



COMMUNITY

Donation & Services Mobile Application

FINAL PLAYBOOK

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MUXD 5203 | DESIGN LAB III

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EXECUTIVE SUMMARY

Tasked with creating a mobile app that addresses some of the extreme difficulties that arise when enduring a natural disaster, the CommUNITY app facilitates and prioritizes neighbor-to-neighbor mutual aid and relief through geo-located offers of and requests for goods and services, chat functionality, and virtual document storage. Meeting our client's list of requirements was forefront in guiding this project through ideation to implementation.

Through desk research, competitive analysis, and interviews with professionals working in the natural disaster relief space, we determined that the "big players" like Red Cross typically cover a large-scale disaster response immediately and effectively. We learned that there is an opportunity for smaller-scale neighborhood relief, especially when a disaster is damaging enough that professionals cannot immediately reach the affected area.

We concluded our research synthesis and transitioned into creating user personas of an archetypal neighbor (aka a recipient), donor, and volunteer, as well as current- and future-state scenarios for each. We then developed a feature list that accommodates persona needs, mindful of the requirements given by the client. We designed the wire flows of CommUNITY that culminated in iterations of high fidelity wireframes and annotated micro-interactions.

Throughout the process, we remained cognizant of the possibility that we are designing for individuals who may have various residency or citizenship statuses, and the app should not identify users directly, nor connect them to an app that may. We created a built-in chat feature to keep communication within the CommUNITY platform itself.

Although we designed the app for usage in a disaster, the app is not necessarily only a disaster response app; it can be used at any time. We displayed information and navigation in as straightforward a way as possible so that the user may easily complete desired tasks. CommUNITY is designed to be accessible and usable by a wide range of users, ideally fostering neighborhood connections in the process.



REQUIREMENTS

Our team approached the app requirements as though they were given by a client and used them as guiding principles through each design phase. They informed the overall look and feel of the app and in the case of the map, became home screen features. During our feature ideation phase, we ensured that each feature idea fit into one of these categories, and prioritized each feature within that category.

Design an application to coordinate community-led efforts and respond to natural disasters, which must include:

- Social media integration
- Interactive mapping
- A way for community organizers to view and manage volunteers, as well as track donations
- A way for community organizers to associate volunteers and donations with needs
- A way for users to volunteer and donate





PRODUCT OVERVIEW

Problem Statement

In times of community crisis, larger organizations are tasked with tackling large scale crises, while local communities are left to manage non-life threatening situations. Neighbors within a community need a way to mobilize assets, organize teams, and distribute donations to other neighbors in need.

How might we enable neighbors to form a network of mutual support?

MVP Overview

This product will focus on creating a neighbor to neighbor network that can be engaged during any natural disaster situation, with the MVP focusing specifically on hurricanes in order to keep a consistent storyline. The North-star Vision of the app is to enable neighbors to rely on community support, rather than being at the mercy of the response from large scale entities that usually provide response and relief like FEMA and Red Cross.

The CommUNITY App will enable community members to quickly organize relief efforts and respond to direct requests for assistance. It will also allow neighbors (whether they are volunteers, donors, or recipients) to pool and distribute resources, whether they are directed financial donations, donations of time and/or services, or donation of physical items like canned goods or clothes.

METHODOLOGY & PLANNING

Methodology

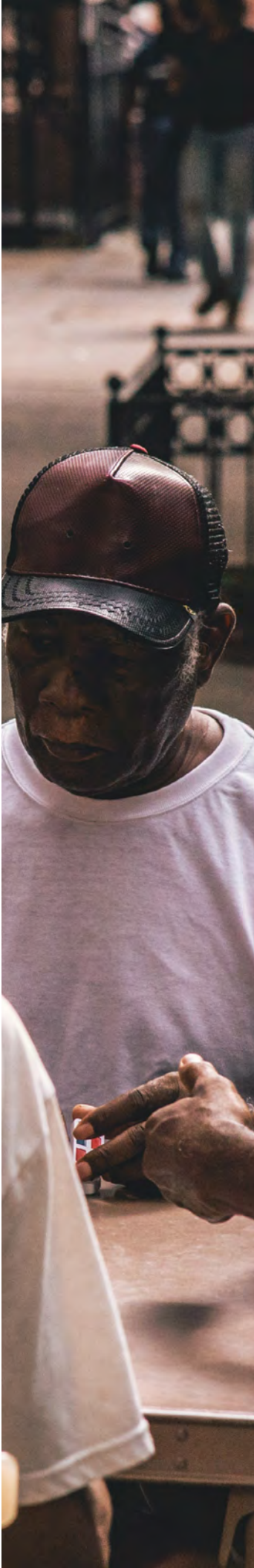
**Asterisked items denote required activities.*

Phase	Methods	Deliverable
Discovery	<ul style="list-style-type: none"> *Conduct user interviews *Analyze research Perform competitive analysis Produce a mood board 	Research Insights Presentation
	<ul style="list-style-type: none"> Craft a user journey *Draft personas 	User Scenario Map Wireflow Diagram
Design	<ul style="list-style-type: none"> Create sketches *Craft low-fidelity wireframes 	Wireframe Annotations
	<ul style="list-style-type: none"> Design high-fidelity wireframes 	Clickable Prototype
Delivery	<ul style="list-style-type: none"> Facilitate Feedback Session 	Final Prototype & Playbook

Project Plan

The CommUNITY app will come together over the course of 6 weeks. Each week will conclude with a major deliverable due by Tuesday 5pm.

DISCOVERY	Week 2	Week 3	Week 4	Week 5	Week 6
Research Insights	11.17.20				
User Scenarios		11.24.20			
Wireflows		11.24.20			
DESIGN					
Wireframes			12.1.20		
Prototype				12.8.20	
Delivery					
Final Prototype					12.16.20
Playbook					12.16.20



DISCOVERY & RESEARCH

Research & Interview Questions

The following aggregated research questions are organized by persona and guided our thinking in relation to our interviews, desk research, and persona creation.

Overall:

What happens before a natural disaster occurs?
What happens when a natural disaster occurs?
How do we systematically manage information from multiple sources and collaborate effectively to assist survivors, mitigate damage, and help communities recover and rebuild?

Community Organizer:

How do we engage local communities?
How do we bridge the gap between neighbors in individual communities?
How do we identify high risk areas within a community?
What will our time frames be for disaster assistance?
What are our limitations?

Donor:

How will funds and other donations be disbursed?
What information do we need to provide - tax deductibility info, other?

Volunteer:

How do I get the most up to date information for what help is needed?
How do we systematically manage information from multiple sources and collaborate effectively to assist survivors, mitigate damage, and help communities rebuild?
How do I best communicate / represent my skills so that my volunteer time is best used?
Is my safety ensured? How?

Neighbor:

How do we identify potential risk?
How do we come up with contingency plans?
How can I evaluate my preparedness for an emergency?
What kind of technology, tools, and practices do I need?
How will the appropriate parties be notified that I need help?
How long will I need to wait to receive help?
What if there is no cellular service?
Is help available for people in my network who have not registered? How?

Interview Participants

Our team conducted six 1:1 interviews, each averaging an hour to gather insight on the current state of community led efforts, Our participants ranged from first responders to PH.D students.

Tom: US Marshall

Experience in disaster response, search and rescue procedures, specifically related to hurricanes & wildfires. Main takeaway was that each disaster is unique to itself, and there are no standard responses for crisis. A tool to aid communities to support themselves is missing on the current market.

Tom: PHD Candidate, University of Hawaii at Manoa - Mutual Aid and response to crisis + pandemic.

Tom helps bridge the gap between graduate students and other local residents via grassroots organizing. Biggest concern is privacy for undocumented residents and students and the disbursement of digital cash.

Lou: NYPD Sergeant, Office of Emergency Management

Member of the 9/11 emergency task force. Worked with city officials to create emergency response plans in the event of a natural disaster or terrorist attack. Biggest feedback is that many people know very little about general emergency preparedness.

Ashanti: Policy & Research Analyst A community leader who works with a variety of organizations to help provide resources to those in need.

Biggest piece of advice was to enable people within the community to know how to access and operate various provided services.

Maggie: Campaign Manager Community organizer with 12+ years of experience in campaign management

Noted how important it is for your data to be correct to ensure that your message is heard and reaches the correct audience. Advice was to keep track of donations to build a user base.

Meg: Red Cross, Regional Manager of Volunteers, Colorado

Expert in volunteer management and deployment strategy, budget and finance, focus on wildfire response Highlighted that Red Cross response was immediate. Biggest challenge is public's perception of what donations may or may not be needed.



DISCOVERY & RESEARCH CONT'D

Key Interview Findings

Our questions followed a traditional disaster timeline which addressed preparation before an event, the disaster event itself, what the organized response looks like, how volunteers are managed, and how donations are managed and distributed. We filtered the interview data into four main categories.

Community Awareness of App

- If holding in-person events, it's important to find creative ways to draw in community members to increase app awareness and downloads, i.e. with food vendors.
- Important to retain users to facilitate convenient peer-to-peer sharing of resources. Communication is critical.
- Who has evacuated? Who needs what and where?
- Easy implementation is key because users may be in a time of crisis or disaster.

Increase in peer-to-peer interactions

- There are no "cookie cutter" situations; priorities can and do change based on disaster or non-disaster, type of need, location, neighborhood, etc.
- Important to focus on non-life threatening situations so that those in dire need can be cared for by trained specialists.
- Critical to consider technical issues where folks may not get notifications, see the app, or have internet connections. How might we find creative ways to reach them?

Increase in Donations

- Key to donations is ensuring that they are easily facilitated, and if online, easy to use on multiple devices.
- Recurring monthly donations are important to grassroots organizing.
- Important to consider how need for donations is communicated while balancing safety considerations (such as advertising that you have many resources to share while not stating your specific location.)



DISCOVERY & RESEARCH CONT'D

Competitive Landscape

Completed a competitive analysis across direct and indirect competitors to understand the current market.



CB Coordinate: A global community designed to connect individual donors with individual victims. Donations can be financial or material.



Citizen: A free, large city app (currently in 20 cities) designed to increase transparency between the city and its residents by providing real time, live updates.



American Red Cross: A national response service designed to quickly respond to emergencies by providing services such as clean water, shelter, & food.



Federal Emergency Management Agency (FEMA): A national government agency designed to provide emergency relief in the form of managing and disbursing grants.



Meals on Wheels: A semi-global donation based service that provides food to the elderly and those in need.



Salvation Army: A semi-global, Christian-based space intended to train for community assistance by providing food, emergency relief, rehabilitation services, clothing, and shelter.



National VOAD: An association of organizations that mitigate and alleviate the impact of disasters by providing forums, promoting collaboration and coordination.



Next Door: A semi-global community where neighbors can borrow and sell items, exchange recommendations, and read the latest local news.



Facebook: A global social networking community that allows users to stay in contact with friends and family.

Findings

The emergency response ecosystem is saturated with top-down models, and models that fuse the different approaches necessary to address the extreme disparities in the scale of effects of foreseeable and unforeseeable emergencies. Through research and interviews, we discovered that overlapping capabilities and areas of responsibility mitigate the consequences of any single organization's failure and diversify the types of services provided.

Market Opportunity Identified:

The opportunities to impact the crisis space are at the poles of crisis mitigation. Individuals struck by a crisis who are in need of support can dial 911 and wait for assistance from government agencies, but that channel of mitigation can be overwhelmed. However, during an event where survival is uncertain, victims are unlikely to have the mental clarity (and perhaps not even the technological capacity) to seek rescue by sorting through a vast catalog of non-profit agencies and NGOs. Alternatively, hyper-localized and passive functionality present opportunities to enable neighbors to offer one another mutual support in modalities that are impossible for larger agencies to replicate.

SYNTHESIS

Personas

Through our research and synthesis, we pivoted our focus into the Neighbor persona. With goals constantly changing for an individual household, we identified 3 role-based personas that are common for a neighbor in a community. These personas would guide the design of our MVP and help us align our focus on the core function of the app.



Victoria Moss
Volunteer *"I want to know that I can have a direct impact in my community when my neighbors are in need."*

Motivation

- Cares about the welfare of their community
- Wants to feel like a valued part of their community
- Works with multiple organizations to tackle community needs

Goals & Needs

- Responds to needs raised by neighbors
- Accepts tasks in-person
- Securely distributes donations
- Communicates knowledge of local resources and events

Hesitations & Pain Points

- A continuous hurdle is the various platforms for gathering and dispensing cash and other donations
- Doesn't know an immediate way to connect with her neighbors in need
- Doesn't have a contingency plan if cell service is lost

Victoria is a high school Biology teacher, who volunteers in her neighborhood through her church. She wants to make the most impact, and sometimes find that volunteering with larger organizations can feel like checking off items on a to do list.



Diane Burke
Donor *"I want a way to directly impact my community in a positive way and ensure my donations truly help someone in need."*

Motivation

- Cares about the welfare of their community and wants to ensure their neighbors feel like they have the resources they need

Goals & Needs

- Wants neighbors to feel empowered
- Prefers specific calls to action
- Wants their community to focus on relationship building and preparedness

Hesitations & Pain Points

- Desires transparency
- Mistrusts the accuracy of contact information
- Unaware of neighbors' need
- Lacks insight to donation management

Diane is a manager at a restaurant. She wants to be involved in her community, but doesn't work a traditional 9-5 schedule and finds it hard to find in person opportunities that match her schedule. She is seeking a way to directly impact her community within her schedule confines.



Rachael Jones
Recipient *"My community is important to me and I want to maintain connections with neighbors. I appreciate feeling valued."*

Motivation

- Ensures all of their family's non-emergency needs are met
- Wants to be part of a self-reliant community

Goals & Needs

- Be aware of local resources available in time of need
- Maintain safety and privacy
- Learn disaster preparation

Hesitations & Pain Points

- Unaware of local resources and services
- Limited internet access
- No current way to submit a direct request & receive a local response

Rachael is a stay at home mom who wants her kids to grow up in a close knit community. She doesn't have many opportunities to meet her neighbors, and wants to know her community can rely on each other in times of need.

SYNTHESIS CONT'D

Journey Mapping

Next, we focused on journey mapping through the lens of the identified role-based personas, the research conducted was used to inform a **current state hurricane response as well as a future state hurricane response**. We created a timeline which includes a “blue skies” period before awareness of a natural disaster, through to the events that occur after the disaster has occurred for both the current and future state journeys. Throughout these journeys, we integrated our three user personas and their involvement with the app, the disaster, and each other. These steps helped us identify potential areas of need and feature opportunities.

Current State

Part 1 of 2

Understanding today's disaster response journey

Disaster Type: Hurricane
Personas: Volunteer (Victorina, Diane & Rachael)

Milestone	Disaster Preparation	Disaster Approaching		
Step	Increase Awareness	Get Prepared	Helping Out	Late Preparation
Persona	Volunteer	Volunteer	Donor	Recipient
Doing	The annual hurricane season is approaching and Victoria is actively informing her neighbors to start building their hurricane kits with water, batteries, and canned goods. Victoria finds that her neighbors are usually delayed in their response to the disaster season. While canvassing her neighbors' homes, she also shares handouts with the emergency routes designated for evacuation out of the city.	As the first hurricane is announced for the season, Victoria boards up her windows to minimize damage to her home, and advises her friends and family to do the same. As she returns home with more supplies for her hurricane kit, she calls the police to report the homeless that are in need of shelter.	The news recently announced that the hurricane is increasing in strength and will impact thousands of lives. With care for her community, Diane calls a major relief organization to donate money to their efforts following the storm's impact.	With the announcement of a stronger hurricane landing in less than 12 hours, Rachael rushes to the store to gather water and canned goods to shelter in place at home with her son. Unfortunately, all the stores she visits are out of water and canned goods.
Thinking	I want to minimize the disaster's impact on my community.	What might my neighbors need that they do not already have or have access to? What might I need (but I do not already have or have access to)?	What is the most useful type of donation to mitigate the expected effects of the hurricane?	She is wondering how she is going to provide for her family in the immediate future if she can't access these supplies for a while.
Feeling	Care and consideration for neighbors; hope that efforts will aid others.	Mix of anxiety, involvement, and hope that preparations will be sufficient.	Cautious, open, helpful, concerned.	Panic and fear, worry.
Opportunities	Early alert neighbors with preparation guides for seasonal disasters.	Form a community for neighbors to meet and build trust with each other.	Streamline local collection efforts Advertise last minute collection drives.	Alert neighbors to the resources available at local stores.

Part 2 of 2

Understanding today's disaster response journey

Disaster Type: Hurricane
Personas: Volunteer (Victorina, Diane & Rachael)

Milestone	Impact	Search & Rescue	Initial Response	Large Response
Step	Disaster Occurs	Awaiting help	Decides to help	Community Response
Persona	Volunteer	Recipient	Volunteer & Donor	Volunteer & Recipient
Doing	As the hurricane makes landfall, Victoria shelters at home while her community is battered by winds and floods. As the storm subsides, she listens to her transistor radio for any local updates and monitors her food and water supply.	Living in a flood zone, Rachael's home is partially flooded causing damage to all of her family's belongings on the first level of the home. Unsure of what to do, Rachael and her son move up to the second floor of the home awaiting the storm to end.	As the rain and winds begin to settle, everyone begins to assess their current situation. Fortunately, Victoria and Diane were not heavily impacted by the hurricane's flooding and winds. With extra canned goods and old clothes in storage, Diane delivers the items for donation to her neighborhood community center. As a long-time community volunteer, Victoria goes to the community center to help gather and distribute resources to the community.	Upon arrival to the neighborhood community center, Victoria is assigned the task of donation distribution. In order to make the process efficient, Victoria organizes the goods by product type and size. Later that day, Rachael arrives to the community center after checking into a temporary shelter with her son. In need of basic goods, Victoria helps Rachael gather canned food, clothes and toiletries to take back to the shelter.
Thinking	What is the damage to my person, home, family, friends, neighbors? I hope everyone is okay.	Rachael is wondering if the water will recede. How long will the ground floor of her home be inundated? Will her house be livable? Will the walls and floor be inundated with mold? Is it safe to go outside?	What is the most immediate need that I can help with?	Diane wonders if they are in the right place at the right time. Rachael is very grateful for the provided assistance.
Feeling	Frightened, worried.	Relief and uncertainty.	Trepidation to see how much damage has been done and how the hurricane has affected neighbors, friends, family, self, someone will care to fix the damage.	Saddened by the damage to community, beauty and strength to rebuild.
Opportunities	Inform community of non-digital communication channels to ensure neighbors stay informed of preparedness updates.	Communicating with neighbors to assess what is going on in her immediate environment.	Community board to connect those who are lacking with those who have excess and are willing to share. Also community board for those seeking potential services they need. Like helping a fallen tree.	Finding a way to best sort through and distribute donations quickly and prevent for gov't org / agency resources (like FEMA, Red Cross, etc.)

SYNTHESIS CONT'D

Future State

Future State User Scenario <small>Part 1 of 3</small>						
Disaster Type: Major						
Persons: Neighborly Volunteer, Diane & Rachael						
Crisis State	Disaster Preparation					
Step	Baseline Awareness					
Persona	Volunteer	Volunteer	Volunteer	Volunteer	Donor	Donor
Doing	Victoria is a local community volunteer preparing for the upcoming hurricane season. With the COMMUNITY app she is able to easily share and pool resources.	Victoria uses the COMMUNITY Board in order to reach out to her neighbors and alert them about the first hurricane of the season that is fast approaching. She creates the post and enters her zip code along with the pertinent information she knows about when the hurricane is set to hit her immediate area.	As Victoria finishes her post, she notices Rachael for share her COMMUNITY post to her social media accounts. She decides to do this to help her neighbors and inform them about the hurricane can reach a wider audience.	Victoria also notices a Resource Library within COMMUNITY and reviews the current resources so she can encourage her neighbors on other available resources.	Diane is thinking her focus is on prep for the hurricane and has identified a few items she has a surplus of that she'd like to donate to neighbors in need.	Diane gathers her items and posts them to her garage. She then lists the items to alert her fellow neighbors that she has an excess of items that may be helpful during the hurricane such as flashlights, blankets, and water bottles.
Thinking	This will be the first year she uses COMMUNITY to help her neighbors.	If there will be any hiccups using the app or any points of confusion.	This is a great way to get messages out to large groups.	Educated and prepared.	In the past, Diane wouldn't be sure what to do with these items.	Diane is hoping her proactive approach will be able to help her neighbors in need.
Feeling	A sense of urgency in inform and prepare neighbors excited to see how the COMMUNITY app will help.	Excited that so far the process has been simple.	Accomplished.	Panic and fear, worry.	Helpful and hopeful.	
Opportunities	Single Sign On - Enables neighbors to easily onboard and sign on to the COMMUNITY app.	Peer2Peer COMMUNITY Board - a single location for neighbors to identify, create, and view requests, as well as send volunteer service requests.	Easy Share Link - Allows neighbors to share their volunteer services and donation requests to wider audience.	Curated Resource Library - A repository of preparedness articles and links based on geographic area.	Single Sign On - Enables neighbors to easily onboard and sign on to the COMMUNITY app.	Donation Tab - Enables donations of goods and links to popular cash app services for donations of money. Interactive Map - Interactive Maps allow users to see how close donors are located.

Future State User Scenario <small>Part 2 of 3</small>						
Disaster Type: Major						
Persons: Neighborly Volunteer, Diane & Rachael						
Crisis State	Disaster Approaching					Disaster Imminent
Step	Disaster Preparedness					Late Preparation
Persona	Donor	Recipient	Recipient	Recipient/Donor	Donor	Volunteer
Doing	An Diane finishes her listing, she notices the option to share this information to her social media accounts. She decides to do so, so her message can reach as many neighbors as possible.	Rachael receives notifications via the COMMUNITY app from Victoria regarding time sensitive information about the impending hurricane and from Diane regarding items she is donating.	Rachael notices that Diane has a few extra flashlights and it just so happens that she is in a few blocks away. She takes the COMMUNITY messaging service to reach out to Diane and see if the still has an extra flashlight available.	Rachael and Diane are able to connect via the COMMUNITY chat. Rachael is able to receive a flashlight prior to the hurricane approaching.	Diane updates her donation listing to remove the additional flashlights that she had.	Victoria has used through her resources and identified extra space for her neighbors. She updates her post on the Peer2Peer Community Board and encourages her neighbors to read through the Curated Resource Library for real estate tips and help on how to safely get through a hurricane.
Thinking		She has been training and hasn't had time to prepare for the hurricane. She opens Diaper.com to see if there is anything she might be in need of.	It would be great if she could meet with Diane for the extra flashlight.		Diane is hoping her proactive approach will be able to help her neighbors in need.	Even though the resources are in the app, some neighbors may not have read them and it could be helpful to share these resources to specific users.
Feeling	Accomplished and that she will actually be able to help someone.	Hurt and disappointed, but grateful that she has been prepared for a short period of time.	Grateful.			
Opportunities	Easy Share Link - Allows neighbors to share their volunteer services and donation requests to wider audience.	Peer2Peer COMMUNITY Board - a single location for neighbors to identify, create, and view requests, as well as send volunteer service requests.	COMMUNITY Chat - Enables close proximity conversations with Bluetooth technology.	COMMUNITY Chat - Enables close proximity conversations with Bluetooth technology.	Donation Tab - Enables donations of goods and links to popular cash app services for donations of money.	Peer2Peer COMMUNITY Board - a single location for neighbors to identify, create, and view requests, as well as send volunteer service requests. Curated Resource Library - A repository of preparedness articles and links based on geographic area.

Future State User Scenario <small>Part 3 of 3</small>							
Disaster Type: Major							
Persons: Neighborly Volunteer, Diane & Rachael							
Crisis State	Disaster Imminent	Disaster Occurs		Disaster Passes			
Step	Late Preparation	Sheltering & Awaiting Help		Initial Response	Community Response		
Persona	Recipient	Volunteer	All	Recipient	Volunteer	Donor	
Doing	After successfully signing an item she needed, Rachael decides to quickly explore everything the COMMUNITY has to offer and notices Victoria's posts on the Peer2Peer COMMUNITY board and decides to read through the resources she has suggested.	Victoria alerts neighbors that the hurricane is now approaching and they should get ready. She is notified by Bluetooth in real time when other's safety and how much other updated on volunteers.	While sheltering in place, neighbors use the COMMUNITY app to determine where help is located and if it is nearby.	Rachael uses the COMMUNITY app to post on the Peer2Peer COMMUNITY Board that she is okay but she can't see a tree has fallen on her car. She wants to be able to drive home for her kids to have her house for supplies.	Victoria sees Rachael's post on the Peer2Peer COMMUNITY Board and offers to come and take her the following day. He runs a landscaping business and can help remove some of the debris to help her determine the extent of damage. Victoria will follow up with Rachael via the COMMUNITY chat to assist her.	Diane sees Victoria's post on the COMMUNITY app. Dione decides to make a donation. He has known Victoria for awhile and knows she is an active member in her neighborhood. He knows she will put the money to good use. He then the amount and what he has for a donation with the item "Therapeutic Baller Support".	Upon clicking the link and seeing the COMMUNITY app, Dione decides to make a donation. He has known Victoria for awhile and knows she is an active member in her neighborhood. He knows she will put the money to good use. He then the amount and what he has for a donation with the item "Therapeutic Baller Support".
Thinking	I probably should have checked this earlier, but better late than never.	The Bluetooth enabled that will be crucial in knowing when help is needed.	Not sure what to do. Previous neighbors can help remove tree or give her a ride to her parents who live in an area that sustained less damage.	That she is okay and wants to help.	He was aware of the hurricane and wanted to see what is needed.	It will be easier to donate money for repair than try to travel to help his and Dione's Victoria to use the money for good.	
Feeling	Overwhelmed but calm prepared.		Scared and confused.		Calming.	Concerned and helpful.	
Opportunities	Peer2Peer COMMUNITY Board - a single location for neighbors to identify, create, and view requests, as well as send volunteer services.	COMMUNITY Chat - Enables close proximity conversations with Bluetooth technology.	Interactive Map - Interactive Maps allow users to see how close donors are located. Also allows for geotagging of food and water stations set up by FEMA, Red Cross, etc.	Peer2Peer COMMUNITY Board - a single location for neighbors to identify, create, and view requests, as well as send volunteer services.	Peer2Peer COMMUNITY Board - a single location for neighbors to identify, create, and view requests, as well as send volunteer services. COMMUNITY Chat - Enables close proximity conversations with Bluetooth technology.	Easy Share Link - Allows neighbors to share their volunteer services and donation requests to wider audience. Donation Tab - Enables donations of goods and links to popular cash app services for donations of money.	



SYNTHESIS CONT'D

Ideal Feature List

We maintained a “big ideas” document to identify and track potential opportunities for post-MVP features as we conducted our research. The idea of ‘The Vault’ came during this stage, which we integrated into our MVP. Many of these ideas were generated directly from our interviews or gaps in service we identified during our user journeys. The following list represents the ideas we identified as the opportunities with the most reach and potential.

Social Media Integration

1. Easy Share link
 - a. Enable neighbors to REQUEST DONATIONS and VOLUNTEERS
2. Community Chat
 - b. Enable CLOSER PROXIMITY CONVERSATIONS with Bluetooth technology
3. Single Sign On
 - c. Enable neighbors to easily on-board and sign-on to the community

Interactive Map / Mapping

1. Location & Safety Status Updates *powered by Bluetooth
 - a. Enable SHARING OF LOCATION AND WELLNESS STATUS to the community app and connected social media accounts.
2. Interactive Maps
 - b. GEOTAG FOOD / WATER stations set up by FEMA/Red Cross, etc

Volunteer Management

1. Peer2Peer Community Board
 - a. IDENTIFY REQUESTS for services
 2. CREATE REQUESTS for services
 3. ALLOW USERS TO VOLUNTEER

Donation Management

1. Donation Tab
 - a. ENABLE DONATIONS OF GOODS
 - b. ENABLE CASH DONATIONS via the popular cash app services

Recipient Usage

1. Curated Resource Library
 - a. Create a REPOSITORY of preparedness articles & links based on geographic area
 - b. Create a CATALOG OF LINKS to larger organizations once they are deployed in their community
2. Secure Digital Storage
 - a. Create vault to STORE LEGAL DOCUMENTS such as proof of home ownership, copies of ID's, etc in case they are lost



DESIGN

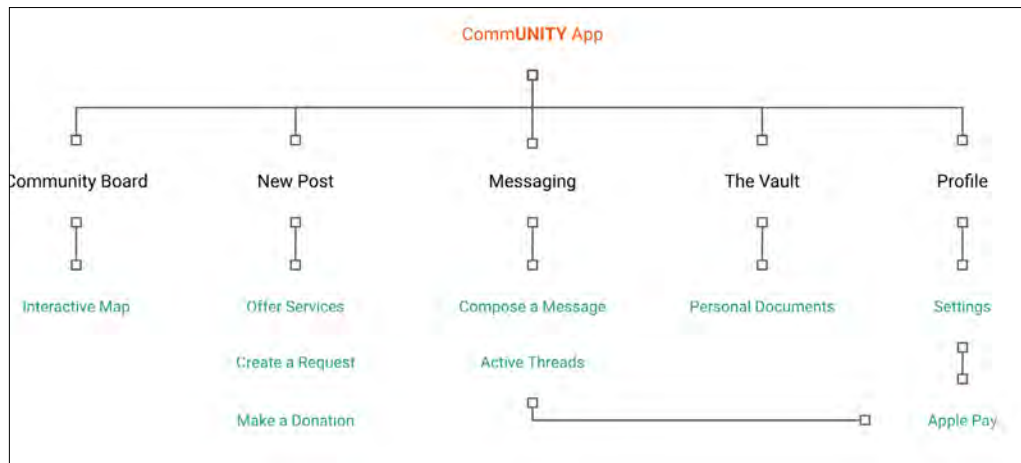
Guiding Concepts for the MVP

Prior to designing the solution, we ideated and prioritized concepts that would help bring the required functionality to reality in the MVP release of CommUNITY. We also incorporated an additional feature to help bring differentiation to similar competitors.



Information Architecture

Bringing together the guiding concepts, the sitemap informs the architectural design and user flow of the experience. This created a framework for our user scenarios, wireframes, and later our high fidelity prototype.



DESIGN CONT'D

User Scenarios

We organized key high-fidelity wireframes against the users flow to visualize the neighbors' journey through their role-based tasks. These wireframes depict the happy paths, key feature sets, as well as annotations for describing the experience.

User Scenario
Volunteer responds to service request
Disaster Type: Flood
Prepared: 10/10/2020

Steps

- 1 View Community Board**
Victoria opens Community and is directed to the Community Board. She views the requests for help close to her location, listed by distance.
- 2 View Interactive Map**
Next, she views the interactive map, and sees the same requests overlaid on an interactive map.
- 3 View Needs of Neighbors**
She clicks on one specific request to view details and see if she is able to help.
- 4 Message Neighbor & Schedule Service Time**
Victoria notices the chat function within the specific request. She is able to message that person stating that she can fulfill this request.

She chats with a neighbor in need, and they are able to establish a time to safely meet and handoff the requested goods.

User Scenario
Donor provides resources to neighbors (1 of 2)
Disaster Type: Flood
Prepared: 10/10/2020

Steps

- 1 Community Board**
Diane opens Community and is directed to the Community Board to see recent posts from neighbors.
- 2 Post to Community Board**
Diane makes a post informing her neighbors of resources she has available for donation.

User Scenario
Donor provides resources to neighbors (2 of 2)
Disaster Type: Flood
Prepared: 10/10/2020

Steps

- 2 Post to Community Board**
Diane makes a post informing her neighbors of resources she has available for donation.
- 3 Share Post to Social Media**
After making the post, Diane shares it to social media to increase her probability of donating the goods.
- 4 Receive Message & Schedule Pick Up**
Diane receives a Community message from someone in need of a flashlight.

Responding to the neighbor, Diane schedules a time and place for handoff.

User Scenario
Recipient obtains resources from neighbors
Disaster Type: Flood
Prepared: 10/10/2020

Steps

- 3 Community Board**
Rachel visits Community and is directed to the Community Board. She notices that she is able to post a request or view the options for existing offers nearby.
- 4 Interactive Map**
She notices that she is able to view the same offers for help on a map rather than listed by distance. She clicks on a neighbor's donation, which she needs.
- 5 View Available Resource**
Rachel views the details for the flashlight listing. She needs the flashlight, but is unsure how she will connect with the donor, as they are 4 miles away.
- 6 Message Neighbor & Schedule Pick Up Time**
She decides to message the donor to see if they are still offering the flashlight, and if they are willing to connect at a location in between them.

The donor agrees, and Rachel is very excited. They agree on a time and place to arrange the flashlight handoff.

DESIGN CONT'D

High Fidelity Wireframes + Annotations

Based on the MVP guiding concepts and site map, we designed the first draft of high fidelity wireframes with feature annotations. These wireframes depict the happy paths, key feature sets, as well as annotations for services and micro interactions.

High Fidelity Wireframe Annotations

Core Functionality for Community Board

Annotations

- Location tags are color coded by type of request, which correspond to the colored bar on each post. Radius can be adjusted.
- Location tags are color coded by type of request. Click on a geo-tag to view corresponding post.
- Post shows approximate distance between you and the poster of the request/service. Immediate 'call to action' responses below to easily click. Direct message would start a conversation with the poster, and share post would allow you to share a post either within the app to another user, or outside the app via various methods.
- Pop up box when you click 'share post' to share via your preferred method.

High Fidelity Wireframe Annotations

Create a New Post

Annotations

- Microinteraction:** Adding photo will prompt a popup for the users' photos or camera.
- Microinteraction:** Keyboard will pop up when the text field is clicked.
- Location will show as approximate to protect users' privacy.

High Fidelity Wireframe Annotations

Chat Directory Navigation

Annotations

- Microinteraction:** Swipe messages left to delete them.
- Microinteraction:** Can filter within the search.
- Microinteraction:** Clicking phone number will launch phone call. Clicking address will open up in maps.

DESIGN CONT'D

High Fidelity Wireframe Annotations

Chat Functionality

Annotations

- 1 Microinteraction: Swipe messages left to delete them.
- 2 Microinteraction: Typing in search pre-populates responses.
- 3 Microinteraction: Apple Pay

High Fidelity Wireframe Annotations

Vault (1 of 2)

Annotations

- 1 Vault Sign-in: Intro screen to sign into Vault. As requested, login not designed but would display here to protect sensitive documentation and to allow easier, immediate access to other parts of the app without requiring login.
- 2 Vault Documents: View your vault documents within categories that the user sets.
- 3 Add Document to Vault: Opens to camera, and the user may photograph a copy of their important documents, and store pertinent information.
- 4 Add Category to Document: Adds a category to the document that the user has just uploaded.

High Fidelity Wireframe Annotations

Vault (2 of 2)

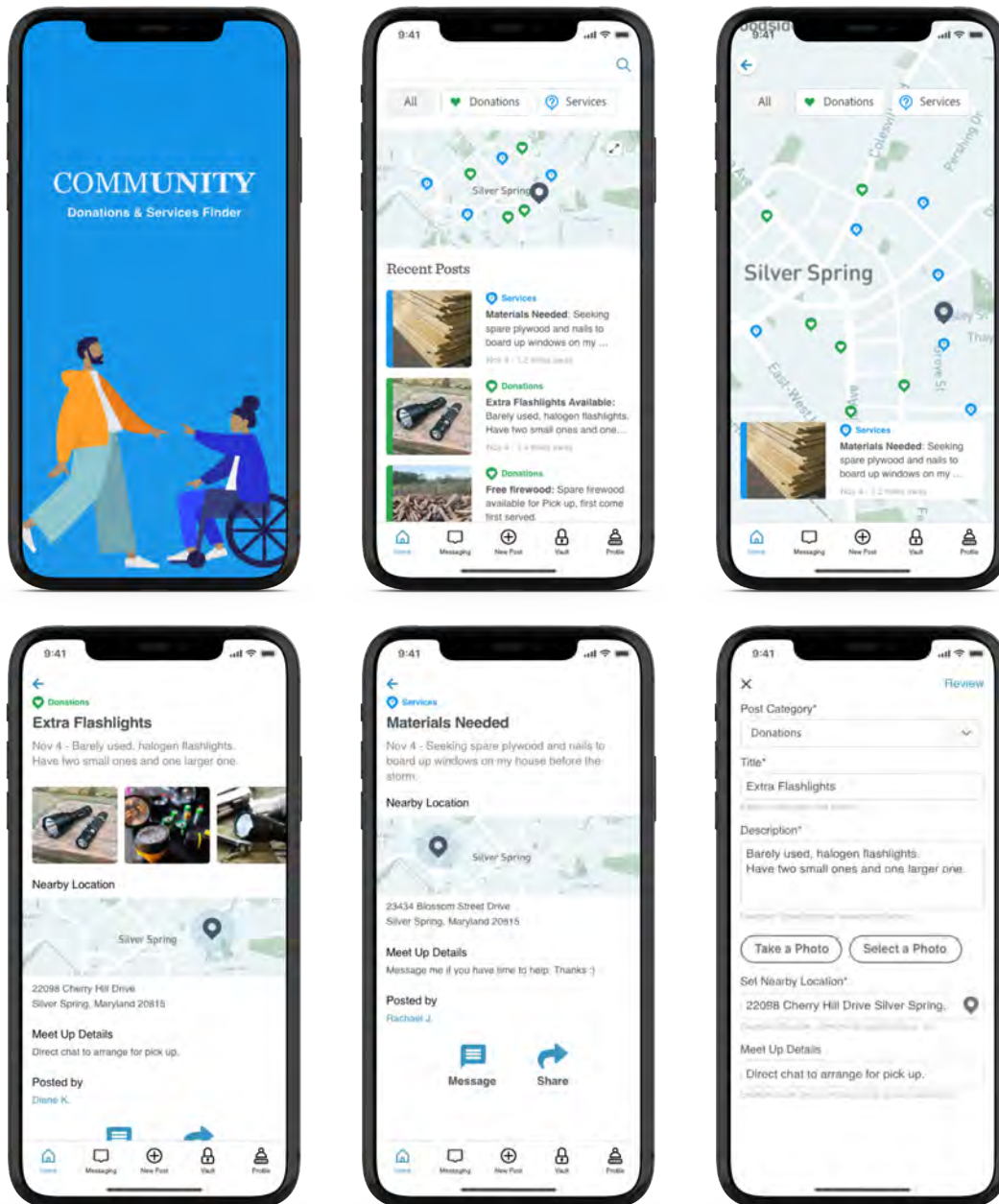
Annotations

- 5 View Documents within a Category: From screen 2, click on the category banner and be taken to view all documents within that specific category.
- 6 View Single Document: Click on a single document from screen 2 or screen 5, and be taken to view its detail.

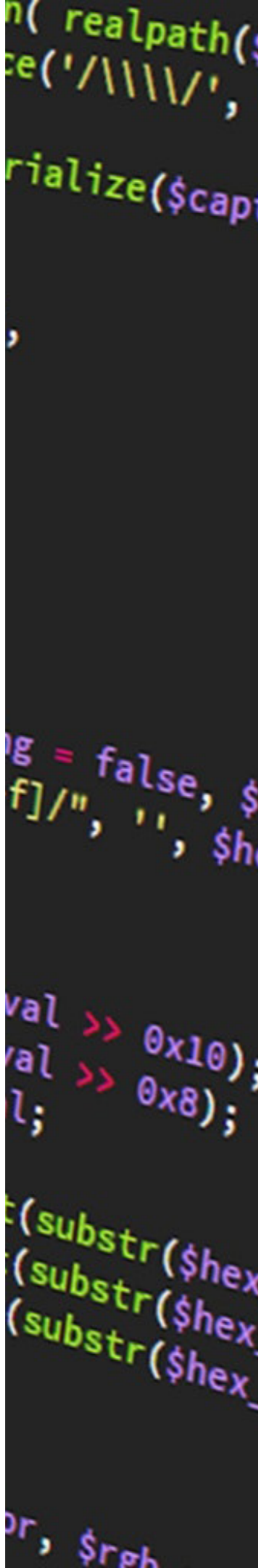
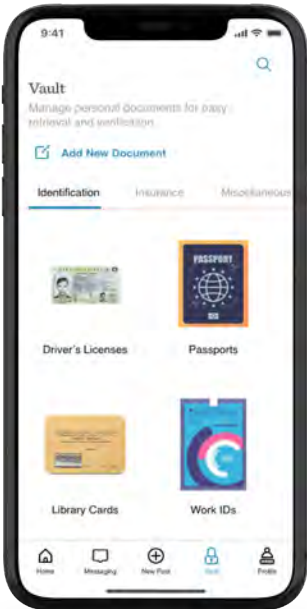
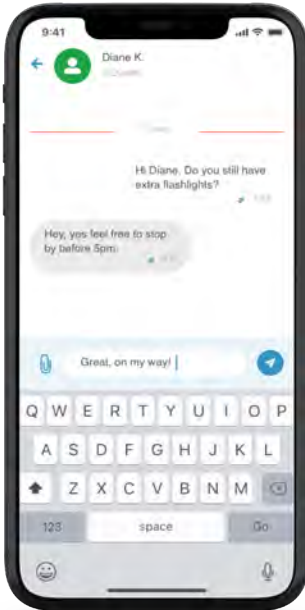
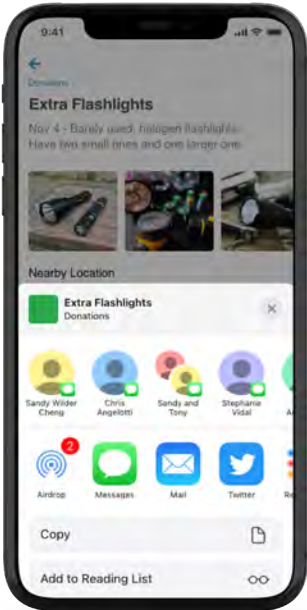
PROTOTYPE

Final Prototype

After 2 internal rounds of feedback, we landed on our final high fidelity wireframes. We organized the frames into a polished prototype, complete with links and micro-interactions. The prototype encompasses the user flows for all 3 role-based personas: volunteer, donor, and recipient and is ready to conduct user testing.

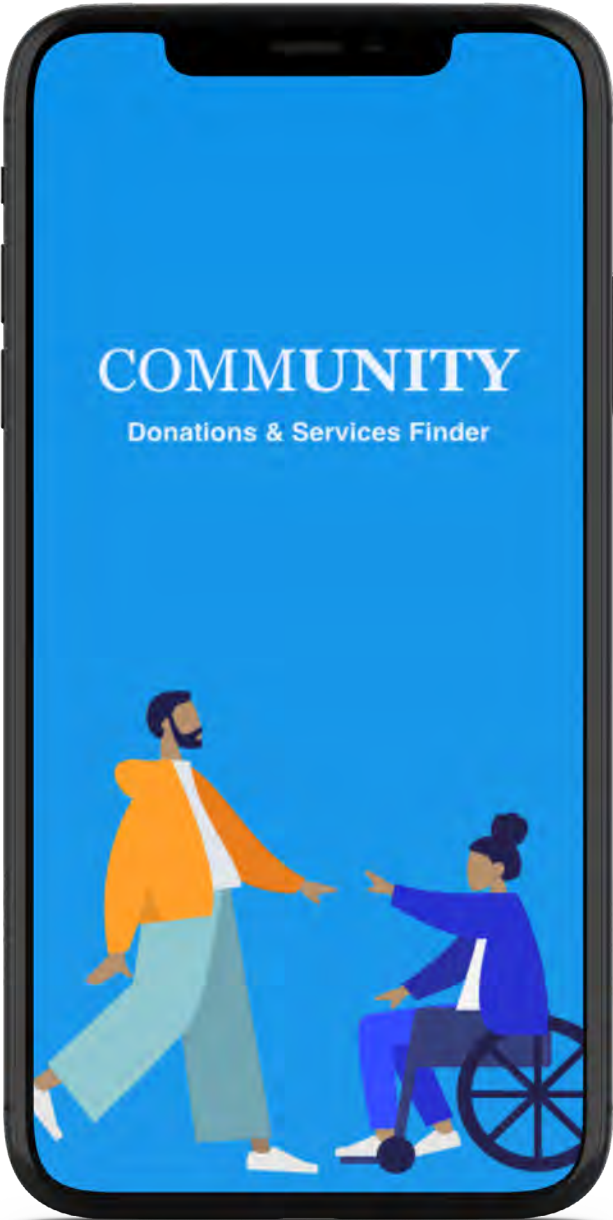


PROTOTYPE



PROTOTYPE

[Final Prototype Link](#)



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val >> 0x8);  
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or, $rgh
```


NEXT STEPS

User Testing of Current State Prototype

We organized the wireframes into a high-fidelity prototype. The prototype encompasses the user flows for all 3 role-based personas: volunteer, donor, and recipient. Testing will follow for overall ergonomics and specific tasks per user type based on the following questions:

Volunteer

Task: Reach out to a neighbor in need

1. How would you start a chat with your neighbor?
2. How would you find a neighbor in need near you?
3. How would you lend yourself to your community via this app?
4. How would you share a post to social media in order to increase exposure?

Donor

Task: Create a donation list

Task: Share your donation post to Twitter

1. How would you donate an extra item/items you have around the house?
2. How do you know what resources your neighbors are in need of?
3. How would you conduct a search to see if a similar item has already been donated or requested?
4. How would you share a post to social media in order to gain more views?

Recipient

Task: Find a nearby donation for a flashlight

Task: View your digital driver's license

1. How would you search for an item you need?
2. How would you create a post for something you need if it wasn't already available?
3. How would you show proof of identity if you lost or didn't have access to your hard copies?
4. How would you contact the donor you need to get in touch with?



NEXT STEPS CONT'D

MVP to Full implementation

Future iterations of the app would include “nice to have” features that were not feasible to explore within the initial 6 week time period, such as:

Bluetooth-enabled messaging

This feature would alleviate overburdened cell networks in time of disaster, or in the case that they're not functioning at all by allowing instant messaging with neighbors within close range.

Resource & Supply Calculator

Estimates a persons potential survival time based on their current provisions (like food and water). These estimations will be based on nationally accepted preparation guidelines and recommendations per type of disaster.

Community Awareness Library

Deposit of articles and literature to help the community prepare early for natural disasters and to lessen the workload of the community organizers after a disaster.

Insurance Discounts

Offered as an incentive for neighbors to download the app.



APPENDIX

Links to Project Resources

[Mural Board](#)

[Google Drive](#)

[Week 1 Creative Brief](#)

[Week 2 Presentation](#)

[Week 3 Presentation](#)

[Week 4 Presentation](#)

[Week 5 Presentation](#)

[Competitive Analysis](#)

[Journey Map - Current State & Future State](#)

[Interview Notes & Questions](#)

[Research Synthesis](#)

[Research Synthesis + Personas \(Week 2\)](#)

[Feature List](#)

[Whimsical Site Map](#)

[Link to Final Prototype](#)

