WCAG

Web Content Accessibility Guidelines

Version 2.0

Web Content Accessibility Guidelines (WCAG) is developed through the W3C process in cooperation with individuals and organizations around the world, with a goal of proving a single shared standard for web content accessibility that meets the needs of individuals, organizations, and governments internationally.

The WCAG documents explain how to make web content more accessible to people with disabilities. Web "content" generally refers to the information in a web page or web application, including:
- natural information such as text, images, and sounds
- code or markup that defines structure, presentation, etc.

Date: 4/24/17
Name of Product: Project MUSE
Compliance Level: AA
Contact for more Information (name/phone/email): Project MUSE Customer Support / (410)-516-6989 / muse@press.jhu.edu

Principle Summary Table

WCAG

Web Content Accessibility Guidelines

Criteria	*Supporting Features*	*Remarks and Explanations*
Principle 1- Perceivable Information and user interface components must be presentable to users in ways they can perceive.	Supports with Exceptions	Exceptions 1.2, 1.3 detailed below.
Principle 2- Operable User interface components and	Supports with Exceptions	Exception 2.4 detailed below.

navigation must be operable.		
Principle 3- Understandable Information and the operation of user interface must be understandable.	Supports	
Principle 4- Robust Content must be robust enough that it can be interpreted reliably by a wide variety of user agents, including assistive technologies.	Supports	

Principle 1- Perceivable

Criteria	*Supporting Features*	*Remarks and Explanations*
Guideline 1.1 – Text Alternatives Provide text alternatives for any non-text content so that it can be changed into other forms people need, such as large print, braille, speech, symbols or simpler language.	Supports	
Guideline 1.2 – Time-based Media Provide alternatives for time-based media.	Supports with Exceptions	Exceptions 1.2.1, 1.2.2, 1.2.3, 1.2.4, 1.2.5 detailed below.
Guideline 1.3 – Adaptable Create content that can be presented in different ways (for example simpler layout) without losing information or structure.	Supports with Exceptions	Exceptions 1.3.2 detailed below.
Guideline 1.4 – Distinguishable Make it easier for users to see and hear content including separating foreground from background.	Supports	

Guideline 1.1 – Text Alternatives

Criteria	*Supporting Features*	*Remarks and Explanations*

1.1.1 Non-text Content -- Level A
 	
All non-text content that is presented to the user has a text alternative that serves the equivalent purpose, except for the situations listed below.
 	
    Controls, Input: If non-text content is a control or accepts user input, then it has a name that describes its purpose. (Refer to Guideline 4.1 for additional requirements for controls and content that accepts user input.)
 	
    Time-Based Media: If non-text content is time-based media, then text alternatives at least provide descriptive identification of the non-text content. (Refer to Guideline 1.2 for additional requirements for media.)
 	
    Test: If non-text content is a test or exercise that would be invalid if presented in text, then text alternatives at least provide descriptive identification of the non-text content.
 	
    Sensory: If non-text content is primarily intended to create a specific sensory experience, then text alternatives at least provide descriptive identification of the non-text content.
 	
    CAPTCHA: If the purpose of non-text content is to confirm that content is being accessed by a person rather than a computer, then text alternatives that identify and describe the purpose of the non-text content are provided, and alternative forms of
	Supports	MUSE provides text alternatives to all produced and hosted content.
		
		Note: Text alternative content not created by MUSE may vary in quality based on what is submitted by the respective publisher.

CAPTCHA using output modes for different types of sensory perception are provided to accommodate different disabilities. Decoration, Formatting, Invisible: If non-text content is pure decoration, is used only for visual formatting, or is not presented to users, then it is implemented in a way that it can be ignored by assistive technology.		

Guideline 1.2 – Time-based Media

Criteria	*Supporting Features*	*Remarks and Explanations*

1.2.1 Audio-only and Video-only (Prerecorded) -- Level A
For prerecorded audio-only and prerecorded video-only media, the following are true, except when the audio or video is a media alternative for text and is clearly labeled as such:
    Prerecorded Audio-only: An alternative for time-based media is provided that presents equivalent information for prerecorded audio-only content.
    Prerecorded Video-only: Either an alternative for time-based media or an audio track is provided that presents equivalent information for prerecorded video-only content.
	Supports with Exceptions	MUSE generated content is available in multiple media formats.
		
		Publisher-submitted content may not have sufficient content alternatives in place.

1.2.2 Captions (Prerecorded) -- Level A Captions are provided for all prerecorded audio content in synchronized media, except when the media is a media alternative for text and is clearly labeled as such.	Supports with Exceptions	MUSE generated content is available in multiple media formats. Publisher-submitted content may not have sufficient content

Criteria	Supporting Features	Remarks and Explanations
		alternatives in place.
1.2.3 Audio Description or Media Alternative (Prerecorded) -- Level A An alternative for time-based media or audio description of the prerecorded video content is provided for synchronized media, except when the media is a media alternative for text and is clearly labeled as such.	Supports with Exceptions	MUSE generated content is available in multiple media formats. Publisher-submitted content may not have sufficient content alternatives in place.
1.2.4 Captions (Live) -- Level AA Captions are provided for all live audio content in synchronized media.	Supports with Exceptions	MUSE generated content is available in multiple media formats. Publisher-submitted content may not have sufficient content alternatives in place.
1.2.5 Audio Description (Prerecorded) -- Level AA Audio description is provided for all prerecorded video content in synchronized media.	Supports with Exceptions	MUSE generated content is available in multiple media formats. Publisher-submitted content may not have sufficient content alternatives in place.

Guideline 1.3 – Adaptable

Criteria	*Supporting Features*	*Remarks and Explanations*
1.3.1 Info and Relationships -- Level A Information, structure, and relationships conveyed through presentation can be programmatically determined or are available in text.	Supports	MUSE is coded to be intelligible to screen readers using semantic markup and relevant id/label attributes. PDF content can vary in accessibility based on the quality of the data provided by publishers, which is not under MUSE's control.
1.3.2 Meaningful Sequence -- Level	Supports with	MUSE is coded to be

A When the sequence in which content is presented affects its meaning, a correct reading sequence can be programmatically determined.	Exceptions	sequentially consistent, though generally it is not necessary to interpret our content. PDF content can vary in accessibility based on the quality of the data provided by publishers, which is not under MUSE's control.
1.3.3 Sensory Characteristics -- Level A Instructions provided for understanding and operating content do not rely solely on sensory characteristics of components such as shape, size, visual location, orientation, or sound.	Supports	Multiple means of interpreting UI elements and control objects are available in each relevant instance.

Guideline 1.4 – Distinguishable

Criteria	*Supporting Features*	*Remarks and Explanations*
1.4.1 Use of Color -- Level A Color is not used as the only visual means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Supports	MUSE uses multiple visual means of distinguishing objects. As an example, hovering over links can change any combination of cursor form, background color, text color, or text decoration.
1.4.2 Audio Control -- Level A If any audio on a Web page plays automatically for more than 3 seconds, either a mechanism is available to pause or stop the audio, or a mechanism is available to control audio volume independently from the overall system volume level.	Supports	MUSE does not use autoplay features on any audio or video content.
1.4.3 Contrast (Minimum) -- Level AA The visual presentation of text and images of text has a contrast ratio of	Supports	MUSE content is represented generally with black text on a white background, or

at least 4.5:1, except for the following:
   Large Text: Large-scale text and images of large-scale text have a contrast ratio of at least 3:1;
   Incidental: Text or images of text that are part of an inactive user interface component, that are pure decoration, that are not visible to anyone, or that are part of a picture that contains significant other visual content, have no contrast requirement.
   Logotypes: Text that is part of a logo or brand name has no minimum contrast requirement.
		occasionally dark blue over an off-white background. This contrast is consistent with a 4.5:1 requirement.

1.4.4 Resize text -- Level AA Except for captions and images of text, text can be resized without assistive technology up to 200 percent without loss of content or functionality.	Supports	MUSE does not lose functionality from resizing text.

1.4.5 Images of Text -- Level AA
If the technologies being used can achieve the visual presentation, text is used to convey information rather than images of text except for the following:
   Customizable: The image of text can be visually customized to the user's requirements;
   Essential: A particular presentation of text is essential to the information being conveyed.
	Supports	MUSE generally does not use images of text. In situations where the text is in a non-UTF compatible format (for instance: a special symbol or logo, or a character from a non-UTF language,) that text can be derived from the PDF.

Principle 2- Operable

Criteria	*Supporting Features*	*Remarks and Explanations*
Guideline 2.1 – Keyboard Accessible Make all functionality available from a keyboard.	Supports	

Guideline 2.2 – Enough Time Provide users enough time to read and use content.	Supports	
Guideline 2.3 – Seizures Do not design content in a way that is known to cause seizures.	Supports	
Guideline 2.4 – Navigable Provide ways to help users navigate, find content, and determine where they are.	Supports with Exceptions	Exception 2.4.4 detailed below.

Guideline 2.1 – Keyboard Accessible

Criteria	*Supporting Features*	*Remarks and Explanations*
2.1.1 Keyboard -- Level A All functionality of the content is operable through a keyboard interface without requiring specific timings for individual keystrokes, except where the underlying function requires input that depends on the path of the user's movement and not just the endpoints.	Supports	MUSE is fully keyboard accessible and does not use any timing-based interactions.
2.1.2 No Keyboard Trap -- Level A If keyboard focus can be moved to a component of the page using a keyboard interface, then focus can be moved away from that component using only a keyboard interface, and, if it requires more than unmodified arrow or tab keys or other standard exit methods, the user is advised of the method for moving focus away.	Supports	Focus can be entered and exited from any location on Project MUSE without becoming locked in a single position.

Guideline 2.2 – Enough Time

Criteria	*Supporting Features*	*Remarks and Explanations*
2.2.1 Timing Adjustable -- Level A For each time limit that is set by the content, at least one of the following is true: Turn off: The user is allowed to turn off the time limit before encountering it; or Adjust: The user is allowed to adjust the time limit before encountering it over a wide range that is at least ten times the length of the default setting; or Extend: The user is warned before time expires and given at least 20 seconds to extend the time limit with a simple action (for example, "press the space bar"), and the user is allowed to extend the time limit at least ten times; or Real-time Exception: The time limit is a required part of a real-time event (for example, an auction), and no alternative to the time limit is possible; or Essential Exception: The time limit is essential and extending it would invalidate the activity; or 20 Hour Exception: The time limit is longer than 20 hours.	Supports	MUSE does not place time limits on its content or interface in this way.
2.2.2 Pause, Stop, Hide -- Level A For moving, blinking, scrolling, or auto-updating information, all of the following are true: Moving, blinking, scrolling: For any moving, blinking or scrolling information that (1) starts automatically, (2) lasts more than five seconds, and (3) is presented in parallel with other content, there is a	Supports	MUSE does not use moving, blinking, scrolling, or auto-updating information.

mechanism for the user to pause, stop, or hide it unless the movement, blinking, or scrolling is part of an activity where it is essential; and Auto-updating: For any auto-updating information that (1) starts automatically and (2) is presented in parallel with other content, there is a mechanism for the user to pause, stop, or hide it or to control the frequency of the update unless the auto-updating is part of an activity where it is essential.		

Guideline 2.3 – Seizures

Criteria	Supporting Features	Remarks and Explanations
2.3.1 Three Flashes or Below Threshold -- Level A Web pages do not contain anything that flashes more than three times in any one second period, or the flash is below the general flash and red flash thresholds.	Supports	MUSE does not use any flashing content.

Guideline 2.4 – Navigable

Criteria	Supporting Features	Remarks and Explanations
2.4.1 Bypass Blocks -- Level A A mechanism is available to bypass blocks of content that are repeated on multiple Web pages.	Supports	A 'Skip to Content' link is available on every page on MUSE that directs users past repetitive navigation.
2.4.2 Page Titled -- Level A Web pages have titles that describe topic or purpose.	Supports	MUSE page titles are descriptive of the content contained within, regardless of the page's context.
2.4.3 Focus Order -- Level A	Supports	Navigation by focus on

If a Web page can be navigated sequentially and the navigation sequences affect meaning or operation, focusable components receive focus in an order that preserves meaning and operability.		MUSE flows in a logical order site-wide.
2.4.4 Link Purpose (In Context) -- Level A The purpose of each link can be determined from the link text alone or from the link text together with its programmatically determined link context, except where the purpose of the link would be ambiguous to users in general.	Supports with Exceptions	MUSE-generated links can have their targets and meaning determined either from the link's text or its attributes/context. Publisher supplied links may not always follow this rule.
2.4.5 Multiple Ways -- Level AA More than one way is available to locate a Web page within a set of Web pages except where the Web Page is the result of, or a step in, a process.	Supports	MUSE employs at least two ways to access specific webpages. Informational pages have their navigations places at the header and footer, and content pages can be reached through multiple iterations of search and browse interfaces.
2.4.6 Headings and Labels -- Level AA Headings and labels describe topic or purpose.	Supports	MUSE uses headings and labels in this fashion.
2.4.7 Focus Visible -- Level AA Any keyboard operable user interface has a mode of operation where the keyboard focus indicator is visible.	Supports	Focus is either represented through manual CSS text decoration or with browser-defined focus settings. This focus is visible against MUSE pages.

Principle 3- Understandable

Criteria	Supporting Features	Remarks and Explanations
Guideline 3.1 – Readable Make text content readable and understandable.	Supports	
Guideline 3.2 – Predictable Make Web pages appear and operate in predictable ways.	Supports	
Guideline 3.3 – Input Assistance Help users avoid and correct mistakes.	Supports	

Guideline 3.1 – Readable

Criteria	Supporting Features	Remarks and Explanations
3.1.1 Language of Page -- Level A The default human language of each Web page can be programmatically determined.	Supports	MUSE pages are coded with English as a default language.
3.1.2 Language of Parts -- Level AA The human language of each passage or phrase in the content can be programmatically determined except for proper names, technical terms, words of indeterminate language, and words or phrases that have become part of the vernacular of the immediately surrounding text.	Supports	When parts of a document on MUSE are not in the default page language, those parts are specified by their appropriate language code.

Guideline 3.2 – Predictable

Criteria	Supporting Features	Remarks and Explanations
3.2.1 On Focus -- Level A	Supports	MUSE does not initiate

Criteria	Supporting Features	Remarks and Explanations
When any component receives focus, it does not initiate a change of context.		context changes on component focus.
3.2.2 On Input -- Level A Changing the setting of any user interface component does not automatically cause a change of context unless the user has been advised of the behavior before using the component.	Supports	MUSE does not initiate context changes on component focus.
3.2.3 Consistent Navigation -- Level AA Navigational mechanisms that are repeated on multiple Web pages within a set of Web pages occur in the same relative order each time they are repeated, unless the user initiates a change.	Supports	MUSE is generated with consistent templates, so navigational items are identical throughout the site.
3.2.4 Consistent Identification -- Level AA Components that have the same functionality within a set of Web pages are identified consistently.	Supports	MUSE is generated with consistent templates, so components in general are identical throughout the site.

Guideline 3.3 – Input Assistance

Criteria	*Supporting Features*	*Remarks and Explanations*
3.3.1 Error Identification -- Level A If an input error is automatically detected, the item that is in error is identified and the error is described to the user in text.	Supports	Input errors are highlighted by color, text, attribute, or combinations of all 3.
3.3.2 Labels or Instructions -- Level A Labels or instructions are provided when content requires user input.	Supports	Input fields are paired with labels or related text explaining the input requirements
3.3.3 Error Suggestion -- Level AA If an input error is automatically	Supports	If a user triggers an input error, MUSE specifies

Criteria		
detected and suggestions for correction are known, then the suggestions are provided to the user, unless it would jeopardize the security or purpose of the content.		what the error is and gives context on how to fix it.

3.3.4 Error Prevention (Legal, Financial, Data) -- Level AA
For Web pages that cause legal commitments or financial transactions for the user to occur, that modify or delete user-controllable data in data storage systems, or that submit user test responses, at least one of the following is true:
    Reversible: Submissions are reversible.
    Checked: Data entered by the user is checked for input errors and the user is provided an opportunity to correct them.
    Confirmed: A mechanism is available for reviewing, confirming, and correcting information before finalizing the submission.
	Supports	MUSE does not use legal or financial transactions on its webpages. Modification or deletion of data is not permanent and may be reversed in a plethora of ways, though generally this is done by re-uploading content (in the case of publishers.) As a last resort, a user may always contact MUSE via Customer Support to resolve an issue.

Principle 4- Robust

Criteria	*Supporting Features*	*Remarks and Explanations*
Guideline 4.1 – Compatible Maximize compatibility with current and future user agents, including assistive technologies.	Supports	

Guideline 4.1 – Compatible

Criteria	*Supporting Features*	*Remarks and Explanations*
4.1.1 Parsing -- Level A In content implemented using markup	Supports	MUSE is coded to XHTML 4.01 standards and all

languages, elements have complete start and end tags, elements are nested according to their specifications, elements do not contain duplicate attributes, and any IDs are unique, except where the specifications allow these features.		submitted XML conforms to the NLM 2.3 Journal Archiving and Interchange Tag Set. Adhering to those standards fulfills the criteria.
4.1.2 Name, Role, Value -- Level A For all user interface components (including but not limited to: form elements, links and components generated by scripts), the name and role can be programmatically determined; states, properties, and values that can be set by the user can be programmatically set; and notification of changes to these items is available to user agents, including assistive technologies.	Supports	MUSE UI components are labeled and named appropriately. Logical components on each page are given role attributes to give assistive technology a better navigational foothold. State changes and values can be programmatically determined.

Supporting Documentation:

- https://www.w3.org/
- https://www.w3.org/WAI/WCAG20/quickref/
- https://www.w3.org/WAI/intro/wcag