Fruit and Nut Tree Network FINAL RECOMMENDATIONS



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Background

Since the beginning of time, nature has had the ability to persevere and sustain itself. Despite various types of threats in the form of natural disasters, widespread disease, and other crises, nature either adapts implicitly or explicitly. As humans have become more conscious to some of these threats, preventive measures have been taken and continue to be devised to help preserve the planet. These measures have come in many forms. Through general education, through legislature, and when that is not possible, through volunteers stepping up to organize



programs. In Maryland, the Baltimore Orchard Project has been established to help fight hunger, help keep the city green, and in turn help steer the city toward long term self-sustainability.



The Baltimore Orchard Project's aim to "[strengthen] communities through planting and cultivating orchards, [teach] citizens to be long-term stewards, and [share] the harvest among neighbors" fulfills many needs for the city of Baltimore (Baltimore Orchard Project, 2016). By teaching the Baltimoreans to grow and care for fruit bearing trees and plants, steps are taken in a direction toward sustainability

while simultaneously building on the sense of community and togetherness.



Baltimore suffers from one of the highest crime and homicide rates in the country. While no program or ordinance is going to completely reverse some of the misfortunes currently plaguing the city, ventures like the Baltimore Orchard project are steps in the right direction, as they provide ways for people to come together and work towards a common goal. Helping the Baltimore Orchard Project team reach out to more of the community and even more importantly strengthen the network between those already volunteering time and money will undoubtedly continue to spread the mission across the city. We will focus on older adult retirees who volunteer their time to The Baltimore Orchard Project. This paper will present an exploration into the details of a proposed concept to accomplish that objective.



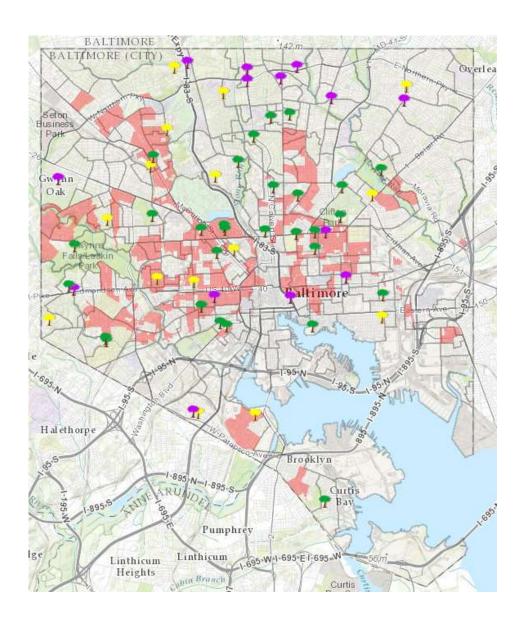






Problem Space

The Baltimore Orchard Project currently connects its volunteers through meet ups coordinated through an email distribution list. This can be problematic because there is chance that volunteers can miss email communications. In addition, the information on orchard health is not currently documented in a unified place. It is also difficult to connect volunteers with one another and track those who sign up for events.





Proposed Solution

We are proposing the development of a social networking application. We are branding this network as the "Fruit & Nut Tree Network", but the Baltimore Orchard Project is welcomed to change the name in the future. Initially, the Fruit & Nut Tree Network aims to address four specific areas:

SELF-IDENTIFICATION

The network will provide a space for volunteers to better identify themselves. Volunteers will be able to create a profile page specifying their name and basic demographic information. They will also be able to highlight if they are a graduate of the Fruit and Nut Tree Academy.



Equally important, we will provide volunteers with the ability to identify specific roles and areas of interest immediately after signing up to join the Fruit & Nut Tree Network. Ellis (2013) state that it is important to be specific in defining the role and time requirements of the volunteers. During our prototype testing, all participants said that it would be valuable to be able to identify specific roles so that volunteers would know what their expectations would be.



ORCHARD IDENTIFICATION

Every orchard will have its own space within the network.

Each space will have unique identifying information such as the orchard's location, a listing of trees within the orchard, associated volunteers and upcoming events. Inform volunteers of orchard status and events important to the individual



EVENTS LISTING

There will be a page dedicated to informing visitors about upcoming events. Users will be able to browse through events to determine if or not they want to attend.



CONNECTING

Users will be able to connect with orchards initially via an interactive orchard map. This map will visually identify orchards in various neighborhoods around Baltimore. In addition, logged-in users will be able to specify orchards that they want to add to their personal networks.





Users will be able to connect with events and easily be able to sign up to volunteer or attend an event. After signing up for an event, users will be able to easily view the events they signed up for and will easily be able to unregister for an event if needed.

Furthermore, users will be able to connect with one another. We recognize the need for volunteers to be able to communicate with each other. The Fruit & Nut Tree Network will allow the volunteers to add friends to their network and be able to see each other's profile information.

We also took into consideration that some visitors may not know about the about the Baltimore Orchard Project. Our solution will allow for access points for people without an account to view information about Orchards and find out basic information about events.



Research Recap

SOCIAL MEDIA HURDLES

- Many organizations fail to develop, maintain, and cultivate relationships
- Problem reaching diverse stakeholders: team members, volunteers, donors, public, other
 NPOs, press
- Small organizations strained for manpower/resources
- Multiple personnel responsible for different outlets creates inconsistency with responsiveness and messaging
- Organization procedures create slow response to community
- Followers show minimum support or don't take real action

VOLUNTEER RECRUITMENT BEST PRACTICES

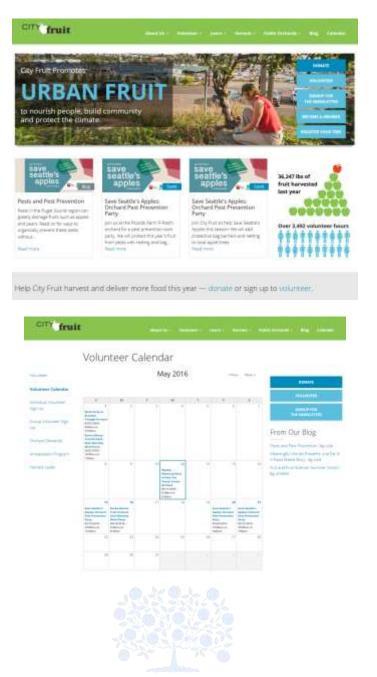
- Use the right outlet to send the right message to the right person
- Create engaging content to develop narrative and make emotional connection
- Embrace Volunteers, give more opportunities for volunteers to do more
- Provide clear roles and time requirements for volunteers
- Recognize volunteers and their contributions
- Proximity people more interested in what happens around where they live
- There is no substitute for strong ground game



Similar Projects

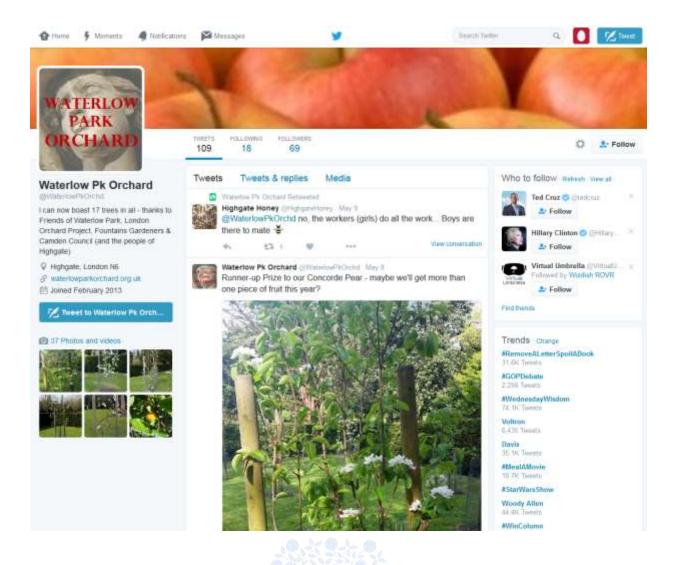
CITY FRUIT

City Fruit, cityfruit.org, facilitates the maintenance of public orchards in Seattle. They use volunteer stewards to organize groups of local community members, and have pages devoted to specific orchards making it more localized. They provide recognition to their volunteers with a "featured volunteer" area. They also incorporate a volunteer calendar on their website giving specific invitation to action, not just a general call for help.



WARTERLOW PARK ORCHARD

Waterlow Park Orchard, https://twitter.com/WaterlowPkOrchd, is an orchard started with the assistance of the Urban Orchard Project who have their own website and twitter page. The Twitter page gives the orchard a personal voice stating, "I can now boast 17 trees in all - thanks to Friends of Waterlow Park, London Orchard Project, Fountains Gardeners & Eamp; Camden Council (and the people of Highgate)". They have an engaging narrative with photographs that show the progress of individual trees as well as showing appreciation for volunteer efforts.



Design Process

After the concept was formalized, the first step was to create a paper prototype. The paper prototype afforded the opportunity to materialize ideas into the form of a tangible paper representation of the concept. This allowed for user testing and feedback in a highly volatile state.

After gaining vital feedback from the participants, we decided to revisit our initial personas and focus on aspects that would be of high value to the Baltimore Orchard Project. The personas helped us to keep in mind the user's perspective and aided in critical design decisions.

From there, the design team made revisions to the overall design and moved towards creating a technical prototype. This time the prototype took the form of a digital interactive version. We use Axure to create a mid-fidelity prototype that gave users the feeling of a real site, but still allowed them to comfortably give feedback. After another round of user testing, the design team made final changes to the prototype before compiling results. The next few sections will go into more details about our process.



Personas

It was important to narrow our scope and focus on the follow two types of users:

PERSON INTERESTED IN VOLUNTEERING



This person has heard about the Baltimore Orchard Project and wants to learn more about how to get involved. She has very little knowledge about Orchards, but is very interested in how BOP is able to provide food to persons in need. She is a little skeptical about joining the Fruit & Nut Tree Network, but still wants to

know what events are happening in her neighborhood. She wants to see the benefits of joining the network before signing up.

FRUIT AND NUT TREE ACADEMY GRADUATE



This person is a recent graduate of the Fruit and Nut Tree Academy. He is ready to volunteer this month, but needs to know what orchard need help. He is eager to sign up for the Fruit & Nut Tree Network. Although seeing information about all of the orchards shows value, he particularly wants to stay

involved with particular orchards in his neighborhood. He also wants the ability to connect with other Volunteers.

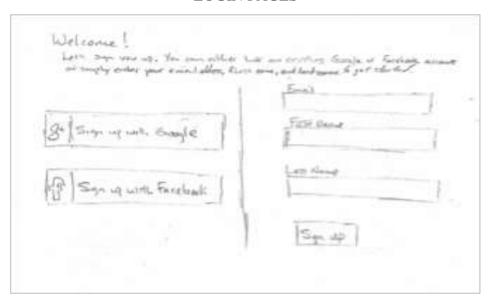


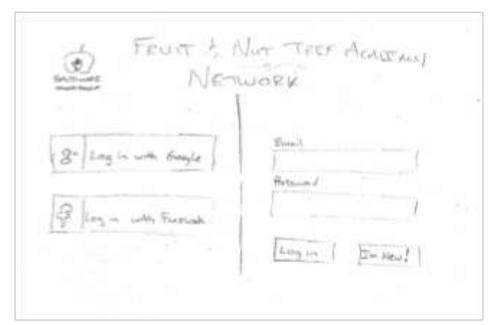
Paper Prototype

The purpose of the paper prototype was to gain initial feedback from users before diving into the more technical approach. Below will show some important sketches from our paper prototype.

PAPER PROTOTYPE SCREENSHOTS

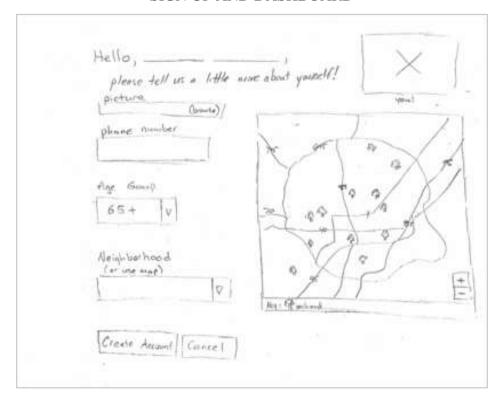
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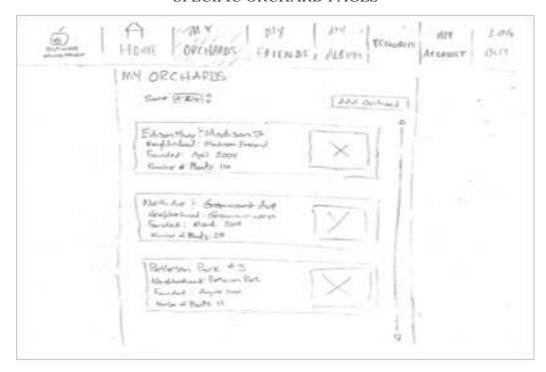
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SPECIFIC ORCHARD PAGES

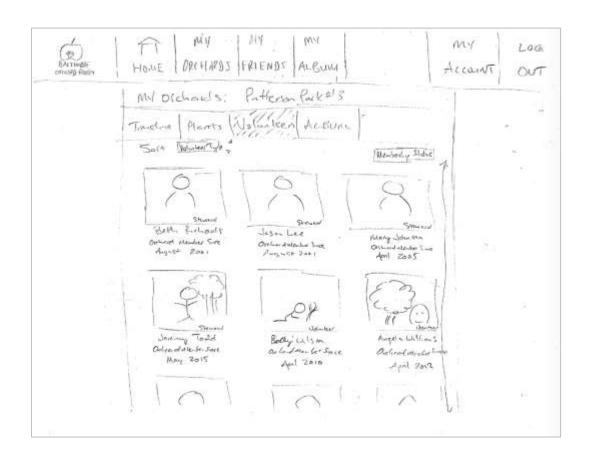


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ORCHARD VOLUNTEERS







PAPER PROTOTYPE TESTING METHODOLOGY

- Have user navigate to BOP's existing volunteer sign up.
- Get feedback on current website and volunteer form.
- Have user continue with prototype from volunteer page.
- Paper prototype became more co-development with participant.
- All pages were reviewed and scrutinized.

BOP'S CURRENT VOLUNTEER SIGN UP PAGE

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	Get Involved!
Email me about upcoming Baltimore C	Dichard Project events - volumeer opportunities, warlishops.
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QUESTIONNAIRE

A testing questionnaire was also developed to gain insight on the participants' experience with volunteering and community outreach. The questionnaire was also tailored to individuals depending on any previous experience with Baltimore Orchard Project.

The questions for people who had no experience with BOP were:

- Have you done any volunteer work or taken part in community outreach?
- If so, describe what you did?
- If so, what are your main reasons for volunteering?
- If not, do you think there are any causes that could get you to volunteer?

[Describe Baltimore Orchard Project]

• Does this sound like something that would interest you?

[Show participant the BOP website]

[Have them try to sign up for volunteering]

- Would you personally want to sign up to be a volunteer?
- What is good about it, what is bad about it?

If you were to volunteer for BOP...

- Would having a specific role be important?
- Would you want to be part of a specific orchard or small community or all Baltimore?
- What would be your preferred method for finding out about events?
- Would you like to be able to get in touch with other volunteers or allow others to get in touch with you?



Current BOP volunteer questions:

- How long have you been with BOP?
- What is your role as a volunteer?
- What are your main reasons for volunteering?
- Do you have specific duties assigned to you?
- Would or do you like having specific duties?
- Do you volunteer in specific locations or just anywhere volunteers are needed?
- Do you have any personal connection with any orchard locations?
- How much time do you spend volunteering?
- Is it a consistent amount and if not, should it be?
- How do you find out about events?
- Are there other avenues of communication that would be as or more desirable?
- Do you communicate with other volunteers outside of BOP events?
- Would you like to be able to get in touch with other volunteers or allow others to get in touch with you?



PAPER PROTOTYPE TESTING

We were able to schedule and test two participants for our paper prototype.

PARTICIPANT 1: ANTHONY

Anthony is a retiree who has recently graduated from the Fruit & Nut Tree Academy.









PARTICIPANT 2: PAMELA

Pamela is a retiree and is currently a volunteer in her community.









PAPER PROTOTYPE LESSONS LEARNED

- Eliminated friend invite/connect during registration
- Discussed having map of orchard
- Discussed maintaining individual tree history
- Combined login and sign-up into one screen
- Participants like idea of having specific roles
- Use less technical language on current BOP website



Technical Prototype

The following section will showcase many important screens from our final prototype with notes to highlight important design decisions and features. To view all of the screens, please access the technical prototype designed in Axure by clicking here:

http://2qphv5.axshare.com/



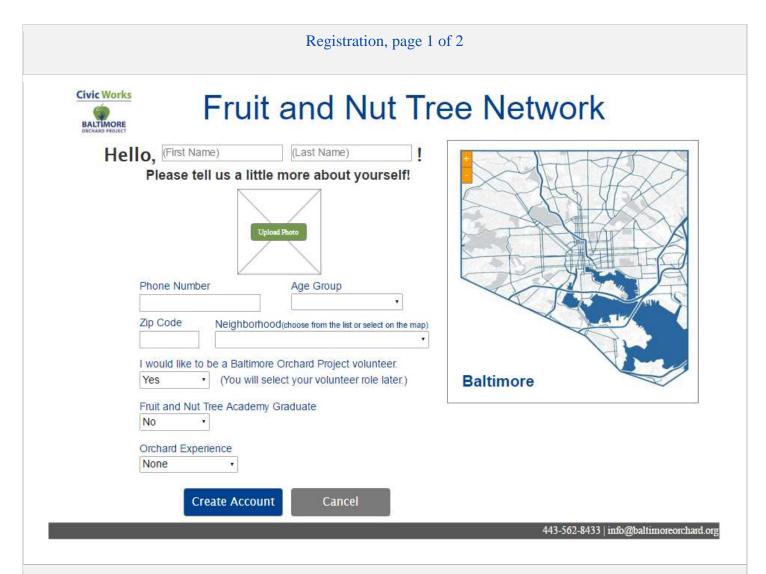
Notes: We reimagined the entry point to give a clearer picture of what a prospective volunteer would expect upon signing up to volunteer or register for the social network. This gives the user options for immediately joining the network or finding out more about orchards and volunteering.



Fruit and Nut Tree Network Home Page **Civic Works** Fruit and Nut Tree Network ORCHARD PROJECT Email Login with Facebook Password Sign in with Google+ Log in

Notes: We present a fairly simple log in and sign up screen with the added but not required ability for users to more quickly log in or register through Facebook or Google. Also we provide a way for users to glance at an orchard before fully committing to signing up for the social network.





Notes: We provide a fairly basic registration form to obtain general contact information as well as orchard experience and interest to become a volunteer (being a volunteer is not a requirement for admission).



Registration, page 2 of 2



Fruit and Nut Tree Network

Thanks for becoming a volunteer!

We appreciate all of the time our volunteers spend helping out.

Please select the role you would like to have as a volunteer.

Some roles need approval so you will be contacted later if you select any of those.

Volunteer Roles:

Orchard hands help maintain orchards, planting, pruning, harvesting, etc. (no experience necessary) volunteer time: approx 4 hrs/mo

Media contributors help document and post about volunteering efforts

volunteer time: approx 3 hrs/mo

Graphic Designers help create recuitment fliers for upcoming events

volunteer time: approx 2 hrs/mo

General volunteers help as necessary for any general calls to action

volunteer time: approx 3 hrs/mo

 Volunteer Ambassadors - help organize your community and spread the word (requires approval)

volunteer time: approx 10 hrs/mo

Orchard Stewards serve as the local community expert for taking care of orchards

(requires approval and training) volunteer time: approx 6 hrs/mo
Not yet - I'm not ready to be a volunteer yet, but I will think about it. (you can sign up or change roles anytime)

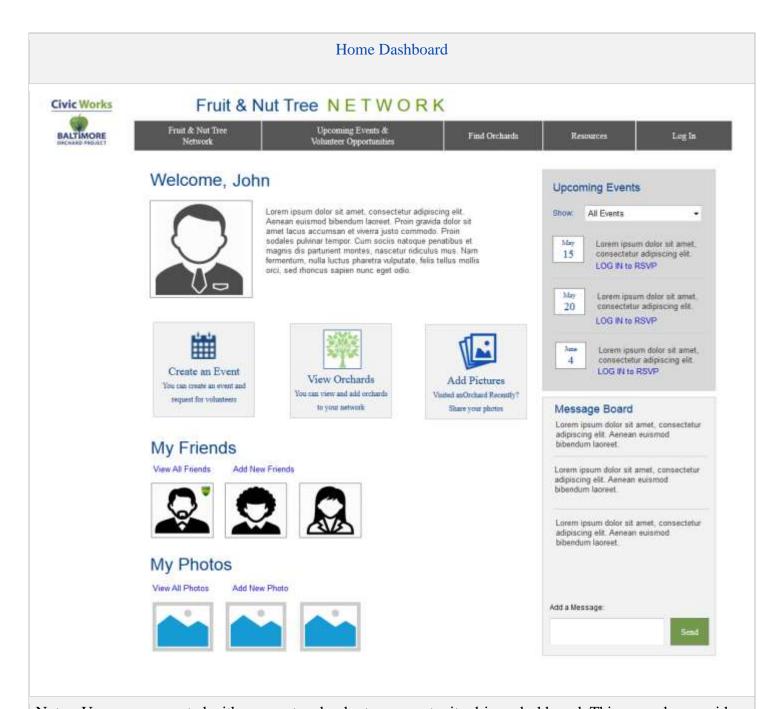
Continue

Cancel

443-562-8433 | info@baltimoreorchard.org

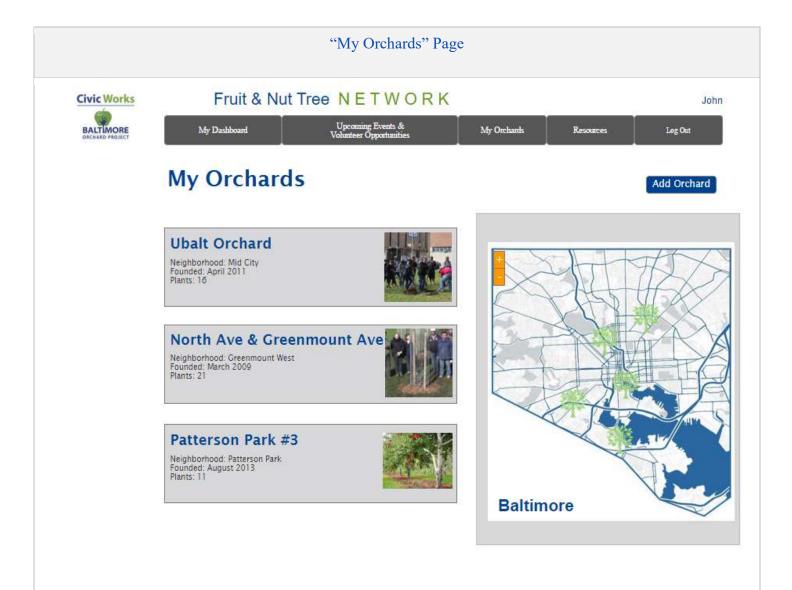
Notes: We finalize the registration process with an optional ability to indicate one or many areas of interest or expertise the signee would like to offer as a volunteer. This optional form can be filled out later.





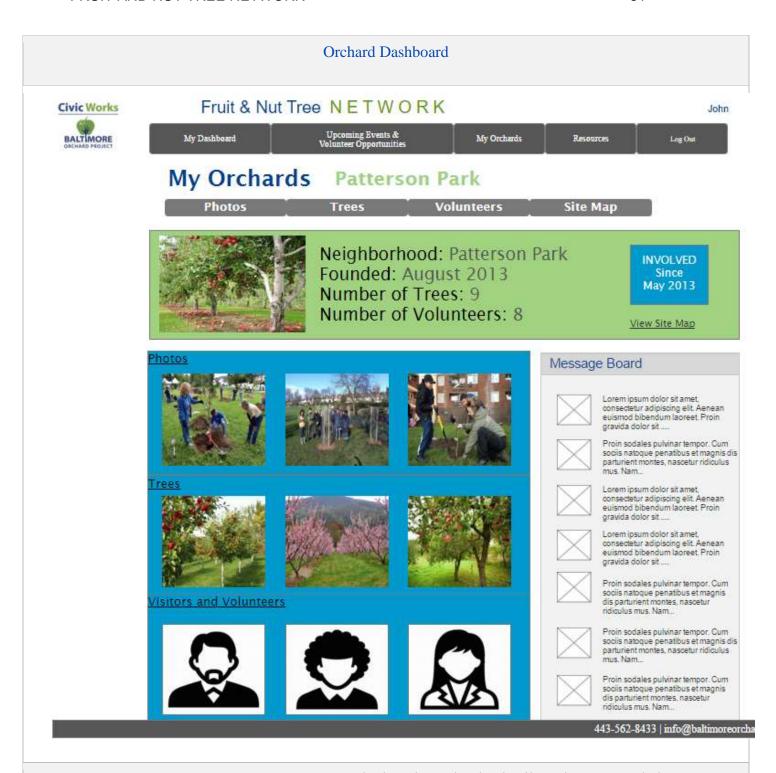
Notes: Users are presented with an event and volunteer opportunity driven dashboard. This page also provides one-click access to the message board, orchards, friends, and photos. The upcoming events sections was separated from the Message Board to remove indication that interactions within those areas are independent.





Notes: Users are able to see a list of orchards they are associated with while also seeing a map of Baltimore's orchards to easily add based on location and name.





Notes: The orchard dashboard provides an intricate look at the orchard's details, volunteers, and photos. A message board is attached to each orchard for transparent information dispersion.



TECHNICAL PROTOTYPE TESTING METHODOLOGY

The technical prototype was conducted similarly to the paper prototypes where the participants were given the questionnaire and examined the existing BOP volunteer sign-up before going into the prototype. We were able to schedule and test four participants for our technical prototype. Three tests were conducted in the homes of the participants, while one test was conducted in a computer lab. Two tests were conducted completely remotely and the other two tests had at least one of the designers physically present.

Each participant was given four scenarios and tasks to complete:

- Task1. You are a resident of Baltimore and are interested in the Baltimore Orchard Project. To further your curiosity, go to the BOP's website to view an orchard.
- Task 2. Let's assume you are a graduate of the Fruit & Nut Tree Academy and have heard about the Fruit & Nut Tree Network. Go to BOP's website and try to register to become a member of the network.
- Task 3. Now that you are a member of the Network, try to RSVP for an event.
- Task 4. As returning user, log in and explore an orchard's tree and site map information

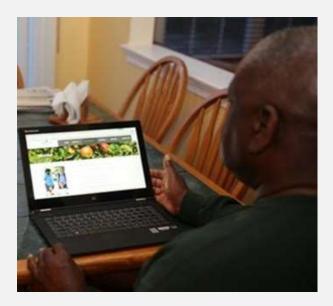


TECHNICAL PROTOTYPE TESTING

PARTICIPANT 1: JAMES

"When you give back, you gain a great deal."

James is a retiree living outside of Maryland and, consequently, has no ties to Baltimore Orchard Project. When asked he did think the idea was interesting and would be interested if he had more free time available. He has volunteered in numerous organizations but shared a specific instance when he volunteered for a literacy group to help a young male learn to read. When asked why he volunteers, he responded, "When you give back you gain a great deal" and it is "good to help other people."

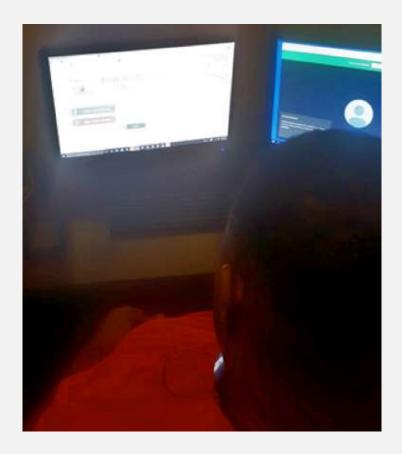


- BOP should better explain what completing volunteer form means
 - Better indicate "sign up" or "register" for interested viewers
 - Asked "why is age group important?" during registration
- Thought message board send button was associated with event RSVP
 - Wants to see the orchard location map under the Orchards button

PARTICIPANT 2: ALPHONSO

"It's Important to give back."

Alphonso is a non-retiree living outside of DC with no ties to Baltimore Orchard Project. He has volunteer experience coaching youth baseball. His preferred communication method is email.



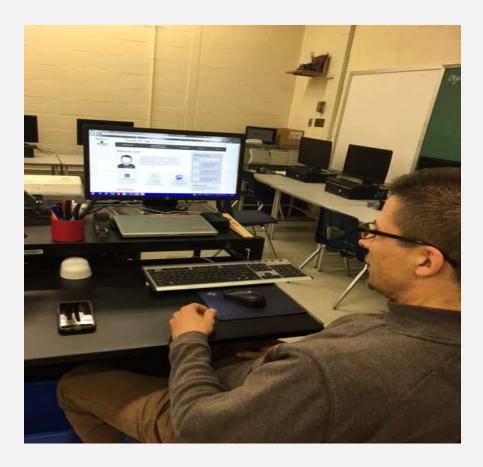
- BOP needs to do better job indicating what current volunteer signup form is for
- Site map should better indicate information about orchard
- Helpful to see who are the volunteers for an orchard and an event
- The prototype is better than their current BOP site because there is a clearer path on what to do



PARTICIPANT 3: GREG

"I want to give back."

Greg is a non-retiree living in Baltimore County with no ties to Baltimore Orchard Project. He has volunteer experience helping to distribute sandwiches with his church.



- BOP needs to do better job indicating what current volunteer signup form is for
- Site map should better indicate information about orchard
- Helpful to see who are the volunteers for an orchard and an event
- The prototype is better than their current BOP site because there is a clearer path on what to do



PARTICIPANT 4: PAMELA

"I can make a difference in people's lives."

Pamela returned as a participant after doing paper prototyping. Has volunteered through various programs at church and believes that BOP may be a good volunteer effort for youth. Her preferred communication method is phone calls & email.



- The current site didn't represent Baltimore
- Wants to see images of how BOP impacts the community
- Terminology on BOP site was over her head
- Wanted to know who can volunteer, is there an age limit and what you would be doing.
- Had trouble distinguishing "I'm New" vs "Login"
- Needed more details in My Orchards to show what events are happening
- RSVP needs to show more details about the event location and the Orchard

Technical Prototype Lessons Learned

- Put more focus on volunteers and events, less on social media aspects
- Remove friends and photos section
- Use cleaner map
- Less busy/smaller text chunks

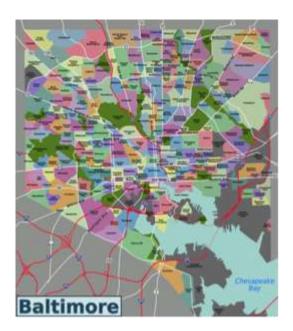


Design Evolution

ORCHARD LOCATION MAP

The Baltimore map of orchard locations was changed to a much more simple depiction.

The original map, while providing a good segmentation of the different neighborhoods, also proved to be too cluttered. The simple design allows the user to focus more on where orchards are located in relation to where they live.





Before & After



MENU BAR

The main navigation menu changed to put more emphasis on the activities of Baltimore Orchard Project over some typical menu items that occur on many other social networks websites. People who sign up for the Fruit and Nut tree network are clearly there to get more information about events and orchards rather than their "friends" or "photos".



Before & After

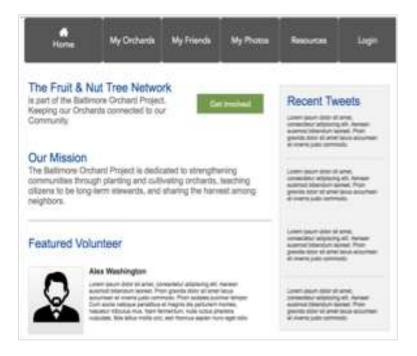




WELCOME PAGE

The main welcome/landing page for users who have not yet logged in was modified to reduce the amount of text on the screen and instead use more inviting icons with limited text.

The call to action was made more clear with the words "sign up" as opposed to the more generic "get involved". Any user has more clear expectations about where that button will take them.



Before & After



The Big Picture / Lessons Learned

- The design demonstrated that people feel more connected with orchards and events nearby
- People want to see and browse upcoming events, not wait for emails
- Email continues to be reliable communication but should be used in conjunction with web postings and other outlets
- Users want to be reassured of necessary skill level to volunteer and contribute
- Volunteers prefer to have a role with indication of time commitment
- Log in gave people sense of ownership
- Volunteers have some interest in interacting with one another but did not prove to be the primary motivation for using the design



Final Recommendations

We decided to divide our recommendations into two categories. First is general advice that can be incorporated into the overall design of the Baltimore Orchard Project website in general. We believe these recommendations can be incorporated with or without pursuing the development of our proposed prototype. The second set of advice is a rough timeline for if you decide to move toward developing a social-networking solution.

GENERAL ADVICE FOR BALTIMORE ORCHARD PROJECT WEBSITE

Better communicate what signing up to volunteer means

- Provide clear descriptions of what volunteers do
- Highlight volunteers and the contributions that they make
- Find a way to recognize the graduates of the Fruit and Nut Tree Academy

Simplify language used for those who may not already know about orchards

- Examples of problem language
 - "tree-mapping"
 - "rain-water management"
 - "providing technical guidance"
- Make volunteering sound like something anybody can do

Use images that represent Baltimore

- People feel more connected to things in their immediate area
- "This looks like I will have to drive miles to get involved"

Show the receiving end of the BOP efforts

• Examples such as the food banks, food trucks or people receiving food

Incorporate interactive map into main navigation

- This map shows people how close they are to an orchard.
- Hard to find on existing website

Expand the distribution of info to better inform volunteers of news and events in the city

- Text alerts and social media posts can help spread the word
- Tools exist to generate automatic messages (ifttt.com)

GOING FORWARD

- Incorporate feedback into existing BOP website
- Develop volunteering roles allowing more opportunity for people who don't consider themselves "outdoorsy"
- Incorporating automatic updating/response with tools like IFTTT
- Decide on extent of development
 - Expand current site with interactive map and orchard landing pages
 - Create orchard/community pages on existing social media network (facebook, twitter, etc.)
 - Provide volunteer profiles to give users more personal experience and buy-in
 - Develop proposed fruit and nut tree network



PROJECT LIMITATION

To develop the proposed solution, more work would be needed focusing on administrative tasks for BOP employees, ambassadors, and stewards. Interactions such as setting up orchard pages, managing individual tree history/log, approving volunteers as stewards or ambassadors, and creating events were not addressed in this design iteration.



Designer Contact Information

Additional questions or comments are welcome by any of the designers.

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