MICHIGAN STATE
U N I V E R S I T YUsability/Accessibility
Research and Consulting

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From: Grey L. Pierce, MSU Usability/Accessibility Research and Consulting
Subject: Kanopy High-Level Accessibility Evaluation for the Library Accessibility Alliance
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MSU Usability/Accessibility Research and Consulting (MSU UARC) conducted a high-level accessibility evaluation of the Kanopy platform to evaluate its conformance with WCAG 2.1 AA Criteria. This evaluation did not include all functionality or content of the site or all WCAG 2.1 AA Success Criteria.

During this evaluation, a number of issues were found that will make the site impossible to use for some individuals with disabilities and will make the site difficult to use for many others.

Critically, no means to pause, stop, or hide the rotator on the Home page is provided and some content does not function when assistive technologies are enabled. Rotators that cannot be stopped create significant issues for individuals with cognitive and visual impairments, as well as for screen reader users. Users that rely on assistive technologies such as screen readers, including individuals with visual and reading impairments, must be able to use all content when those technologies are enabled.

Keyboard users, including screen reader users and users with dexterity impairments, will find it difficult or impossible to access or use some content. Some content cannot be reached or operated via keyboard, making it impossible to use for those that rely on keyboard access. Many interactive elements lack a sufficiently visible focus indicator, making it difficult for many keyboard-only users to effectively use them, as they cannot determine when they have reached the correct element. Some content unexpectedly changes when keyboard focus shifts and focus order is incorrect in some places, increasing the difficulty of using the site with a keyboard.

Individuals who rely on screen readers, including many users with visual, reading, and language impairments, will have problems using the site. Some content is not read out correctly and structural information (including headings and lists) is not appropriately conveyed to users, making it difficult or impossible to understand content and organization in places. Custom elements do not correctly announce themselves to screen readers, making them difficult to understand and use. Some images have inappropriate alternative text, significantly impacting users with visual impairments.

Other issues were found that will make it difficult for users with a variety of disabilities to effectively use the system, including insufficient color contrast, use of color alone to distinguish content, content being removed when the viewport or text size is changed, and missing audio descriptions for videos.

To improve access for users with disabilities, MSU UARC recommends a full WCAG 2.1 AA evaluation and that the problems discovered be remediated.

Note: Results for "representation" were used as an example of a Search Results page amd "The Mask You Live In" was used as an example of a Film page.

For reference, screenshots of the Home page (wide, medium, and narrow viewport widths) at the time this evaluation was completed have been included at the end of this memo.

High-Level Findings

Conformance

- Cannot navigate the Browse dropdown via keyboard when screen reader is in use.
 [WCAG 2.1 CR 4, WCAG 2.1 SC 2.1.1]
- On the Search Results page, focus is not visible on contents of the "Sort by" dropdown when screen reader is in use. [WCAG 2.1 CR 4, WCAG 2.1 SC 2.4.7]
- On the Film page, focus is not visible on contents of the "More" dropdown when screen reader is in use. [WCAG 2.1 CR 4, WCAG 2.1 SC 2.4.7]
- On the Home page, no means is provided to pause, stop, or hide rotating content. [WCAG 2.1 CR 5, WCAG 2.1 SC 2.2.2]

Document Structure

- Headings are not appropriately structured. [WCAG 2.1 SC 1.3.1]
 - On the Home and Search Results pages, h2s are not structured under an h1
 - $\circ~$ On the Search Results page, result titles (e.g., "Miss Representation") should be tagged as headings
 - On the Film page, supplier ("The Representation Project") should not be tagged as a heading
 - \circ $\,$ On the Film page, "Citation" in the Citation Tools section should not be tagged as a heading
 - On the Browse by Subjects page, categories (e.g., "Movies", "Documentaries") should be tagged as headings (h2s)
- Lists are not appropriately structured. [WCAG 2.1 SC 1.3.1]
 - In the page footer, the lists of links after "Available on:" (i.e., "iPhone", "iPad", etc.) should be coded into a programmatic list
 - On the Home page, lists of items in each category (e.g., the list of videos under "Newly Added Documentaries") should be coded into a programmatic list
 - On the Search Results page, the list of filter categories (i.e., "Subjects", "Suppliers", etc.) and the lists under each category (when expanded) should be coded into programmatic lists
 - On the Search Results page, the list of results should be coded into a programmatic list
 - On the Search Results page, the list under "69 videos you can request for your library" should be coded into a programmatic list
 - \circ $\,$ On the Search Results page, the list of subjects in the Subjects tab should be coded into a programmatic list
 - On the Film page, "Running Time", "Year", "Filmmakers", etc. should be coded into a programmatic list
 - \circ $\,$ On the Film page, comments should be coded into a programmatic list
 - On the Film page, the list of Related Videos should be coded into a programmatic list

- On the Browse by Subjects page, lists under each category (e.g., "Independent Cinema", "World Cinema", etc. under "Movies") should be coded into programmatic lists
- All content in the search autocomplete is either not read out by screen readers or is incorrectly read out as the search input text. [WCAG 2.1 SC 1.3.1, WCAG 2.1 SC 4.1.2]

Keyboard Support

- Some interactive content cannot be reached or operated via keyboard. [WCAG 2.1 SC 2.1.1]
 - Cannot reach "View all results" in search autocomplete popup
 - On the Home page, cannot reach any item summary, video length, star rating, or "Watch" and "My List" buttons (visible on mouse hover of thumbnails)
 - On the Film page, cannot reach buttons to scroll "People who watched this also watched" list
 - On the Film page, cannot open playback rate dropdown in the video player
- Cannot navigate the Browse dropdown via keyboard when screen reader is in use. [WCAG 2.1 SC 2.1.1, WCAG 2.1 CR 4]
- "LOG IN" and "SIGN UP" in the page header incorrectly receive focus before content that is visually structured and read out before them. [WCAG 2.1 SC 2.4.3]
- Focus does not go to the left-side menu when it is opened and incorrectly goes to inactive page contents [narrow viewport]. [WCAG 2.1 SC 2.4.3]
- On the Search Results page, filter categories inappropriately receive focus twice (once on the text and once on the arrow graphic). [WCAG 2.1 SC 2.4.3]
- On the Search Results and Film pages, video text and thumbnails inappropriately receive focus separately. [WCAG 2.1 SC 2.4.3]
- On the Film page, focus incorrectly advances to content that is not visible on screen (i.e., content that is revealed by using the "SHOW MORE" button). [WCAG 2.1 SC 2.4.3]
- On the Film page, "Show more" inappropriately receives focus twice (once on the text and once on the arrow graphic) in the "Related videos" section. [WCAG 2.1 SC 2.4.3]
- Focus is not sufficiently visible for a variety of interactive content. [WCAG 2.1 SC 2.4.7]
 - "LOG IN" and "SIGN UP" in the page header
 - Contents of the "BROWSE" dropdown in the page header
 - On the Home page, rotator images and rotator navigation dots
 - On the Home page, thumbnails at the end of each category list are not fully on screen when they receive keyboard focus
 - On the Home and Search Results pages, thumbnails with light backgrounds (e.g., graphic for Miss Representation)
 - \circ $\,$ On the Search Results page, "Sort by" dropdown contents $\,$
 - On the Search Results page, items in Filters sections (e.g., under "Suppliers" when expanded)
 - On the Film page, button to play video (when video player is not loaded)

- On the Film page, "My List", "Share", "Create Clip/Playlist", and "More" buttons
- On the Film page, "More" dropdown contents
- On the Film page, star ratings
- On the Film page, "SHOW MORE"
- On the Film page, closed caption dropdown contents in the video player
- \circ $\,$ On the Film page, arrows to scroll "People who watched this also watched" section
- On the Film page, images at the end of "People who watched this also watched" list are not on screen when they receive keyboard focus
- On the Search Results page, focus is not visible on contents of the "Sort by" dropdown when screen reader is in use. [WCAG 2.1 SC 2.4.7, WCAG 2.1 CR 4]
- On the Film page, focus is not visible on contents of the "More" dropdown when screen reader is in use. [WCAG 2.1 SC 2.4.7, WCAG 2.1 CR 4]
- "BROWSE" unexpectedly opens a menu when it receives focus, without the user taking an action. [WCAG 2.1 SC 3.2.1]
- On the Search Results page, "Sort by" unexpectedly opens a dropdown when it receives focus, without the user taking an action. [WCAG 2.1 SC 3.2.1]
- On the Film page, the "More" button unexpectedly opens a dropdown when it receives focus, without the user taking an action. [WCAG 2.1 SC 3.2.1]
- On the Film page, advancing focus into the summary section (i.e., to reach "SHOW MORE") unexpectedly causes the summary text to disappear and be replaced by other content. [WCAG 2.1 SC 3.2.1]

Images

- Throughout the site, thumbnails have alternative text that is identical to the text that immediately follows them (they should have null alt attributes). [WCAG 2.1 SC 1.1.1]
- "Download on the App Store" is not appropriate alternative text for "iPhone", "iPad", and Apple TV graphics in the page footer. [WCAG 2.1 SC 1.1.1]
- "Download on the Play Store" is not appropriate alternative text for "Android" and "Android TV" graphics in the page footer. [WCAG 2.1 SC 1.1.1]
- "Download on the Amazon App Store" is not appropriate alternative text for "FireTV" and "FireTablet" graphics in the page footer. [WCAG 2.1 SC 1.1.1]
- On the Home page, rotator images and rotator dots do not have appropriate alternative text. [WCAG 2.1 SC 1.1.1].
- On the Film page, the close button in the Transcript and Citation Tool sections does not have appropriate alternative text. [WCAG 2.1 SC 1.1.1]

Color and Visual Characteristics

- Color is the only means to differentiate some focused elements (e.g., image links with light backgrounds on the Home and Search Results pages; "My List", "Share", "Create Clip/Playlist", "More", and "SHOW MORE" buttons on the Film page). [WCAG 2.1 SC 1.4.1]
- Green text on dark grey background (e.g., "SEE MORE" in filter sections on Search Results page; "SEE MORE", video supplier in "Related videos" section [e.g., "Media Education Foundation], comment source and date [e.g., "Multhomah County Library
 - 6 months ago"] on Film page) and white text on orange (e.g., highlighted transcript

text in Transcript section on Film page while video is playing) have insufficient contrast. [WCAG 2.1 SC 1.4.3]

 Light grey symbols on light backgrounds (e.g., arrows to scroll "People who watched this also watched" section on Film page) have insufficient contrast. [WCAG 2.1 SC 1.4.11]

Custom Elements and Dynamic Content

- On the Search Results page, filters and "Sort by" dropdown disappear at some page widths and text sizes. [WCAG 2.1 SC 1.4.4]
- On the Film page, "People who watched this also watched" text is cut off at some page widths and text sizes. [WCAG 2.1 SC 1.4.4]
- On the Film page, buttons to navigate "People who watched this also watched" section disappear at some page widths and text sizes. [WCAG 2.1 SC 1.4.4]
- The role and value (i.e., that it is a menu and whether it is open) are not provided for the "BROWSE" menu. [WCAG 2.1 SC 4.1.2]
- Name, role, and value (i.e., "menu", that it opens a menu, and whether it is open) are not provided for menu (hamburger icon) button [narrow viewport]. [WCAG 2.1 SC 4.1.2]
- On the Search Results page, roles and values (i.e., that they expand and whether they are expanded or collapsed) are not provided for filter categories (e.g., "Suppliers") or "There are matches in the transcript" buttons, and screen reader users are not notified when they change. [WCAG 2.1 SC 4.1.2]
- On the Search Results page, roles (i.e., that they expand) are not provided for "SEE MORE" and "Show more" buttons, and screen reader users are not notified when they change. [WCAG 2.1 SC 4.1.2]
- On the Search Results page, roles and values (i.e., that they are tabs and whether they are selected) are not provided for tabs (i.e., "Videos", "Subjects", "Companies"). [WCAG 2.1 SC 4.1.2]
- On the Search Results page, screen reader users are not notified when filters are added or removed. [WCAG 2.1 SC 4.1.2]
- On the Film page, roles (i.e., that they expand) are not provided for "Read more"/"Read less" buttons or for "Show more" in the "Related videos" section, and screen reader users are not notified when they change. [WCAG 2.1 SC 4.1.2]
- On the Film page, roles and values (i.e., that they are tabs and whether they are selected) are not provided for tabs (e.g., "Spanish", "English" in Transcript section; "APA", "MLA" in Citation Tool section), and screen reader users are not notified when they change. [WCAG 2.1 SC 4.1.2]
- On the Film page, value (e.g., "1x") is not provide for the playback rate button in the video player, and screen reader users are not notified when it changes. [WCAG 2.1 SC 4.1.2]
- On the Film page, screen reader users are not notified when the close button in the Transcript and Citation Tool sections is activated. [WCAG 2.1 SC 4.1.2]
- On the Film page, screen reader users are not notified when transcript links are activated. [WCAG 2.1 SC 4.1.2]
- All content in the search autocomplete is either not read out by screen readers or is incorrectly read out as the search input text, and screen reader users are not notified when it appears. [WCAG 2.1 SC 4.1.2, WCAG 2.1 SC 1.3.1]

Audio and Video Media

• Audio descriptions of visual content in videos are not provided. [WCAG 2.0 SC 1.2.5]

Disclaimer: This high-level evaluation was conducted for the Library Accessibility Alliance, and represents a good faith effort conducted within a limited time frame. It should not be assumed to be complete or free from error. No warranties or guarantees are implied. UARC is not responsible for direct, indirect, or incidental damages based on this work; its use or interpretation by any individual, group, or organization; or on conditions beyond our control.

Home Page Screenshots

Large Viewport



Medium Viewport



Narrow Viewport

