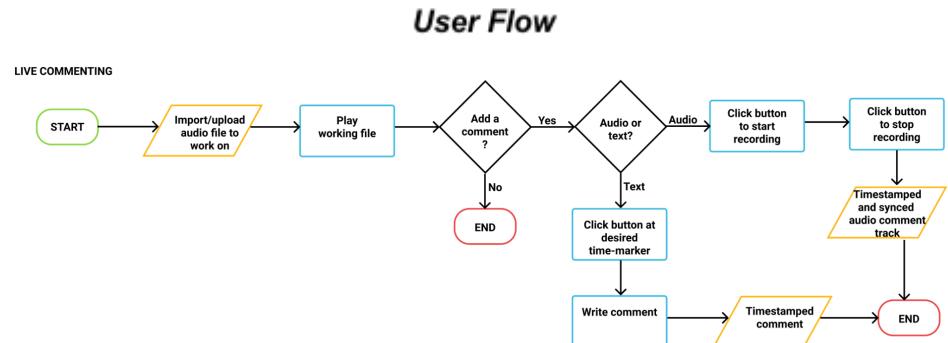
## Prototyping

To turn features into a product design, our team began with basic user flows. The most important flow to track was the novel Live Commenting feature.

From there, we built low-fidelity versions of several site pages, opting for a dashboard-style home page and left-hand toolbar navigation.

In our style guide, we defined a bold “dark” theme that tested high for accessibility. We felt this best reflected the classic analog studio tools such as soundboard mixers with white print on black, plus brightly colored “lights”.

Applying our style guide, we built out our lo-fi design into a high-fidelity prototype. We did user testing on the clickable hi-fi prototype and iterated based on findings to build out our final design.



## Low-Fidelity Prototype

The low-fidelity prototype consists of several wireframes representing different parts of the application:

- Dashboard:** Shows a sidebar with 'SIDETRACK LOGO' and '[USERNAME]'. The main area displays 'PROJECT TITLE' (placeholder text), 'Project Collaborators' (list of users), 'Project Assets' (list of files like 'filename.mp3'), and a waveform visualization for 'filename.mp3'. A footer section shows a waveform and timestamped comments.
- Project Details:** Shows a 'January' calendar grid, a 'Today' card with recent updates ('Added 5 files to the task "Create Harmony"'), and a 'Task Card' for 'Create harmony by 01/30/21'.
- Settings:** Shows 'SETTINGS' with sections for 'General' (Dark Mode, Color Scheme), 'Linked Accounts' (Google, DropBox, Fruity Loops, Soundcloud, Bandcamp), 'Sharing Defaults' (File Sharing, Project Sharing), 'Subscription' (Subscription Type: Standard, Premium, Business), 'Privacy' (New Password, Confirm Password, Account Visibility), and 'Playback' (Audio Quality: Auto, Low, Medium, High).

## Style Guide

### Typography

#### Desktop

##### Headline Text - H1

Red Hot Display / Bold / 60pt

Large Text  
Red Hot Display / Medium / 22pt

Medium Text  
Red Hot Display / Medium / 16pt

Small Text  
Red Hot Display / Medium / 10pt

##### Headline Text - H2

Red Hot Display / Bold / 50pt

Large Text  
Red Hot Display / Medium / 18pt

##### Headline Text - H3

Red Hot Display / Bold / 25pt

Large Text  
Red Hot Display / Medium / 14pt

#### Mobile

##### Headline Text - H1

Red Hot Display / Bold / 35pt

Large Text  
Red Hot Display / Medium / 16pt

Medium Text  
Red Hot Display / Medium / 10pt

##### Headline Text - H2

Red Hot Display / Bold / 50pt

Large Text  
Red Hot Display / Medium / 14pt

##### Headline Text - H3

Red Hot Display / Bold / 25pt

Large Text  
Red Hot Display / Medium / 10pt

### Iconography



### Colors

#### Text & Background



#### Accent Colors



### Buttons

#### Large



#### Small



### Elevation



5

## High-Fidelity Prototype

The high-fidelity prototype includes the following components:

- Header:** Shows 'SIDETRACK' logo, 'Log In', 'Sign Up Free', and social media links.
- Home Screen:** Features a 'Recent Updates' feed, a 'Guitar Jam Session' agenda entry for 'My First Song' on Tuesday, 08/03/21 from 12:00 PM – 4:00 PM, a 'Tasks' section, and a 'Project Assets' section listing 'filename.mp3'.
- Left Sidebar:** Includes 'SIDETRACK LOGO', '[USERNAME]', 'Features', 'Pricing', 'Help', 'Blog', and a 'Sign Up Free' button.
- Bottom Navigation:** Shows 'SIDETRACK' logo, 'Home', 'Calendar', 'Projects', 'Tasks', 'Settings', and 'Help'.
- Footer:** Shows integration icons for YouTube, Dropbox, Google Drive, and more.

This detailed view shows:

- Project Page:** Displays 'My First Song' with a waveform preview, 'Record Vocals' tasks, and comments from users like '@RMaskeySings' and '@jonbovi'.
- Upcoming Events and Reminders:** Shows a list of events and reminders, including 'Create Harmony' and 'Intro Lyrics'.
- Project Assets:** Shows a list of assets including 'filename.mp3'.
- 3rd-Party Tools:** Shows integrations with 'Dropbox', 'Google Drive', 'Soundcloud', 'Bandcamp', 'Fruity Loops', and 'GarageBand'.
- Calendar View:** Shows a weekly agenda for 'Guitar Jam Session' and 'Record Vocals' tasks.
- Comments Section:** Shows a comment thread for 'vocaltrackv1.mp3'.

## **Conclusions & Future Opportunities**

One important factor to future development is platform inclusivity. Musicians in particular tend to build fast loyalty to products that help them further their projects, which means that by the time Sidetrack comes into play, they'll have already invested in online platforms that they use to record, share, and build awareness. 3rd-party app integration needs to be a primary mission of the Sidetrack project as it grows into a fully-fledged platform.

The global pandemic and subsequent quarantine periods offered a unique view into the needs of musicians, and it became painfully obvious that a need that lagged was the ability to collaborate remotely. The nature of music created technical hurdles that seemed fairly insurmountable for recording and collaboration that wasn't entirely digital to begin with -- hurdles like internet lag, simultaneous audio/video feeds, and clunky structures that impeded the flow of creation. In terms of Sidetrack, the "live" recording and collaborating needs novel approaches that sidestep these hurdles rather than trying to implement technical solutions that, for now, exceed the limits of an average person's internet and computing power. As the platform expands, feature creativity will need to supersede technical advances.

An opportunity that we realized towards the end of the project is the versatility of the live audio-commenting feature. There is potential for this system to be adopted by existing platforms (SoundCloud, for example) and to become a future standard for music and track-sharing platforms.



# USDA Forest Service Challenge

## Full Government Website Redesign

While government websites are notorious for their bulk, the breadth of the Forest Service website had become so huge that simple tasks were nearly impossible for users to complete. Our project, then, was to apply user research to determine which user flows needed to come to the forefront and which could be tucked into more specialized sections of an updated information architecture.

We designed a more focused site, adhering to WCAG 2.1 AAA standards, so that all citizens can make better use of their public lands.

### Project Overview

An Accessibility Compliant redesign of the USDA Forest Service official website. Redesign declutters UI, streamlines user flows, eliminates redundancies, and reorders navigation hierarchy based on user research and testing.

#### **Role:**

UX & UI Designer Partner, two-member team

#### **Tools:**

Adobe Xd, Trello, Miro, Google Drive, Contrast Checker, UsabilityHub.com

#### **Timeline:**

1-month Government Website Design Challenge, \$0 Budget,  
focus: Information Architecture & Navigation Hierarchy

#### **Final Deliverables:**

Hi-Fidelity Desktop & Mobile Prototypes, Updated Style Guide

#### **The Problem:**

For the average user, the US Forest Service website was overwhelming and difficult to navigate. Failure rate for user tests was near 100%.

#### **The Solution:**

Our design approach was to focus on reorganizing navigation hierarchies and cutting back on page clutter, helping users of all kinds focus on their goals when visiting the Forest Service.

# User Research

To assess the original site, how it meets user needs, and what changes would be most productive, our team:

- Conducted user interviews of citizens who utilize National Forests
- Asked users to complete a task-based success/failure user test of original website
  - Testing done in two rounds after honing criteria

## ***Important Findings:***

- The original website was catering to several different types of users including citizens utilizing access to public lands, material resource organizations with USFS contracts, and scientists and researchers. We chose to bring public access to citizens to the forefront of our redesign.
- The breadth of the website included hundreds of forest areas in all 50 states, and because there were numerous and inconsistent pathways to information on each area, navigation quickly became maze-like and nearly impossible for users to operate without becoming quickly lost and overwhelmed.

# Definition & Synthesis

## ***User Persona***

<b>Luis Romero</b> 	<p><b>Behavioral Demographics:</b></p> <p>Age: 42 Personality: Easy-going, Dad energy Occupation: Urban Planner, 100k / year Lives: Near Seattle Family: Married with 2 kids, 8 &amp; 12 years old</p> <ul style="list-style-type: none"><li>• Enjoys spending time outdoors.</li><li>• Has a workshop that he builds in over weekends.</li><li>• Shops at REI for family camping trips.</li><li>• Calls parents twice a week</li><li>• Close with 5 siblings</li></ul>
<b>Goals &amp; Needs:</b> <ul style="list-style-type: none"><li>• Trying to get his kids outside more</li><li>• Wants to teach his kids about ecology and natural systems</li><li>• Has a bucket list of natural sites to see</li><li>• Wants to spend more time away from the busy city and in the fresh air of the abundant nearby forest-land</li><li>• Loves spending time with his family both as a unit &amp; extended family</li><li>• Advocate for public lands and wants to pass on appreciation to children</li><li>• Wants his family to visit more often, usually makes the trip with his wife and kids to visit them in Oakland, CA.</li><li>• Get his parents to sign up for their lifetime passes</li></ul>	<b>Pain Points &amp; Potential Solutions:</b> <ul style="list-style-type: none"><li>• Wants to organize more family get-togethers in National Forests, but the website is hard to navigate for his folks.</li><li>• Wants parents to know about their benefits as seniors.</li><li>• Doesn't like National Park fees and crowds.</li><li>• Has trouble finding ecological information on specific places he visits with his kids</li><li>• USFS Mission is confused, has to make it up to share his dedication to public lands with his kids</li><li>• Would be easier to plan trips with his family if the USFS webpage was easier to navigate, especially for his parents</li><li>• If the website were more mission-oriented, the idea of caring for public lands would be easier to share</li></ul>

## ***Brand Evaluation***

<b>Current Brand Description</b>	<b>Future UI Goals</b>
<p><a href="https://www.fs.usda.gov/about-agency">https://www.fs.usda.gov/about-agency</a></p> <p><b>Motto:</b> "Caring for the land and serving the people."</p>	<ul style="list-style-type: none"><li>• Maintain natural beauty and abundance of American forests/lands</li><li>• Balance short and long-term needs of people and nature</li><li>• Working in collaboration with communities and our partners;</li><li>• Providing access to resources and experiences that promote economic, ecological, and social vitality; and</li><li>• Connecting people to the land and one another.</li><li>• Delivering world-class science, technology and land management.</li></ul>
<p><b>Brand Positioning Statement</b></p> <p><b>The USDA Forest Service helps the American people maintain, utilize, and preserve national forests and grasslands by providing dependable and cooperative services that make the American people feel protected and provided for so they can enjoy and benefit from the natural abundance of their shared land for generations to come.</b></p>	

## Heuristic Evaluation

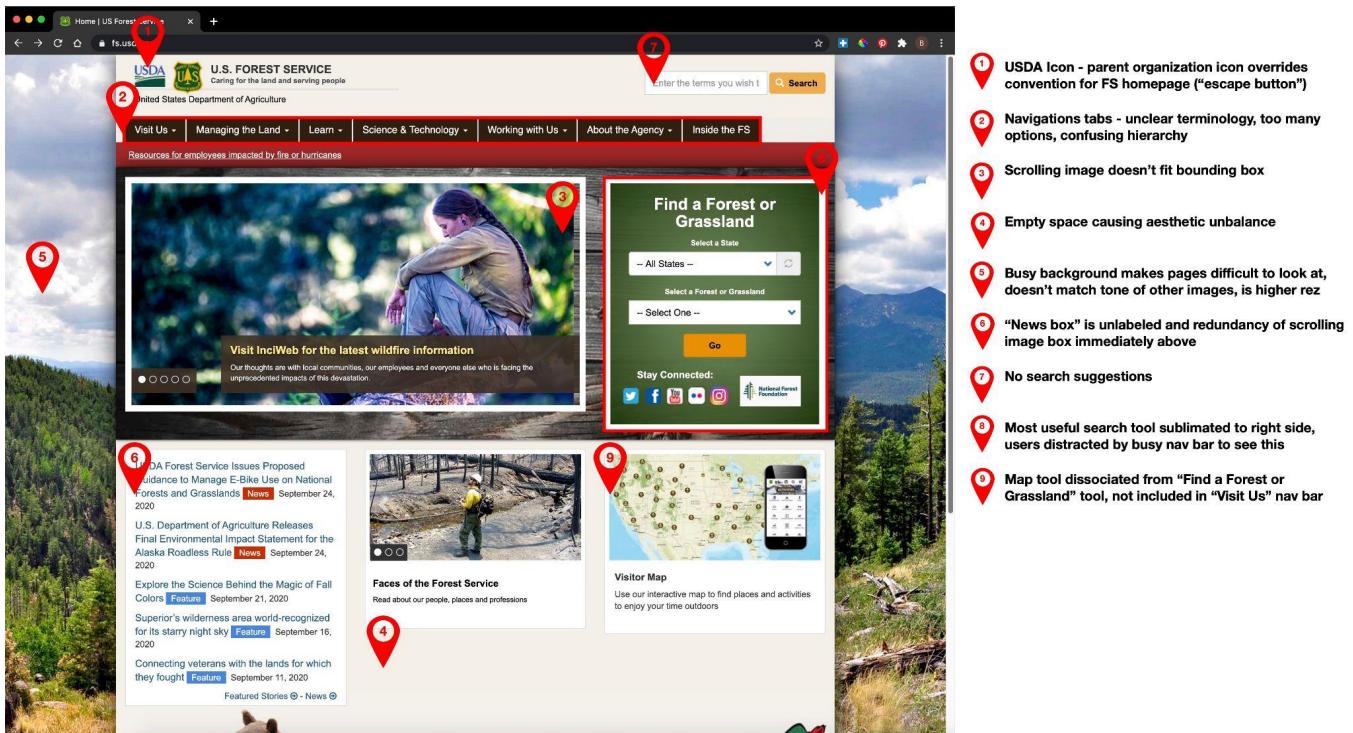
### Results:

Based on our user research, we were able to define the core elements of the USFS brand and who the average user is. By centering our work around a brand positioning statement and a user persona, we identified which changes to the website were most critical to make.

Through a heuristic evaluation and redlining, we were able to define what did not need to be addressed as well as the most glaring issues that required our attention and problem-solving.

Heuristic	Rating	Comments
Example	3 2 1	
<b>Navigation: make getting around your site easy and eliminate the user's guess work</b>		
Consistent Navigation	X	Individual Forest pages are inconsistent. It looks like a different website: Different background image, different sidebar, and the tabs disappear
Easy to identify your location on the site (breadcrumbs, headers, colors)	X	Good idea to have breadcrumbs, but it doesn't work for the "related content" links.
Consistent way to return home	X	USDA logo farther left goes to the USDA website—a completely different website, while the Forest Service logo takes you back home. BAD!
Limited number of buttons & links	X	Too many links! The hierarchy is confusing.
Navigation choices are ordered in the most logical or task-oriented manner	X	No apparent order to secondary links, seemingly no single task in mind for the user. "Inside FS" is more internal - should be a different website for a completely different target audience.
The information that users are most likely to need is easy to navigate to from most pages	X	Most information a user seeks is buried at least 2/3 clicks in, hidden behind ambiguous labeling and confusing navigational hierarchy
Category labels accurately describe the information in the category	X	Expectations for page contents do not match labels used in most cases. Some labels used twice for different pages.
The terms used for navigation items and hypertext links are unambiguous and jargon-free	X	Labels don't appear to be jargon on first glance, but turn out to be common words that have a specific meaning for the Forest Service. What does "Managing the Land" mean, specifically? How does it different from the content in Science & Technology, or Learn tabs.
There is a visible change when the mouse points at something clickable	X	It's unclear where you are in the sidebar because it's not highlighted
Clicking the back button always takes the user back to the page the user came from	X	Functions properly
The major sections of the site are available from every page	X	Tabs disappear for individual forest pages
There are no dead ends	X	Sometimes no feedback in the destinations page.

### Redlining



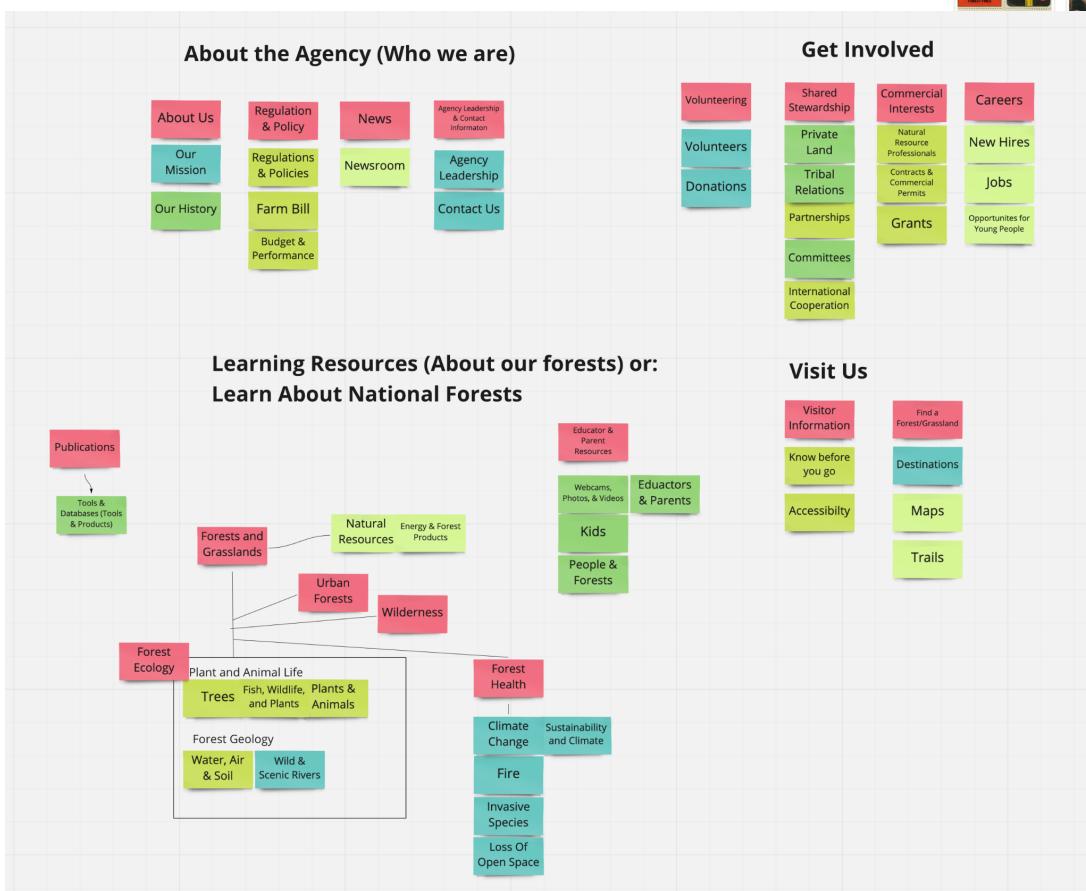
## Mood Board

## Ideation

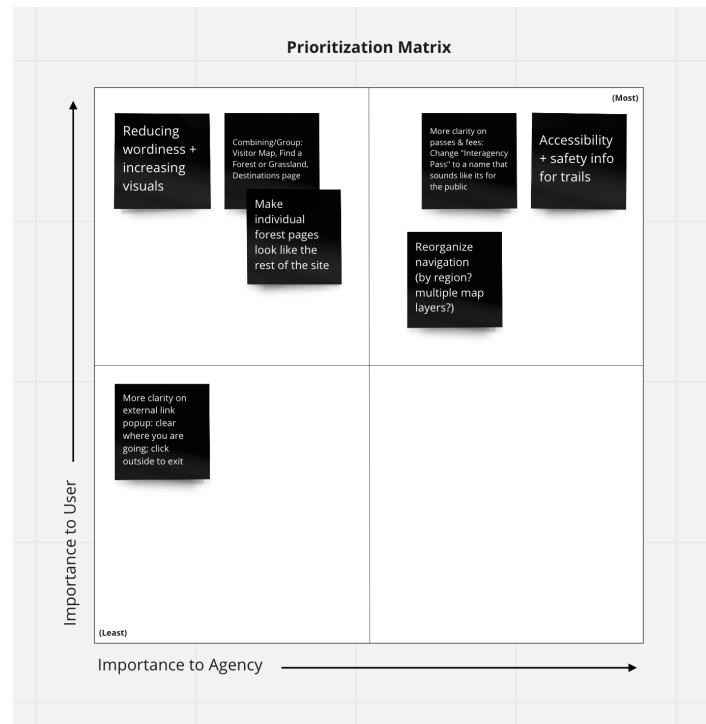
The ideation phase of our project consisted of two parts:

- the beginning stages of development for a new user interface style
- the reorganization of the information architecture

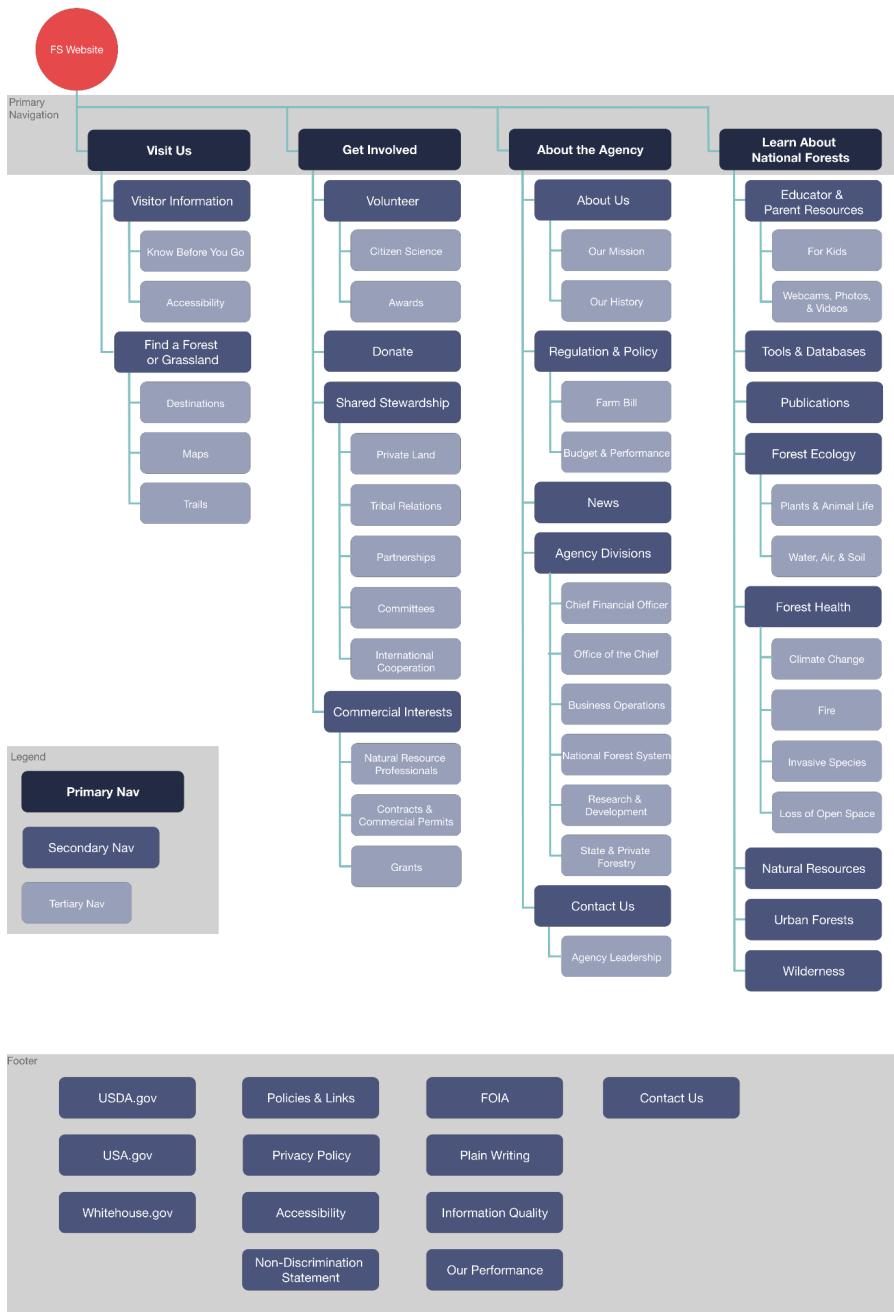
## Information Architecture Card Sort



## Prioritization Matrix



## Site Map Redesign



### Style

We created mood boards that guided us towards utilizing the universally recognizable and classic design seen on USFS signposts and real-world structures. Because our mood boards and aesthetic ideas leaned this way, we were able to determine that original site had veered away from its own historic and strong design. We decided to focus our design on a return to this aesthetic.

### Information Architecture

For the information architecture, we first sorted user desires into a prioritization matrix. This was important to determine which features were most sought for the average user, information that we would need to feature prominently in our redesign.

Next, we did several rounds of card-sorting to determine the most direct and useful organization of site pages. In addition to each team member completing a card-sort exercise, we had several potential USFS site users complete one as well. With the results, we were able to combine the separate sorts into one final structure. This structure formed the basis of our entirely re-worked site map.

The new site map maintains integrity for each of the sites' different types of users while retraining the main focus towards everyday citizen-users. Through this re-mapping, we were able to consolidate several redundant sections, make each section more readily accessible, and reduce the number of clicks each type of user would have to make.

## Prototyping:

Designed AAA ADA Compliant UI Components and Style Tile  
Tested Lo-Fi navigation prototypes  
Iterated up to Hi-Fi with two rounds of User Testing

[XD SCREENSHOTS]

## Testing & Iteration:

5-second User Tests of Lo to Hi-Fidelity prototypes revealed room for further decluttering and the implementation of a more pronounced hero image to highlight the most-used user flow

[XD SCREENSHOTS]

## Conclusions & Future Opportunities:

We must do more user testing of our prototypes for further iterations. The tasks will be the same as our previous user tests to maintain reliability and consistency.

We want to design an easy-to-use, interactive map for users to search for a National Forest or Grassland

Due to the great size of the original website, a complete redesign takes on a much broader scope that we set out to handle. Additionally, while ACA Compliant, there are further regulatory requirements of a federal government website that we were unaware of or unable to address.