

BACKPAC

UX-W: BackPac

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SI 487

UX Validation Report

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PROJECT DESCRIPTION

Client Mission

BackPac is a company that strives for their users to increase their civic engagement and help give back to their community. They provide value through their partner and volunteer applications. BackPac aims to provide users an easier way to find and sign up for volunteer opportunities and NPO Volunteer Coordinators, or “Partners”, an easier way to recruit and retain volunteers.

Project Description

Our team has been tasked to solve the problem of designing a user interface that is meaningful and efficient for the BackPac Partner application. This application will allow NPOs (starting in Washtenaw county, expanding as popularity and demand grows) to post their events and opportunities for volunteers to view, learn about and sign up for. There are several requirements that we will need to consider, like how current NPO event coordinators use technology to build a volunteer base and recruit volunteers. We will design and prototype a mobile and web application.

Project Background

BackPac is a new organization that was recently founded by two Stephen M. Ross School of Business MBA students to provide a solution to improve community engagement. The BackPac team has been developing this idea for some time, and has received funding to make their dream a reality. Our project focuses on the volunteer Partner App, an interface that will allow event coordinators from local NPOs, to post about volunteer opportunities that will attract and retain volunteers. Our project will focus on the needs of these volunteer coordinators and we will design an interface that is efficient and provides an easier process to find volunteers.

PROJECT GOALS

Our team came up with three key project goals for this semester. These goals will help us align our research goals and guide our research plan. They are the following:

Project Goals

- **Create** and prototype a mobile design solution for the Partner App which provides a sustainable and intuitive experience for Volunteer Coordinators.
- **Recruit** the help of additional non-profit organizations to test and provide feedback about the overall usability, aesthetic, and longevity of various Partner App design solutions.
- **Explore** the challenges mobile technologies pose with volunteer recruiting, and research how we can work to improve these issues through this design experience.

RESEARCH PLAN + METHODOLOGIES

Competitive Analysis

In our UX Research Plan & Materials Report we stated our intent to conduct a competitive analysis to compare the previously identified competitors to criteria such as ease of navigation, visual appeal, and informational hierarchy. After re-evaluating the nature of our project, we will no longer conduct a formal competitive analysis for two reasons.

Since we will be working on designing a product for *nonprofits and volunteer coordinators* to use for organizing and recruiting volunteers, there is limited access for analyzing the use of competitor platforms from the perspective of a volunteer coordinator. Additionally, we previously only had access to the Volunteer App, but our client recently granted us access to the beta version of the Partner App.

After re-evaluating the nature of our project, we will no longer conduct a formal competitive analysis. Since we will be working on designing a product for *nonprofits* to use for organizing and recruiting volunteers, there is limited access for analyzing the use of competitor platforms from the volunteer coordinator perspective. It was still important to note several competitors of BackPac so we conducted informal research to understand the different platforms currently available to non-profit organizations. We identified direct, indirect, and analogous competitors.

Our direct competitor is DonorPerfect Fundraising Software. DonorPerfect provides a clean dashboard for nonprofits to use when managing their fundraising and volunteering; the volunteering aspect is of particular interest as BackPac is trying to help organizations manage their volunteering opportunities.

The indirect competitor is the Ann Arbor Observer, which offers an online database that creates a guide to the city of Ann Arbor. It includes a section listing nonprofits and other organizations in the area who are looking for volunteers and offering community members opportunities to get involved.

Some analogous organizations we decided on include Food Gatherers and 826 Michigan because they offer insight into how organizations are trying to appeal to gain new volunteers.

Heuristic Evaluation

We conducted a heuristic evaluation on the beta version of our client's Partner App, as it is not currently available in the app store. This allowed us to gain a better understanding of how the Partner app works, as well as gauge how our design requirements will improve the overall experience for our end users. We decided to assess the Partner App against 9 of the 10 heuristics.

We did not evaluate the app for Help and Documentation, because there are currently no walkthroughs and the details for the onboarding process have been left to our client.

Each heuristic has specific judgement points which we used to evaluate the app objectively. In developing the criteria for our heuristic evaluation, we also made sure to include judgement points regarding design and functionality which we expected the app may not have. We included these because we felt it was important to evaluate the app against as many heuristics as possible to gain a holistic understanding of where the Partner App currently stands in its design and what functionality has already been developed. We wanted to make sure we had a concrete understanding of the baseline functions that have been implemented, in order for our team to make design decisions that will complement these functions so that our client can easily implement them in future iterations of the app.

To conduct this assessment, each team member began by taking time to interact and get comfortable with the interface. Once each member had time to explore all the features and navigation within the app, we each evaluated each judgement point based on the severity rankings defined in [Appendix H](#). We then came together with our individually scored evaluations and discussed each one of the judgement points to create an evaluation with rankings we could all agree on. Our final rankings and comments can be found in the [Appendix H](#).

Informational Interviews

During our research phase throughout the month of January, we interviewed volunteer coordinators from various NPOs in the area. Our client provided us with contact information for several potential interview subjects, and we reached out to each of them requesting 30 minutes of their time for a brief informational interview.

Our goal was to interview a minimum of nine volunteer coordinators (3+ who are partners of BackPac, 3+ who have in-progress relationships with BackPac, and 3+ who have never been in contact with BackPac). We hoped this would allow us to gain an understanding of how NPOs recruited volunteers before and after (if applicable) partnering with BackPac, as well as focus on the sources of success and failure with various recruiting methods.

We created two interview scripts, one for partners who have used the BackPac app and a separate one for NPOs that have not been introduced to BackPac. We developed our interview scripts by combining some questions from a script used by our client in the earlier stages of their research and design. We then added relevant questions to help us gain a deeper understanding of the current situation from the perspective of the volunteer coordinators.

Our interviews were conducted via phone call and the audio was recorded with participants' consent. All of our audio files can be found under [Appendix D](#) with the exception of the final interview we conducted with Karen Boyd. There were some technical difficulties that did not allow us to record the call, but all of the notes were recorded in the interview findings Excel

spreadsheet. The length of the interviews varied from 10 minutes to 30 minutes depending on the amount of content the interview subject provided. While we hoped to conduct at least 9 interviews, we had a lower response rate than expected and were only able to conduct 5 interviews at this point. We are still contacting more individuals and requesting user interviews with them.

Micro-Usability Testing

We also performed five micro-usability tests on the iOS beta version of the Partner App. Our test subjects were University of Michigan students with various backgrounds and interests. We will also conduct more micro-usability tests throughout the design phase with individuals who fit our target audience, such as volunteer coordinators and program managers. This will allow us to check-in on our work through an iterative process. We want to ensure the work completed during the design phase meets the needs of users in the way we intend it to.

We created a procedure and script to run during the tests. As the conversation progressed, we treated the test more of a conversation rather than directly abiding by the predefined script. We explained to the users to be vocal about their thoughts while navigating the app. It was helpful to hear what they liked about the interface and what was frustrating to them. This gave us a better insight into what it is like for the user to be experiencing the app for the first time, with minimal background information about the context of the app.

One thing we noticed as we continued testing our subjects was the need for background information. During the first test we conducted we did not give any background information about the context of the Partner App, or its purpose. We found that this made it extremely difficult for the user to understand what was going on. The Partner App is a very specific interface intended for the use of Volunteer Coordinators, if a user was not expecting that, they might not know what their end goal will be.

The more background information they gave, the better the feedback became from the user. It was important that we conducted several tests, because it allowed us to understand how different people process information and how they interpret signs and symbols. This testing method was very effective for us to understand how users perceive different interfaces and how their interaction changes as a result.

RESEARCH RESULTS

Heuristic Evaluation Results

Completing a Heuristic Evaluation of the current BackPac Partner App allowed us to pin-point exactly where usability problems lie, and helped us to get one step closer in developing an approach where we can solve these issues. Creating a complex rubric and judgement system allowed us to holistically look at this interface to evaluate its performance in a number of areas.

A big point of interest that we discussed in our findings was the ambiguity the interface presents in regards to specific user direction. Back-buttons are not present and it is hard to understand where you are in the app at any given time. The interface does not allow clarity in this way, and creates a lot of confusion during testing. This is something that is very important for a user to remain on the app and achieve their goals successfully. Something that we will definitely take into account in our re-design.

Another point of conflict was how the text entry fields are currently designed. They have direction text inside the text box that disappears when a user starts inputting content. When a user looks back on the event that they created, they do not have any context about what was supposed to go in each field. This could spark confusion and frustration in the user which could lead them to closing the app and foregoing the experience.

Understanding these points of tension that are currently implemented in the app allowed us to craft our design and UX requirements in a way that addresses all current issues.

The result of coming together as a group to discuss what we found was a great way to understand our project on a deeper level. We all had different comments and viewed the interface from unique perspectives. Acknowledging all of the insights we each had, allowed us to form a better understanding of how our design recommendations will directly impact the interface we create.

Informational Interview Results

We were able to conduct four interviews with volunteer coordinators from various nonprofit organizations (see [Appendix E](#)). These interviews allowed our team to successfully identify the sources of success and frustration volunteer coordinators have with various recruitment methods. The information received from interviews was entered into a spreadsheet to organize our findings.

We received lots of information about different aspects of recruitment that volunteer coordinators experience. The data covered a range of topics, so we completed an affinity diagram to organize and understand all the context we possibly could. The differences among the

experiences of different coordinators from different nonprofits was clear, but there were also several commonalities, which we indicated on our diagram with stars.

The interviews yielded helpful qualitative data regarding the volunteer populations, various volunteer recruitment methods, and feedback and follow up practices. There is a large presence from retired members in the community who volunteer willingly, as well as individuals working full time. The younger population, however, is significantly smaller and many individuals often do not continue volunteering for an extended period of time. Involvement from younger members of the community is also often required by their high school or degree program in college.

Many frustrations with current recruitment methods were system-related, meaning that volunteer coordinators had the most issues with software being difficult to use or information online not being clear enough. Many of the organizations also do not send out automated messages and reminders to volunteers and struggle to utilize mainstream social media, because they do not always serve all the functions they require.

Gaining a more holistic understanding of the context surrounding the recruitment experience for volunteer coordinators was crucial to understanding what we needed to address in our design requirements in order to create a solution that will improve the volunteer coordinator experience and help NPOs to grow their volunteer population.

Conducting interviews individually and then coming together to discuss our results helped to split the workload and allow for each team member to build a one-on-one relationship with the interviewee. This will be helpful when we begin user testing, as we hope to gain feedback from these individuals.

Micro-Usability Test Results

The screen recordings and audio files for the micro-usability tests we conducted can be found in [Appendix G](#). We found that users felt good about the overall design and aesthetic of the interface, however they found a lot of the questions and fields misleading. This was important to learn because we want to make sure that users understand our interface so they follow through in reaching their goal. We want to ensure retention in every aspect from both volunteer coordinators and aspiring volunteers. It is essential that all fields are easy to understand and intuitive so that every user, despite their background and life experience can successfully use the app.

The first major result we saw was that users were perplexed because every field on the form was required. Some of the questions did not always call for a response like the sliders at the bottom of the page that indicated if there was a training or orientation event. If the user wanted to note that “No, this event does not require an orientation or training” they could not do so because the field is required. Figure 1 shows the required sliders on the bottom of the form. During the tests we found

that every slider had to be selected for the “submit” button to highlight and then the user could go back and uncheck a slider if it did not pertain to their event. However, not all users performed this action which is something we need to consider when thinking about the architecture of the new interface we design.

Users also pointed out their frustration regarding that they could not read the rest of the text in the “Training/Orientation” event field. It is important that the user can find meaning in each field they come across so that they understand what it is asking of them.

Another point of tension surrounded the “Indoor/Outdoor” and “Solo/Group” fields. None of the users we tested identified this area of the form as two separate fields. While the developer intended for the user to select if the event was Indoor or Outdoor and if it was a Solo or Group event most users interpreted this as they were only required to select one of the four circles.

These were some of the main pain points we found as results from our Micro-Usability tests. Overall, we need to make sure that every field is clear and a wide range of users can understand its meaning and that the fields are distinct and that the answer options make sense.

The screenshot shows a mobile application interface titled "EDIT EVENT". The form contains several input fields and toggle switches, each with a red asterisk indicating a required field. The fields are:

- try harder *
- casual *
- big email *
- Indoor (selected) Outdoor *
- Solo (selected) Group *
- Is this a Training/Orientation ev... *
- Background Check Required *
- Training/Orientation Required *

A "SUBMIT" button is located at the bottom of the form.

RESEARCH ANALYSIS

Analysis Methods

To synthesize the data we collected from our interviews, we created an affinity diagram to help organize and understand the information. From this we were able to identify themes and specific frustrations to address in our design requirements. We also conducted a heuristic evaluation to gain a baseline understanding of the design and overall usability of the BackPac Partner App. This allowed us to objectively evaluate our client's beta version of the Partner App, which was very useful in informing our design requirements.

We also conducted five micro-usability tests of the Partner App interface. We gave the users access to the interface and provided them with minimal direction to complete a goal. This test focused on filling out a form that allows a user to post an event on the Volunteer App. These tests allowed us to further understand the users thoughts, feelings and frustrations when navigating this form. It informed our UX requirements as well as our design ideas moving forward for the next phase of the project.

These methods allowed us to visualize and understand our data from a new, holistic perspective. This helped our team address the current needs of volunteer coordinators and build this into our UX design requirements for the BackPac Partner application.

Themes & Insights

Through the process of creating an affinity diagram, conducting interviews and doing a heuristic evaluation of the current partner app platform, we were able to identify a few themes and insights that have informed our design goals and requirements.

We found that most volunteer coordinators that we interviewed were very comfortable with their current recruitment process. They know these platforms well and have figured out ways to make manual processes more efficient, but they are excited for the opportunity to have a platform that will allow them to digitize part (or all) of the volunteer recruitment process with BackPac. We found a common trend in most Volunteer Coordinator's we interviewed that they are always looking for new ways to reach a wider audience. Most volunteer coordinators were excited about this opportunity but will need further instruction to successfully integrate it into their current business practices. This helped us to make sure that we are creating a platform that is easy to use and access so that the organizations we on-board will stay on the app and keep posting their opportunities.

We need to make sure we are creating a product that is meaningful to every user that interacts with it. Creating an affinity diagram with the research we found from the interviews allowed us to

organize our findings logically, to understand which themes and overall frustrations were coming up the most.

After we conducted our interviews and organized our findings so we could make logical sense of them, we performed a heuristic evaluation of the current Partner App interface. One of the big insights we gained after performing our heuristic evaluation was making sure our user does not get confused while navigating the app. Some of the individuals we interviewed are a part of organizations that are already on-boarded on the volunteer facing app, and are not sure how they can control what is posted on the app. The app is still in beta form, so it is natural that they are going to have some confusion on the current state of the app that gives them control over what the volunteer sees, however hearing this from these volunteer coordinators reinforced to us how important it is that VC's can fully understand and manipulate the partner app. Using functionalities that will allow the user to pin-point exactly where they are in the application will ensure that they understand the capabilities they have at their fingertips and will want to integrate the platform into their current recruiting process.

Conducting the Micro-Usability tests allowed us to understand how a user might perceive the interface when looking at it for the first time without context. Throughout this process we got to talk to users about their overall experience and discuss if they were a volunteer coordinator if this app would be successful in filling their needs. Talking to users and having conversations about what was hard for them and what they liked reinforced our findings from the Heuristic evaluation and gave us a better idea of how we can improve our requirements to ensure that we are considering all aspects of the interface moving forward into the design phase.

User Personas & Journeys

We decided to create three user personas based on our target demographics. We wanted to set the tone for our design work and use these personas to empathize with our users and keep in mind the various perspectives of our target users. We began by creating three user personas which demonstrate some of the main themes we noticed while interviewing coordinators. These reflect both personal and business motivations experienced by coordinators.

We followed this up by creating three user journey maps to match with our three personas. As with the persona profiles, these maps explore the various emotions, pleasures, frustrations, goals and needs of three different volunteer coordinators, each with unique motivations and needs.

Each user journey map has 6 stages. During some of these stages, the user is on the Partner App, but other stages occur before and after using the app. The first stage is Research, during which the user is searching for a new product or tool for volunteer recruitment and/or tracking purposes. The assumption in these cases is that each user ultimately decides to try BackPac. Following this decision, the second stage is Sign Up, which refers to the onboarding process for the BackPac Partner App. Next in the user's journey is the Discover stage, which involves the user making

initial navigations and getting to know the features and overall layout. Users then go on to the Event stage and post their first event on BackPac using the Partner App. The fifth stage is Pre-Event Communication when coordinators follow up with volunteers to confirm a signup. The last stage is Post-Event Feedback, and coordinators follow up with volunteers to gain feedback about their experiences and areas for improvement.

Both of these tools helped us to empathize with and better understand our target users and their unique needs and motivations. This is important as our client's product is a two-sided platform with two different mobile apps meant to serve two different user groups with drastically different needs and goals. It is important to keep these two groups separate as we go into the design phase so we remain focused on serving the volunteer coordinators.

UX Design Requirements

After completing our research analysis, we agreed on ten UX design requirements for the BackPac Partner Application. We took into account business requirements, user requirements, and functional requirements to ensure our product solution meets the needs of all stakeholders involved. Our requirements spreadsheet can be found in [Appendix K](#) below.

UX DESIGN PROCESS

UX Design Process Overview

Step 1: Divide the Work

Our team began by dividing up the tabs across the bottom (Create, Track, and Profile) among the three of us. Each person was made responsible for ideating the screens that would appear under that tab for the entire design phase.

Step 2: Consult Research Notes + Begin Initial Sketches

Before we jumped into creating initial sketches, we started with our requirements and personas in front of us. First, we began by making general notes about what we knew needed to be addressed in our prototype. At this point our notes mostly pertained to general navigation issues and where we thought certain information should be found within the app. Following these initial sketches we spoke with our client team and discussed the changes we made as well as what aspects of the app still needed adjustments - based on our requirements and personal observations.

Step 3: Transform Sketches + Revisions Into Mid-Fidelity Wireframes

After receiving feedback from our client about our low fidelity sketches, we spent a little time redrawing some aspects. Since we had a good grasp on the basic flow and functions we would implement in our design, we moved into mid-fidelity wireframes, during which we still worked on navigation issues, but we focused much more on design elements, such as icons, textual placement, and white space. At this time, we began paying close attention to our word choice throughout the app; users of the current version had lots of issues with not being able to understand descriptive text throughout the app, and we wanted to be conscious of other areas of the app that might have confusing language, like in the initial tutorial for example. Following this iteration of mid-fidelity wireframes, we again spoke with our client to discuss changes we made and what aspects still needed adjustments.

Step 4: Transform Mid-Fidelity Wireframes Into a High-Fidelity Prototype

After this round of feedback from our client on our mid-fidelity wireframes, we compiled our notes and began creating our high fidelity prototype. In order to focus on more important design aspects of the Partner App (PA), we decided to maintain the same coloring and fonts of the current PA. We plan to test out various, more colorful palettes for the final prototype in the validation phase.

This allowed us to focus more on how our personas would navigate the flow of our app, designing a tutorial and complete onboarding process to eliminate confusion in our users. We wanted to focus on creating a clear and consistent flow of our app and make sure the structure was consistent and usable before we focused on minute details that bring it all together.

Iterative Progression of Design

Early Ideas & Paper Prototypes

Our earliest ideas were informed from the information we gathered from the micro-usability tests we performed during the research phase on the current PA. Using the current PA as a basis for our design, allowed us to assess points of conflict in users with the current interface allowing us to identify specific improvements we could make during this phase. We created paper prototypes along with an outline that identified which pieces of functionality will be available within the three tabs of our design (create, track and profile). This allowed us to each be responsible for ideating a tab and creating prototypes that communicated our choices. Our initial ideas and paper prototypes can be found in [Appendix L](#).

Wireframes

Once we received feedback from our client on the features he liked and what could be improved we started working on converting our physical prototypes, to digital ones. We decided to use Balsamiq Wireframes to create our mid-fi prototypes. Our team had not used Balsamiq before this project. We decided we wanted to learn a new platform and found that Balsamiq made the wireframing process seamless and allowed us to hone in on improving our design. The link to our Balsamiq file can be found in [Appendix M](#).

In this stage of our design process, we fleshed out the “create event” form. Making sure that all of the options for selection made sense to our user. Several usability test participants mentioned that they did not understand the intent of every question on the form and the selection interfaces did not make sense (ex:the interface prompting the user to a required slider when their response might not yield that output). We decided that using dropdowns and text fields were the best methods to engage our users and help them to understand the intention for our design.

Balsamiq had resources, such as icons that were easy for us to use and manipulate in our design. This allowed us to focus on the flow of our interface, making sure we were designing for all users, keeping in mind the personas we created and usability testing we did to inform the decisions we were making in our wireframes.

High Fidelity Prototype

After we finalized our wireframes on Balsamiq we met with our client to discuss his thoughts and receive his feedback. We took extensive notes and did our best to implement the majority of his feedback. We dug in and refined the smaller details of the fields on our forms, the functionality of the track tab and considering what information was of critical need to our user in the profile tab.

We decided to use Figma to design our high fidelity prototype. We were attracted to the collaboration capability this web application has. It was a platform that would allow us the opportunity to work alongside each other digitally. This gave us the capability to see our

teammates design in real time allowing us to keep a consistent design theme across multiple screens.

While the COVID-19 news was impactful, we still designed to the best of our ability and made time to implement extra design choices that we left out at the beginning of the design process like color, font and element effects. We did not try to focus on the most minimal detail because we did lose some time because of the pandemic and we all needed to do what we could to take care of ourselves during this critical and emotional period. The link to our Figma file can be found in [Appendix N](#).

Final UX Design

Final UX Design Rationale

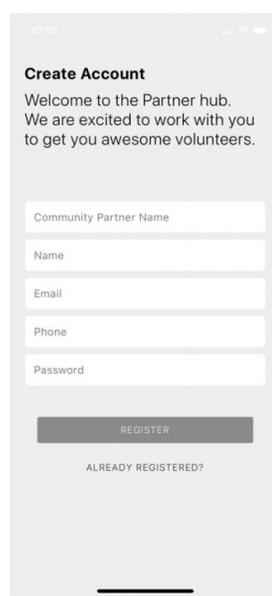
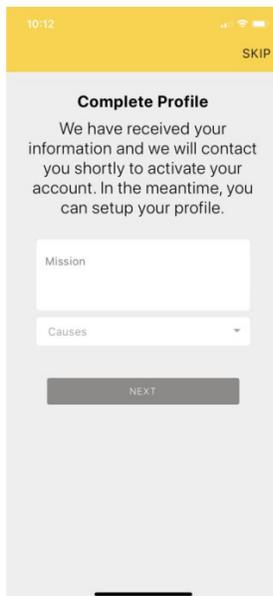
Our UX requirements for this project included 10 items and at this point we have designed a prototype that addresses six of them. We were able to address all but two of our “must have” requirements and we have been able to address one of our requirements that would be “nice to have”, leaving just two necessary requirements unaddressed at this time. Below is an outline of our progress regarding each of our design requirements.

#1: Calendar Integration

A very important requirement for our target users was the capability for calendar integration to make it easier for volunteer coordinators to automatically send calendar invites without having to leave the app. While we have not ideated how this will work in the app yet, we are looking at having users integrate their calendars under Settings, and then they would see a button to add an event to their calendar or send a mass invite without leaving the app - or BackPac would at least start the process before opening another app.

#2: Automated Pre and Post Volunteer Communication

Coordinators also expressed difficulty keeping up with the various modes of communicating with volunteers before or after events. They described having to switch between email, spreadsheets, and the organization’s internal software. We are aiming to help them automate some of the communication they carry out in order to follow up with volunteers about their sign ups, experiences, and upcoming events. We have not ideated this process yet, but plan to



#3: Onboarding Process

The onboarding process to register an account on BackPac was a little vague, and we worked on making the process clearer with more structure and clearer text fields. The onboarding process in our final prototype is much clearer, indicating things like whose information is required in the Sign Up process, and we renamed the “Mission Statement” to “Bio” as this term allows for more freedom in regards to what an organization wants to tell the community about themselves. The two images on the left are the current version of our client’s app, and the two below are the version in our prototype right now.



Sign Up

Organization Name

Volunteer Coordinator First Name

Volunteer Coordinator Last Name

Contact Email

Contact Phone Number

Password

Confirm Password

Register

Select up to **3 causes** that your organization resonates with...



Religious



Educational



Charitable



Animals



Public Safety



Youth & Sports

Next

One more thing...

Logo

Browse...

Youtube Link

Facebook Link

Instagram Link

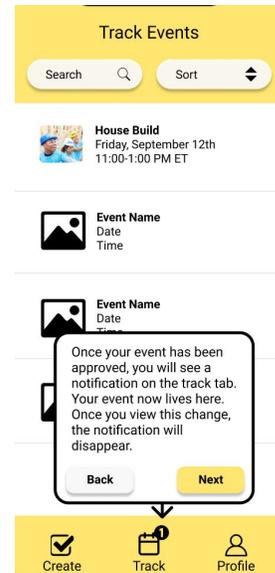
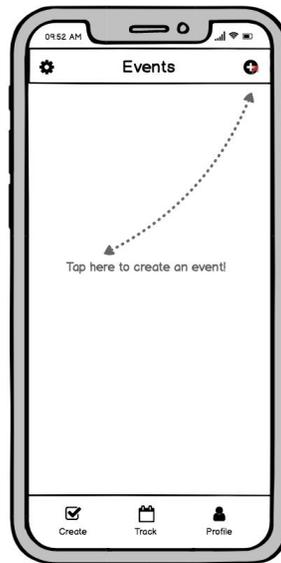
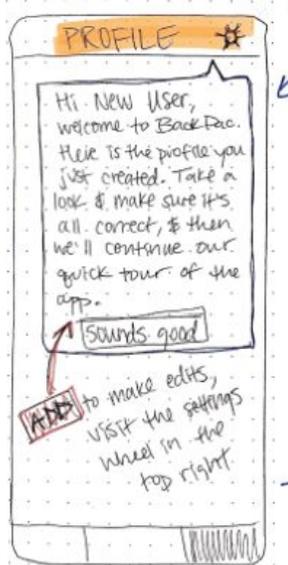
Twitter Link

Website

Next

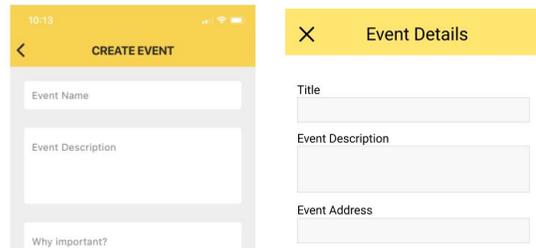
#4: Help Section

We wanted to offer a kind of Help section to allow users to access information and documentation about how to use the app and common troubleshooting fixes. We are recommending our client consider adding in-depth troubleshooting documentation within the Settings section of the app eventually. But to help users get to know the app and what they can do, we have designed a tutorial, also frequently referred to as a walk through, that launches in the app when a user logs in for the first time or registers an account. Nothing like this existed in our client's version. Below are our iterations for the tutorial.



#5: Help Text Fields

In our client's version (left), the descriptive text to explain what information needed to be entered in the field would disappear when users began entering their information because the descriptive text was within the field. Additionally, a lot of feedback we received indicated the language of the text confused them, and our prototype (right) addresses both these issues.

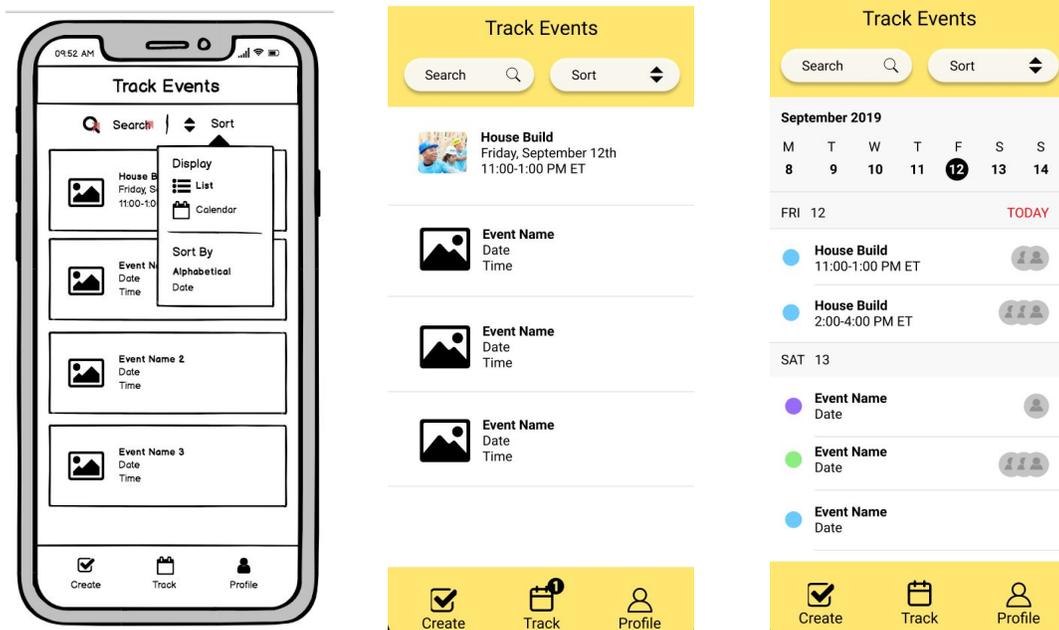


#6: Back Button

The current version of the Partner App lacked a lot of user flexibility in terms of navigation. The biggest issue is that users weren't able to navigate backwards to a previous page in several instances, including during onboarding and when creating an event. You can see in every iteration the addition of back buttons and full navigation flexibility throughout the app.

#7: Dashboard

While our client's Event Tracking dashboard showed a lot of information in a small preview, it also wasn't very easy to parse through. Our iterations below show how we played around with different layouts for this dashboard, and ultimately decided to offer users the option to sort events how they prefer - by date or alphabetically.



#8: Resources

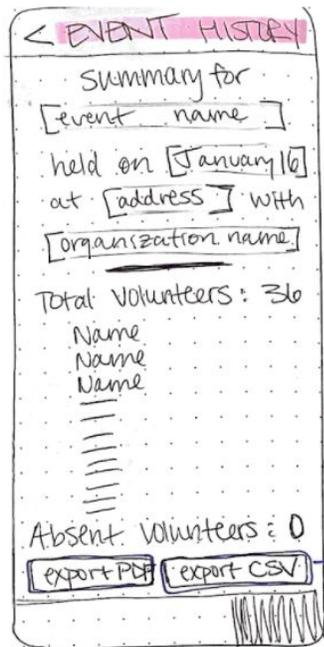
This requirement is not one of our “must have” requirements, however it is something that coordinators pointed out would be really useful. We have set this requirement aside, but will prioritize this requirement over others if time permits.

#9: Direct Message/Chatbot

This requirement is not one of our “must have” requirements. We have set this requirement aside and will provide our client with some wireframes if time permits, but since this is not an important need to address at this time, we are prioritizing other requirements first.

#10: Excel Integration

While it was not something coordinators indicated they would need the Partner App to have, we managed to easily design a way for them to export the data from volunteer events into either a CSV or PDF format to their email.



Interactive Prototype

Please see [Appendix N](#) to view our interactive prototype in Figma.

VALIDATION STUDY

Study Design + Methodology

Research Questions and Metrics

For the validation phase, we came up with three research questions that would best evaluate whether our hi-fidelity prototype aligned with our project's requirements and satisfied our client and users' needs. They are the following:

1. Is the experience we have created confusing to our users?
2. Will our design be sustainable for volunteer coordinators to use?
3. What are the main pain points of our design, and how can we make sure they do not promote user drop-off?

To answer our research questions we decided on the following metrics:

1. Conducting usability tests with users, both from our target audience and regular users
2. Evaluating our results through documenting comments for each task in a spreadsheet
3. Creating an affinity diagram as a visual to use to understand the results of our tests and derive our analysis

Through conducting usability tests, we had the ability to walk through our high-fidelity prototype task-by-task and assess the full experience of the user. What did they find pleasant about the application? What was confusing? Were there any features that were difficult to navigate? Understanding not only how easily the participants were able to complete the tasks, but also how they felt throughout the process allowed us to ensure our design is intuitive, enjoyable and sustainable for users.

Study Approach

In the research phase of our project, we decided to conduct micro-usability tests on our client's current version of the Partner App. As a result, for the validation phase of our project we chose to conduct single system user testing on our redesigned high-fidelity prototype. We felt that after conducting the micro-usability tests, we had a firm understanding of the pain points in the client's current design and built our prototype to address these.

We also decided that we wanted a variation of participants. We felt that it was necessary to test two users who have experience as a volunteer coordinator, as they come directly from our target users. We recruited them from our SME we met in the beginning stages of our project. In addition to this, we wanted to make sure any user, not just volunteer coordinators, could make sense of our interface. We tested five additional users who did not come from our target audience.

For the two volunteer coordinators and three of the usability tests with regular users outside of our target audience, we organized our tests digitally on Zoom. For all testing sessions, users accessed our high-fidelity prototype in Figma. In addition to two virtual tests, we were able to conduct five in-person usability tests with friends we are quarantining with. Please view [Appendix Q](#) for our usability test files.

Procedures and Materials

We wanted to make sure the interface we created had a clean, easy user flow that could be understood by any user. To test this, we conducted micro-usability tests that would expose our participants to every facet of our new design. As stated, every test was conducted using the same high-fidelity prototype we completed in Figma. *Due to a mishap with protocol documents, three of the tests with regular users were conducted using a previous version of our protocol, however, all the same facets of our prototype were tested during these sessions and we have adjusted the data in our spreadsheet accordingly. These three users were also asked one additional missed post-test question within a few minutes of completing their session when the error was caught, and this data is also reflected in our spreadsheet.

We took our participants through each of the five processes of our re-designed Partner App (Onboarding, Tutorial, Create, Track and Profile). We wrote a test introduction, that we spoke aloud before the test began, to make sure we were giving each participant the same base level description about our interface, and we asked them to explain their thinking fully and out loud as they went through the tasks. The participants completed thirteen tasks* followed by a post-test questionnaire. Please view [Appendix O](#) to see our interview task script and post-test questionnaire.

We chose this process because it highlighted the entirety of our application. We wanted to ensure every aspect of the application was easily understandable and pleasant for the user. Therefore, we asked participants to go through all of the main user tasks (i.e. creating an event, editing a profile, viewing scheduled events, etc.) which directly address our user requirements. We utilized the tasks to test the functionality of the application, whereas the post-test questionnaire assessed the emotions and overall reflections the users had throughout the experience.

We decided to collect only qualitative data during our validation phase, in order to grant us more time to conduct a complete analysis of all the features in our prototype with each one of our participants. Rather than asking our users to use a usability scale to help us understand what was and was not satisfactory about our design, we went through the data for each task and developed an affinity diagram to assess which parts of our design needed to be adjusted. This allowed us to collect more organic content from our users and better gauge their initial reactions to the interface, rather than focusing on numerical scorings.

Recruitment

We considered the potential biases of testing one type of demographic. Therefore we attempted to avoid this bias by having two different testing subjects (volunteer coordinators vs. non-volunteer coordinators). We hoped that by having variety in our participants that we would gather information from multiple perspectives, backgrounds, and experiences.

Recruiting participants was an easy process. We reached out to two volunteer coordinators via email that we were already in contact with from our research phase. There was no incentive for these participants except that giving feedback on the BackPac application will only help improve their user experience with the application. Both volunteer coordinators were remote, so therefore we conducted virtual usability testing via Zoom. In addition, we tested five college students that we are quarantining with. They did not receive any incentive for participating either. Since we are quarantined with them, two of these tests were conducted in-person, while the other three were conducted using Zoom in order to record the session for later viewing.

Analysis

Demographics

As stated, we tested both volunteer coordinators who come directly from our target audience, as well as college students, due to our circumstances. All but one user was located in Ann Arbor. The app is meant to serve those in Washtenaw county for the time being, so it was beneficial to hear from many users within the target area.

Raw Data

We entered our raw quantitative data from user testing into a spreadsheet organized by each individual task. From this, we were able to apply the data toward creating an affinity diagram to understand the main themes, as well as an overview of the most frequent comments from each task. A link to our spreadsheet can be found in [Appendix P](#).

Affinity Diagram

Our affinity diagram helped to highlight several main themes from all of our testing sessions. From these we were able to gain a more holistic understanding of how our users reacted to the prototype, what confused them, and what delighted them. Our affinity diagram can be found in [Appendix R](#).

Insights

Easiest Aspects to Use

Overall, the easiest aspects to use seemed to be the ones that could be executed quickly, such as emailing a volunteer or checking in volunteers. These actions have been made especially easy in our design so that all users have to do is tap an icon.

Areas of Confusion

Two things in particular were a little confusing to users. The first was understanding the difference between an event that has been saved versus an event that is pending approval. This seemed to temporarily confuse many of our users, but they quickly understood the difference between the two. The other thing some users found confusing was where to locate event history. This information is tucked away under settings, because we didn't see anywhere else that made sense to put it, however, most users were able to find the information after a little while without help.

Recommended Design Improvements

One of the recurring issues we noticed was the clickable targets that users were clicking were too small in our prototype and did not realistically portray where users would be able to click in the real thing. Multiple users indicated they would likely want the option to reschedule a recurring event during the event creation process, as well as the option to check in volunteers individually, rather than all at once.

Some less popular, but equally important design recommendations were to reorder the list of social media on the final registration screen by popularity; the recommended order was Facebook, Instagram, Twitter, then YouTube. One user thought the portion to add directions to an organization was vague and they weren't sure how they would fill in that section in reality. The same user pointed out that volunteers might need additional contact information in addition to just a name on an event details page.

Overall Usefulness

A majority of users indicated that the overall navigation was simple and the information was well-labeled for the most part. We had a few spelling errors and some areas where we will clarify textual elements, but overall a majority of our participants said they would use BackPac in the future - whether as a coordinator or a volunteer.

Adjustments

In the coming week, we plan to meet with our client and go through all of his feedback on our high-fidelity prototype and explain the adjustments that we feel are necessary changes to make for our final UX specification. Based on what we have gathered during the validation phase and what notes our client has, we will revise the most important aspects of our design and make the necessary adjustments in our high-fidelity prototype.

We have created a comprehensive list of the adjustments we think are necessary based on what we have learned from testing. The adjustments have been prioritized based on how they affect the overall usability of the product and how they relate to our design requirements. We have noted a changes priority by putting the rank in parentheses next to the change description. We have defined the three priorities of changes as:

Priority 1 - Must Happen

Priority 2 - Should Happen

Priority 3 - If Time Permits

- **Onboarding**

- Add an option for volunteer coordinators to reschedule a past event (1)
- Remove websites from social links. (Website field included twice in onboarding process -- omit one). (1)
- Create more categories that are well defined for causes organizations might resonate with. (2)
 - Poverty
 - Sports
 - Animals
 - Children
 - Community
 - Art
 - Education
 - Environment
 - Hunger
 - Senior
 - LGBTQ
 - Sports
 - Veterans

- **Tutorial**

- Change the first field to a more defined title that they are creating a “volunteer event” when hitting the plus sign in the top right hand corner of the screen. (2)
- Explain the process if an event is recurring - what is different, how can they note this when creating an event. (1)
- Explain how to reschedule past events. (2)

- **Create**

- Come up with a better word for “pending approval” perhaps “submitted for review” (2)
- Come up with a better word for “saved” perhaps “work in progress”, “drafts” or “saved to edit” (2)
- **Create Event Form**
 - Change “Max number of volunteers” to “Max number of volunteers per timeslot” (1)
 - Add field for “other notes to share with potential volunteers” (2)
 - Add a field for uploading documents for volunteers to sign before they arrive at the event (1)
 - Add field for participant age limit. (1)

- **Track**

- Add edit event time to edit options in the event detail page. (1)
- Background test and training functionality
 - How will volunteer coordinators understand that this process is directed through a third party? (3)
 - Distinction needs to be made about what these fields represent, why they are there and how the VC can change them. (3)
- Sending an email functionality improved (2)
- Sort by date dropdown
 - Maybe add a number next to the profile icon(s) to show how many volunteers have signed up so far. (3)
- **Profile**
 - Add a feature for Volunteer Coordinators to better understand how their profile will be perceived on the volunteer end of BackPac. (3)
 - Not many organizations have all of the social media links, amending the layout on the profile so that only necessary links are shown. (3)

APPENDIX

Appendix A: Interview Subjects

#	Name	Primary Contact	Status
1	Habitat for Humanity of Huron Valley	James Hannah	Live on app
2	Shelter Association of Washtenaw County (SAWC)	Amyra Archuleta	Getting onboarded soon
3	Friends in Deed/Circles	Amtheyst Floyd	Aware of BackPac but not posting opportunities
4	Family Learning Institute (Fli)	Debbie Baker	Getting onboarded soon
5	Mercy Education Project (MEP)	Karen Boyd	No prior knowledge of BackPac

Appendix B: Interview Script #1 (Current BackPac Partners)

Subject Background Information

1. What is your name and role at [NPO]?
2. How long have you been at [NPO] for?
3. What geographical locations do you recruit volunteers from? Washtenaw county or beyond?

Current Methodologies

4. Can you walk us through the different ways you currently recruit volunteers?
 - a. What technological platforms or services do you use?
5. Is there anything you wish you could change about any of these methods/platforms?
6. Is there any method/platform that is more pleasing to use than others? Why is this the case?
7. How has your experience using BackPac changed your current/past methodologies for recruiting volunteers?

Volunteer Demographics

8. On average, how old are your volunteers?
9. Under what context do they volunteer?
 - a. If they are required, why is this the case and vice versa? (i.e. for school, company purposes, law-required community service, etc.)
10. What category of attendance do the majority of volunteers fall under?
 - a. No shows, one-timers, few-timers, frequenters
11. Do you face difficulties recruiting and maintaining volunteers?

Following Up

12. How do you work to ensure people who sign up to volunteer will show up?
 - a. E.g. a reminder email/text to remind them, requiring a check-in be completed in the days leading up, etc.
13. Do you follow up with volunteers for feedback about their experience or facilitate suggestions in any way?

Appendix C: Interview Script #2 (Potential BackPac Partners)

Subject Background Information

1. What is your name and role at [NPO]?
2. How long have you been at [NPO] for?
3. What geographical locations do you recruit volunteers from? Washtenaw county or beyond?

Current Methodologies

4. Can you walk us through the different ways you currently recruit volunteers?
 - b. What technological platforms or services do you use?
5. Is there anything you wish you could change about any of these methods/platforms?
6. Is there any method/platform that is more pleasing to use than others? Why is this the case?

Volunteer Demographics

7. On average, how old are your volunteers?
8. Under what context do they volunteer?
 - a. If they are required, why is this the case and vice versa? (i.e. for school, company purposes, law-required community service, etc.)
9. What category of attendance do the majority of volunteers fall under?
 - a. No shows, one-timers, few-timers, frequenters

Following Up

10. How do you work to ensure people who sign up to volunteer will show up?
 - a. E.g. a reminder email/text to remind them, requiring a check-in be completed in the days leading up, etc.
11. Do you follow up with volunteers for feedback about their experience or facilitate suggestions in any way?

Gauging BackPac Interest

12. What are your thoughts on switching to a mobile application that will allow you to list event opportunities and recruit volunteers?

Appendix D: Interview Audio & Text Files

- [Copy of FamilyLearningInstitute.m4a](#)

- [Copy of FamilyLearningInstitute.txt](#)
- [Copy of FriendsinDeed/Circles.mp3](#)
- [Copy of FriendsinDeed/Circles.otter.ai.txt](#)
- [Copy of HabitatforHumanity-HuronValley.m4a](#)
- [Copy of HabitatforHumanity-HuronValley.txt](#)
- [Copy of ShelterAssociationofWashtenawCounty\(SAWC\).m4a](#)
- [Copy of ShelterAssociationofWashtenawCounty\(SAWC\).txt](#)

Appendix E: Interview Findings Spreadsheet

- [BackPac Interview Findings](#)

Appendix F: Micro-Usability Test Protocol

Introduction

Thank you for your participation in our research. Our goal today is to observe how you interact with the BackPac volunteer interface. Please note that there are no right or wrong answers. We would like you to explain your thinking by taking out loud throughout the process. We will record a screen capture and audio during all micro-usability tests if that is ok with you.

- **Task 1:** Please navigate to the BackPac Partner app and open it.
- **Task 2:** Please log into your account.
- **Task 3:** Please create an event.
- **Task 4:** Please ensure your event has been posted
- **Task 5:** Check who has signed up for your event
- **Task 6:** Use the email list function to email a reminder to the participants who have signed up for your event.

Post Task Questions

- How did you feel during the process?
- What was frustrating?
- What was easy?
- What would you have changed?
- Would you use this app/interface?

Micro-usability Test Procedure

1. Open the app
2. Log into your account
3. Create an event
4. Make sure your event has been posted
 - a. Navigate to the profile to check upcoming events you are hosting

5. Check who has signed up for your event
6. Send a reminder email for participants who are signed up to volunteer at your event

Appendix G: Micro-Usability Test Files

Screen Recordings

- [Test 1](#)
- [Test 2](#)
- [Test 3](#)
- [Test 4](#)
- [Test 5](#)

Audio Files

- [Test 1](#)
- [Test 2](#)
- [Test 3](#)
- [Test 4](#)
- [Test 5](#)

Text Files

- [Test 1](#)
- [Test 2](#)
- [Test 3](#)
- [Test 4](#)
- [Test 5](#)

[Excel of Findings](#)

Appendix H: Heuristic Evaluation

Severity Rating Scale

Severity	Definition
0	Not a usability problem
1	Cosmetic problem - no need to fix unless time permits
2	Minor usability problem
3	Major usability problem - should be given priority
4	Usability catastrophe - imperative to fix before product release

Final Heuristic Evaluation

Rating	Review Checklist	Comments
1. Visibility of system status		
3	Is content clearly labeled and organized with a title or header?	Most fields are labeled, however when the user provides content they can no longer see the heading.
3	Does the system make users aware of where they are in the flow of searching for information?	There are many missing back buttons and no clear breadcrumbs for users to reference where they are in the interface.
3	Is there some form of feedback for every operator action?	Few forms of feedback are given on this interface.
3	Does the system provide visibility: this is, by looking, can the user tell the state of the system and the alternatives for action?	There is no way to understand the state of the event while on the homescreen.

Rating	Review Checklist	Comments
2. Match between system and the real world		
3	Are icons concrete and familiar?	Few icons are used.
2	Is language clear and easily understood?	Most language is clear and easy to understand, where present.
2	Is information ordered in the most logical way, given the various users, overall content, and tasks to be carried out?	Information is ordered logically.
3	When prompts imply a necessary action, are the words in the message consistent with that action?	Words are vague and do not specifically target a specific action.
4	Is there a search feature that is easy to understand and utilize?	Not present

Rating	Review Checklist	Comments
3. User control and freedom		

4	Can users easily reverse their actions? (back buttons)	No back buttons present on the interface.
3	When a user's task is complete, does the system wait for a signal from the user before processing?	No
4	Can the user easily search for specific content via the search feature?	Search not present.

Rating	Review Checklist	Comments
4. Consistency and standards		
2	Do all screens look similar in that they clearly appear to be from the same app? - Consider fonts, text size, colors, white space, buttons and other CTAs	Yes
3	Is the terminology consistent and understandable for all users?	Somewhat

Rating	Review Checklist	Comments
5. Helps users recognize, diagnose, and recover from errors		
4	When a user makes an error, is it brought to their attention prominently?	Error is not accounted for and hard to understand for the user.
4	Do error messages indicate what action the user needs to take to correct the error?	No
4	Do error messages suggest the cause of the problem?	No
4	Are error messages worded so that the system, not the user, takes the blame?	No

Rating	Review Checklist	Comments
6. Error prevention		
4	Are search choices logical, distinctive, and mutually exclusive?	No
4	Does the search <i>bar</i> prevent the users from	No

	making errors in finding relevant content?	
4	Are action buttons clearly marked and clearly different?	No

Rating	Review Checklist	Comments
7. Recognition rather than recall		
4	Does the system expect users to remember earlier decisions/actions when completing later steps?	Yes, provides little resources for the user to remember the actions they made previously.
4	Can users conduct searches even if they do not recall all that they are looking for?	No
4	Can users easily see links and pages they have already visited?	No

Rating	Review Checklist	Comments
8. Flexibility and efficiency of use		
2	Does the system force expert users to do things in slow, inefficient ways?	No
2	Can users skip some unnecessary steps?	Yes
4	Does the system allow novice users to enter the simplest, most common form of each command, and allow expert users to add parameters?	No
n/a	Is the search feature effective at finding relative results?	No search feature

Rating	Review Checklist	Comments
9. Aesthetic and minimalist design		
1	Is typography easy to read?	Yes
1	Are all icons <i>in a set</i> visually and conceptually distinct?	Yes
1	Are multimedia elements (photos, graphics,	Yes

	tables, charts, icons, etc.) used effectively to increase visual appeal and engage users?	
2	Does all content stand out from its background?	Some content -- text in fields does not.
1	Are meaningful groups of items separated by whitespace?	Yes
1	Are headers/titles brief, yet long enough to communicate clearly?	Yes

Appendix I: Personas + User Journey Maps

Nancy Brown
Persona #1



Experience: Expert in the volunteer space
Occupation: Program Manager
Traits: Passionate, driven, and a leader

Motivations

- To give back to the local community
- Bring individuals together over their passion for volunteering
- Make working at non-profit organizations less straining

Attitudes

- Comfortable with current process
- Excited about opportunities to improve efficiency of recruitment
- Feels positively about BackPac

Goals & Needs

- To make recruiting volunteers an automated process
- Improve communication between volunteers and the organization
- Ensure volunteers are committed to the program and organization

Pain Points

- Recruiting is a very manual process
- Very busy dealing with logistics such as scheduling and communication
- Spends too much time emailing prospective volunteers who don't end up following through

Skills

- Email
- Prefers in-person and phone communication
- MS Word and Excel

Nancy Brown

Persona # 1

Background

Nancy Brown is an industry professional who has been in the non-profit sector for years. She is comfortable with their current situation of recruiting volunteers but is excited for a new opportunity that a mobile app will bring to her organization. She is a very busy lady and having a process that is automated, efficient and engaging will benefit not only her organization but the overall experience of those who come to volunteer.

Motivations

Nancy has used numerous tools and platforms in her career to recruit volunteers and has heard that a mobile app might help reach more potential volunteers. Nancy's biggest concerns are that a mobile application will be a burden when it comes to keeping volunteer and event information organized. She likes to keep everything standardized in spreadsheets and hopes the data will be easy to access and export.

	Research	Sign Up	Discover	Event	Pre-Event Communication	Post-Event Feedback
Touchpoints	- Google - In person conversations with other coordinators	- Login page - Account creation form - Profile completion page	- Event tracking page - Schedule page - Settings page	- Event tracking page - Create an Event - Event form	- Personal pre-event confirmation email	- NONE
Thinking + Feeling	- Looking for a new tool that will cleanly display the volunteer and event information she needs to keep in order - Feels like the current software she uses is too hectic and cluttered, making her job harder	- Thinks the Packy animal is cute but then forgets about it - Worried that volunteers might want more information than the NPOs profile offers	- Happy the app design is plain and easy to digest - Frustrated trying to understand everything the app could do and what she needed to do first	- Wishes the help text on the event creation form didn't disappear when she starts typing - Confused by some of the components on the event creation form - Wishes she had more control over multimedia elements in event posts	- Annoyed and tired of sending individual emails	- Following up is much lower on her task list at this time and she doesn't see the need for it now. Most volunteers keep coming back so she assumes this is not a concern now.
Areas for Improvement	- Decluttered interface to organize data	- Add more fields to organizations' profile pages so they can manage the information they give volunteers	- Guided walk through upon first use of app	- Place help text above the text fields and clarify what each one means - Allow for more elements to be added to organization's profiles so they can control how they connect with volunteers	- Automate the communication with volunteers to confirm opportunities	- NONE

Jack Smith

Persona #2



Experience: Middle Aged with eight years at NPO's
Occupation: Volunteer Coordinator
Traits: Empathetic, open-minded and enthusiastic

Motivations

- To help individuals in need
- To give everyone the opportunity to help their community through service
- Wants to recruit volunteers in anyway he can

Attitudes

- Excited to educate new volunteers on his organization
- Regularly instills a "come one come all" attitude
- Uses any platform that will allow him to gain a wider reach for volunteers

Skills

- Highly skilled in excel
- Likes to communicate on the phone
- Email
- Highly skilled at interpreting another person's emotions

Goals & Needs

- To recruit as many individuals as needed for volunteer events
- To create a positive experience for volunteers that contribute their time to his organization
- Ensure that the mission of his organization is upheld and communicated to all volunteers who sign up
- Wants to improve reach and retention of volunteers

Pain Points

- Wants to make sure his volunteers feel appreciated
- Needs to have easy to use platforms so he can manage the different services he uses to recruit volunteers
- Platforms that don't allow him to export his data into an excel file frustrate him

Jack Smith

Persona # 2

Background

Jack Smith wants to give everyone he meets the opportunity to volunteer. He understands the value of civic engagement and wants to activate a community of volunteers that are excited to give back to those in need. He likes to use any platform necessary to reach a wider audience. He does not have a lot of experience in recruiting volunteers through a mobile interface but is excited by this opportunity.

Motivations

Jack wants to cast a big net in terms of who he recruits. Invites people of all ages and backgrounds to find volunteer opportunities. Jack wants to activate a larger community of volunteers who enjoy these collaborative experiences and will grow the community. He hopes this mobile app will help him attract people from other communities in the area.

	Research	Sign Up	Discover	Event	Pre-Event Communication	Post-Event Feedback
Touchpoints	<ul style="list-style-type: none"> - Google - Conversations within online social media groups of other coordinators 	<ul style="list-style-type: none"> - Login page - Account creation form - Profile completion page 	<ul style="list-style-type: none"> - Event tracking page - Schedule page - Settings page 	<ul style="list-style-type: none"> - Event tracking page - Create an Event - Event form 	<ul style="list-style-type: none"> - Automated pre-event confirmation email 	<ul style="list-style-type: none"> - Automated post-event email follow up to thank volunteers and rate their experience, but nothing to facilitate qualitative feedback
Thinking + Feeling	<ul style="list-style-type: none"> - Looking for a tool suitable for users of various ages and levels of literacy to use for finding the information they need to reach out or volunteer 	<ul style="list-style-type: none"> - Wishes he could select multiple causes that the NPO contributes to - Worried that volunteers might want more information than the NPOs profile offers 	<ul style="list-style-type: none"> - Initially surprised at the plain aesthetic but doesn't mind - Feeling a little confused at first trying to understand everything the app can do 	<ul style="list-style-type: none"> - Confused by some of the components on the event creation form - Wished the event form offered more flexibility to customize each event as much as needed 	<ul style="list-style-type: none"> - Wishes the organization sent personal emails and calendar invites to setup a point of contact at the organization for volunteers 	<ul style="list-style-type: none"> - Wants to offer volunteers more opportunities to provide more qualitative feedback on their experiences
Areas for Improvement	<ul style="list-style-type: none"> - A recruitment tool that people of all ages would be able to use and enjoy using 	<ul style="list-style-type: none"> - Add more fields to organizations' profile pages so they can manage the information they give volunteers - Allow organizations to select more than one cause 	<ul style="list-style-type: none"> - Guided walk through upon first use of app - Spruce up the app's aesthetic to make it look more attractive 	<ul style="list-style-type: none"> - Place help text above the text fields and clarify what each one means - Adjust the form to offer more flexibility for volunteer coordinators 	<ul style="list-style-type: none"> - Allow for coordinators to send personalized messages to volunteers through the app, as well as calendar invites 	<ul style="list-style-type: none"> - Automate follow up messages that include a survey to assess volunteers' experiences

Sarah Robinson

Persona #3



Motivations

- Wants to make a change in her local community
- Intends to make a positive impact through volunteer opportunities

Attitudes

- Excited to onboard to a platform that will allow her a wider reach
- Interested in joining a new mobile platform for recruiting volunteers

Experience: under a year at her organization
Occupation: Volunteer Coordinator
Traits: honest, creative, extroverted

Skills

- Advanced social media skills
- Excellent interpersonal skills
- Experience with invision and sketch

Goals & Needs

- Grow the organization
- Build a more sustainable community of volunteers for the future
- Have a faster way to acquire and interact with volunteers
- A system that is designed well and aesthetically pleasing to appeal to a younger audience

Pain Points

- Current systems that are used at her organization are "clunky" and hard to understand
- Complicated and dated systems make her job tedious
- She is frustrated with this dated system because she knows that there has to be a better way to get her job done

Sarah Robinson

Persona # 3

Background

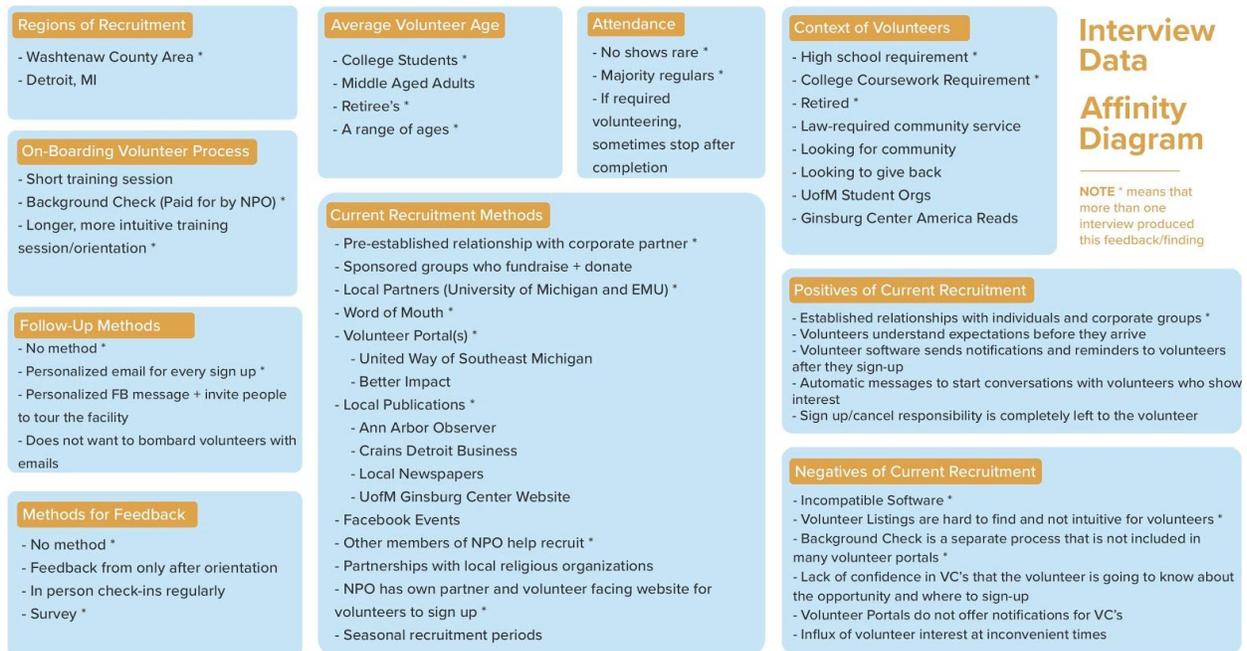
Sarah Robinson is a recent graduate who is excited to be working for a non-profit that aligns with her beliefs. She understands the power of social media and markets her volunteer opportunities on several interfaces. She is thrilled at the idea of a mobile app that is accessible to everyone and will gain interest in a younger audience. She is excited to have the opportunity to make an impact on young adults in her area and get them excited about volunteering.

Motivations

Sarah wants a tool that will help her stay connected and in communication with the wider volunteer community, individual members, and groups. Sarah specifically wants to attract the younger population in an effort to grow the volunteer community of the upcoming generation. She hopes this mobile app will help spark an interest in the younger community and allow her to maintain personal conversations with community members.

	Research	Sign Up	Discover	Event	Pre-Event Communication	Post-Event Feedback
Touchpoints	<ul style="list-style-type: none"> - Google - Conversations within online social media groups of other coordinators - iOS app store 	<ul style="list-style-type: none"> - Login page - Account creation form - Profile completion page 	<ul style="list-style-type: none"> - Event tracking page - Schedule page - Settings page 	<ul style="list-style-type: none"> - Event tracking page - Create an Event - Event form 	<ul style="list-style-type: none"> - Automated pre-event confirmation email 	<ul style="list-style-type: none"> - Automated follow up email to thank volunteers, but nothing to request feedback about their experience
Thinking + Feeling	<ul style="list-style-type: none"> - Not satisfied with the current tools her organization uses to recruit volunteers; Sarah wants to use recruitment tools to also bring the volunteer community closer by fostering closer relationships 	<ul style="list-style-type: none"> - Thinks the Packy animal is cute but then forgets about it - Worried that volunteers might want more information than the NPOs profile offers 	<ul style="list-style-type: none"> - Lacks a sophisticated tour upon first use - Aesthetic could be more attractive - concerned how this will affect recruitment of the younger population 	<ul style="list-style-type: none"> - Wishes the help text on the event creation form didn't disappear when she starts typing - Confused by some of the components on the event creation form - Wishes she had more control over multimedia elements in event posts 	<ul style="list-style-type: none"> - Wishes the organization was more personal when confirming with volunteers. Also thinks they should send confirmations in more forms, like texts and calendar invites 	<ul style="list-style-type: none"> - Wishes the organization reached out to their volunteers more about their experiences. Also wants to survey the general population about any volunteer experiences they have had
Areas for Improvement	<ul style="list-style-type: none"> - An attractive mobile app to encourage young people to volunteer more 	<ul style="list-style-type: none"> - Add more fields to organizations' profile pages so they can manage the information they give volunteers 	<ul style="list-style-type: none"> - Guided walk through upon first use of app - Redesign app to look more attractive and offer interactivity elements like social media offers 	<ul style="list-style-type: none"> - Place help text above the text fields and clarify what each one means - Allow for more elements to be added to organization's profiles so they can control how they connect with volunteers 	<ul style="list-style-type: none"> - Allow for coordinators to send personalized messages to volunteers through the app, as well as calendar invites 	<ul style="list-style-type: none"> - Automate personalized follow up messages - Allow coordinators to reach out to volunteers using the app for other organizations

Appendix J: Affinity Diagram From Interview Data



Appendix K: UX Requirements

#	User Story Title	User Story Description	Priority	Notes
1	Calendar Integration	Volunteer Coordinators need to improve scheduling and communication by linking events directly to their email and calendar	MUST HAVE	<ul style="list-style-type: none"> Integrate to Outlook, Google Calendar, Apple Calendar, etc. Automatic invite attachments
2	Pre and Post Volunteer Communication	Volunteer Coordinators need a way to send automatic emails to their groups of volunteers	MUST HAVE	<ul style="list-style-type: none"> Confirmation email when signing up for event Reminder email prior to event Feedback survey post event Enable notifications
3	Onboarding Process	Volunteer Coordinators need a structured, organized and informative onboarding process	MUST HAVE	<ul style="list-style-type: none"> Step-by-step onboarding process that is easy to understand, especially for non-tech savvy individuals Optional: app tutorial for new users
4	Help Section	Volunteer Coordinators need a help section to reference for common but easy-to-fix issues	MUST HAVE	<ul style="list-style-type: none"> FAQ Troubleshooting Avoids the need to email BackPac founders for small issues
5	Help Text Fields	Volunteer Coordinators need clear and visible help text fields when creating an event to post on BackPac	MUST HAVE	<ul style="list-style-type: none"> Filling out fields for event listing is not intuitive Help text should be above box so it is visible at all times
6	Back Button	Volunteer Coordinators need easy access to return to previous pages	MUST HAVE	<ul style="list-style-type: none"> Unable to go back a page, users must start over Makes the experience more complicated if an issue arises
7	Dashboard	Volunteer Coordinators need a dashboard that organizes their upcoming and past events and volunteer sign-ups	MUST HAVE	<ul style="list-style-type: none"> Clear dashboard that allows for in-app organization Manage events, volunteer contact info, etc.
8	Resources	Volunteer Coordinators would like to conduct and provide background checks, training for volunteers, resources etc. directly on BackPac	SHOULD HAVE	Eliminates the need for volunteers to switch between platforms (i.e. BackPac for signing up and the NPO website to complete background check)
9	Direct Message/Chatbot	Volunteer Coordinators need a way to communicate with other coordinators and Backpac when issues arise	NICE TO HAVE	<ul style="list-style-type: none"> Personalized assistance for more in-depth issues Potential Ideas: AI bot with pre-configured messages, direct message or option to schedule a phone call with BackPac team
10	Excel Integration	Volunteer Coordinators want to integrate BackPac with Excel so that volunteer data can be stored automatically and efficiently	NICE TO HAVE	<ul style="list-style-type: none"> Export data into CSV file Study health/fitness apps for inspiration

Appendix L: Initial Sketches

[LowFi Sketch Progression](#)

Appendix M: Wireframes

[Balsamic File - Wireframes](#)

Appendix N: HiFi Prototype

[Link to HiFi Prototype](#)

Appendix O: Usability Test Procedure

Introduction

Thank you for your participation in our research. Our goal today is to observe how you interact with the BackPac volunteer coordinator interface. There are no wrong answers and we would like you to please explain your thinking out loud as you go through the process. We will record a screen capture and audio during all micro-usability tests. Is that ok with you?

Interview Script/Protocol

- **Task 1:** Please select **sign up** and complete the **onboarding** process on the screen.
- **Task 2:** Please complete the **tutorial** process on the screen.
- **Task 3:** Please **create an event** and save it.
- **Task 4:** Navigate back to the “**create**” **home screen**.
- **Task 5:** Submit the event you have just created for **approval**.
- **Task 6:** Please navigate to the **track** section of the app and use the **sort feature** to find an event.
- **Task 7:** Select an **event** from the **track page**.
- **Task 8:** Once you have landed on the **event detail page** please **check in** your volunteers.
- **Task 9:** **Email** a volunteer who has not finished their training.
- **Task 10:** Please edit your **event details**.
- **Task 11:** Please view your **profile**.
- **Task 12:** Please **edit** your information via your profile.
- **Task 13:** Please access your **event history**.

Post Test Questionnaire

- How did you feel during the process?
- What was frustrating?
- What was easy?
- What would you have changed?
- Do you volunteer? Would this app encourage you to volunteer more?
 - If no, why?
 - If yes, would you use this app to look for opportunities in addition or instead of what you already do?

Appendix P: Usability Test Findings Spreadsheet

[Usability Test Findings Spreadsheet](#)

Appendix Q: Usability Test Files

- [AbigailDemarsPart1](#)
- [AbigailDemarsPart2](#)
- [ElleryRosenzweig](#)
- [CammieDalton](#)

- [MackenzieDalton](#)
- [StephanieKostolansky](#)
- [JuliaLauer](#)
- [NadiaElnaggar](#)

Appendix R: Validation Phase Affinity Diagram

