High-level accessibility review - BTAA (Bloomsbury's Drama Online Platform)

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Contents

Summary	3
Top 3 problems for the Bloomsbury's Drama Online Platform	
Accessibility findings	3
Project wide issues	3
Bloomsbury's Drama Online Landing Page	4
2. Bloomsbury's Drama Online Search Results	6
3. Video Landing Page	7
4. Playwright Page	8
5. Advanced Search Page	Q

Bloomsbury's Drama Online Platform

Summary

Top 3 problems for the Bloomsbury's Drama Online Platform

This assessment covers portions of the Bloomsbury's Drama Online Platform. The assessment revealed serious problems with screen reader compatibility, resulting in screen reader users missing important information needed to understand content and operate features.

- 1. **ARIA** Many issues exist with the implementation of ARIA roles, the associated attributes that go with roles and the widgets that they make up. The WAI-ARIA spec must be reviewed in order to correctly implement roles and attributes in a way that makes sense and is supported.
- 2. Images of Text The homepage makes use of many images of text, where real text should be used.
- 3. Info and Relationships Lists and headings are frequently misused.

Accessibility findings

Project wide issues

The issues presented in this section were identified in multiple pages and are recorded here to avoid repetition. These are applicable to each screen. Due to particularities, similar issues are still reported on a page per page basis, where applicable.

Automated findings using Axe

Issues found through automated testing come from the Axe plugin, an open source accessibility testing tool that is available for Chrome, Firefox and Edge. Details here: https://www.deque.com/products/axe/.

- 1. **SC 1.3.1 A** The menu that contains the 'Access provided by' notice and 'Sign in' link is missing required child element roles, such as group, menuitemradio, menuitem, menuitemcheckbox.
- 2. **SC 1.3.1 A** The top level menu items all have the role 'listitem' but are not nested within a required parent role, such as list or group.
- 3. **SC 4.1.2** A Just before and just after the footer links there are empty links that contain no text or accessible link names.
- 4. **SC 4.1.2 A** The row that contains the 'Access provided by' notice and 'Sign in' link is using ARIA attributes that are unsupported on the roles where they're used: aria-label
- 5. **SC 1.4.3 AA** The "Sign in" link is low in contrast. A 4.05:1 contrast ratio is observed.

Additional manual findings using NVDA screen reader

- 1. **SC 1.4.3 AA** The top level navigation items are low in contrast on hover. A 4.05:1 contrast ratio is observed.
- 2. SC 2.4.7 AA The 'Drama Online' linked logo is missing a clearly visible focus indicator.
- 3. **SC 1.1.1 A** The 'Login Icon' image is decorative and should have an empty alt attribute value.
- 4. **SC 4.1.2 A** The 'Access provided by' notice link is missing an href attribute.
- 5. **SC 2.4.3 A** The 'Login icon' image and 'Access provided by' notice both inappropriately contain a tabindex=0 which causes unnecessary tab stops for keyboard users.
- 6. **SC 4.1.2 A** Top level navigation items that contain a submenu do not programmatically indicate this.
- 7. **SC 1.4.3 AA** The Home, About, Accessibility, Contact Us, Help items are low in contrast on focus and hover. A 4.05:1 contrast ratio is observed.
- 8. **SC 2.4.7 AA** The linked logos in the footer are all missing a clearly visible focus indicator.
- 9. **SC 1.3.1 A** The 'Copyright Bloomsbury Publishing Plc 2021' content and 'Terms and Conditions' and 'Privacy Policy' links are inappropriately marked as section headings.
- 10. **SC 2.4.3 A** The 'Back to top' link visually only appears toward the bottom of the page, yet when it does appear, it is only available at the top of the DOM. As a result, a screen reader user is unlikely to ever encounter the control.

1. Bloomsbury's Drama Online Landing Page

Source: https://www-dramaonlinelibrary-com.offcampus.lib.washington.edu/home

Test case: Initial interface – menus & submenus, search boxes, images, etc.



Automated findings using Axe

- 1. SC 4.1.2 A The listbox that contains the carousel is missing an accessible name/label.
- 2. **SC 1.3.1 A** The listbox that contains the carousel is missing required child element roles, such as group or option.
- 3. SC 1.1.1 A The linked Twitter logo image is missing an alt attribute and appropriate value.
- 4. **SC 4.1.2 A** The Twitter logo image link is missing accessible link text.
- 5. **SC 1.3.1** A The ordered list that contains the carousel control elements is not properly structured. The list contains child elements that are not allowed within it.
- 6. **SC 4.1.2** A The left and right carousel arrow links contain focusable child elements. This type of nesting is unsupported.

Additional manual findings using NVDA screen reader

- 1. SC 1.4.3 AA The 'Search' placeholder is low in contrast. A 1.61:1 contrast ratio is observed.
- 2. **SC 4.1.2 A** The 'submit search' control is not programmatically disabled even though it appears to be visually disabled.
- 3. **SC 1.4.11 AA** The 'submit search' icon is low in contrast in its 'disabled' state. A 2.3:1 contrast ratio is observed.
- 4. **SC 1.4.11 AA** The 'Previous', 'Next', carousel dot and carousel play/pause icons in the carousel do not consistently provide a 3:1 contrast ratio against the carousel slide backgrounds.
- 5. **SC 1.4.11 AA** The focus indicators for the 'Previous', 'Next', carousel dot and carousel play/pause focus indicators in the carousel do not consistently provide a 3:1 contrast ratio against the carousel slide backgrounds.
- 6. **SC 1.4.5 AA** The "Featured Content, Black British Playwrights", "Learning Resources, Access free teaching tools", "Plays", "Playwrights", "Video", "Audio", "Context & Criticism", "Theatre Craft" and

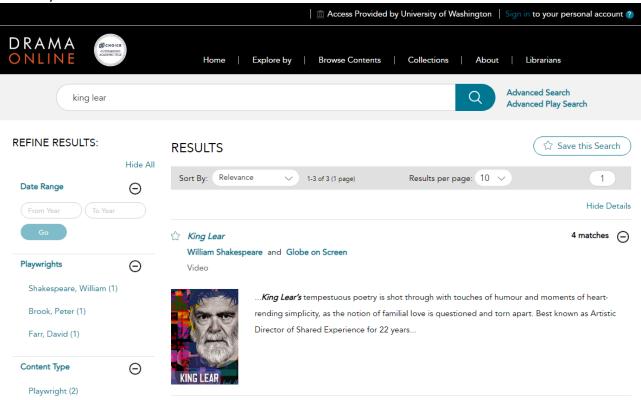
- all text content in the carousel slides is all implemented as an image of text.
- 7. **SC 1.1.1 A** The "Featured Content" and "Learning Resources" images are missing vital text in the existing alt attribute values.
- 8. **SC 2.5.3 A** The "Featured Content, Black British Playwrights", "Learning Resources, Access free teaching tools", "National Theatre Collection 2, 8 new titles coming February 2022" links do not include their visible text in their accessible name.
- 9. **SC 2.4.7 AA** Several focusable elements starting from the carousel controls down to the 'Follow @dramaonlinelib on Twitter' are missing a clearly visible focus indicator.
- 10. **SC 1.3.1 A** The "National Theatre Collection 2, 8 new titles coming February 2022" content is inappropriately marked up as a section heading.

2. Bloomsbury's Drama Online Search Results

Source: https://www-dramaonlinelibrary-com.offcampus.lib.washington.edu/searchresults?any=king%20lear

Test case: Search for "King Lear" on initial landing page/interface. Test search results page (menus, buttons, etc.), including:

- "Sort by" button & Refine Results.



Automated findings using Axe

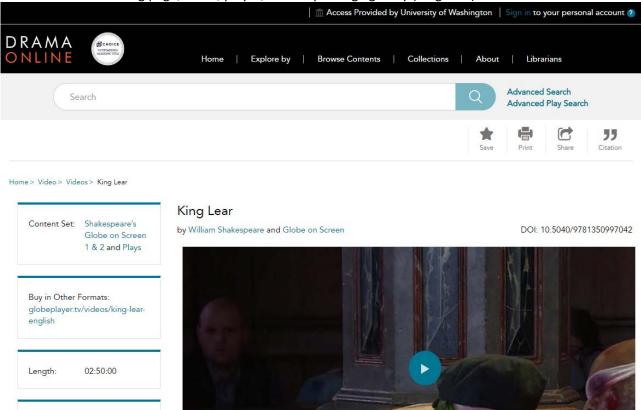
- 1. **SC 1.3.1 A** The ARIA menus found in the 'Refine Results' section are missing required child element roles, such as group, menuitemradio, menuitem, menuitemcheckbox.
- 2. **SC 1.3.1 A** The 'filtered_list' menu found just after the "Results" heading is missing required child element roles, such as group, menuitemradio, menuitem, menuitemcheckbox.
- 3. **SC 4.1.1 A** The page contains IDs that are duplicated: img-icon, search-result-link, fromDate_error, toDate_error, accordionrefine, hdnfromdate, hdntodate, collapsesub5, collapsesub5, title.
- 4. **SC 4.1.2 A** All search results contain an empty link that is missing an accessible name. These empty links appear to be duplicate for links that are already defined within each search result.
- 5. **SC 1.3.1** A The 'Sort by' and 'Results per page' select dropdowns are not programmatically associated with their visible labels.
- 6. **SC 4.1.2 A** ARIA attributes are used on several elements that either are missing a semantic role or have a semantic role that does not support the use of the affected attributes. The incorrectly implemented attributes are: aria-labelledby, aria-label.
- 7. **SC 1.4.3 AA** The 'Go' button is low in contrast. A 2.13:1 contrast ratio is observed. Note, the control appears to be visually (but not programmatically) disabled. If it is programmatically disabled, then the contrast requirement no longer applies, until the control is programmatically enabled again.

Additional manual findings using NVDA screen reader

3. Video Landing Page

Source: https://www-dramaonlinelibrary-com.offcampus.lib.washington.edu/video?docid=do-9781350997042&tocid=do-9781350997042_5966815697001&st=King+Lear

Test case: Video landing page, video, player, transcript image gallery (King Lear)



Automated findings using Axe

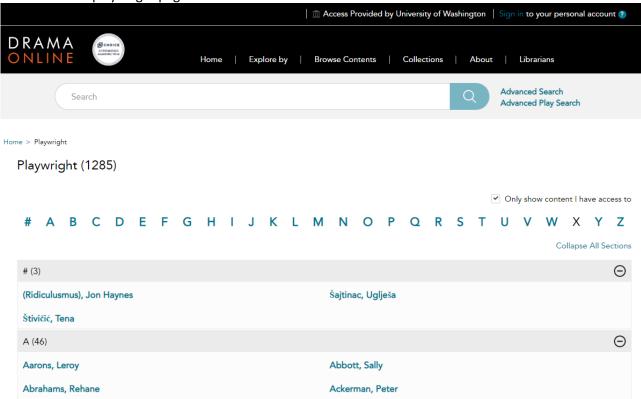
- 1. **SC 1.3.1 A** The ARIA menu that contains the Save, Print, Share and Citation tools is missing required child element roles, such as group, menuitemradio, menuitem, menuitemcheckbox.
- 2. **SC 1.3.1 A** Sections of the left-hand menu have the role 'menuitem' but are not nested within a required parent role, such as menu, menubar or group. This also applies to the 'Captions menu'.
- 3. **SC 4.1.2 A** The video player slider uses aria-valuenow, and the attribute contains an invalid attribute value, NaN.
- 4. **SC 4.1.1 A** The page contains IDs that are duplicated: taxonomy-subjects.
- 5. **SC 1.3.1 A** The 'Content Set' and 'Buy in other formats' sections contain unordered lists UL elements that contain nested elements that are not allowed in a UL.
- 6. **SC 1.3.1 A** The 'Save', 'Print', 'Share', 'Citation', 'Videos' (breadcrumb) and 'King Lear' (breadcrumb) content is nested in a list item LI element that is not nested within an unordered or ordered list, as required.
- 7. **SC 4.1.2 A** ARIA attributes are used on several elements that either are missing a semantic role or have a semantic role that does not support the use of the affected attributes. The incorrectly implemented attributes are: aria-label.

Additional manual findings using NVDA screen reader

4. Playwright Page

Source: https://www-dramaonlinelibrary-com.offcampus.lib.washington.edu/browse-

content?docid=playwright **Test case:** Test playwright page



Automated findings using Axe

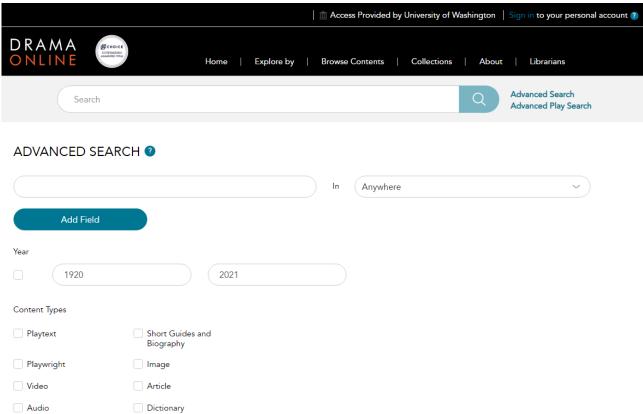
- 1. **SC 4.1.2 A** ARIA attributes are used on elements that either are missing a semantic role or have a semantic role that does not support the use of the affected attributes. The incorrectly implemented attributes are: aria-labelledby.
- 2. **SC 2.4.4 A** The link "Wright, Tom" exists twice on the page and the links each lead to a unique destination. The link name or label does not provide any additional programmatic context to distinguish the unique purpose of each link.

Additional manual findings using NVDA screen reader

5. Advanced Search Page

Source: https://www-dramaonlinelibrary-com.offcampus.lib.washington.edu/advanced-search

Test case: Advanced Search



Automated findings using Axe

1. **SC 4.1.2 A** – ARIA attributes are used on elements that either are missing a semantic role or have a semantic role that does not support the use of the affected attributes. The incorrectly implemented attributes are: aria-labelledby.

Additional manual findings using NVDA screen reader