

* PUBLIC USER INTERFACE

ROAD TESTING THE PUI*



HOW DIY USABILITY
TESTING TAUGHT US
ABOUT USERS' MENTAL
MODELS FOR ONLINE
ARCHIVAL RESEARCH



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WHY IS USABILITY and ACCESSIBILITY TESTING IMPORTANT?

Ensure the software platform is easy to learn and convenient to use **FOR ALL USERS**



Check that the PUI meets users' expectations



Support changes and enhancements to the PUI with real-world use



Identify bugs and flaws invisible to experienced (staff) users and developers



Show how successful users are with research tasks with this new tool



Collect user reactions and feedback to...



- Support iterative development
- Build training tools
- Squash internal fears of change (we hope!)

DECIDING WHEN TO TEST THE PUI

AS EARLY AS POSSIBLE

Test *before* changing settings and adding enhancements to the “out-of-the-box” PUI

SAVE  & 

But...

PUI must be functional

Waited for updates and serious bug fixes from Lyrasis

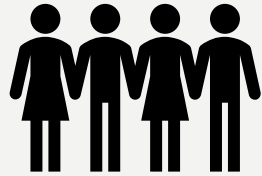
Users must be available

Test during semester when students and faculty are available and not over-burdened

TEST PERIOD: Feb 1-16, 2018

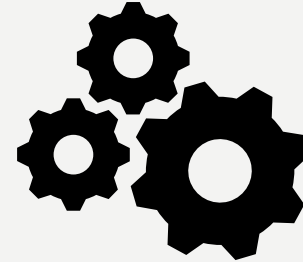
GOAL: TEST **SITE FUNCTION** WITH **REAL USERS**

“What do our users want? How do they see and use this resource?”



1. Undergraduate students
 2. Graduate students
 3. Faculty
 4. Outside researchers
 5. Library staff
- + Users who use screen readers
(accessibility testing)

**USE
PUI
TO**



1. Identify the purpose of the site, which institutions are represented, and what users can do on the site.
2. Find collections relevant to a search topic, subject, name, collection identifier, or date range (or combination thereof).
3. Find known materials within a larger collection.
4. Understand how to access materials and request material for use in the reading room.

METHOD

QUALITATIVE

=



USER STORIES help us understand a user's mental model*

*A MENTAL MODEL is what the user believes about the system and how they expect it to work

FACILITATED

=



- Trouble-shoot issues
- Prompt user to “think aloud”
- Observe body language and non-verbal reactions

TESTING

=

TEST the WEBSITE *not*
THE USER

BENEFITS

Low cost

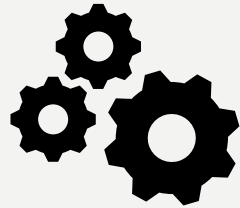
DIY - Anyone can conduct tests (you do not need to be an expert)

Minimal tools needed

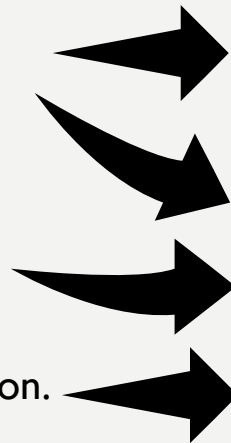
Only 3-5 test participants needed for feedback each round

Repeatable

WHAT WE DID: STEP 1 – PLAN & PREPARE



1. Identify the purpose of the site, which institutions are represented, and what users can do on the site.
2. Find collections relevant to a search topic, subject, name, collection identifier, or date range (or combination thereof).
3. Find known materials within a larger collection.
4. Understand how to access materials and request material for use in the reading room.



1. "Tell me what you think of the site? What is this site for and who would use it?"
2. TASK 1: Find materials related to women during the civil war...
3. TASK 2: Find a 1943 album from Berkeley College
4. TASK 3: Find something useful for your own research!



Postponed until Usability Testing Round 2, but also...

1. Asked for each task: How would you view that item in the Reading Room?

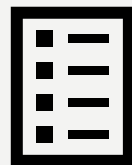
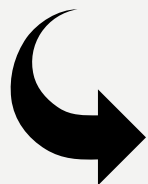
WHAT WE DID: STEP 2 – RECRUITING



At least minimal familiarity with archives and special collections, some primary source research experience.



Motivated test participant who understands context of tasks



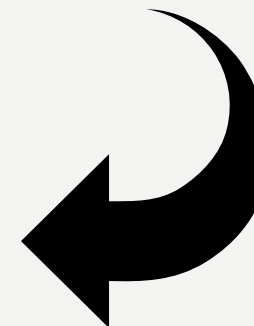
List of recent researchers in each category



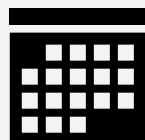
Snowball sampling - Test participants connect us with other users



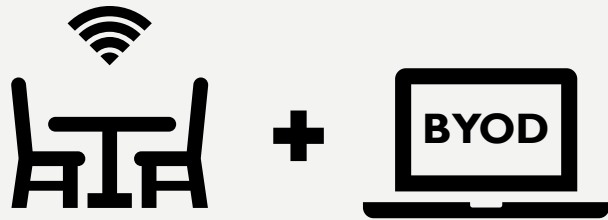
\$10 Amazon gift card



Doodle poll for test sign-up



WHAT WE DID: STEP 3 – TESTING!

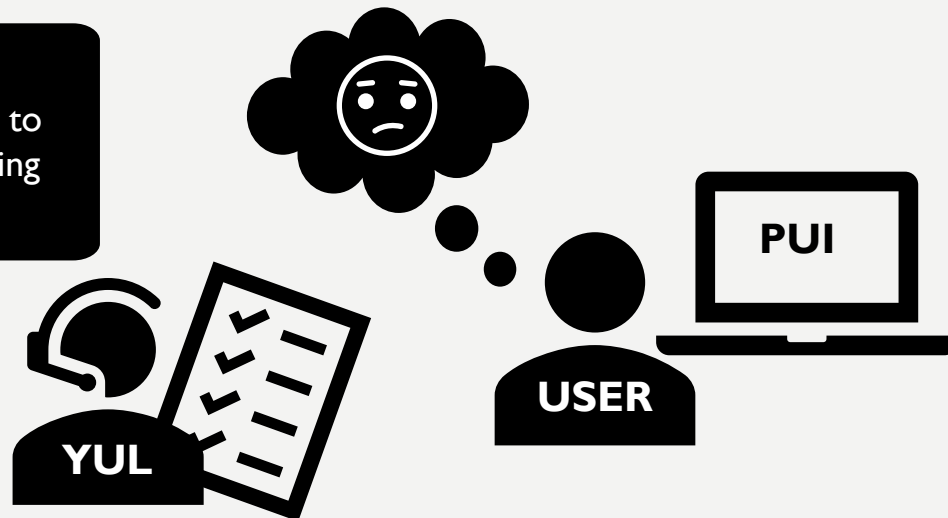


Met with each participant in a private room equipped with wi-fi. Participants were asked to bring their own device (BYOD)



Screen capture and conversation was recorded to the cloud using **Zoom**. Participants signed a consent form to be recorded.

What are you thinking...
Is that what you expected to happen? What are you trying to do now?



Finished tests are uploaded to a secure cloud folder for later review and analysis



TESTS COMPLETED!

16 total tests completed

- 3 undergraduates
- 5 graduate students (2 discounted due to technical difficulties)
- 2 faculty
- 2 outside researchers
- 3 staff (1 test conducted in old version of Internet Explorer - highlighted browser compatibility issue)
- 1 undergraduate using a screen reader

NEXT STEP:
DATA ANALYSIS *then*
REPORT AND RECOMMEND

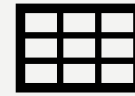
COLLECTED DATA



14 videos with sound and screen capture, including 1 with an audible screen reader



DATA ANALYSIS



Feedback and observations from recordings were coded

Coding process:

Feedback was compiled into a spreadsheet with categories for components and sections of the site.

Sample categories:

- ✓ Home page
- ✓ Visual appearance
- ✓ Top navigation bar
- ✓ Searching
- ✓ Language and use of jargon

Most feedback fell within these general categories

Patterns emerge



- **Many users gave similar feedback**
- **75% of users used the date filter to refine a search**
- **Points of confusion and delight were similar across all user groups**

FINDINGS

IN A NUTSHELL

More than half of test participants found the site easier to use and more intuitive than the current Yale Finding Aid Database.

Some language and design elements did not match users' mental models.

“Mental model” - *what a user believes about the system at hand.*

- Based on education, background, expertise, expectations

ASpace jargon	User's mental model
Container Inventory	Box list
Collection organization	Finding aid
File	Folder

Key points of confusion for users



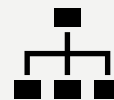
Navigation



Search relevancy and search behavior



“Where is the finding aid?”



Inherited description from the collection level is repeated at lower levels of description + missing “scope and contents note” label or any indication of inheritance from higher levels



Location of page elements (also accessibility issues!)

- Facets in the right sidebar – violated users' mental models
- Search form

RECOMMENDATIONS



a sampling!



Layout changes (e.g., move filters/context tree to the left sidebar)



Clearer language/description



Accessibility changes



Improve search relevancy



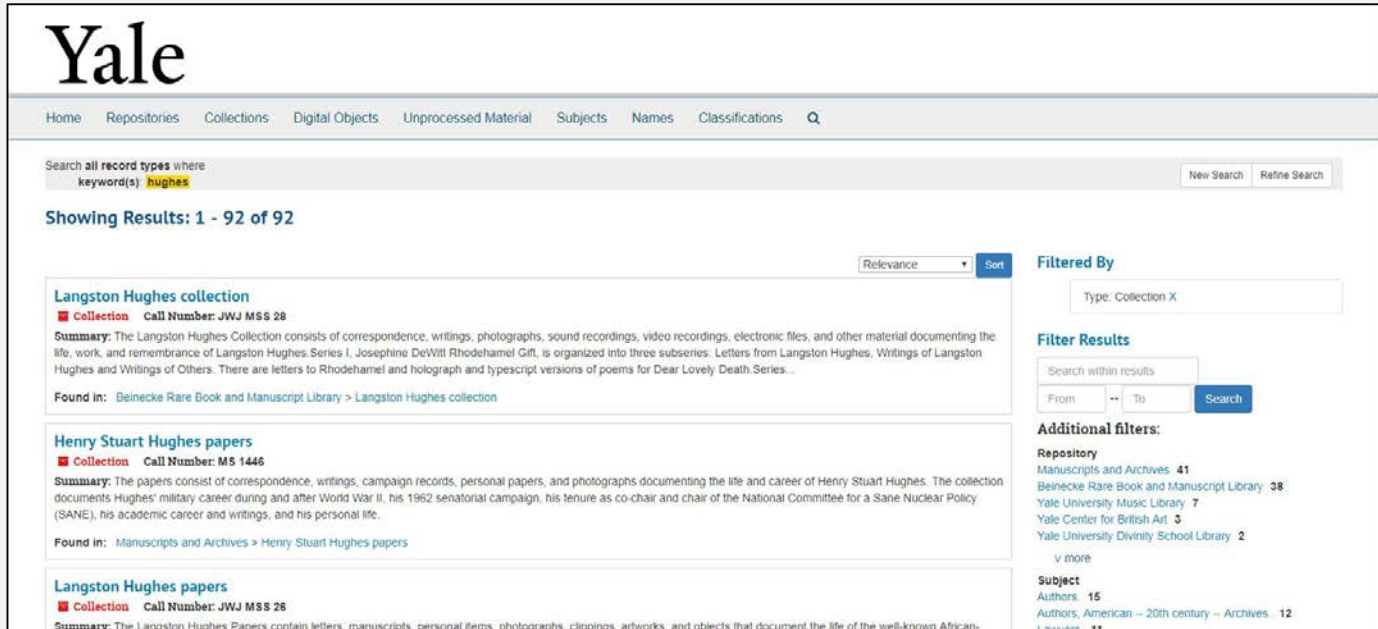
Add Yale identity skinning

NEXT STEPS



May - Round 2 testing for Aeon plug-in and other customizations before launch

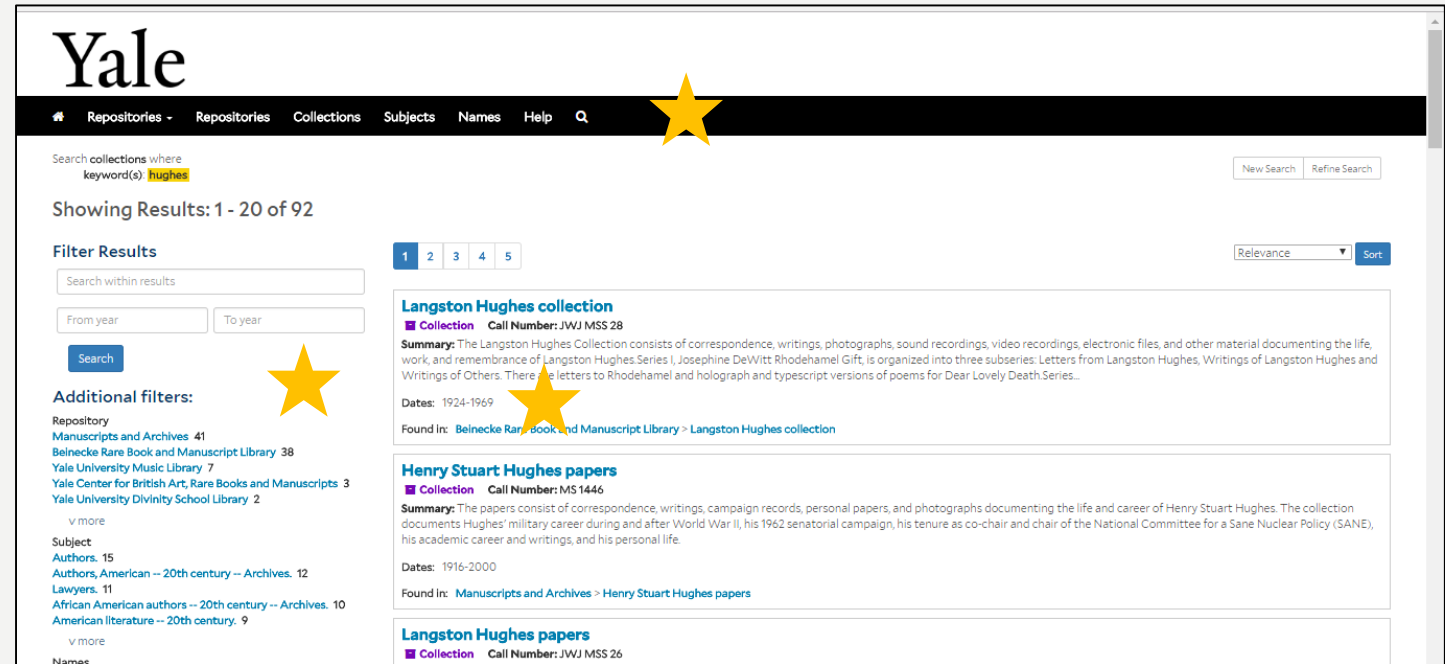
Future testing - An actionable plan for iterative usability testing should be put in place for future development and upgrades (smaller-scale testing)



OUT-OF-THE-BOX PUI
what users saw during testing

★ WITH CUSTOMIZATIONS

- Facets moved to left side
- Contrast problems resolved for accessibility
- Dates added to search results



Langston Hughes papers

Collection Call Number: JWJ MSS 26



Beinecke Rare Book and Manuscript Library > Langston Hughes papers

Collection Overview Collection Organization Container Inventory

The career of James Langston Hughes spanned five decades. He wrote poetry, short stories, plays, newspaper columns, children's books, and pictorial histories. He also edited several volumes of prose and fiction by Afro-American and African writers. Through his writing and through his extensive travels and lecture tours he came into direct contact with an amazing array of writers, artists, activists, and performers. The papers span the... [See more >](#)

Dates

1862-1980

Information about Access

This collection is open for research.

Boxes 639-667 and items in cold storage: Restricted fragile material. Reference surrogates have been substituted in the main files. For further information consult the appropriate curator.

Search Collection

Years: From To To Search

Collection organization

Langston Hughes papers

- > Box 421, folder 9320
- > Personal Correspondence, ca. 1910-1967

OUT-OF-THE-BOX PUI
what users saw during testing

★ WITH CUSTOMIZATIONS

New breadcrumb styling
New labels!

- “Finding Aid View”
- “Navigate the collection”
- “Description of papers”

Yale

Repositories - Repositories Collections Subjects Names Help Q

Beinecke Rare Book and Manuscript Library > Langston Hughes papers

Langston Hughes papers

Collection Call Number: JWJ MSS 26

Collection Overview Finding Aid View Container List

Description of the Papers

The career of James Langston Hughes spanned five decades. He wrote poetry, short stories, plays, newspaper columns, children's books, and pictorial histories. He also edited several volumes of prose and fiction by Afro-American and African writers. Through his writing and through his extensive travels and lecture tours he came into direct contact with an amazing array of writers, artists, activists, and performers. The papers span the... [See more >](#)

Dates

1862-1980

Language

English

Information about Access

The materials are open for research.

Citation Ask a Question

Search Collection

From year To year Search

Navigate the collection

Langston Hughes papers

- + Box 421, folder 9320
- + Personal Correspondence, ca. 1910-1967



THANK YOU!

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