

Tester: Ian, professional game tester for Nintendo/Microsoft

My design mostly was to allow Ian to sandbox our system, after he had finished (he thought he had explored everything) I gave him tasks to cover the functionality of the site he hadn't explored on his own. Since he had explored very much, I only had one task: manage a queue that you did not create. The most time during the user test was him attempting to break the site, he would put settings very high with lots of characters for names, he would click buttons rapidly, and anything else he thought we might have overlooked. We found a few bugs we didn't know about, (e.g. text overflow), reinforced some opinions we already had (e.g. queue images when listed out needed to be left aligned), and learned that our product is actually pretty user friendly and intuitive once the user understand the basic "function" our product provides (queue management). As for user testing, I learned that it really is great to find intelligent and motivated testers. In addition, it's nice to get a tester that kind of *wants* to find flaws, making bug finding into a reward (game-like) system can increase tester performance.

Tester: Jordan, UW senior in Psychology and Sociology; Rachel, UW freshman

I set up the testing sessions by briefly explaining to each user what LineUp was for and what role I wanted them to play as a user. I then let them both explore the site with these roles in mind.

I asked Rachel to play the role of a business owner who wanted to set up a queue. She was able to login easily but was slightly confused by the filler text, which was Team Aphrodite-related and not useful at all. She was also a little overwhelmed by the number of form fields she had to fill in, and said that she would like to see "required" tags next to the ones that were actually important. Rachel also exposed a bug related to the administrators and managers fields: if you add yourself, it redirects to the error page! After she created the queue, Rachel explored the queue admin interface. She said that drag-and-drop functionality on the list itself would be really nice, and had a little trouble understanding what the "First Person" button meant (we changed it as a result). She accidentally dequeued the first person and said that it would be nice to have an undo button for this action.

Jordan played the role of a user looking to join a queue. She reflected that as a first-time user, it was hard to know what the "create a queue" was for; she said it was conceivable that a user might want to create a queue for a business that didn't currently have one, then expect that the business would honor that queue. However, she had little trouble navigating to the "Find a New Queue" button, searching for the queue she wanted, and joining it. She did not like how the progress bar looked so we updated it to show actual progress. Jordan expressed concerns about how to verify that the queue you were joining was legit; we discussed a couple of different options (having the real business verify, having the location verify, having the time of the latest dequeue, having users verify) but each could be easily fooled by competitors seeking to confuse the users of their competition. Jordan said that she didn't really know what the Postpone button on the queue info page did, as it made her think of a set amount of time to postpone by rather than a single position. She also said that the top navigation buttons were confusing; the edit button didn't do anything (we removed it), the logout button was unintuitive at first (she said we should have a mouseover to explain what it was). Jordan also said she was afraid she would lose her place in line if she logged out and recommend we have a mouseover on the logout button that said "Your changes are saved! Feel free to navigate to a different page."

Tester: Adrian, UW Senior in Mechanical Engineering

For this session, I began by letting Adrian read the LineUp “About” pages to get an idea about what types of interactions we were hoping LineUp would be useful for. She liked the About pages and when she said that she felt like she had a good idea about what our program was designed to do and how to do some of the broader tasks, we moved to line-up.us. At first I had her give me her opinion about the new color scheme, button placement, and overall feel of the website at first glance. She suggested that our color scheme reminded her of a child’s playroom, but that it was good overall and she liked the black border around the “Login” button on the login page, but thought that it should be bigger than the “Sign Up” button. She didn’t like that some buttons had a gradient while others did not, which we fixed afterwards and she thought that the collapsible boxes on the Home page needed to have a message saying something like “You are not in any queues at the moment” when no queues were displayed. After getting a little more design feedback, I asked her to join a queue of her choosing and then leave it. She was able to do so without further prompting. I then asked her to create a queue of her choosing, which she was also able to do with no further prompting. I then asked her to advertise her queue to herself and join it as an anonymous user. She quickly figured out how to get the url for a queue and put it in a new browser window, but she was really nervous about giving her name as an anonymous user when trying to join the queue. After explaining that this was the name that would be called when she reached the front of the line, she felt better about it. I then asked if she wouldn’t mind exploring the other buttons and features of LineUp. She began by exploring the anonymous visitor’s access and found that she could create a queue as an anonymous user and that she got stuck if she accidentally logged out. She was a little confused by these features. I think in future releases, we should heavily limit the things an anonymous user can do, or at least require them to make a username/password combination if they want to do more with LineUp. At this point, we were about out of time, so I thanked her for helping test LineUp and we parted ways.

Tester: Anthony, UW sophomore in Biology, and Theodore, UW Junior in Education

To get a feel for how users might interact with one another through LineUp, I asked Anthony to use LineUp as though he were an administrator (after explaining and giving examples of what this role typically desires as outcomes) and Theodore to use LineUp as a user of Anthony’s queues. I also asked Anthony to work on his phone and Theodore to work on his laptop so that they could each get a different feel for the website’s design. This time, I did not ask either Anthony or Theodore to read the “About” pages, but instead jumped right into asking Anthony to create a queue and then Theodore to find and join his “free ice cream” queue. I then asked Anthony to advertise his queue to 5 anonymous users and then asked Theodore to be each of those users in new incognito windows. With 6 people in the queue at that point, I asked Anthony to dequeue the top 3 people. At first, he had no idea how to dequeue people and needed prompting to press the “First Person” button. Because of this, we have changed the text to “Remove First”, adding the verb as a helpful prompt. I then asked Anthony to rearrange the remaining people in his queue and add and remove at least once each. While he did this, I asked Theodore to watch his position in the queue as anonymous users change. He didn’t like that a user does not get any explanation when their position increases because of an

administrator action in particular, but we talked about what he might like to see instead and he was unsure if anything was better. Finally, I had Anthony try closing and opening his queue, having Theodore trying to interact with it in each state. Overall, Theodore liked the low level of interaction he and Anthony seemed to have with one another and how quickly he could move around the site and in and out of queues, while Anthony suggested that queue owners might want to be able to get more information about their users. Theodore thought that users should be able to sign-in with email addresses and that we were missing a “Forgot your password?” button. Anthony did not like how the thick borders looked on his phone, so we made the borders scale by percentages instead of fixed numbers of pixels to help alleviate that concern. Throughout the test, I was really pleased to see that both Anthony and Theodore clicked on the Help button whenever they got stuck and that the information it provided was enough for them to continue on without my prompting.

Summary of changes resulting from user testing:

- Increased validation/restriction on user input to form fields
- More flexible handling of extreme user input to form fields if they occur
- More helpful placeholder text in form fields for “Create Queue”
- Added functional progress bar for visual element of where you are in the queue
- More flexible UI design to account for mobile users
- More intuitive button names (“Postpone” became “Move Back One”, “First Person” became “Remove First”)
- Easier access for administrators to queue URL for emailing to potential anonymous users

Summary of things learned from performing user evaluation

We mostly learned that giving user testers free reign over the product was the best way to collect candid, unbiased feedback about our design. We also learned the value of using testers completely unfamiliar with our product: they can come up with feedback from scratch as if they were first time users of the product in real life.