

Our UX Journey

MiALA 2024

Sruthin Gaddam, Shelby Kroske,
& Shel Vilag



Our team

Austin D.

UX and Accessibility Specialist

Kevin F.

Web Applications Developer

Sruthin G.

User Experience Librarian

Shelby K.

UX Designer

Joshua S.

Head of User Experience

Shel V.

UX/UI Developer

Defining UX



- Practicing a set of methods and techniques to understand user needs
- Reduce the friction between the task and the tools necessary to accomplish the task

– Leah Buley

The Journey Begins

It is good to have an end to journey toward; but it is the journey that matters, in the end.”

— Ursula K. Le Guin,
The Left Hand of
Darkness

Project Background

- Library website Migration
 - Our previous website was built ~10 years
- Drupal (CMS) end of life expedited the need for the migration process
 - EOL Jan, 2025
- Strong need for an overhaul of the design and information architecture

Project Background

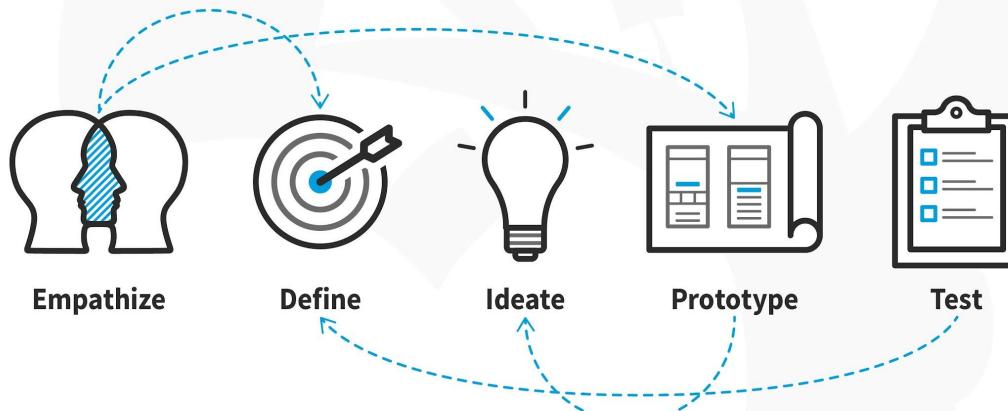
- MSU Libraries website had ~1600 pages
 - Lacked consistency in design, tone and functionality
- UX research/testing rarely done
 - Lack of resources/training
- Lack of means to receive feedback

Design Development Cycle

- Research/Design slightly ahead of development
- Our mantra
 - Fail fast, fail often
 - Iterate & test often
 - Discard often
- UX testing following development

Design Development Cycle

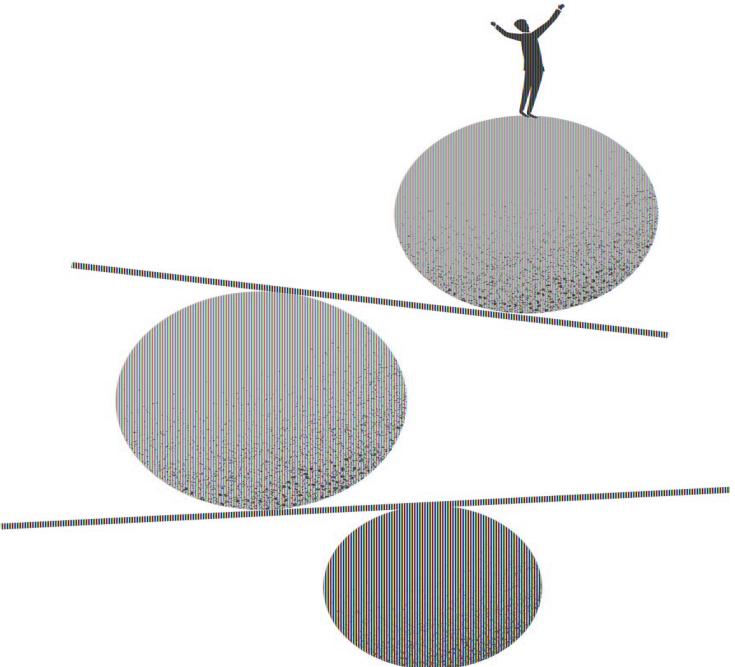
Design Thinking: A 5-Stage Process



Interaction Design Foundation
interaction-design.org

Building a Rhythm

- Ensuring Design/Development/UX progress together
- Balancing Design/Development and UX activities



Building a Rhythm

- Working within our constraints
 - Time/resource management
 - Participant incentives
 - Limited volunteer pool

Testing

Forming, Norming, Performing

- Forming
 - Excitement, high positive expectations of the team
- Norming
 - Achieving group harmony
- Performing
 - Establishing cadence, and excel.

What to test

- Placing more efforts in planning our tasks

Poorly Designed Task	Well Designed Task
Perform a search on the main website	Find a book with title “Title of a book...” and checkout for 30 days
Too vague	Specific and direct

How to test

- Remove technological barriers
 - Ask everyone the same set of questions
 - Embrace the silence (give the participant time to think)
 - Follow the 80/20 (silence-talking) rule
 - Test in a neutral environment
 - Accept their version of reality
- Andy Priestner, A Handbook of User Experience Research & Design in Libraries

UX Methodologies

- Cognitive Mapping
- User Journey Mapping
- Graffiti Walls
- A/B Testing
- Heuristic Analysis

User Journey Maps

Involves recording of activities, feelings and thoughts of users as they try to complete a task

Task: Find today's building hours of the Main Library, Makerspace, & Passport Services

Do	<ul style="list-style-type: none">Clicked on "full list of hours"Used drop down in the calendar/month view. Located today's date.Used date drop down, but then realized they can look at the full calendar.
Think & Say	<ul style="list-style-type: none">"I really like that it was 'right there'" (easy to find)"I just realized you can see the month or the week"
Feelings	<ul style="list-style-type: none">Really like the month view and week view, "really impressed".
Opportunities	<ul style="list-style-type: none">Consider making "GO" button more apparentNeed to reconfigure H1/H2 on this pageIs there a way to more obviously indicate that the location has changed after clicking "GO"?

User Journey Maps



Main Library Hours

Choose a location or service: Main Library and choose a date: 03/2023

March 2023 - Main Library

< Previous month [Next month >](#)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27	28	1	2	3	4

Location & Service Hours

Choose a location or service: Main Library

Choose a date: 05/2023

Main Library

< May 2023 >

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
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User Journey Maps

“I like the [right side] better than the What’s going on section.

“It is going to look lame and outdated”

What's going on

News
[Giving Tuesday](#)
February 23, 2023
Elise Jajuga
Happy #GivingTuesday! Are you looking for a way to give back to MSU? The @MSULibraries and the @MSUArchives would love support ...

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[Happy snowy Friday](#)
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Make Central News: Happy snowy Friday! Cuddle up in some comfy threads and check out this piece by @thesnews featuring the...

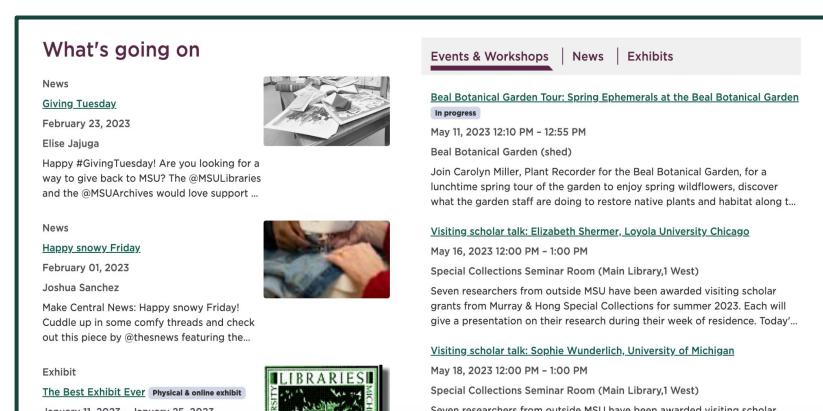
Exhibit
[The Best Exhibit Ever](#) Physical & online exhibit
January 11, 2023 - January 25, 2023

Events & Workshops | News | Exhibits

[Beal Botanical Garden Tour: Spring Ephemerals at the Beal Botanical Garden](#)
In progress
May 11, 2023 12:10 PM - 12:55 PM
Beal Botanical Garden (shed)
Join Carolyn Miller, Plant Recorder for the Beal Botanical Garden, for a luncheon spring tour of the garden to enjoy spring wildflowers, discover what the garden staff are doing to restore native plants and habitat along t...

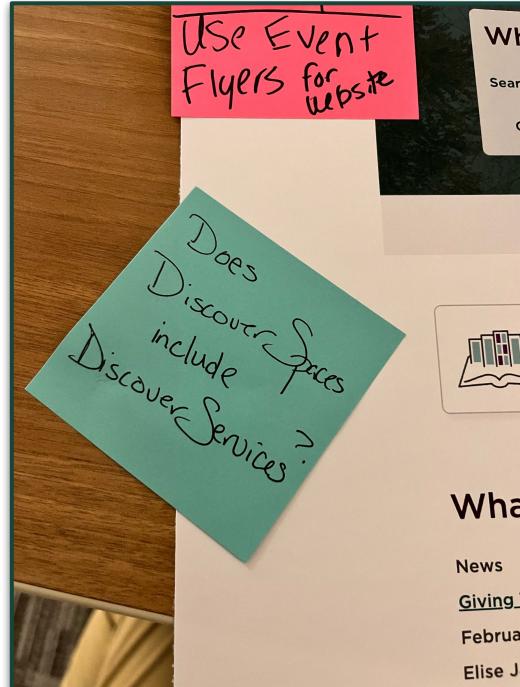
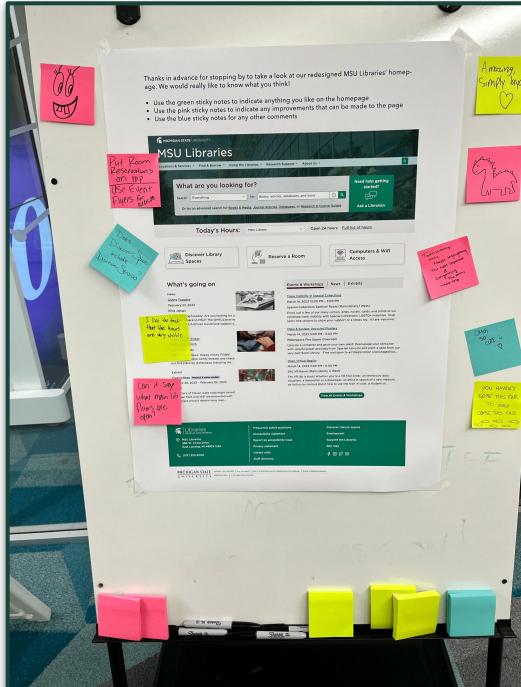
[Visiting scholar talk: Elizabeth Shermer, Loyola University Chicago](#)
May 16, 2023 12:00 PM - 1:00 PM
Special Collections Seminar Room (Main Library,1 West)
Seven researchers from outside MSU have been awarded visiting scholar grants from Murray & Hong Special Collections for summer 2023. Each will give a presentation on their research during their week of residence. Today ...

[Visiting scholar talk: Sophie Wunderlich, University of Michigan](#)
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Graffiti Walls

A space, either on a wall or a white board where people can openly and anonymously share their feelings.



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[Artist Talk with Elka Stevens](#)

January 5, 2022

Online

Dr. Stevens scholarly interests lie at the intersections of visual and material culture, international trade, gender, and identity. Dr. Stevens uses textiles and clothing as a lens of analysis...

[Muslim Journeys: An Early Modern Anglo-Muslim Archive: Cross-Cultural Encounters and Identity Formations](#)

January 5, 2022

MSU Libraries, Green Room

Drawing on selected pre-1800 archival materials from the Stephen O. Murray and Keelung Hong Special Collections...



[Introduction to ESRI StoryMaps and StoryMaps JS](#)

January 5, 2022

MSU Libraries, Digital Scholarship Lab

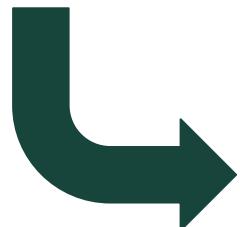
Both ESRI and Knight Labs Story Maps combine narrative text, images and other content with maps allowing for the creation of

Does
Discover Services
include
Services?
Discover Services

Explore our services

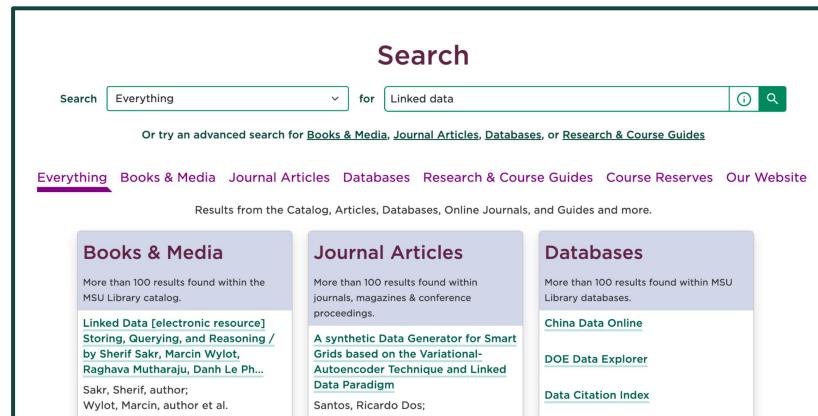


Service description, you can get passports at the MSU Libraries! Visit lib.msu.edu/passports for more information and to make an appointment.



A/B Testing

- Compares the performance and usability of two different versions
- Evaluating the effectiveness of both versions



A/B Testing

"There's a lot of information, a lot of words right off the bat. I don't think people are going to read through all the options. I have no idea what's going on here "

A

Books & Media →

1000+ results

Results within books, ebooks, journals, audio & video sources, and more.

“I like the 1000+ results tag better than the text. It's not intuitive that you have to hover over tooltip to know there more ”

B

Articles →

1000+ results



Results within journal articles, magazines & conference proceedings.

“I like the descriptions that are shown (previous one without the tooltip)”

A/B Testing

The screenshot shows the MSU Libraries search interface. At the top, there is a dark header bar with the Michigan State University logo and a search bar containing the text "Michigan". Below this is a light green navigation bar with links for Locations & Services, Find & Borrow, Using the Libraries, Research Support, and About Us. The main search area features a search bar with dropdown menus for "All Sources" and "Michigan", and a search button. Below the search bar is a link to an advanced search. The page content includes a navigation bar with "All Sources" underlined, followed by links for Books & Media, Articles, Databases, Research & Course Guides, Course Reserves, Digital Repository, Our Website, and Journals & Newspapers. Three main search results boxes are displayed: "Books & Media" with 1000+ results, "Articles" with 1000+ results, and "Databases" with 40 results. Each result box lists a few example titles.

MICHIGAN STATE UNIVERSITY

MSU Libraries | Search

Locations & Services ▾ Find & Borrow ▾ Using the Libraries ▾ Research Support ▾ About Us ▾

Search All Sources for Michigan

Or try an advanced search for [Books & Media](#), [Articles](#), [Databases](#), [Research & Course Guides](#), [Course Reserves](#), [Digital Repository](#), [Our Website](#), or [Journals & Newspapers](#)

All Sources | Books & Media | Articles | Databases | Research & Course Guides | Course Reserves | Digital Repository | Our Website

Books & Media →
1000+ results
Results within books, ebooks, journals, audio & video sources, and more.
[Michigan's land, Michigan's future : final report of the Michigan Land Use Leadership Council](#)

Articles →
1000+ results
Results within journal articles, magazines & conference proceedings.
[Trust and distrust in low-income Michigan residents during the early COVID-19 pandemic: A qualitative study.](#)

Databases →
40 results
Results within MSU Library subscribed databases.
[Map Michigan](#)
[Michigan Legislature](#)

Cognitive Mapping

Users create a drawing of the experience of a physical or digital space

The image displays two cognitive maps for a "Header & Footer Content & Layout Exercise".

Left Map (Jenny B.):

- Header:** MSU Branding, Library Branding, Site Search.
- Main menu:** Background image, Search, Hours.
- Search:** Search, Hours.
- Page Content:** Contact info (address, phone email, Ask Us), Social Media Icons, Repeat select links from Main Menu (Branches, Most Commonly Used Links, Privacy Statement).
- Pre-footer:** Ask Us (floating tab/button).
- Footer:** MSU Branding.

Right Map (Sruthi G.):

- Header:** MSU Masthead, MSU Libraries Branding, Site Search, Ask a Librarian, Location and Hours.
- Main menu:** My Account, Give.
- Secondary Header:** Background image, Search, Today's Hours.
- Page Content:** Address, Accessibility, Site Map, Call MSU: (517) 355-1855, Visit: msu.edu, MSU is an affirmative action, equal opportunity employer, Notice of Nondiscrimination.
- Secondary Footer:** 366 W. Circle Dr, East Lansing, MI, 48823, E-test@lib.msu.edu, Ph: 123-456-1234, Get Help, Support, BRANCHES Business Library University Archives, Social Media Icons, FAQ | Login (Staff) | Intranet, Privacy Statement.
- Footer:** MSU Branding.

Heuristic Analysis

Evaluators assess the system (websites/apps) against a set of guidelines.

10 Usability Heuristics



Visibility of System Status



Match Between System & the Real World



User Control & Freedom



Consistency & Standards



Error Prevention



Recognition Rather than Recall



Flexibility & Efficiency of Use



Aesthetic & Minimalist Design



Help Users Recognize, Diagnose & Recover from Errors



Help & Documentation

Interaction Design Foundation
interaction-design.org



How We Communicate Results

- What did we do with our discoveries?
 - Affinity maps
 - Communicating with the team
 - Communicating with other units
- Planning implementation

How We Communicate Results

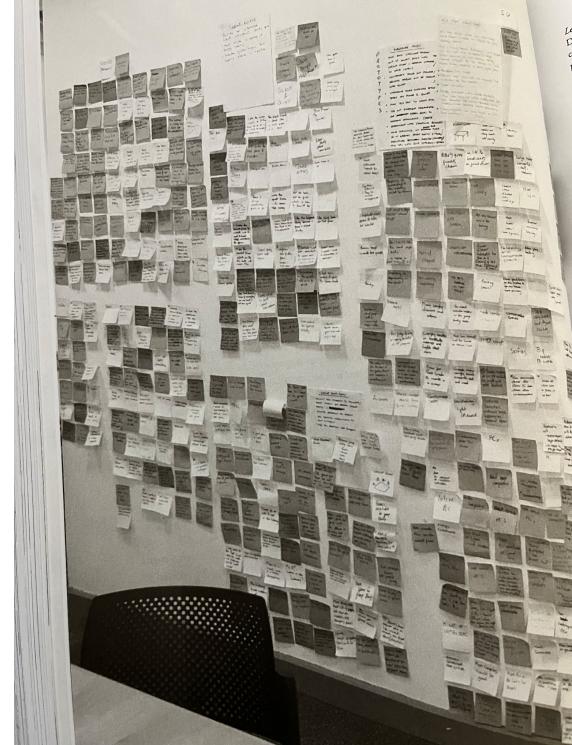
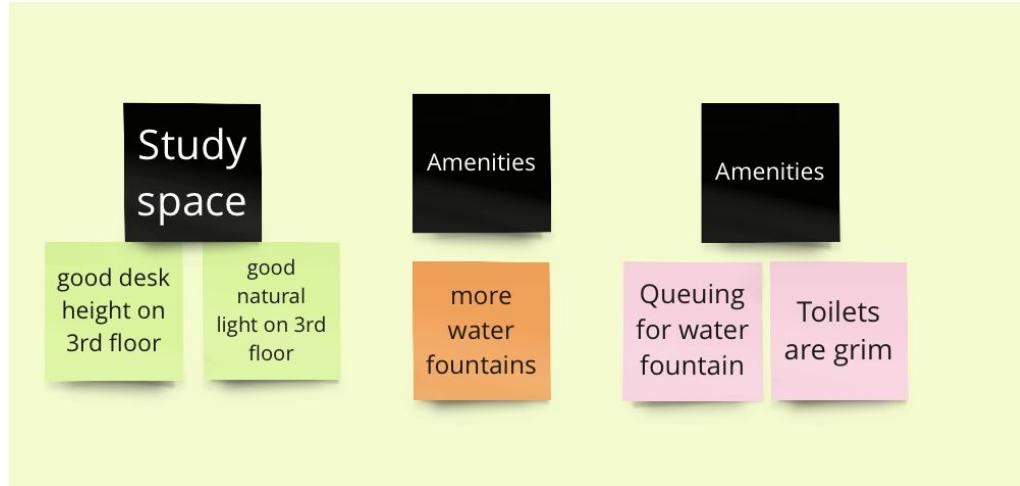


Image from: *A Handbook of User Experience Research & Design In Libraries* by Andy Priestner

Discovery & Progression

How We Heard From Users

Initial:

Website Advisory
Group (WAG)

As we went:

Recruiting MSUL
staff and student
employees

Current:

Volunteer for UX
Research form on
library website

Students from the
XA program



How We Heard From Users

- User research recruitment
 - Internal participants initially
 - Slowly expanded participant pool
- Roadblock/challenge to recruiting
 - Limitations on ability to offer incentives to participants

Volunteer for UX Research

Please use the form to volunteer for UX research at the MSU Libraries. We really appreciate your help in making our physical and digital spaces better. One of our team members will contact you inviting you to our next UX testing activity. Typically we try to do UX testing once a month; based on when this form is submitted you may not hear from us for a few weeks.

Full Name *

John Doe

Email *

email@msu.edu

Affiliation *

- Select -

Submit

Our First UX Tests

- User testing
 - One Student employee as test participant
- Drafted predefined set of tasks
- We did the test via zoom
 - Moderators were watching the screen and taking notes

Our More Recent Tests

- Our team grew in size, more hands on deck
- Rotating moderators and note takers
- We learned how to write better tasks

Our Discoveries: Libraries Site

- Gained a great understanding of how all users (faculty, staff, students, community) experience each part of the site
- What user expectations are and are not being met

What Next?

What We Do Next

- Increase and diversify pool of usability testing participants
- Improve testing incentives
- Make plans for problems we discovered, but can't yet address
- Share our research and processes to the wider UX/Library community

Our UX Journey:

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