

# Summary and Checklist: Images, Canvas, SVG, and Other Non-Text Content

# **Summary**

All non-text content must be represented in a text format in one way or another, whether in the form of an alt attribute for an image, an alternative representation of non-HTML objects, or within the accessibility API methods of non-HTML objects.

# Checklist

# **Image Alt Text**

# **Informative Images**

- Images that convey content MUST have programmatically determinable alternative text.
- The alternative text for informative images MUST be meaningful (accurately conveying the purpose of the image and the author's intent in a way that is useful to those who cannot see the image).
- Alternative text SHOULD NOT include words that identify the element as a graphic or image.
- The length of the alternative text for informative images SHOULD be concise (no more than about 150 characters).

# **Decorative or Redundant Images**

 Images that do not convey content, are decorative, or are redundant to content that is already conveyed in text MUST be given null alternative text (alt=""), ARIA role="presentation", or implemented as CSS backgrounds.

# **Actionable Images**

- All actionable images (e.g., links, buttons, controls)
   MUST have alternative text.
- The alternative text for actionable images MUST be meaningful (accurately conveying the purpose or result of the action).
- Alternative text SHOULD NOT include words that identify the element as a link, graphic, or image.
- The length of the alternative text for actionable images SHOULD be concise (no more than about 150 characters).

#### Form Inputs type="image"

- Form inputs with type="image" MUST have alternative text.
- The alternative text for form inputs with type="image" MUST accurately convey the purpose or result of the input action.
- The length of the alternative text for inputs with type="image" SHOULD be concise (no more than about 150 characters).

# **Animated Images**

- A method MUST be provided to pause, stop, or hide any prerecorded video-only content that begins playing automatically and which lasts more than 5 seconds.
- Animated images MUST NOT flash or flicker more than 3 times per second.

# **Complex Images - Extended Descriptions**

- Complex images MUST be briefly described using alt text AND MUST have a more complete long description.
- The long description (or a link or button to access the long description) SHOULD be visible to sighted users.
- The long description SHOULD be programmatically associated with the image.

#### **Images of Text**

- An image MUST NOT include informative text if an equivalent visual presentation of the text can be rendered using real text.
- Images MUST NOT include informative text, unless the text is essential (such as a logo), or the font, size, color, and background are customizable.

#### **CSS Background Images**

- Purely decorative or redundant CSS images SHOULD NOT have a text alternative in the HTML content.
- The alternative text for informative or actionable CSS images MUST be available as programmatically determinable text in the HTML content.
- The alternative text (in the HTML content) for informative or actionable CSS images MUST adequately and accurately describe the purpose of the image.



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# Image Alt Text (continued)

#### **Image Maps**

- The alternative text for the <img> of a client-side image map MUST be available as programmatically determinable text.
- The alternative text for the <img> element of a client-side image map MUST be meaningful (accurately describing the purpose or author's intent in a way that is useful to people who cannot see the image).
- The length of the alternative text for the <img> element of client-side image maps SHOULD be concise (no more than about 150 characters).
- The alternative text for the <area> of a client-side image map MUST be available as programmatically determinable text.
- The alternative text for the actionable <area>
   element of a client-side image map MUST be
   meaningful (accurately describing the purpose or
   result of the action in a way that is useful to people
   who cannot see the image).
- The length of the alternative text for the <area> element of client-side image maps SHOULD be concise (no more than about 150 characters).
- Server-side image maps SHOULD NOT be used when a client-side image map (or other method) can accomplish the same functionality.

# **SVG**

#### SVG as img src

- All SVG <img> elements SHOULD be set to role="img".
- All informative or actionable SVG <img> elements
   MUST have meaningful, concise alternative text (via alt, aria-label, or aria-labelledby).

#### **Inline SVGs**

- All <svg> elements MUST be set to role="img".
- All informative or actionable <svg> elements MUST have meaningful alternative text (via the <title> element).
- The alternative text (<title>) of an <svg> element
   MUST be programmatically associated with the
   <svg> element via aria-labelledby.
- All text within the image that needs to be spoken by a screen reader MUST be associated with the <svg> element using aria-labelledby.

#### Inline SVGs (continued)

 The total number of characters of alt text associated with the <svg> element SHOULD NOT exceed 150 characters.

#### **Embedded SVGs**

SVG SHOULD NOT be embedded via <object> or <iframe>.

# **Complex Alternative Text**

- Complex <svg> images MUST have meaningful, concise alternative text AND MUST have a more complete long description.
- A <desc> element MUST be used to provide a
   detailed description of a complex <svg> if it is not
   provided in any other way.
- The <desc> attribute of an <svg> element MUST be programmatically associated with the <svg> element (via aria-labelledby).
- The length of all associated alternative text (including <title> and <desc>) for the <svg> element SHOULD be concise (no more than about 150 characters).

#### **Text in SVGs**

- Text within <svg> elements SHOULD be eliminated
   OR SHOULD be kept to a minimum.
- All informative <text> elements inside <svg>
   elements MUST be referenced in the alternative text
   of the <svg> element, or in a long description.

#### **SVG Color Contrast**

- SVG images SHOULD include a base background color behind the important parts of the image, at a minimum.
- SVG images SHOULD be styled to ensure compatibility with Windows High Contrast Mode

#### **Animated SVG Content**

- SVG animations SHOULD use JavaScript, rather than the <animate> element.
- SVG animations MUST not flash or blink at a rate of 3 times per second or more.
- SVG animations MUST NOT auto-play for more than 5 seconds.
- SVG animations MUST allow users to pause the animation.
- SVG animations SHOULD NOT distract the user from the main purpose of the web content.



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#### SVG (continued)

#### Interactive SVGs

- Interactive <svg> objects MUST be fully keyboardaccessible.
- Interactive <svg> objects MUST be fully touchscreen-accessible.
- Interactive <svg> objects MUST communicate the applicable name, role, and value of controls, events, and semantic elements within the <svg> object.

#### **Icon Fonts**

- Informative icon fonts without accompanying visible text SHOULD be assigned role="img".
- Informative icon fonts without accompanying visible text MUST have a text alternative.
- Actionable icon fonts without accompanying visible text MUST have a text alternative.
- The alternative text for informative icon fonts MUST be meaningful.
- Decorative or redundant icon fonts SHOULD be set to aria-hidden="true".

# HTML 5 <canvas>

- When <canvas> elements are used to display graphics, they MUST be assigned role="img".
- All <canvas> elements MUST have a text alternative.
- The alternative text for <canvas> elements MUST be meaningful.
- All <canvas> elements with complex images MUST have a detailed text alternative.
- All <canvas> elements SHOULD have a background
  fill.
- If text is required in a graphic, it MAY be more appropriate to use SVG instead of <canvas>.
- A <canvas> element operable with mouse MUST also be keyboard accessible.

# Multimedia

- All prerecorded video MUST have synchronized captions.
- Prerecorded audio MAY have synchronized captions.
- All live video with dialog and/or narration MUST have synchronized captions.
- Live audio consisting mainly of dialog and/or narration SHOULD have synchronized captions.
- All prerecorded video and audio MUST have text transcripts.
- Videos MUST include audio descriptions of important visual content that is not conveyed through the audio.

# Plug-ins

• All <object> elements MUST have alternative text.

#### **Documents**

- An HTML version of non-HTML content SHOULD be made available to users.
- Non-HTML documents MUST adhere to basic accessibility principles.
- PDF files MUST be in tagged PDF format.
- EPUB files MUST adhere to HTML accessibility principles, and the accessibility principles of any other technologies used within the EPUB document.
- EPUB files SHOULD be in EPUB 3 format.
- EPUB documents SHOULD adhere to the additional accessibility principles in the EPUB Accessibility specification.