High-Level Accessibility Evaluation (WCAG 2.1)
Africa Commons Platform
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Prepared for:
BTAA-Library Accessibility Alliance

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SUMMARY

This report reflects the findings of a high-level assessment of Africa Commons platform for its conformance with the W3C Web Content Accessibility Guidelines version 2.1 (WCAG 2.1).

There are very few WCAG 2.1 compliance issues with the platform, and the few that are present are programmatic in nature and should be relatively easy to fix. However, creating an accessible platform is a constantly moving goalpost, so it is important to keep in mind that there are continual updates to the WCAG standards that may require more work in the future. Below are the most critical issues to focus on correcting to improve access for all potential users of the system.

Top Findings

1. **Color Contrast:** The paramount issue with the platform is color contrast. There are a couple of repeated contrast violations across pages, as well as across page-specific violations. An easy fix is to ensure that the contrast between text and the background is 4.5:1 for regular text. Also note that placeholder text must also meet contrast.

2. **Compatibility** There are a few very minor issues with compatibility across all pages, and these are very minor issues that can be easily fixed. When authoring for ARIA be sure to reference the WAI-ARIA Best Practices from W3.

3. **Usability:** Minor issues with usability were identified in the evaluation. Simple corrections can make a sizable difference.
   - The repeated periods in the Table of Contents for an individual result should be hidden from the screen reader.
   - There are multiple ways of implementing a dropdown menu based on the content and context, however, drop menus should follow appropriate ARIA implementation.
**ACCESSIBILITY FINDINGS**

This report was conducted against the Africa Commons platform and covers a selection of pages and features that were to be tested as a representative sample of the database’s conformance to the WCAG 2.1 AA standards.

The resource was reviewed using a combination of manual and automatic review tools and assistive technologies, including the WAVE Accessibility Assessment tool, Axe Accessibility Assessment tool, WCAG Color Contrast Checker, and NVDA screen reader. All problems identified by automatic tools were double checked manually. This evaluation was performed using Firefox on Windows 10.

Below are the errors revealed during the accessibility evaluation of Africa Commons platform. Each result shows a summary of accessibility issues and reason it was flagged. Screenshots are included.

1. **Initial Interface**

   **Test Case:** Test initial interface/landing page to ensure menus, sub-menus, search box, images, icons, etc. are accessible. URL: https://africacommons-net.offcampus.lib.washington.edu
SC 1.4.3: Elements must have sufficient color contrast.

Location(s):
- `<button class="z-10 btn bg-brand text-contrast rounded-md mt-2 justify-center outline-offset-4" type="submit" name="subscribe">Subscribe</button>`
- `<a class="VIpgJd-ZVi9od-l4eHX-hSRGPd" href="https://translate.google.com" target="_blank"><img src="https://www.gstatic.com/images/branding/googlelogo/1x/googlelogo_color_42x16dp.png" style="padding-right: 3px" alt="Google Translate" width="37px" height="14px">Translate</a>`

Reason flagged:
- Element has insufficient color contrast of 2.59 (foreground color: #ffffff, background color: #b69c86, font size: 10.5pt (14px), font weight: normal). Expected contrast ratio of 4.5:1
- Element has insufficient color contrast of 1.05 (foreground color: #444444, background color: #44403c, font size: 9.0pt (12px), font weight: bold). Expected contrast ratio of 4.5:1

2. Search Results

Test Case: From the initial landing page, conduct a search for: poetry. Test search results page, including filtering the Collection to Drum Magazine. Test Sort By option to Date (Older First) and change the number of page results from 10 to 50.
SC 1.4.3: Elements must have sufficient color contrast.
Location(s): This issue has multiple instances across this page.

Reason flagged:
- Element has insufficient color contrast of 3.94 (foreground color: #808080, background color: #ffffff, font size: 9.6pt (12.8px), font weight: normal). Expected contrast ratio of 4.5:1
- Element has insufficient color contrast of 2.59 (foreground color: #ffffff, background color: #b69c86, font size: 10.5pt (14px), font weight: normal). Expected contrast ratio of 4.5:1
- Element has insufficient color contrast of 1.05 (foreground color: #444444, background color: #44403c, font size: 9.0pt (12px), font weight: bold). Expected contrast ratio of 4.5:1

3. Individual Results

Test Case: Click on a journal issue and test the Table of Contents. Click on Read to test the full-text access.
SC 1.4.3: Elements must have sufficient color contrast.

Location(s):
- `<small data-toggle="tooltip" title="" data-original-title="Coherent Identifier">20.500.12592/26d62w</small>`
- `<p class="text-black-50 mt-3">1 December 1955</p>`
- `<button class="btn hover-brand mt-2 bg-brand border-brand text-contrast" name="subscribe" type="submit" id="mc-embedded-subscribe" style="width: 100%; font-size: 0.9rem;">Subscribe</button>`
- `<a class="VIpgJd-ZVi9od-l4eHX-hSRGPd" href="https://translate.google.com" target="_blank"><img src="https://www.gstatic.com/images/branding/googlelogo/1x/googlelogo_color_42x16dp.png" style="padding-right: 3px" alt="Reason flagged:
- Element has insufficient color contrast of 3.94 (foreground color: #808080, background color: #ffffff, font size: 9.6pt (12.8px), font weight: normal). Expected contrast ratio of 4.5:1
- Element has insufficient color contrast of 2.59 (foreground color: #ffffff, background color: #b69c86, font size: 10.5pt (14px), font weight: normal). Expected contrast ratio of 4.5:1
- Element has insufficient color contrast of 1.05 (foreground color: #444444, background color: #44403c, font size: 9.0pt (12px), font weight: bold). Expected contrast ratio of 4.5:1

SC 2.1.1: Scrollable region must have keyboard access

Location(s):
- `<div class="rpv-core__inner-pages rpv-core__inner-pages--vertical" data-testid="core__inner-pages" style="height: 100%; overflow: auto; position: relative;">`
Reason flagged:
- Element should have focusable content
- Element should be focusable

SC 4.1.2: Certain ARIA roles must contain particular children.
Location(s):
- `<div aria-expanded="false" aria-haspopup="menu" aria-controls="rpv-core__popver-body-zoom">`

Reason flagged:
- Element has no aria-busy="true" attribute

Note: Currently, the TOC reads off every individual period between the section title and the page number. While not a WCAG violation, this is an issue for users that require the use of a screen reader. A simple fix is to hide this string from the screen reader.

Note: The SC 2.1.1 and SC 4.1.2 violations outlined here apply to the document viewer. This may be outside of the control of the developers if using a third-party document viewer.

4. Advanced Search

Test Case: Test Advanced Search page:

SC 4.1.2: ARIA input fields must have an accessible name.
Location(s):
- `<span class="select2-selection__rendered" id="select2-org-select-container" role="textbox" aria-readonly="true"><span class="select2-selection__placeholder">Start typing organization name...</span></span>`
Reason flagged:
- aria-label attribute does not exist or is empty
- aria-labelledby attribute does not exist, references elements that do not exist or references elements that are empty
- Element has no title attribute

SC 1.4.3: Elements must have sufficient color contrast.
Location(s):
- <span class="select2-selection__placeholder">Start typing organization name...</span>
- <button class="btn hover-brand mt-2 bg-brand border-brand text-contrast" name="subscribe" type="submit" id="mc-embedded-subscribe" style="width: 100%; font-size: 0.9rem;">Subscribe</button>
- <a class="VIpgJd-ZVi9od-l4eHX-hSRGPd" href="https://translate.google.com" target="_blank"><img src="https://www.gstatic.com/images/branding/googlelogo/1x/googlelogo_color_42x16dp.png" style="padding-right: 3px" alt=

Reason flagged:
- Element has insufficient color contrast of 2.84 (foreground color: #999999, background color: #ffffff, font size: 12.0pt (16px), font weight: normal). Expected contrast ratio of 4.5:1
- Element has insufficient color contrast of 2.59 (foreground color: #ffffff, background color: #b69c86, font size: 10.5pt (14px), font weight: normal). Expected contrast ratio of 4.5:1
- Element has insufficient color contrast of 1.05 (foreground color: #444444, background color: #44403c, font size: 9.0pt (12px), font weight: bold). Expected contrast ratio of 4.5:1

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