

Text Alternative How-to Tabs

Get started tab

Summary

From ["Intent" of "Understanding Guideline 1.1: Text Alternatives"](#)

- The purpose of this guideline is to ensure that all non-text content is also available in text.
- "Text" refers to electronic text, not an image of text. Electronic text has the unique advantage that it is presentation neutral.

Why

From ["Intent" of "Understanding Guideline 1.1: Text Alternatives"](#)

- It can be rendered visually, auditorily, tactilely, or by any combination. As a result, information rendered in electronic text can be presented in whatever form best meets the needs of the user.
- It can also be easily enlarged, spoken aloud so that it is easier for people with reading disabilities to understand, or rendered in whatever tactile form best meets the needs of a user.

Who it helps

From ["Benefits" of Understanding Success Criterion 1.1.1: Non-text Content](#)

- This Guideline helps people who have difficulty perceiving visual content. Assistive technology can read text aloud, present it visually, or convert it to braille.
- Text alternatives may help some people who have difficulty understanding the meaning of photographs, drawings, and other images (e.g., line drawings, graphic designs, paintings, three-dimensional representations), graphs, charts, animations, etc.
- People who are deaf, are hard of hearing, or who are having trouble understanding audio information for any reason can read the text presentation. Research is ongoing regarding automatic translation of text into sign language.
- People who are deaf-blind can read the text in braille.
- Additionally, text alternatives support the ability to search for non-text content and to repurpose content in a variety of ways.

From ["Why is this important?" in "Images Concepts" of "WAI Tutorials"](#)

- People using screen readers: The text alternative can be read aloud or rendered as Braille

- People using speech input software: Users can put the focus onto a button or linked image with a single voice command
- People browsing speech-enabled websites: The text alternative can be read aloud
- The followings are not about users with disabilities:
 - Mobile web users: Images can be turned off, especially for data-roaming
 - Search engine optimization: Images become indexable by search engines

How

From [“Intent” in “Understanding WCAG 2.1”](#)

- Make information conveyed by non-text content accessible through the use of a text alternative.
- Text alternatives are a primary way for making information accessible because they can be rendered through any sensory modality (for example, visual, auditory or tactile) to match the needs of the user.
- Providing text alternatives allows the information to be rendered in a variety of ways by a variety of user agents.
 - a person who cannot see a picture can have the text alternative read aloud using synthesized speech.
 - A person who cannot hear an audio file can have the text alternative displayed so that he or she can read it.
 - In the future, text alternatives will also allow information to be more easily translated into sign language or into a simpler form of the same language.

From [“Note on CAPTCHA” in “Understanding WCAG 2.1”](#)

- Requiring two different forms of CAPTCHA on a given site ensures that most people with disabilities will find a form they can use.

From [“Additional information” in “Understanding WCAG 2.1”](#)

- Text alternatives can make the same information available in a form that can be rendered through any modality (for example, visual, auditory or tactile)

Plan tab

Planning responsibilities

- Ensure that text alternatives are equivalents for non-text content.
- Text alternatives must convey the purpose of an image or function to provide an equivalent user experience. For instance, an appropriate text alternative for a search button would be “search” rather than “magnifying lens”.

- For every image, write alternative text that provides the information or function of the image. For purely decorative images, there is no need to write alternative text.

Tips for collaboration

- Designers, Editors and/or Content Managers know what non-text contents convey.
- Developers use semantic attributes/properties to provide text alternatives.
- QA testers know to test for appropriate text alternatives, including semantic code evaluation.
- Search Engine Optimizers (SEO) know how to maximize the increase in search engine visibility provided by text alternatives. However, the ability to leverage this increase cannot cause any text alternative guidelines to be broken.

Planning for each stage

How to get started early

- Early project meetings need to discuss accessibility and the importance of improving the usability of the site for people with disabilities.
- Providing text alternatives will help all users and maximize potentials by making non-text content machine-readable.
- Appropriate alternative text is not an exact science. Some people prefer most images to have more detailed description; and others prefer much less description.

How to remediate

- You don't usually see the alt text on a web page, it is in the web page markup
- Every image should include text alternative in the code.
 - If an image conveys information useful for interacting with or understanding the web page content, then it needs alternative text.
 - If an image is just decorative and people don't need to know about the image, then it should be implemented so that assistive technologies will ignore it.
- Automated tests can tell you if alt is missing.
- To determine if the alternative text is appropriate, you need to see the image and judge it in context.
 - The text needs to convey the same meaning as the image. That is, if someone cannot see the image, they get the important information from the image in the alternative text.
 - Alternative text depends on context. For example, for an image of a dog on a kennel club website, the alt text might include the breed of the dog; however, the same image on a dog park website may be there just to make the page more attractive, and the image might not need any alt text (and should have null alt). One way to help think about appropriate alt text is: if you were helping someone read

and interact with the web page and they cannot see it, what would you say about the image?

- Images that are functional – for example, images that initiate actions (like submit buttons) and linked images (like in navigation) – need alt text that is the functional equivalent.
- If there is text in the image – for example, in a logo – that text needs to be included in the alt text.
- If the image has complex information – such as charts or graphs – the image should have a short alt text to identify the image, and then the detailed description of the information should be provided elsewhere (for example, in a data table).

Design tab

Design responsibilities

- Work with content authors and developers to provide text alternatives for non-text content.
- Share what the non-text content you designed is supposed to convey to users.

Designer tips

- Provide a place in your design for text alternatives for images and media. For example, you might need:
 - Text along with icons and graphical buttons
 - Captions and descriptions for complex graphs

User testing and meaningful involvement

- As early as possible in your project, learn the basics of how people with disabilities use the web by reading online resources and watching videos.
 - [Ilya, senior staff member who is blind | How People with Disabilities Use the Web > Stories of Web Users](#)
 - [Preety, middle school student with Attention Deficit Hyperactivity Disorder and Dyslexia | How People with Disabilities Use the Web > Stories of Web Users](#)
 - [Kaseem, teenager who is deaf and blind | How People with Disabilities Use the Web > Stories of Web Users](#)
 - [Video: Text to Speech | Web Accessibility Perspectives](#)
 - Determine if the user perceives text alternative for non-text content and get equivalent information by using assistive technology.
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Develop tab

Technical responsibilities

- Ensure that alternative text for images is added to all informational and functional images.
- Use empty alternative text, `alt=""` for decorative images, or include them in the CSS instead.
- Text alternatives are usually provided by those responsible for written content.

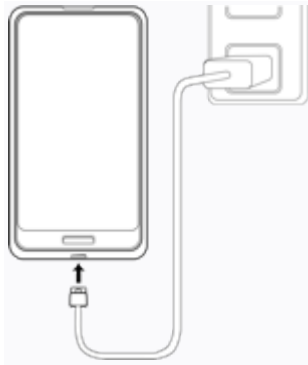
Technical tips

- If the image is not important for understanding the content — for example, it is just decoration or "eye candy" — it should be implemented so that assistive technology ignore it. One way to help determine if an image should have null alt is to ask yourself: If the image was removed, would the user still get all the information from the page?
 - The alternative text does not need to include the words "button", "link", or "image of". (Screen readers automatically provide that information.)
 - If the image is sufficiently described in the text — for example, a simple diagram illustrating what's written in the web page text — it can have brief alt text such as "Diagram of work flow as describe above."
 - In HTML (which is web page code, called markup), alt is an attribute of the image element, and other elements. (So "alt tag" is technically incorrect; the correct terminology is "alt attribute", or you can say "alt text".) It looks like this in markup: ``
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Examples tab

Using alternative text to communicate important information

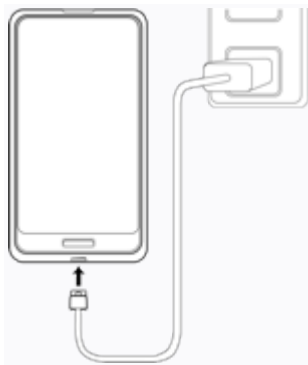
Uninformative



Charging the phone: Connect the phone to a power outlet using the cable and power adaptor provided.

Alternative text for image: "Charging phone"

Informative



Charging the phone: Connect the phone to a power outlet using the cable and power adaptor provided.

Alternative text for image: "Plug cable into the bottom edge of the phone."



Outcomes tab

Text alternative available

- A text alternative for non-text content is available via user agents and assistive technologies, which allows users who are unable to perceive and / or understand the non-text content to determine its meaning.

Methods for **Text alternative available**

1. [Text Alternative for Image of Text \(HTML\)](#)
 2. [Text Alternative for Functional Image \(HTML\)](#)
 3. [Text Alternative fo Decorative images \(HTML\)](#)
 4. [Text Alternative for Images of text \(HTML\)](#)
 5. [Text Alternative for Informative images \(HTML\)](#)
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Resources tab

Resources are for information purposes only, no endorsement implied.

- [Video: Text to Speech | Web Accessibility Perspectives](#)
- [Images Concepts | Web Accessibility Tutorials - Guidance on how to create websites that meet WCAG](#)
 - [An alt Decision Tree](#)
- [Image text alternatives \("alt text"\) | Easy Checks](#)