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-discernible 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 250 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 250 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 250 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 5 seconds or more.
- Animated images MUST NOT flash or flicker at 3 or more 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 colors and contrast of the image 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-discernible 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 Maps

- The alternative text for the `<img>` of a client-side image map MUST be available as programmatically-discernible 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 250 characters).
- The alternative text for the `<area>` of a client-side image map MUST be available as programmatically-discernible 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 250 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, concise alternative text (via `<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`.
- The total number of characters of alt text associated with the `<svg>` element SHOULD NOT exceed 250 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`).

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

Interactive SVGs

- Interactive `<svg>` objects MUST be fully keyboard-accessible.
- 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.

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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, consider using 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.
- A full-featured HTML alternative SHOULD be provided for Silverlight and Flash objects.
- Accessible Silverlight and Flash objects MUST use the accessibility API.
- Silverlight and Flash objects MUST adhere to basic content accessibility principles.
- Silverlight and Flash objects MUST adhere to multimedia accessibility principles.
- Silverlight and Flash objects MUST adhere to basic interactive accessibility principles.

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.