

# High-Level Accessibility Evaluation (WCAG 2.1)

Films On Demand

February 11, 2023

**Prepared for:** BTAA-Library Accessibility Alliance

Prepared by: Emily Mason, UX Researcher User-Experience Lab CCI Research & Innovation Center (RIC) University of Tennessee uxl@utk.edu

**Primary Point of Contact:** Amy Forrester, RIC Assistant Director aforres4@utk.edu

# TABLE OF CONTENTS

SUMM	ARY	3
Тор	Findings	3
Bes	st Practices	3
Access	SIBILITY FINDINGS	4
1.	Initial Interface	4
2.	Search Results	6
3.	Individual Results	9
4.	Advanced Search	12





# SUMMARY

This report reflects the findings of a high-level assessment of Films On Demand 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**

- Compatibility: There are very few issues with this system overall and the only compliance issue that stands out is around the use of unique id's. This can definitely cause several problems depending on what elements are affected. Be sure that if an object is hidden from ARIA, it does not receive focus. For an in-depth guide to ARIA implementation, please see the WAI-ARIA Authoring Best Practices .Guide from W3.
- Keyboard Accessible and Navigable: Overall, the site does a good job of supporting users that require the use of keyboards to navigate, however the transcript on the individual results page has a few problems. Additionally, the focus ring for the site is not very noticeable and could become a violation in WCAG 2.2. Consider reviewing the WCAG 2.2 Draft for upcoming guidelines on focus rings.
- 3. **Color Contrast**: While there are no serious problems with contrast, there are a few minor contrast issues around a particular grey color that were flagged. These occurred on the search bar across the site and the breadcrumbs on the individual results page.

# **Best Practices**

Simple corrections that can make a sizable difference.

- All page content should be contained by landmarks.
- Document should have one main landmark.
- Ensure landmarks are unique.
- Page should contain a level one heading.
- Heading levels should only increase by one.





# **ACCESSIBILITY FINDINGS**

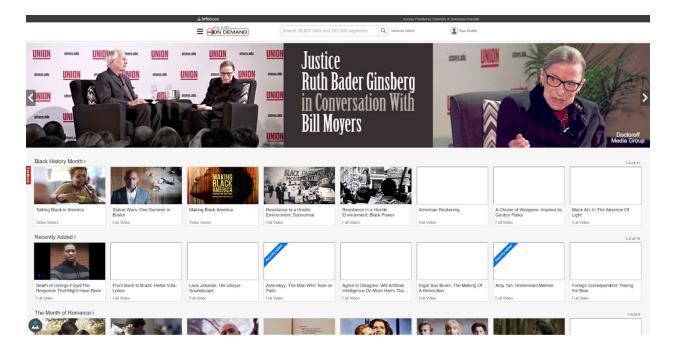
This report was conducted against the Films On Demand platform and covers a selection of pages and features that were to be tested as a representative sample of the database's conformance to the WCAG 2.1 AA standards.

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 Films On Demand. 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. https://fod-infobase-com.utk.idm.oclc.org/nd\_Home.aspx





# Instances: 1

### Location(s):

- <img id="pendo-image-badge-03840ae9" style="display: block; height: 56px; width: 56px; padding: 0px; margin: 0px; line-height: 1; border: medium none; box-shadow: rgba(255, 255, 255, 0) 0px 0px 0px 0px; float: none; vertical-align: baseline;" src="https://pendo-static-5657992016560128.storage.googleapis.com/T3bUU5ffz9CoHe2Tav8rE5HPPng/g uide-media-44f1bd6d-731f-41e4-94d9-153f5379d69a" data-\_pendo-image-1="" class="\_pendo-image \_pendo-badge-image \_pendo-resource-center-badgeimage">

#### **Reason flagged:**

- Element does not have an alt attribute
- 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
- Element's default semantics were not overridden with role="none" or role="presentation"

**SC 1.4.3:** Elements must have sufficient color contrast.

# Instances: 1

#### Location(s):

 <input name="ctl00\$txtSearchBox" maxlength="100" id="ctl00\_txtSearchBox" class="searchBar form-control" type="text" autocomplete="off" placeholder="Search 38,037 titles and 283,096 segments">

#### **Reason flagged:**

- Element has insufficient color contrast of 2.84 (foreground color: #999999, background color: #ffffff, font size: 13.5pt (18px), font weight: normal). Expected contrast ratio of 4.5:1.
- This issue occurs on the search box at the top of the page. The placeholder text and border do not meet a contrast ratio of 4.5:1. This can be easily solved by darkening the gray used here to a compliant gray.

**SC 4.1.1:** ID of active elements must be unique.

#### Instances: 12

**Location(s):** This issue has multiple locations throughout the page.

### **Reason flagged:**

 Document has active elements with the same id attribute: ctl00\_BodyContent\_ucSliders\_rpHeroSlider\_ctl0(#)\_hpImage







- Document has active elements with the same id attribute: ctl00\_BodyContent\_ucSliders\_rpHeroSlider\_ctl0(#)\_hpImage
- This issue seems to only be occurring on the hero slider at the top of the page.

**SC 4.1.1:** ID attribute value must be unique

Instances: 4

Location(s):

- id="havingTrouble" tabindex="0">Having trouble logging in?
- <div id="loginForgot" class="forgot-box text-center hide">
- <a id="btnRetrieveUsername" data-toggle="modal" href="#forgotUsername">Retrieve Username</a>
- <a id="btnResetPassword" data-toggle="modal" href="#forgotPassword">Reset Your Password</a>

#### **Reason flagged:**

- Document has multiple static elements with the same id attribute:
  - havingTrouble
  - loginForgot
  - btnRetrieveUsername
  - btnResetPassword

**SC 4.1.2:** Aria hidden elements must not be focusable or contain focusable elements. **Instances:** 22

**Location(s):** This issue has multiple locations throughout the page.

#### **Reason flagged:**

- Focusable content should have tabindex='-1' or be removed from the DOM.
- This issue is occurring on items that fall outside of the carousel. Because these elements are hidden from the screen reader, it is unable to inform the user what the item is when it is tabbed to.

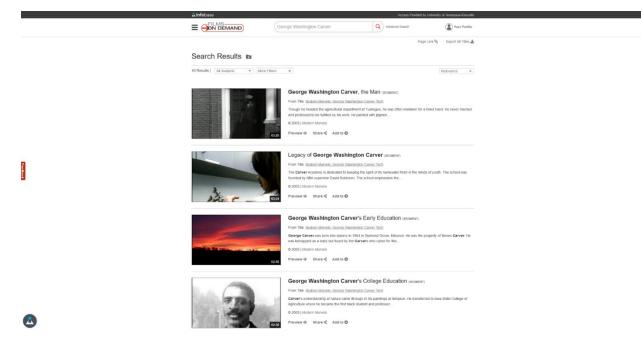
**Note:** The focus ring is currently not very visible. Although it is not a compliance issue right now, it likely will be under WCAG 2.2 and should be reviewed and revised.

# 2. Search Results

**Test Case:** From the initial landing page, conduct a search for: George Washington Carver. Test search results page, filter subject for "American History" and sort by "Most Viewed." https://fod-infobase-com.utk.idm.oclc.org/p\_Search.aspx?bc=0&rd=a&q=George%20Washington%20Carver







#### Instances: 1

Location(s):

<img id="pendo-image-badge-03840ae9" style="display: block; height: 56px; width: 56px; padding: 0px; margin: 0px; line-height: 1; border: medium none; box-shadow: rgba(255, 255, 255, 0) 0px 0px 0px 0px; float: none; vertical-align: baseline;" src="https://pendo-static-5657992016560128.storage.googleapis.com/T3bUU5ffz9CoHe2Tav8rE5HPPng/g uide-media-44f1bd6d-731f-41e4-94d9-153f5379d69a" data-\_pendo-image-1="" class="\_pendo-image\_pendo-badge-image\_pendo-resource-center-badge-</li>

image">

#### **Reason flagged:**

- Element does not have an alt attribute
- 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
- Element's default semantics were not overridden with role="none" or role="presentation"

**SC 1.4.1:** Links must be distinguishable without relying on color.

Instances: 1 Location(s):





 <a id="ctl00\_BodyContent\_ucList\_rpResults\_ctl23\_hpProducer" class="producer" href="/p\_Search.aspx?st=adv&rd=title&prod=PBS&type=browse &sortby=Copyright\_Date&pID=537">PBS</a>

#### **Reason flagged:**

- The link has insufficient color contrast of 2.2:1 with the surrounding text.
  (Minimum contrast is 3:1, link text: #666666, surrounding text: #333333)
- The link has no styling (such as underline) to distinguish it from the surrounding text

**SC 1.4.3:** Elements must have sufficient color contrast.

#### Instances: 1

Location(s):

<input name="ctl00\$txtSearchBox" maxlength="100" id="ctl00\_txtSearchBox" class="searchBar form-control" type="text" autocomplete="off" placeholder="Search 38,037 titles and 283,096 segments">

#### Reason flagged:

 Element has insufficient color contrast of 2.84 (foreground color: #999999, background color: #ffffff, font size: 13.5pt (18px), font weight: normal). Expected contrast ratio of 4.5:1.

SC 4.1.1: ID used in ARIA and labels must be unique.

#### Instances: 12

Location(s):

- <h4 id="modal-title-add" class="modal-title">Select Classes to Import</h4>

#### **Reason flagged:**

- Document has multiple elements referenced with ARIA with the same id attribute: modal-title-add
- This issue seems to only be occurring on the hero slider at the top of the page.

**SC 4.1.1:** ID attribute value must be unique.

### Instances: 4

Location(s):

- id="havingTrouble" tabindex="0">Having trouble logging in?
- <div id="loginForgot" class="forgot-box text-center hide">
- <a id="btnRetrieveUsername" data-toggle="modal" href="#forgotUsername">Retrieve Username</a>





 - <a id="btnResetPassword" data-toggle="modal" href="#forgotPassword">Reset Your Password</a>

#### **Reason flagged:**

- Document has multiple static elements with the same id attribute:
  - havingTrouble
  - loginForgot
  - btnRetrieveUsername
  - btnResetPassword

SC 4.1.2: Elements must only use allowed ARIA attributes.

#### Instances: 1

#### Location(s):

 <a id="ctl00\_BodyContent\_ucDynamicFilters\_moreFilters" class="more-filters" btn btn-default" data-toggle="dropdown" data-target="#other-search-filters" aria-haspopup="true" aria-expanded="false" tabindex="0">

#### **Reason flagged:**

- ARIA attribute is not allowed: aria-expanded="false"

**Note:** The "Sort by" function announces to screen reader as "Search Edit; Read-only; Blank." Unsure if this is intentional or an error and should be reviewed. It may be an ID issue or just an issue with the Browser/Screen Reader combo used.

# 3. Individual Results

**Test Case**: Test individual search result landing page for "George Washington Carver's College Education" & test actual video.

l	Image: Control of the state of the stat	ent at Tuskegee. He was often restaken for work, He parties with pigneerts he made he		ray Young-Ho Caw's Peak Beauty In Franciscomy 9:33 months and the Phase Beauty encode Target and the Phase encode Target and the Phase encode Target and the Phase ray Mathematics 2018 (2018) Phase Pha	
	You may also like			1-6 of 26	
	Police Atlack Alfran-American Protestors in Solma ca. 1905	The Home Maker: Samuel Sambo Mockbee	This Day in History: March 7, 1965 – "Bloody Sunday" in Full Video	Terror in Tuscaloosa-Tomados Ravage Alabama: In the Line Full Video	





# Instances: 1

### Location(s):

- <img id="pendo-image-badge-03840ae9" style="display: block; height: 56px; width: 56px; padding: 0px; margin: 0px; line-height: 1; border: medium none; box-shadow: rgba(255, 255, 255, 0) 0px 0px 0px 0px; float: none; vertical-align: baseline;" src="https://pendo-static-5657992016560128.storage.googleapis.com/T3bUU5ffz9CoHe2Tav8rE5HPPng/g uide-media-44f1bd6d-731f-41e4-94d9-153f5379d69a" data-\_pendo-image-1="" class="\_pendo-image \_pendo-badge-image \_pendo-resource-center-badgeimage">

#### **Reason flagged:**

- Element does not have an alt attribute
- 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
- Element's default semantics were not overridden with role="none" or role="presentation"

**SC 1.3.1:** <dl> elements must only directly contain properly ordered <dt> and <dd> groups, <script>,<template>, or <div> elements.

### Instances: 1

Location(s):

 - <dl id="descParentDiv" class="dl-horizontal descParentDiv" style="min-height: 235px; margin-bottom: 0px;">

#### Reason flagged:

- dl element has direct children that are not allowed: div > div

**SC 1.3.1:** <dt> and <dd> elements must be contained by a <dl>.

Instances: 17

**Location(s):** This issue has multiple locations throughout the page.

#### **Reason flagged:**

- Description list item does not have a <dl> parent element

**SC 1.4.3:** Elements must have sufficient color contrast.

Instances: 2

Location(s):

- <a id="ctl00\_BodyContent\_ucList\_rpResults\_ctl23\_hpProducer" class="producer"





href="/p\_Search.aspx?st=adv&rd=title&prod=PBS&type=browse &sortby=Copyright\_Date&pID=537">PBS</a>

- <span>Modern Marvels: George Washington Carver Tech</span>

#### Reason flagged:

- Element has insufficient color contrast of 2.84 (foreground color: #999999, background color: #ffffff, font size: 10.5pt (14px), font weight: normal). Expected contrast ratio of 4.5:1
- The breadcrumb on this page also has contrast issues.

**SC 2.1.1:** Scrollable region must have keyboard access.

#### Instances: 1

Location(s):

– <div class="p3sdk-interactive-transcript-content" style="height: 300px">

#### Reason flagged:

- Element should have focusable content
- Element should be focusable
- The text block here should be navigable using the virtual cursor and have proper screen reader support.

**SC 4.1.1:** ID used in ARIA and labels must be unique.

#### Instances: 12

Location(s):

- <h4 id="modal-title-add" class="modal-title">Add To</h4>

#### **Reason flagged:**

- Document has multiple elements referenced with ARIA with the same id attribute: modal-title-add
- This issue seems to only be occurring on the hero slider at the top of the page.

**SC 4.1.1:** ID attribute value must be unique. **Instances:** 22 **Location(s):** *This issue has multiple locations throughout the page.* 

#### **Reason flagged:**

– Document has multiple static elements with the same id attribute.

SC 4.1.2: Elements must only use allowed ARIA attributes. Instances: 1 Location(s):





 - <a id="ctl00\_BodyContent\_ucDynamicFilters\_moreFilters" class="more-filters btn btn-default" data-toggle="dropdown" data-target="#other-search-filters" aria-haspopup="true" aria-expanded="false" tabindex="0">

#### Reason flagged:

- ARIA attribute is not allowed: aria-expanded="false"

**SC 4.1.2:** Aria hidden elements must not be focusable or contain focusable elements. **Instances:** 22

**Location(s):** This issue has multiple locations throughout the page.

#### **Reason flagged:**

- Focusable content should have tabindex='-1' or be removed from the DOM.
- This issue is occurring on items that fall outside of the carousel. Because these elements are hidden from the screen reader, it is unable to inform the user what the item is when it is tabbed to.

**Note:** When navigating between the video player and the text frame, there are a couple of tab stops that are not visible on the page and it appears like the text frame is a focusable element itself. This should be reviewed.

**Note:** In the Transcripts portion of the text, when tabbing from the "Download Transcript" button to the transcript itself, the frame does not scroll properly. The screen reader does not appear to read properly when using the virtual cursor. **Note:** When moving from the transcript to the action buttons beneath the video player, the screen reader stops announcing anything at all for the rest of the page, until the footer links.

# 4. Advanced Search

Test Case: Test advanced search page. https://digital.films.com/p\_AdvancedSearch.aspx

	a Infecese		Access Productly Datasety & Serense-Knoolde
		(Search 36,037 titles and 283,056 segments Q	Advanced Linear T
	Advanced Search		
	four fearch liefy		
	440 +		
	AND =		
	+ Add Row . Readt		
	Search Options		
	Select a Type		
8			Cearlides Search
0			
•			





### Instances: 1

Location(s):

<img id="pendo-image-badge-03840ae9" style="display: block; height: 56px; width: 56px; padding: 0px; margin: 0px; line-height: 1; border: medium none; box-shadow: rgba(255, 255, 255, 0) 0px 0px 0px 0px; float: none; vertical-align: baseline;" src="https://pendo-static-5657992016560128.storage.googleapis.com/T3bUU5ffz9CoHe2Tav8rE5HPPng/g uide-media-44f1bd6d-731f-41e4-94d9-153f5379d69a" data-\_pendo-image-1="" class="\_pendo-image \_pendo-badge-image \_pendo-resource-center-badgeimage">

#### Reason flagged:

- Element does not have an alt attribute
- 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
- Element's default semantics were not overridden with role="none" or role="presentation"

**SC 1.3.1:** <dl> elements must only directly contain properly ordered <dt> and <dd> groups, <script>,<template>, or <div> elements.

### Instances: 1

Location(s):

 - <dl id="descParentDiv" class="dl-horizontal descParentDiv" style="min-height: 235px; margin-bottom: 0px;">

#### Reason flagged:

- dl element has direct children that are not allowed: div > div

**SC 1.3.1:** <dt> and <dd> elements must be contained by a <dl>.

Instances: 17

**Location(s):** This issue has multiple locations throughout the page.

#### Reason flagged:

Description list item does not have a <dl> parent element

**SC 1.4.1:** Elements must have sufficient color contrast.

Instances: 2

Location(s):





- <a id="ctl00\_BodyContent\_ucList\_rpResults\_ctl23\_hpProducer" class="producer" href="/p\_Search.aspx?st=adv&rd=title&prod=PBS&type=browse &sortby=Copyright\_Date&pID=537">PBS</a>
- <span>Modern Marvels: George Washington Carver Tech</span>

#### Reason flagged:

- Element has insufficient color contrast of 2.84 (foreground color: #999999, background color: #ffffff, font size: 10.5pt (14px), font weight: normal). Expected contrast ratio of 4.5:1
- The breadcrumb on this page also has contrast issues.

**SC 1.4.3:** Elements must have sufficient color contrast.

#### Instances: 1

Location(s):

- <input name="ctl00\$txtSearchBox" maxlength="100" id="ctl00\_txtSearchBox" class="searchBar form-control" type="text" autocomplete="off" placeholder="Search 38,037 titles and 283,096 segments">

#### Reason flagged:

 Element has insufficient color contrast of 2.84 (foreground color: #999999, background color: #ffffff, font size: 13.5pt (18px), font weight: normal). Expected contrast ratio of 4.5:1.

**SC 2.1.1:** Scrollable region must have keyboard access.

#### Instances: 1

Location(s):

- <div class="p3sdk-interactive-transcript-content" style="height: 300px">

#### Reason flagged:

- Element should have focusable content
- Element should be focusable
- The text block here should be navigable using the virtual cursor and have proper screen reader support.

**SC 4.1.1:** ID used in ARIA and labels must be unique.

Instances: 12

Location(s):

- <h4 id="modal-title-add" class="modal-title">Add To</h4>





#### **Reason flagged:**

- Document has multiple elements referenced with ARIA with the same id attribute: modal-title-add
- This issue seems to only be occurring on the hero slider at the top of the page.

#### **SC 4.1.1:** ID attribute value must be unique

#### Instances: 4

#### Location(s):

- id="havingTrouble" tabindex="0">Having trouble logging in?
- <div id="loginForgot" class="forgot-box text-center hide">
- <a id="btnRetrieveUsername" data-toggle="modal" href="#forgotUsername">Retrieve Username</a>
- <a id="btnResetPassword" data-toggle="modal" href="#forgotPassword">Reset
  Your Password</a>

#### **Reason flagged:**

- Document has multiple static elements with the same id attribute:
  - havingTrouble
  - loginForgot
  - o btnRetrieveUsername
  - btnResetPassword

#### **SC 4.1.2:** Elements must only use allowed ARIA attributes.

#### Instances: 1

### Location(s):

 <a id="ctl00\_BodyContent\_ucDynamicFilters\_moreFilters" class="more-filters btn btn-default" data-toggle="dropdown" data-target="#other-search-filters" aria-haspopup="true" aria-expanded="false" tabindex="0">

#### Reason flagged:

- ARIA attribute is not allowed: aria-expanded="false"
- **SC 4.1.2:** Form elements must have labels.

# Instances: 2

# Location(s):

- <input id="txtKeyword" name="txtKeyword" type="text" class="adv-search-bar sub-keywords">
- <input id="Text1" name="Text1" type="text" class="adv-search-bar subkeywords">





#### **Reason flagged:**

Form element has explicit <label> that is hidden

**Note:** The boolean functions and "Search by Type" select menu both announce to screen reader as "Search Edit; Read-only; Blank." Unsure if this is an error or if it is by design, but this definitely does not seem like the expected behavior.

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. UT 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.



