# **Final Presentation**

# Building Bridges

**Team Pinpoint** 

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- (1) Introduction
- (2) Key Insight #1: Export
- (3) Key Insight #2: Organize
- (4) Key Insight #3: Transfer
- (5) Reflections
- 6 Next Steps



# "Archives should adjust to [users]"

- A

# **ArtCenter Archives: Project Description**

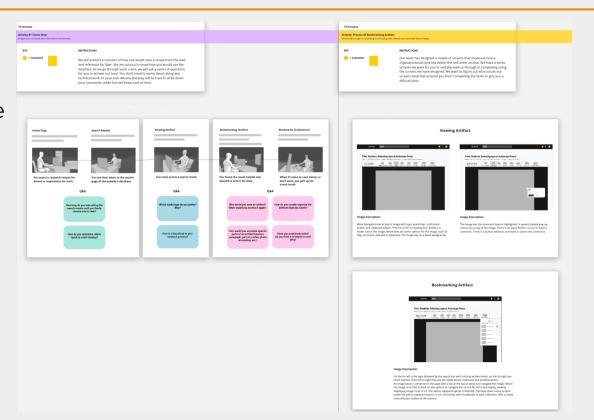
Design a digital archival system that leverages commonly-used assistive technologies for viewing and saving research items

# Participatory Design Sessions: What were we trying to discover?

- To understand how people currently save and organize information from the web
- To explore different features and tools that best assists the user's disability needs in order to view and save research items

# Participatory Design Sessions: What activities did we show?

- Comic Strip
- Mid-Fidelity Prototype





# Participant: "L--"

Disability: Low vision and hard of hearing

Tools used:







Organizational Preferences:

Well labeled folders as well as list format links on a word document. Multiple ways of holding all the information.



# Participant:

Disability: ADHD inattentive type

Tools used:







Organizational Preferences:

Zotero and well labeled folders. It is beneficial when a document is labeled properly, heading, subheading..., so that a text to speech reader can process it.

# **Activity #1: Comic Strip**

Searching Comic Strip

### **Home Page**

Image Description: A black and white 3d illustration of an individual sitting on an office chair in front of a desk with a desktop computer on it. Their face is not visible and in the background is a sofa and an empty shelf.



You want to research for a project, recipe or inspiration.

### **Search Results**

Image Description: There is a front view of their face is slightly sad looking as they continue to stare at the desktop still sitting on the office chair behind the desk.



You are then taken to the results page of the website's database.

2. Viewing Comic Strip

## **Viewing Artifact**

Image Description: Closer to the person now their eyes are closed and their expression is flat while behind their desktop monitor. They are still behind their desk and on their office chair.



You come across a search result.

3. Bookmarking Comic Strip

## **Bookmarking Artifact**

Image Description: We are behind the person sitting at an office chair in front of a desk with a desktop on top of it. Their hands are on the keyboard and mouse. In the far background we can see part of an empty shelf and a sofa. To the right of the sofa is a closed door.



You found the result helpful and wanted to save it for later.

### Bookmarks (Collections)

Image Description: We are in front of the person again who now has a big red smile on their face as they sit at their desk viewing their desktop computer, their hands are off the mouse and keyboard on the desk.



When it's time to cook dinner or start work, you pull up the saved result.

# **Activity #2: Interface Analysis**

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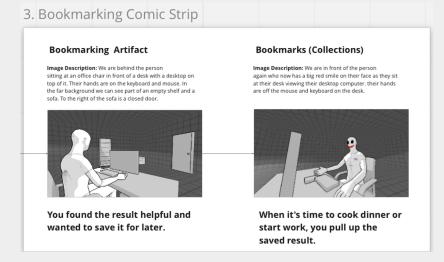


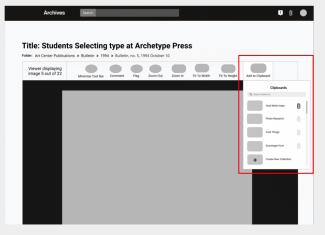


Black Navigation bar at too of image with logo, search bar, notification button and clipboard button. On the left column, the tools listed are search, search history, community. On the main right column, first row, are the recent clippings. Each lighting thas a visual preview that lists the media type and artistic tile. On the second row, are saved collections with a visual preview, collection title, description, and lesswords.

# What were some of your assumptions?

- Need for collaboration within archives
- The use of an internal clipboard/saving system





# What shifted about those assumptions?

- Everyone has their own research process.
- People don't stay in the archive for too long unless they are doing in-depth research
- People already have working and efficient workflows

If I were: doing research in this I would probably create a collection i the archive even if not going back they would title collection and then save to collection How useful would the collection actually be?

Preferred option is to just save

if it doesn't give you a way to save an image I will use the way to save it in the archive

prefer to use an outside program to [export and]organize content no way to save to another program or organization software

# <sup>2</sup> Key Insight 1: Export

Exporting in multiple different forms

"We started off thinking how to make a collaborative archive but realized that it wasn't what was needed."

- Charlene Joy Dela Cruz

# The Flow:

Grab the needed items and manipulate them outside of the archives.

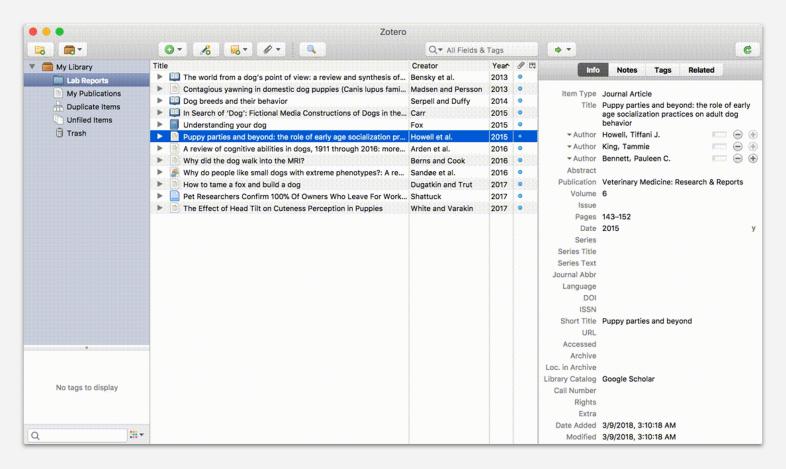
# The Need:

Users have to be able to easily export items from the web and transfer them into their preferred tools.

# **Possible Solution:**

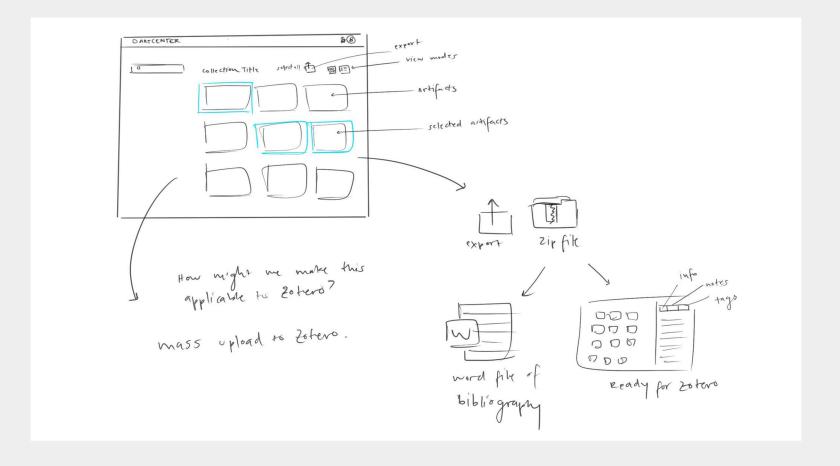
Design an archive that allows individual and mass item exporting and citing.

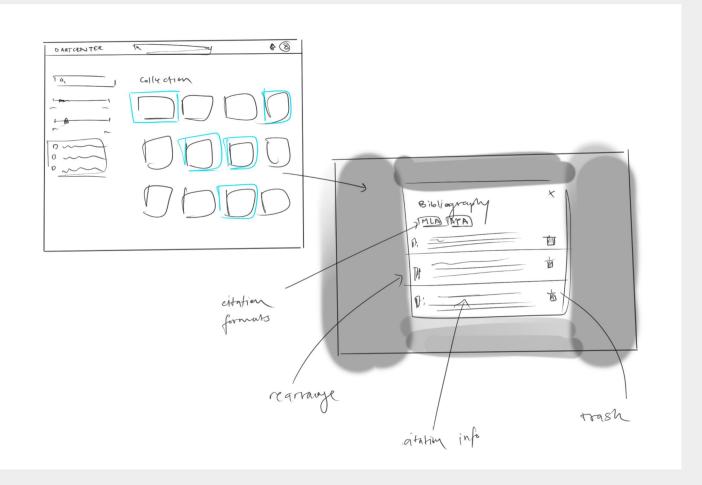
"[I] Prefer personal research/ disposable research within the website [...] For academic research and more important research save to the computer or to Zotero"

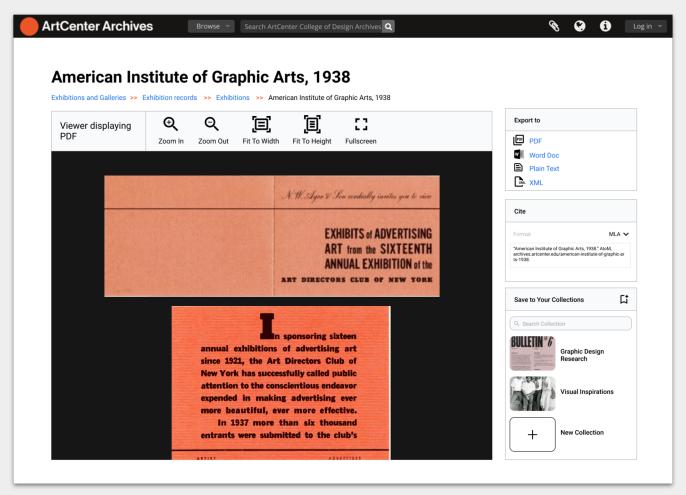


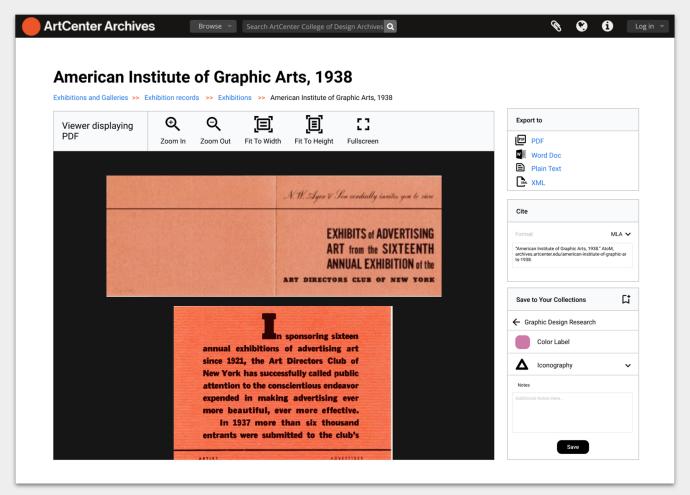


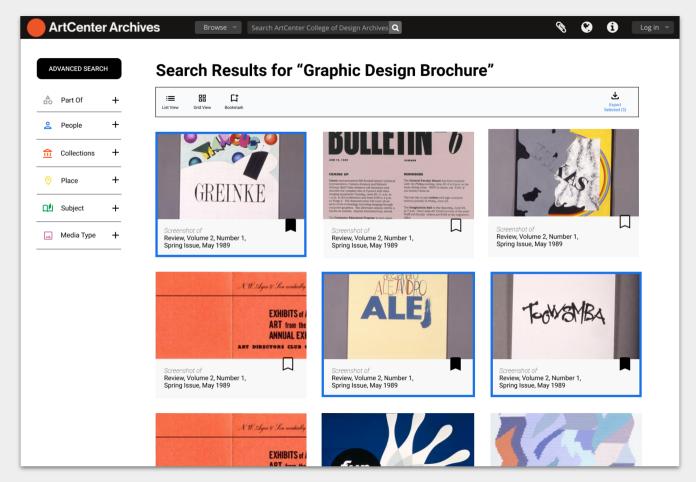
"If [an archive] doesn't give me a way to save an image [to my computer] then I will use [the built in program] to save it in the archive"

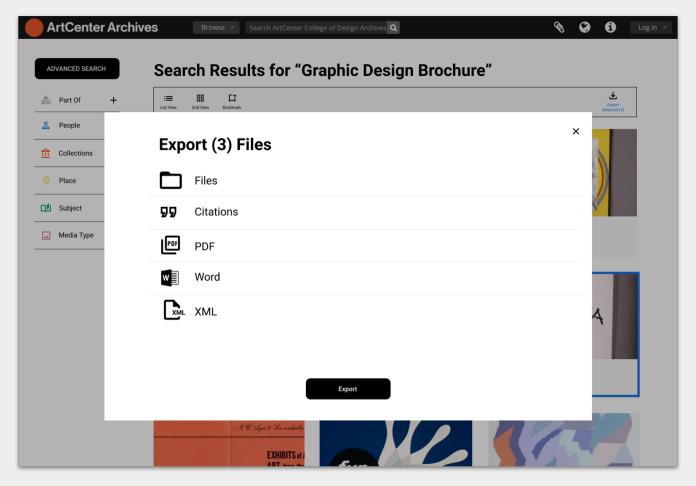














# **Key Insight 2: Organize**

Manipulating the website layout to be compatible with assistive technology

"The most meaningful design intervention is to be respectful to the technologies people already use."

- Joey Serricchio

# The Flow:

Users have their own way of organizing found items for their research.

# The Need:

Participants need tools that could provide specific hierarchy to their found items.

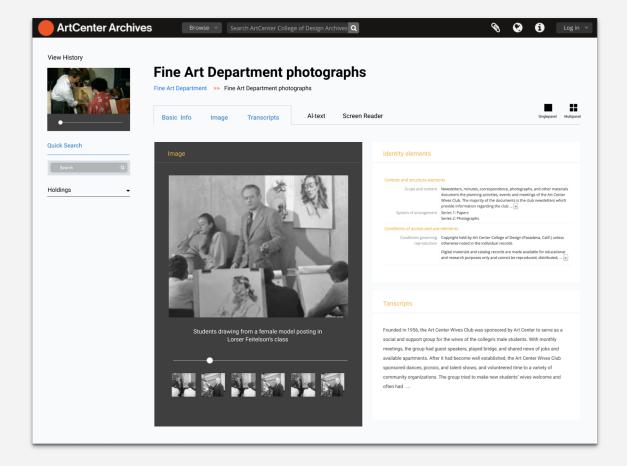
# **Possible Solution:**

Provide a multi-layer organization system that includes color hierarchy, iconography, and nesting folders.

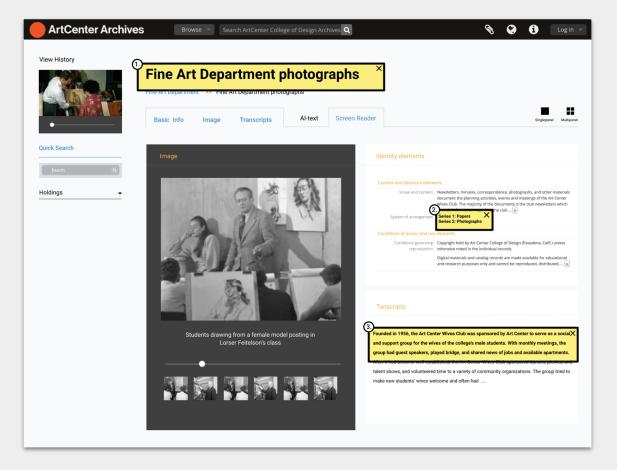
# Importance of Hierarchy

- **A** Transcripts
- **\$ Screen Reader Frames**
- **%** Alt-text
- **\*** Color highlighting
- Nesting Drop Downs
- Icons

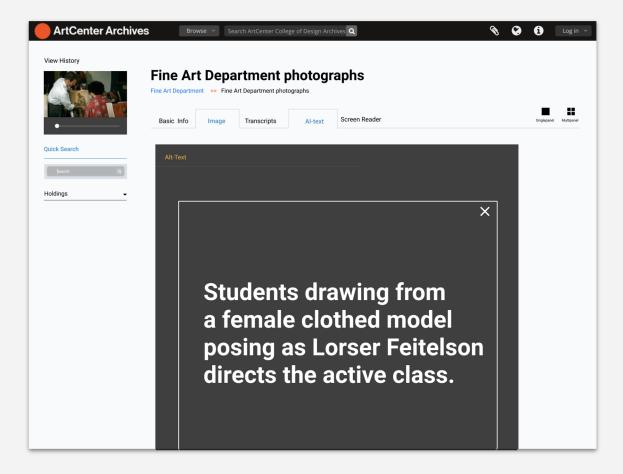
# **Transcripts**



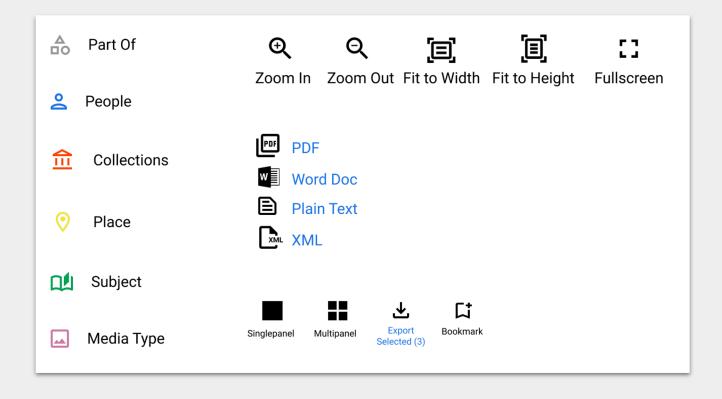
# ⋄ Screen reader frames



# **\*** Alt-Text



# Icons

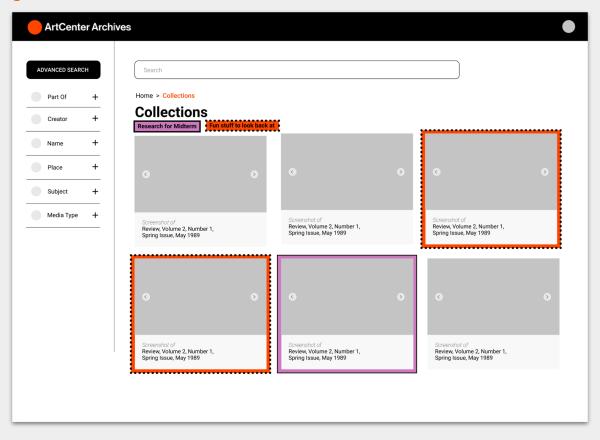


"If physical textbook is less than 200 dollars I highlight heavily"

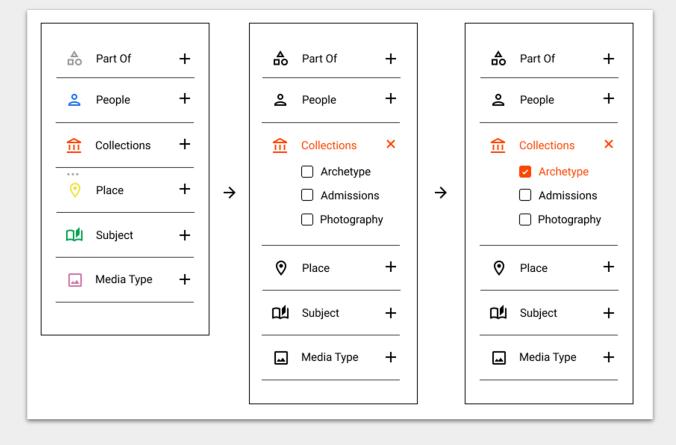
- A

"[I] wouldn't have to read [if I know] all green are food items..."

# **\*** The Highlighting Feature



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# **Key Insight 3: Transfer**

Bridging Archives to Third Party Accessibility Tools

"People with disabilities have their own systems in place. We have to acknowledge that and design around it."

- Elise Co

# **Transfer**

 Rather than providing built-in tools and force users to adjust to a new mental model, we found it more beneficial to construct the archives to be compatible with their preferred tools.

### **Browser Specific Tools**



- Assess
- Accommodate
- Advanced reading



- Al-powered
- Listening assistant
- Choose voice/language



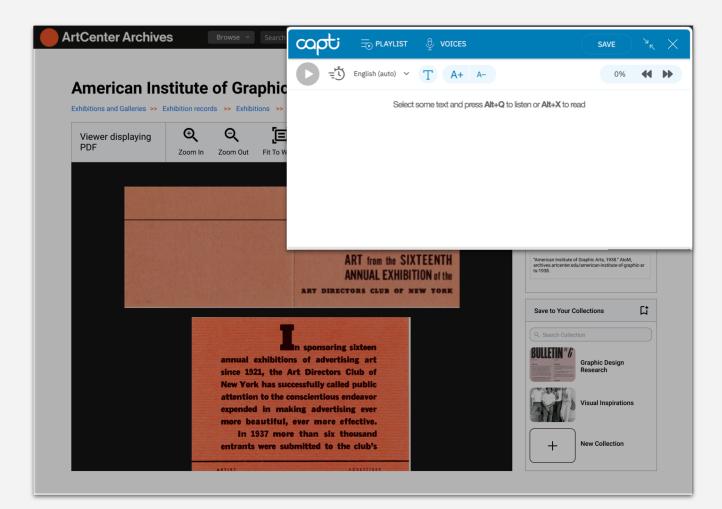
- Collect with a click
- Organize your way
- Cite in style

### **Screen Readers**

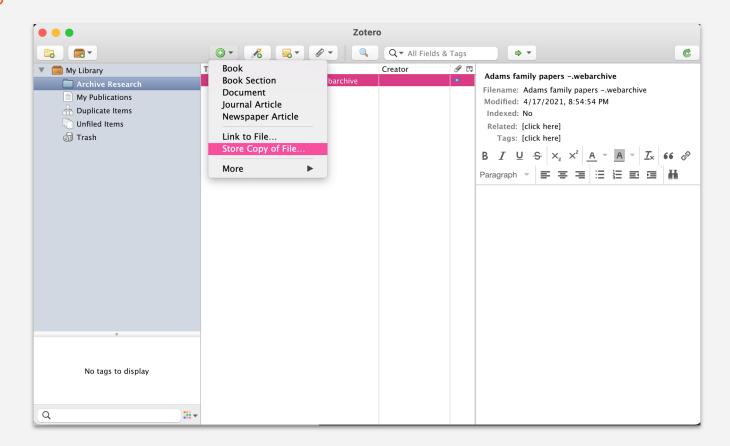
- NVDA (NV Access; available for Windows computers)
- **JAWS** (Freedom Scientific; available for Windows computers)
- VoiceOver (Apple; available for Mac computers and iOS devices)
- TalkBack (Google; available for Android devices)



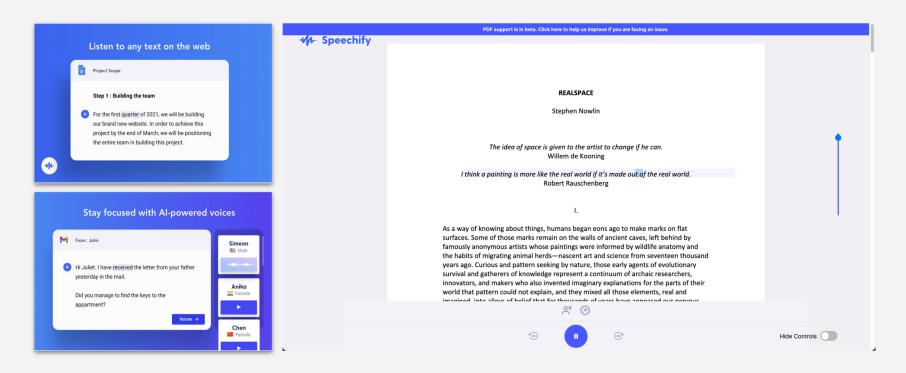




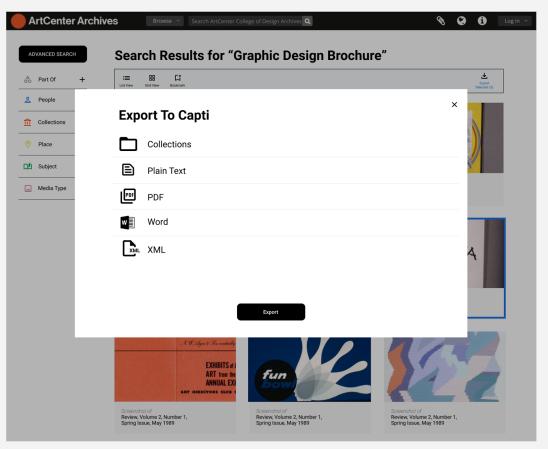
#### **☀** Zotero



#### **\*** Speechify



**\*\*** Exporting Directly to Assistive Technologies



"Everyone learns differently.

Adapt with what the individual needs."

- I.

# **5** Reflections

### How did your understanding of the accessibility space change?

- Overlaps between different disabilities focused on the need for clear organization and hierarchy
- Need for an updated universal design guidelines for all websites to follow to be compatible with assistive technologies

## 6 Next Steps

### **Project Continued (Summer 2021)**

- Streamline a bookmarking user flow from search to view item to collection
- Unify the language in saving and exporting items and collections
- Explore how bookmarked items would live outside the archive

# Thank You