PRIORITIZING PEOPLE
Accessibility and Digital Collections

Nathan Tallman, Hanning Chen, and Heather Alexander
ABOUT US

**Product Owner, Product Analyst, and User Interface Designer**

You may be familiar with the roles or have them in your organization. But you have users. You probably want users to use your collections. But your users may have impairments. Thinking about your collections through the lens of these roles may help you make your collections more accessible to impaired users.
ACTIVITY

YOU HAVE BEEN SMOTE AND ARE IMPAIRED.

- Random impairments will be assigned. Props are provided if necessary.
- Using a personal device or one of the provided laptops (installed with NVDA and JAWS software), try using your organization’s digital collections. (Or any online digital collection.)
- A list of suggested activities to perform is provided.
- How long does it take you to perform these activities? Was it easy? How did the experience make you feel, personally?
Activity

• Collections
  • Penn State
    • https://dbbt.io/HSln
  • Keystone Library Network
    • https://dbbt.io/HSqH
  • Oregon Digital
    • https://dbbt.io/HSql
  • University of Maine
    • https://dbbt.io/HSqq
  • Barnard College
    • https://dbbt.io/HSqz
  • University of Florida
    • https://dbbt.io/HSqK
  • Library of Congress
    • https://dbbt.io/HSq9
  • Stanford Libraries
    • https://dbbt.io/HSqx
  • Use your own organization’s collections!

• Actions
  • Browse complete listing of collections and choose one to explore.
  • Find the top five creators and subject for your chosen collection.
  • Do a basic search and try to page through the search results. Select one result view the object.
  • When was the original created? What format was the original? Go back to the homepage.
  • Do an advanced search and combine at least three fields, one of them being a phrase search.
  • After exploring the results, try to print (pretend) and download some objects.
PRODUCT OWNERSHIP

- Comes from the Scrum/Agile framework.
- PO is the chief stakeholder, defines the vision, prioritizes work, and liaises with other stakeholders.
- Interfaces with the development team/vendor and other stakeholders/rest of the organization.
- PO is accountable for delivering maximum value.
- If accessibility is important to your organization and users, it's the product owner's job to deliver an accessible application.
BETTER FOR EVERYONE

It can be a fight for resources, but

**A FOCUS ON ACCESSIBILITY OFTEN LEADS TO A BETTER EXPERIENCE FOR ALL USERS.**

For example:

Headings clarify the structure of a page. The accessibility requirement on headings will help creating a logical and coherent website in general.

Accessibility requires texts to have enough contrast with background. This works better for other types of users as well.

Enforcing ALT text on image & UI elements will help everyone better understand the contents and functions of a website.
WEB ACCESSIBILITY

OUR PHYSICAL SPACES ARE ACCESSIBLE, OUR DIGITAL SPACES NEED TO BE TOO

WA I / WCAG
W3C Web Accessibility Initiative, including the Web Content Accessibility Guidelines 2.1 (June 2018)

Universal Design
Universal design considers all users, including those with disabilities, and reduces or eliminates the need for adaptive technologies.

Section 504, 508
The Rehabilitation Act of 1973 prohibits programs receiving federal funding from discriminating against people with disabilities through inaccessible interfaces.

Title II, ADA
Title II of the Americans with Disabilities Act of 1990 prohibits discrimination against qualified individuals from public entities.
CONTENTdm 6.x

- We had stability and maintenance issues with our self-hosted instance. Crashed on the Dean’s husband.
- Known issues with accessibility and mobile devices.
- Had already started work on Samvera replacement, but was 2+ years away.

OCLC’S NEW HOSTED VERSION OF CONTENTdm ADVERTISED ACCESSIBILITY IMPROVEMENTS. WE ASKED FOR A TRIAL.
WORKED WITH PENN STATE EIT ACCESSIBILITY GROUP TO TEST NEW CONTENTDM WITH SOME OF OUR COLLECTION.

RESULTS WERE DISAPPOINTING BASED ON OCLC MESSAGING AND STRONGLY WORDED EMAILS SENT.

ACCESSIBILITY IS MATURING

ACCESSIBILITY IS MATURING
SO ARE WE

Accessibility is still evolving.

We are fortunate to work with partners on accessibility issues.

Education of everyone on the production chain is ongoing.

Standards are still being established and revised.

We learned a lot and start to look at accessibility from a new angle.

CONTENTdm team at OCLC is taking the issue seriously and is continuously making accessibility improvements to our product.
CULTURAL HERITAGE OBJECTS REPOSITORY

- Samvera-based digital repository with Blacklight as the only starting UI.
  - Accessibility a priority, required feature from day one. Every incremental release undergoes some form of accessibility testing.
  - Full testing with EIT Accessibility Group as needed and planned for major releases.
  - MVP includes minimal/no JavaScript or other fancy UI features to maintain focus on core accessibility for graceful fallback.
- Staff need an accessible interface too.
BEST PRACTICES FOR ADAPTING & CREATING ACCESSIBLE DIGITAL COLLECTION INTERFACES

WORKING WITH VENDORS

• Test all claims
• Don’t be reluctant to ask or give feedback to the team who developed it
• When customizing, be careful not to reverse accessibility
• Test customizations with SitelImprove – it can be downloaded as a Chrome extension
• Accessibility is always evolving, we are constantly working to make improvements to our products

DEVELOPING YOUR OWN

• Universal design
• Progressive enhancement
• Routine testing, both automated & manual (WCAG) and human using adaptive tech
• Valid, semantic HTML encoding
• Unicode! (Accessibility for all languages!)
• Know how to use ALT and ARIA attributes
• Test content without CSS and JS enabled
• Remember screen readers when adding hidden content and for skipping non-primary content
Accessible Content

When uploading content
- Use descriptive yet simple English for your content
- Give relevant names to your titles, subjects, and description; not Page 01, Page02, Page 03
- Title will be the same as link and alt text

When configuring WCT
- Test intended colors in webaim.org/resources/contrastchecker/
- Text size 'Medium' is the intended sizing for the text
- When you customize be careful writing descriptions and be mindful of headings (make sure your site doesn't have too many headings)
QUESTIONS?

Penn State University, Digital Preservation Librarian
Nathan Tallman, @madcow1029

OCLC, Product Analyst
Hanning Chen, @oclc

OCLC, User Interface Designer
Heather Alexander, @halexdee

Thank you to our colleagues Michael Tribone (UX/UI Designer) and Linda Klimczyk (Assistant Head, I-Tech) at Penn State University Libraries for their feedback.
PRIORITIZING PEOPLE
Accessibility and Digital Collections
Nathan Tallman, Hanning Chen, and Heather Alexander

ABOUT US
Product Owner, Product Analyst, and User Interface Designer
You may be familiar with the roles or have them in your organization. But you have users. You probably want users to use your collections. But your users may have impairments. Thinking about your collections through the lens of these roles may help you make your collections more accessible to impaired users.

ACTIVITY
YOU HAVE BEEN SMOTE AND ARE IMPAIRED.
Random impairments will be assigned. Props are provided if necessary.
Using a personal device or one of the provided laptops (installed with NVDA and JAWS software), try using your organization’s digital collections. (Or any online digital collection.)
A list of suggested activities to perform is provided.
How long does it take you to perform these activities? Was it easy? How did the experience make you feel, personally?

Activity
• Collections
  • Penn State
    https://dbbt.io/HS1n
  • Keystone Library Network
    https://dbbt.io/HSqH
  • Oregon Digital
    https://dbbt.io/HSqI
  • University of Maine
    https://dbbt.io/HSqq
  • Barnard College
    https://dbbt.io/HSqz
  • University of Florida
    https://dbbt.io/HSqK
  • Library of Congress
    https://dbbt.io/HSq9
  • Stanford Libraries
    https://dbbt.io/HSqx
  • Use your own organization’s collections!

• Actions
  • Browse complete listing of collections and choose one to explore.
  • Find the top five creators and subject for your chosen collection.
  • Do a basic search and try to page through the search results. Select one result view the object.
  • When was the original created? What format was the original? Go back to the homepage.
• Do an advanced search and combine at least three fields, one of them being a phrase search.
• After exploring the results, try to print (pretend) and download some objects.

5  PRODUCT OWNERSHIP
  o Comes from the Scrum/Agile framework.
  o PO is the chief stakeholder, defines the vision, prioritizes work, and liaises with other stakeholders.
  o Interfaces with the development team/vendor and other stakeholders/rest of the organization.
  o PO is accountable for delivering maximum value.
  o If accessibility is important to your organization and users, it's the product owner's job to deliver an accessible application.

6  BETTER FOR EVERYONE
  1. It can be a fight for resources, but
     A FOCUS ON ACCESSIBILITY OFTEN LEADS TO A BETTER EXPERIENCE FOR ALL USERS.
  2. Headings clarify the structure of a page. The accessibility requirement on headings will help creating a logical and coherent website in general.
     Accessibility requires texts to have enough contrast with background. This works better for other types of users as well.
     Enforcing ALT text on image & UI elements will help everyone better understand the contents and functions of a website.

7  WEB ACCESSIBILITY
  1. OUR PHYSICAL SPACES ARE ACCESSIBLE, OUR DIGITAL SPACES NEED TO BE TOO
  2. W3C Web Accessibility Initiative, including the Web Content Accessibility Guidelines 2.1 (June 2018)
  3. WAI / WCAG
  4. Universal design considers all users, including those with disabilities, and reduces or eliminates the need for adaptive technologies.
  5. Universal Design
  6. The Rehabilitation Act of 1973 prohibits programs receiving federal funding from discriminating against people with disabilities through inaccessible interfaces.
  7. Section 504, 508
  8. Title II of the Americans with Disabilities Act of 1990 prohibits discrimination against qualified individuals from public entities.
  9. Title II, ADA

8  CONTENTdm 6.x
  1. OCLC'S NEW HOSTED VERSION OF CONTENTdm ADVERTISED ACCESSIBILITY IMPROVEMENTS. WE ASKED FOR A TRIAL.
  2. oWe had stability and maintenance issues with our self-hosted instance. Crashed on the Dean's husband.
     oKnown issues with accessibility and mobile devices.
     oHad already started work on Samvera replacement, but was 2+ years away.
CONTENTdm Responsive

1. ALWAYS DO YOUR OWN TESTING.
2. • Worked with Penn State EIT Accessibility Group to test new CONTENTdm with some of our collection.
   • Results were disappointing based on OCLC messaging and strongly worded emails sent.
   • OCLC listened and their response showed they cared. Successive improvements were made, with additional rounds of testing and report sharing.

ACCESSIBILITY IS MATURING

CULTURAL HERITAGE OBJECTS REPOSITORY

• Samvera-based digital repository with Blacklight as the only starting UI.
• Accessibility a priority, required feature from day one. Every incremental release undergoes some form of accessibility testing.
• Full testing with EIT Accessibility Group as needed and planned for major releases.
• MVP includes minimal/no JavaScript or other fancy UI features to maintain focus on core accessibility for graceful fallback.
• Staff need an accessible interface too.

BEST PRACTICES FOR ADAPTING & CREATING ACCESSIBLE DIGITAL COLLECTION INTERFACES

WORKING WITH VENDORS

1. • Test all claims
   • Don’t be reluctant to ask or give feedback to the team who developed it
   • When customizing, be careful not to reverse accessibility
   • Test customizations with SiteImprove – it can be downloaded as a Chrome extension
   • Accessibility is always evolving, we are constantly working to make improvements to our products

DEVELOPING YOUR OWN

2. • Universal design
   • Progressive enhancement
   • Routine testing, both automated & manual (WCAG) and human using adaptive tech
   • Valid, semantic HTML encoding
   • Unicode! (Accessibility for all languages!)
   • Know how to use ALT and ARIA attributes
   • Test content without CSS and JS enabled
   • Remember screen readers when adding hidden content and for skipping non-primary content

Accessible Content

1. Your website is only as smart as you allow it
2. • Use descriptive yet simple English for your content
   • Give relevant names to your titles, subjects, and description; not Page 01, Page02, Page 03
   • Title will be the same as link and alt text
When uploading content

- Test intended colors in webaim.org/resources/contrastchecker/
- Text size 'Medium' is the intended sizing for the text
- When you customize be careful writing descriptions and be mindful of headings (make sure your site doesn't have too many headings)

When configuring WCT

QUESTIONS?

1. Penn State University, Digital Preservation Librarian
2. Nathan Tallman, @madcow1029
3. OCLC, Product Analyst
4. Hanning Chen, @oclc
5. OCLC, User Interface Designer
6. Heather Alexander, @halexdee