

Aspen Facets Usability Testing Report

June & July 2022

Summary

The SWAN User Experience manager conducted usability testing of mockups of the Aspen catalog to test new designs for search filters functionality. Since this test was specifically focused on advanced search features with filters, we recruited library staff members as they tend to do the most complex searches in the library catalog. Mockups of desktop and mobile views were provided by ByWater Solutions, which supports Aspen and provides ongoing development.

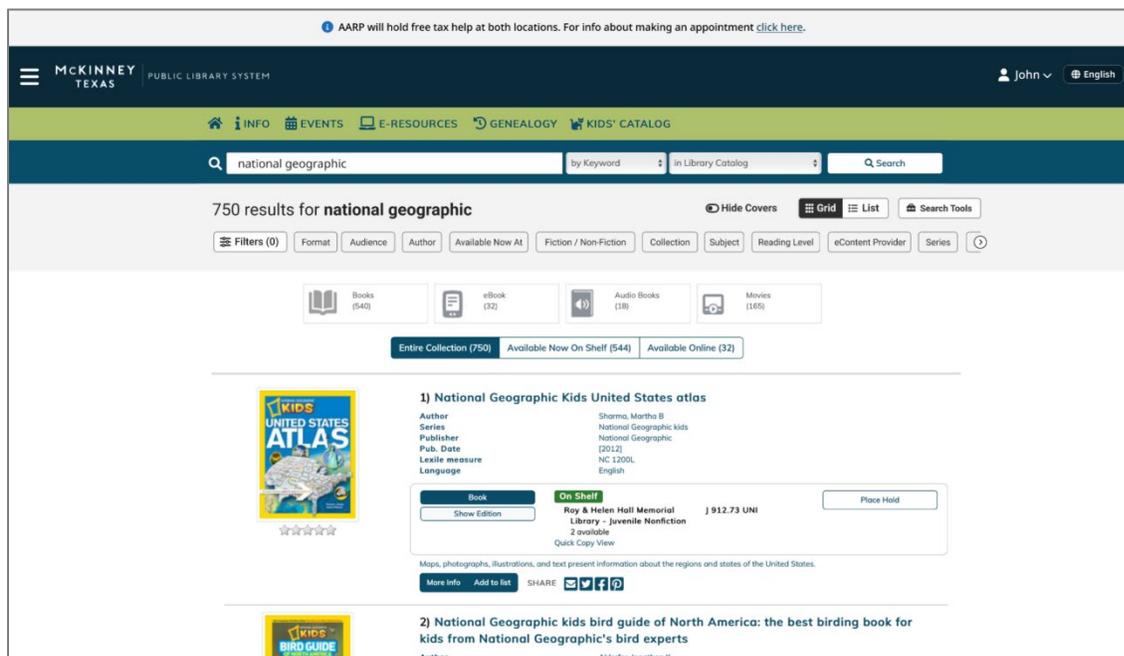


FIGURE 1 DESKTOP VIEW.

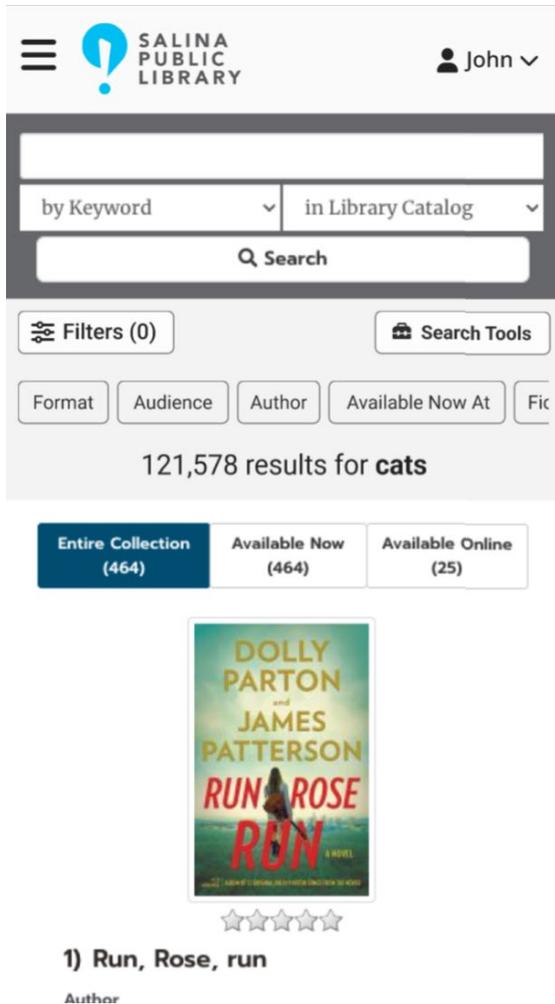


FIGURE 2 MOBILE VIEW.

Key Findings

1. The horizontal filter interaction works well for desktop and mobile. All participants successfully used the horizontal filters in both desktop and mobile views.

While the horizontal scrolling interaction was initially a concern for the desktop view, all participants clicked on the arrow icon to view more filters – which wasn’t functional in the mockup but showed they easily identified the interaction. All participants also were able to scroll on the mobile view, even without an arrow icon displayed.

Participants were also able to successfully update filters that had been previously applied and accurately identify the filters that were currently applied. They also noted features they liked, such as the applied filters “scootch left” and the clear labels for the applied filter options, like Large Print.

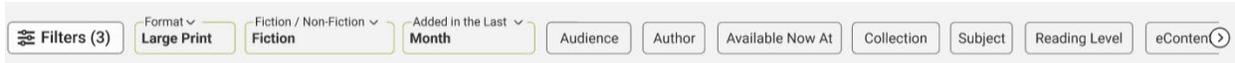


FIGURE 3 DESKTOP VIEW HORIZONTAL FILTERS.

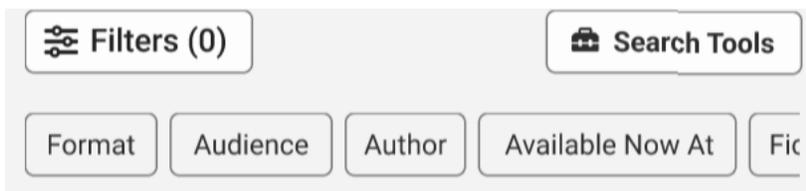


FIGURE 4 MOBILE VIEW HORIZONTAL FILTERS.

Recommendation 1: Implement the horizontal filters

The visual design elements and interactions – including the swiping to view more filters and stacking applied filters to the left – worked well and aligns with design trends in retail sites.

2. “Sort by” and “Filter” are different interactions

The placement of the “Sort By” options at the top of the filter drawer was not intuitive for most participants, though all but one found the option after clicking and hunting.

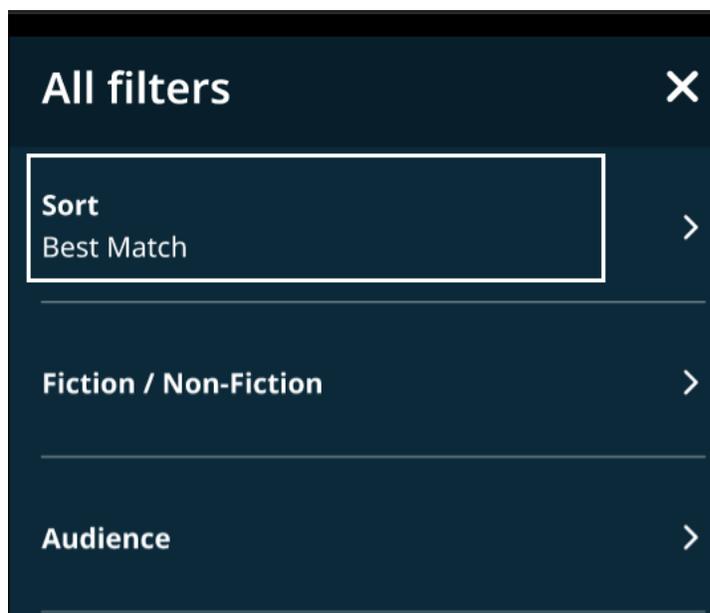


FIGURE 5 SORT BY FILTER IN THE FILTER DRAWER.

Recommendation 2: Investigate alternatives for placement and design of the sort filter

Participants expected a separate sort dropdown, largely because this is the current functionality in the catalog. Visually distinguishing the sort options in the filter drawer, using the current layout but different visual cues, could also be an avenue worth exploring.

3. Reactions to the filter drawer were mixed

Two participants strongly expressed that they preferred the filters to be always displayed on the left side of the screen, as they are in the current desktop view of the catalog. The other three participants noted that they preferred the proposed layout changes. One participant noted several major websites that all use filters on the left, and on further investigation, one – Target.com - now uses a combination of horizontal filters and progressive disclosure, though the others – Amazon.com, Zappos.com, and two others – do present filters on the left.

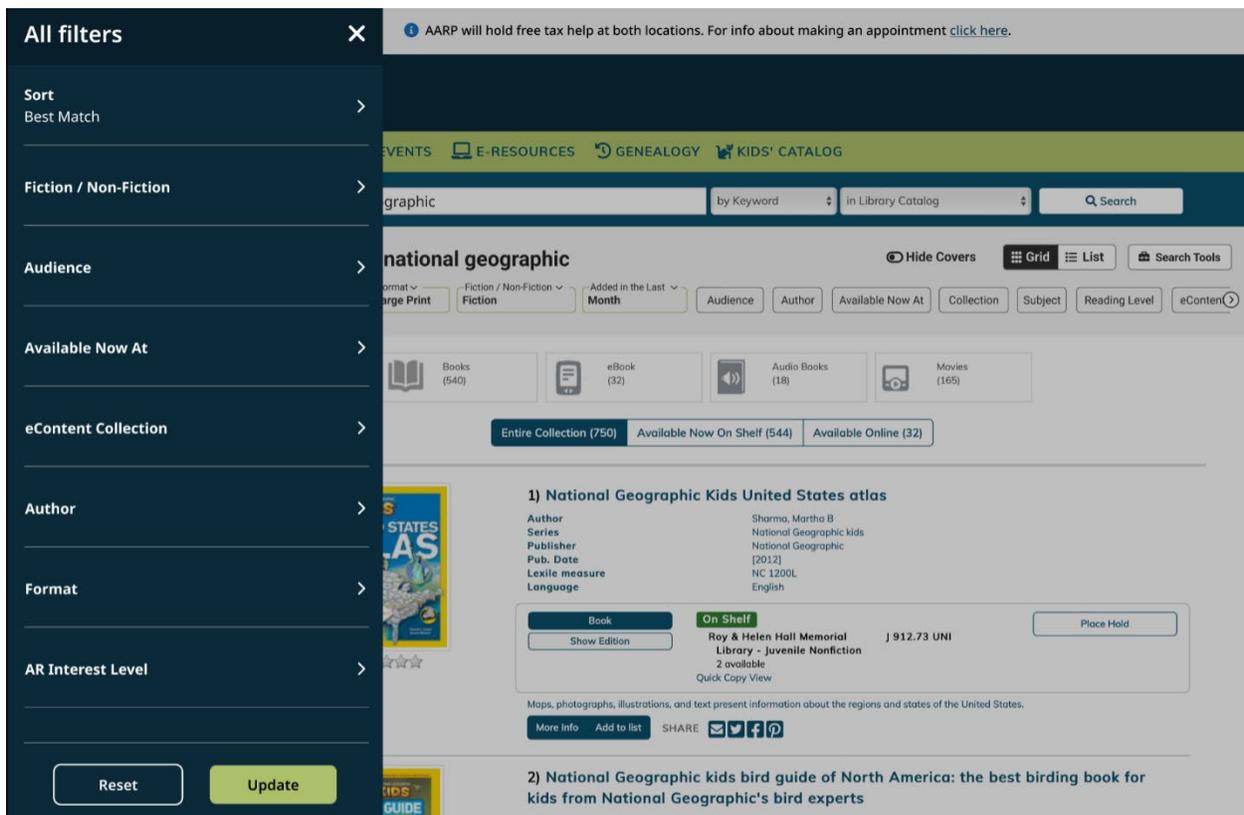


FIGURE 6 FILTER DRAWER ON DESKTOP VIEW.

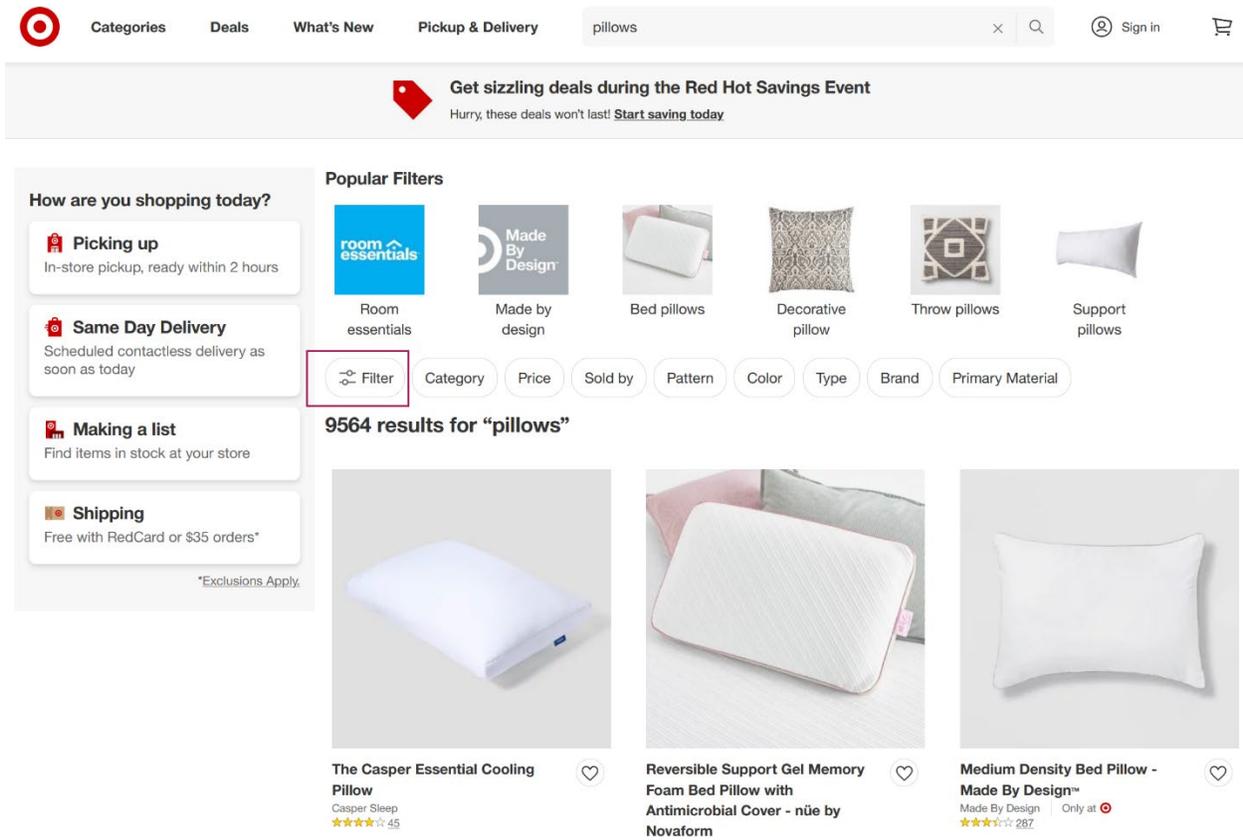


FIGURE 7 TARGET.COM FILTER BUTTON AND HORIZONTAL FILTERS.

All participants found and used the “Filter” button to display the filter drawer. One participant didn’t initially use it on the desktop view but found it later on the mobile view. In previous testing with patrons, the patrons that used filters found them easily, and for those that would never use filters, the progressive disclosure interaction kept unnecessary options out of their way.

Recommendation 3: Continue to pursue the filter drawer design

Based on previous testing with patrons, and the observed usability and intuitiveness of the filter drawer interaction, development of the filter drawer design should proceed. The progressive disclosure removes visual clutter for the many patrons that do not use filters, and consistency between mobile and desktop experiences is another important usability consideration. That said, the additional click in the desktop view to display filters may be unpopular with some users, which can hopefully be offset by currently proposed additional filter enhancements that include the ability to exclude filters and search filter options, in the case of long lists of filters for subject, format, etc.

Bugs & Issues

No Update button for filters in the mobile view

Participants C, D, and E were not presented with the “Update” and “Cancel” options in the mobile view due to a possible bug with the mockups or browser issues. Without these options, participants were unsure if the filters automatically updated after checking the filter box. However, in desktop view all participants had the update button and were able to successfully apply filters. This issue underscored the importance of always displaying the update button above the fold.

Methods

The SWAN User Experience Manager conducted online usability testing of interactive mockups provided by ByWater Solutions, created in Figma.

Participants used their own devices and shared their screens through Zoom. Tests were scheduled for 30 minutes using the script in the Appendix.

For more information on usability testing, see:

- Moran, Kate. “Usability Testing 101,” Nielsen Norman Group, December 1, 2019, <https://www.nngroup.com/articles/usability-testing-101/>
- Krug, Steve. 2010. *Rocket Surgery Made Easy: The Do-it-yourself Guide to Finding and Fixing Usability Problems*.

Participants

All library staff participants were recruited through the SWAN Community Forums. All participants are members of the SWAN Discovery and User Experience Advisory Group.

Participant	Device Used
A	Surface tablet (touchscreen) with a separate keyboard and mouse.
B	Dell laptop, with built in keyboard and touch pad.
C	Windows desktop, mouse, keyboard.
D	Windows desktop, mouse, keyboard.
E	Windows laptop, mouse, keyboard.

Task Completion Rates & Observations

Find the filters on desktop (Task 1)

Pass: 5 of 5

All participants noticed the horizontal filters on the initial view of the mockups.

Use the horizontal filters on desktop (Task 2)

Pass: 5 of 5

All participants successfully used the horizontal filters, and all used them first before using the filter button.

Click arrow to scroll the horizontal filters on desktop (Task 2)

Pass: 5 of 5

While the arrow button wasn't functional on the mockup, all participants attempted to use it, indicating they would be able to successfully scroll through the horizontal filters with an arrow interaction.

Use the filter button on desktop (Task 2,3, or 4)

Pass: 4 of 5

Participant D did not find the filter button on the desktop found it later in the mobile view.

Update a filter on desktop (Task 3)

Pass: 5 of 5

Most participants used the horizontal filters to update, but one used the filter button to open their filters and update.

Sort results on desktop (Task 4)

Pass: 4 of 5

Even though most participants found the sort options, several commented that they didn't expect to find them under "filters" and initially skimmed past the sort option in the filter drawer. One participant never found the sort, even after viewing all filters several times in mobile and desktop.

Accurately identify the filters applied on desktop (Task 5)

Pass: 5 of 5

Participant C explicitly called out the count displaying on the filter button, and Participant D noted they liked that the filters displayed the options selected. Other participants noted the bold font and green outline indicated the filters applied, and Participant B noted that they liked that the filters applied "scootch left".

Two participants noted they expected to see the filters applied in the filter drawer as well as the horizontal filters.

Use horizontal filters on mobile (Task 6)

Pass: 5 of 5

All participants were able to use the swipe features for the horizontal filters in the mobile view. Some participants were not able to apply filters due to a bug with the mockup, and without seeing the “Update” button they were not sure if the filters automatically applied.

Additional Comments & Observations

Several participants commented on the sort filters:

- “Boy that is not intuitive at all. To have to reopen those filters again – I don’t think of those as the same. One is for narrowing down and one is for sorting. I think that’s pretty frustrating to have to go to the same place for those.” – Participant A
- “The only thing I felt like I was missing is the sort by. Which it was there. It didn’t feel as obvious to me. That could also be change. I’m not distraught.” - Participant E

There were some mixed opinions of the drawer functionality as well:

- “ Not having the sidebar with filters on desktop was extremely visually distracting... I’m so trained by the internet to look for filter options on the left side of the screen that not having there I kept being like, wait no, its not there. So I thought that was really weird. The places I shop most often – Target, Amazon... – filters are on the side.” – Participant A
- “I like them on the left. That is where we’re used to the filters being.” – C
- “ I feel like in Aspen we have a lot on the left hand side, not its kind of nice this is a little more centered.” – Participant E

Reactions to the horizontal filters were largely positive:

- “Especially in the mobile display, I do like the filters at the top...I like there isn’t some window that reappears and disappears, weird dropdown menus. I do like that.” – Participant B
- “Do like the filters at the top. Think it looks better. Going between desktop and mobile is more similar.” – Participant D

Participant C also noted that the filter category buttons did not appear on the mobile view, but these were just missing from the mockup. Participants A and E noted they expected the applied filters to appear in the filter drawer, which was also just missing from the mockup and is a planned feature.

Appendix: Script

Introduction

Hi, _____. My name is _____, and I’m going to be walking you through this session today.

Before we begin, I have some information for you, and I'm going to read it to make sure that I cover everything.

We're here to test out mockups for some new features in the library catalog. I want to make clear right away is that we're testing the mockups, not you. The mockups will not have the full functionality of the catalog, so there might be times during the test that something may not work and we will need to reset, and that is just because we're testing mockups and not a full working catalog.

As you use the mockups, I'm going to ask you as much as possible to try to think out loud: to say what you're looking at, what you're trying to do, and what you're thinking. This will be a big help. Don't worry that you will hurt my feelings. I want to make sure I'm passing along good feedback to the designer to improve the catalog for everyone.

If you have any questions or if you need take a break at any point, just let me know.

If it is okay with you I'd like to record this session – it will just be audio and your screen, no video of your face.

START THE SCREEN RECORDING

Pre-Test Questions

What device are you using?

Tasks

Link for 1-5: <https://www.figma.com/proto/DQf0783OgrXNNn1XtW35IS/Aspen-Mockups?node-id=510%3A204&scaling=scale-down&page-id=509%3A203&starting-point-node-id=510%3A204>

Link for 6: <https://www.figma.com/proto/DQf0783OgrXNNn1XtW35IS/Aspen-Mockups?node-id=601%3A1106&page-id=509%3A203&starting-point-node-id=601%3A1106>

Now I'm going to show you the mockups of the catalog.

1. Tell me about what you are seeing: what is different than you are used to seeing in the catalog?
 - a. I want to point out there are no scroll bars on the mockups, so you might take a minute to get a feel for how to scroll. You can click and drag your mouse or if you have a touch screen you can swipe.
2. You are creating a new browse category for your library catalog. You want it to include fiction large print books added to the catalog in the last month. How would you create that search?
3. Let's say you were hoping to get more titles. Change your search to include fiction large print books added in the last 6 months instead.
4. Can you sort these results by date added?
5. How can you tell what filters are currently applied to your results?
6. I'm going to show one more screen. This time we're pretending you are on your phone. How would you search for large print fiction here?

Wrap Up

Thanks, that was very helpful. Do you have any questions for me, now that we're done?

STOP the SCREEN RECORDING