CHIP-IN

Nonprofits need things. Your team can help.

Becca Stanger

... has a first named derived from the Hebrew 'Rebekah', meaning "a snare" - and we're not going to lie, she snared some pretty good user interviews during the semester. It was fascinating.

Brian Carlo

... resembles his own namesake, which means "hill" in a metaphorical sense. His nobility shone brightly as he navigated this semester, and explains his penchant for striking valiant poses.

Danielle Dai

... gleans a name from the French phrase "God is my judge." For the purposes of grad school, however, she has set this mantra aside and accepted that professors are the key judges for now.

Todor Tzolov

... is a Bulgarian variation of the name 'Theodore', meaning "gift of God." Fortunately, he never let this get to his head - although his skill as an entremetier was definitely a gift from a higher power.

Ricky Holtz

... legally has the name 'Erik', which means "all powerful." Judging by his abysmal gym attendance this semester, we doubt this is true - although maybe UX design counts as a type of power?

tinyurl.com/i213ChipIn

Overview

About the Team

After finding a shared interest in donations and nonprofits, our group slowly narrowed its focus to finding a way to optimize donation drives among teams that know one another and work together, like in offices or university settings. Through several iterations of design and feedback, we came up with a great starting point for an interface to help organize drives for specific items needed by nonprofits. Moving forward, we would like to include more step-by-step guidance to our users and perhaps expand our product to other applications of collaborative collection.

Introduction

Donation drives are run and organized frequently by outside groups for nearly the entire spectrum of charities and nonprofit organizations. Because many potential users already have experienced participating in a drive, as either as an organizer or a donor, we considered it a manageable and well-bound area of focus for us to make reasonable improvements over the course of one semester.

We believe our application would make things easier for the lead organizers of donations drives by providing them with a Web interface to select suitable nearby nonprofits for their teams to support based on their location and the number of required donations. Our application would allow an administrator to easily distribute the details of a selected drive to their team using a simple URL that would not require the complicated step of creating a profile or having to provide an excess of information. After taking on the challenge to run a drive, organizers would have control of a central hub page, where they and their teams could track the progress of their dives through completion.

Problem Statement

It's time-consuming and difficult to find and organize donation drives in small communities.

We are looking to improve the donation drive donation process for organizations of 5 to 100 members (e.g., a corporate office location, I School students, etc.). Currently, the process is ineffective because it requires lead organizers to use a combination of paper, e-mail, Excel spreadsheets and in-person conversations to achieve their goals. Participants can often fail to engage effectively because they are not sufficiently informed about and connected to the nonprofit being supported. There are also few incentives for those who organize the drives to come up with better systems because they are not the main focus of their jobs and usually are short-term projects.

Design Process

Opportunity Selection

From the start, our team came together with a common interest in the social impact potential of the original project idea. We worried a bit initially that having a team of passionate designers and thinkers rather than developers might be a bit of a limitation for developing prototypes later in the design process. In the end, though, we found that while we had some technical limitations, our design tendencies also allowed us to think through our product.

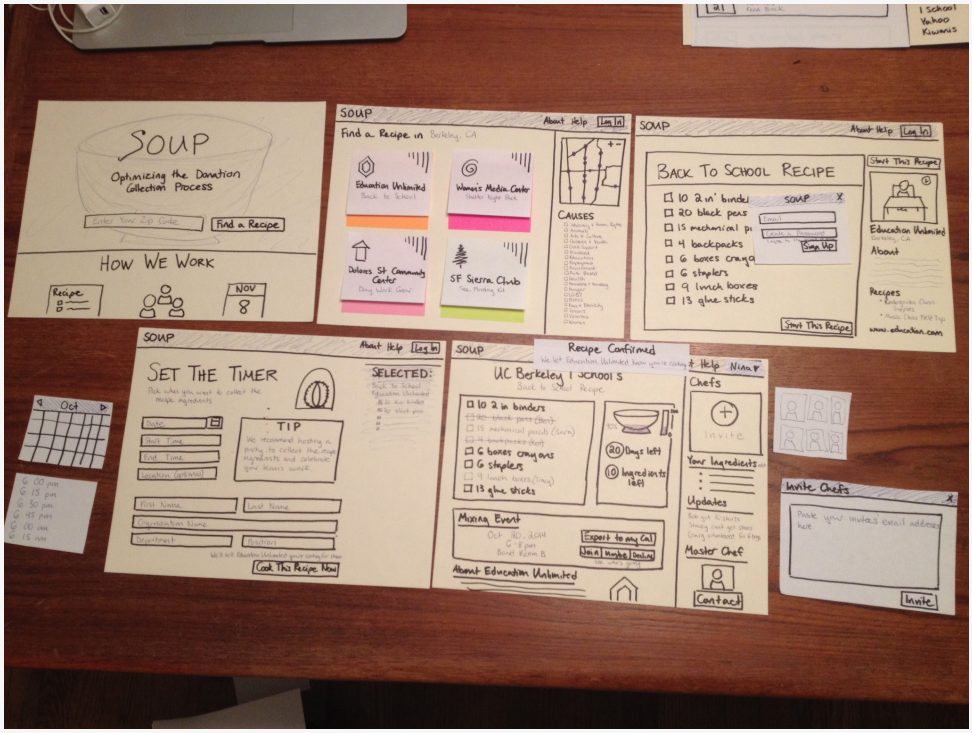
Observation & Interviewing

Conducting contextual interviews proved extremely informative. While we may have had a vague initial understanding of the circumstances surrounding donations, it was not until we talked with donors, organizers, delivery services, small community organizations, large national nonprofits, and others that we truly understood all the nuances and intricacies of the field. The insights gleaned from contextual interviews also helped us better understand the most important needs in the field. While we originally thought we would be able to help transport food between offices and shelters, we quickly realized how difficult this idea would be given food safety laws and oversaturation in the area. But we found a new problem; donation drives were funneling plenty of goods to large national nonprofits while local nonprofits weren't receiving the exact goods they needed.

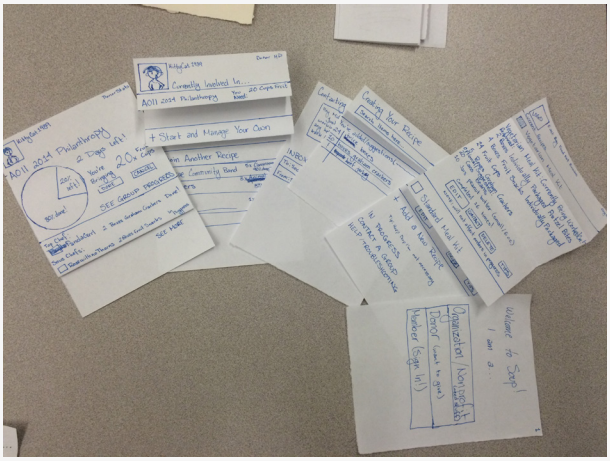
The user personas we developed in the user observation step also really helped us throughout our design process by giving us specific users and needs to focus on. Rather than trying to design a system that satisfied all needs, we focused on the needs and perspectives of Nina, Sam, Jon, and more. We repeatedly brought up Nina and her needs throughout the semester.

After the user observations assignment, we decided we would either focus on the entry point of donors or the end point of nonprofits. By focusing on either the starting or ending point, we might be able to help small local nonprofits receive the goods they needed.

Lo-Fi Prototyping



the final lo-fi prototype



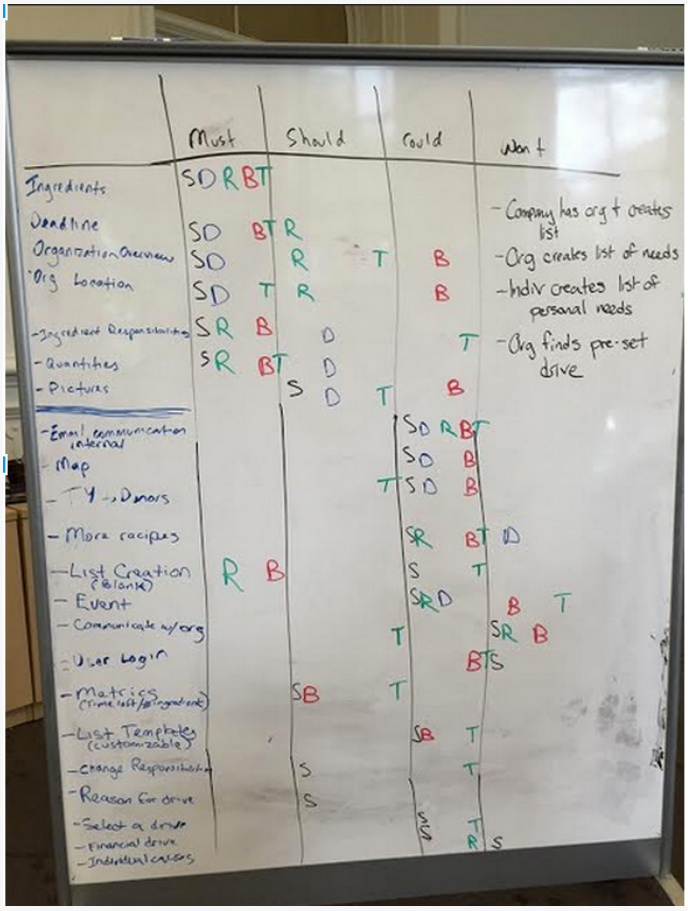
a preliminary, interactive lo-fi prototype

Lo-fi prototyping was the biggest turning point for our group. Initially, we considered several project ideas in the complex field we were beginning to understand. By forcing ourselves to put one concrete website idea to paper, though, we moved from the theoretical to the practical. It was hard for our group to decide on one idea, so we focused on one scenarios — donors and their organizers. But considering the technophobia common among many nonprofit administrators, we decided that asking them to join or maintain an online resource would be too demanding and ultimately impractical. Thus, we agreed to focus on the entry point of donors instead.

Deciding on one project idea within the narrowed scope of donors still proved difficult, but ultimately with a few group sessions we managed to crank out one initial prototype. It was not until we actually began to build the prototype with paper, however, that we realized just how much thought the fine details of designing a clean interface required. Through an unintended all-nighter making the lo-fi paper prototype, we learned firsthand just how much energy we would need to devote not just to the idea but also the implementation and details of the project.

Interactions & Evaluations

We implemented our interactive prototype with Balsamic and Invision. Balsamic let us focus on structure and layout without getting too caught up in visual design, and Invision allowed us to add a bit more interactivity than Balsamic. When designing the flow of our second prototype, we tried very hard to keep the feedback of our think-aloud users in mind.



MSCW exercise for prototyping

Confronted with the question of our project's goal from think alouds, we also took the time to thoroughly discuss as a team what we wanted the goal of our project to be. To help us narrow this down, we used the MSCW exercise, which asks each team member to brainstorm individually what our product Must, Should, Could, and Won't do. When we merged our brainstorms, there were a few features that all of us listed as Musts. This helped us narrow our project down to the most essential building blocks with room for growth to Shoulds and Coulds later. In hindsight, the exercise might have led us to a bit too narrow a focus rather than helping us to explore the full potential of our product. We worried at the time that we would lose the narrative of our product's goal if we tried to accomplish too much at once. Or perhaps we just needed to iterate through a few more cycles of design to expand our application's capabilities to other Shoulds and Coulds.

The heuristic evaluations, like the contextual interviews and think alouds, gave us another conduit of very helpful feedback. The heuristics in particular gave us a vocabulary to describe our aims. For example, when designing the confirmation flow of pop-up windows we discussed the best way to "help users recognize, diagnose, and recover from errors."

And, of course, we finished the design process for this course with a functional prototype and strategies for evaluating its effectiveness at solving our initial design problem.

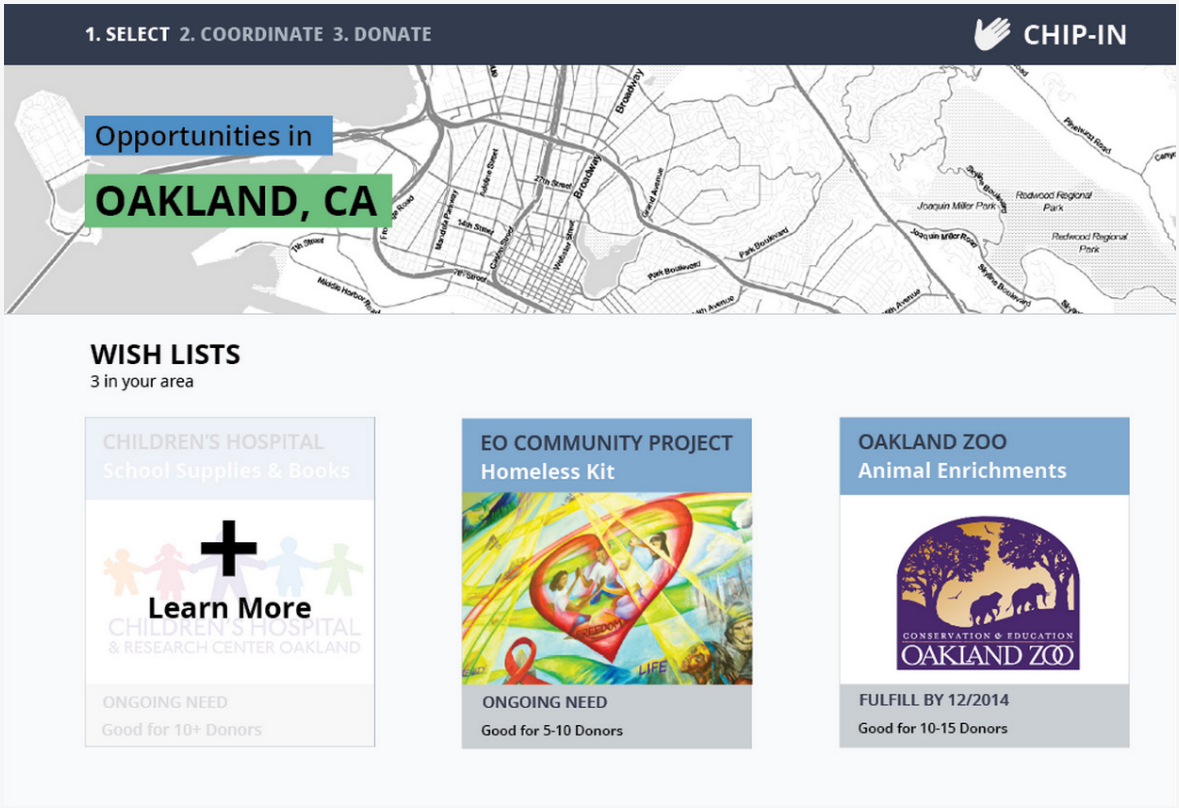
Final Prototype

Aesthetics & Experience

Our landing page got a visual update, and we added a workflow to help people better understand what they were committing themselves to.

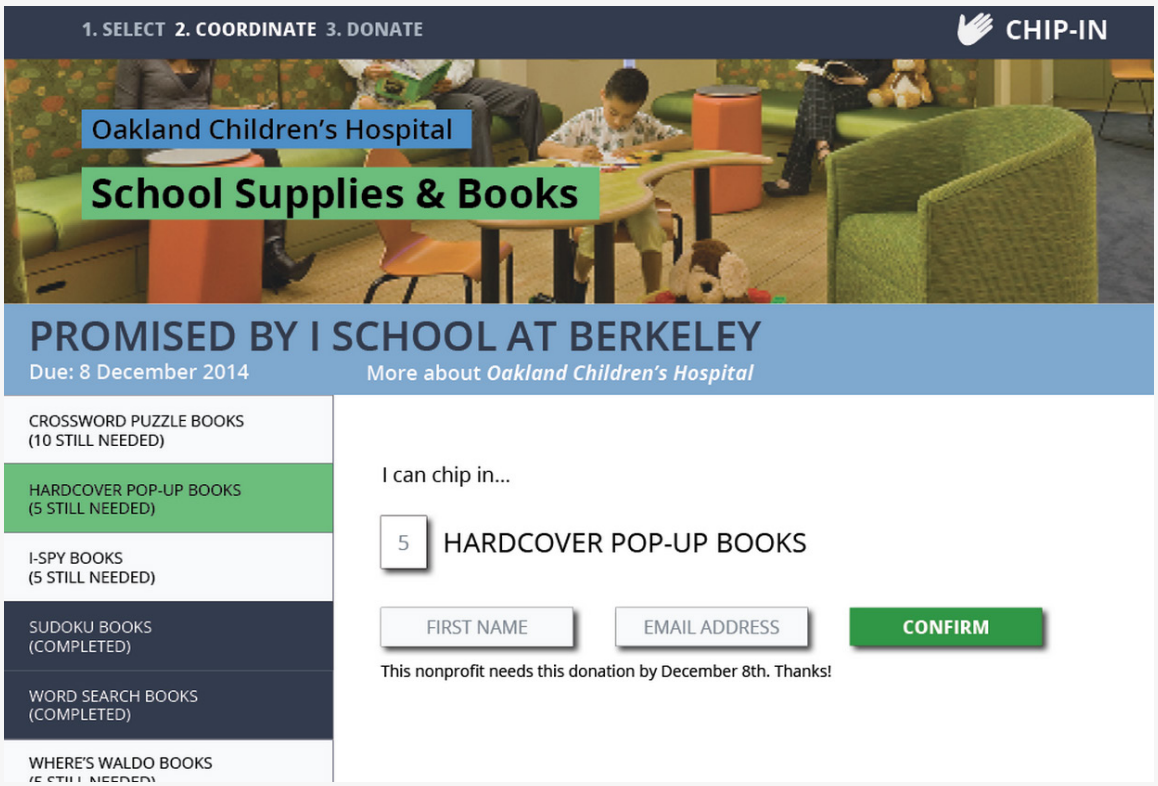
Our final prototype looped in the results of our heuristic evaluations and added a graphic design element. We tried to find opportunities to make smart changes based on user feedback while maintaining the purpose of the application — so, in some cases, a user's wants didn't translate into a user needs. This was somewhat challenging because we needed to take our own biases into account when we made this call. But we reminded ourselves of the iterative nature of design and tried to make smart decisions that we could feel confident about during user testing, even if we didn't end up keeping them down the road. Essentially, we needed to remember that this prototype was only "final" in the sense that the class was coming to a close — in a work environment, we would keep exploring ways to make the interface better.

One major change we made for being this far into the process was changing the name of our donation drive interface from the metaphorical "Soup" to the much more straightforward Chip-in. We did this based on repeated feedback from interview participants who seemed confused about the concrete purpose of the interface during the early stages of using it. While by the end, many of them understood the Soup metaphor and grew fond of it as a differentiator that would help our interface stand out in the crowd, it was clear we ran the risk of user abandonment early on because our value proposition was not direct and clear.



For the purposes of the prototype, we removed add-ons to the workflow that would be distracting, like a filter. Since we only had three example charities (and one wish list!) we didn't want to distract people from our current goal: to clean up Chip In's primary workflow.

To arrive at a new name, we used other services like Team in Training as an inspiration and came up with a list of about 10 potential new names all of which were unambiguous about what purpose our interface served. To be objective, we voted on these options in an anonymous survey and the clear winner was Chip-in.



Our centralized hub gives people information when they need it, but further user testing shows that there's still work to be done.

Experimental Design & Results

We originally thought the experiment design was more of a hypothetical thought exercise and didn't realize that we would be responsible for actually conducting the experiment. Thus, some of the experiments we originally had in mind were a bit too vague or complicated for us to conduct. After discussing this misunderstanding with Nick, we decided to create a survey to allow us to collect more structured quantitative and qualitative feedback on different parts of our interface during our remaining user interviews.

Our experiment was divided into three main parts. First participants completed a pre-screening questionnaire to help us understand the depth and quality of their prior experience with drives. Since this was qualitative data, we asked the participants directly, in order to afford us the opportunity to ask follow-up questions on any useful details. Next, we conducted the main part of the experiment and allowed participants to navigate through the interface using specific personas which we assigned to them as organizers or drive participants. Though this provided them with some framing in understanding the interface, we felt this was OK, since the pre-experiment questionnaire had already done this to some degree. Finally, upon concluding the experiment, we provided participants with an anonymous survey that provided quantitative evaluation of the interface on a Likert scale. We felt it was important for the survey to be anonymous to provide more honest feedback, while also excluding any qualitative feedback because our participants were already fatigued from the first two parts.

As we anticipated earlier in the design of the application, the donation process is a frequently occurring activity that is intimately tied with physical space. Though randomly selected, most of our experiment subjects had adequate and sometimes extensive experience with donation drives throughout their lifetime, from grade school through college and professionally. Repeatedly, those who were involved as administrators stated that they wanted to see the actual impact they were making, but the tools they had used (spreadsheets, email, paper announcements) did not make it easy to execute or likely to succeed.

Because most had prior experience with drives and had to use general tools to accomplish their goals, the feedback we received during the navigation through the interface was generally positive. Early on, at our main page and search results page, participants understood what they were trying to do and those with prior organizing experience were happy that the selection process was simplified for them, going from multiple Google searches and MS Office documents down to just a two page process. The third step of the experiment, where participants commit to a drive, was repeatedly the most stressful point for all users, as many were unsure of what they were committing to and whether it would be approved/ OK with their teams, etc. Beyond that, they were happy that the team collaboration of the drive was consolidated onto a single page where all team members can confirm their contributions. From both organizers and participants, we heard that though it may become more competitive, the team collection page should include extra detail about who is committing to what items, in order to make the physical collection of the goods that happens in-person more straightforward.

Question	Avg. Score
I found it easy to select a good to donate	5.75
The interface motivated me further to donate	4.75
I understood what would happen after I selected an item to donate	5.25
It was easy to find a drive for my organization	5.25
I understood what I was committing to when selecting a drive	5.5
I understood how to use the hub page to organize a drive	5.5
I understood from the homepage what the website was designed to do	6
The interface feels simple to use	6.5
I found the interface to not be too cluttered	6.75

table of survey results

This last point made us realize that donations are brought to a common office, rather than to the charity itself, so our application is still dependent on the successful effort and offline activity of the organizers. Though they typically have prior experience and seem poised to handle this well, some additional steps, reminders and guidelines in our interface would have been good to ensure their success.

The results from our post-experiment survey, which users completed anonymously, were overwhelmingly positive. Our biggest strengths were that our interface was not cluttered, simple to use and effectively accomplishes what it is set out to do. All of these scored 6 or higher out of a possible 7. Though we scored well in all other areas, those that could benefit from the most improvement are: increasing the users motivation to donate, understanding what happens after committing to a drive, and making it even easier to select a cause. Overall, we agreed with the ranking of these strengths and weaknesses, since we had already discussed that if given the extra time, adding additional steps to the drive organization process would increase clarity and engagement. The detailed survey results can be seen above.

Discussion

One of the biggest challenges developing our application was designing for three different user groups. While we tried our best to come up with a single solution that might be applicable to all, it became clear throughout our design and development process that each user group — drive organizers, donors, and nonprofits — would have unique needs that wouldn't necessarily align with the others.

One clear area for improvement is storytelling. During our interviews and evaluations, users continually wanted to know more about the nonprofits' stories and how specific donations might help them. We believe our platform could be an incredible space for organizations to share the important work they do in communities, and it's apparent there's a real thirst for that among potential users.

We also learned that we can probably do much better in telling our own story as application developers to our users, who might not have a user interface designer sitting next to them during a testing session to offer a bit of guidance. Explaining a somewhat complicated process succinctly and intuitively is extremely difficult. By designing an interface that embraced both drive organizers and drive participants, we hoped to simplify our interactions and our story as designers, but with few ways to differentiate their relatively separate workflows, this oftentimes led to confusion. Donors felt anxiety from being prodded with too much information and too many conditions to participate; drive organizers often wanted the opposite.

The Future

State of the Soup

Our application remains in the iterative design stages. Although we didn't feel comfortable enough with our design to move forward with an initial working product, we have learned a great deal through many rounds of testing and feedback and would be ready to make many relatively simple fixes as a result of the most recent design cycle.

Some of these fixes include solidifying the steps of the coordination process — particularly at the points of commitment to run a drive, and a clear explanation of how to distribute the unique URL of the drive hub page to the rest of the members of the team. We envisioned our app would be quite similar to Doodle or When2Meet, but Chip-In is more than a mere tool. Its value is only apparent through a proper amount of explanation, and finding the right balance between saying too much and not saying quite enough is crucial. More must be done to integrate the distribution of the unique URLs into an office e-mail environment.

Quite frankly, we could also improve our labeling. We need to make sure there is consistency with the labeling of item quantities on every page. Users should be able to see how their peers have donated throughout the drive (e.g., who has donated pop-up books so far, and how many?) to spur on healthy competiton. Clear delineations should be made between administrators' and regular users' accounts. And due dates — whether specific or on on a rolling basis — would be consistent and more apparent.

Thinking Forward

Moving forward, there are some interesting questions to be addressed, perhaps through more rigorous user testing, more rounds of research, or a shift in scope — potentially broadening to more abstract, ad hoc groups of users.

Future design iterations might be improved by tackling each workflow model with its own design approach, married in a central hub with similar visual design elements. According to our interviews and evaluations, for drive organizers it was all about control and customization. Continuing iterations of our application might include more robust searching and sorting of local nonprofits, a clearer emphasis on due dates and potential costs to fulfill a wish list, and better "dashboard" features so managers can keep a better handle on the drive and its donors. For the regular user, simpler interactions with clearer expectations involving the absolute basics of the drive — what exactly must be donated, and how much?; where do I bring it?; when is it due? — are critical. Below, we've shown some key additions we've considered for each stage of the workflow if we were to continue working.

SELECT	COORDINATE	DONATE
Wish list creation	URL personalization	Thank-you communication from nonprofits
Search map interactivity	Specialized dash for coordinator	Partially completed list handling
Search filtering	Welcome and reminder e-mails	
	Progress infographics	