MAKING THE WEB ACCESSIBLE FOR EVERYONE

A book on inclusive design and usability for all users

BIP accessibility audit handbook - Group 1

1

TEXT CONTENT

P - 3

2

AUDIO & VIDEO CONTENT

P - 25

3

ICONOGRAPHY AND PICTURES

P - 46

4

NAVIGATION

P - 78

5

ERROR MANAGEMENT

P - 108

-01- TEXT CONTENT

QUICK TABLE OF CONTENTS

CHAPTER 1: CAPTIONS AND ICONS

Indicates the usefull links to get to know more about the subject

Indicates a fast to read list

Indicates a more detailed text

Indicates an important information

Indicates a definition

Indicates the good ways of doing it

Indicates the bad ways of doing it

Indicates the tips and tricks we provide

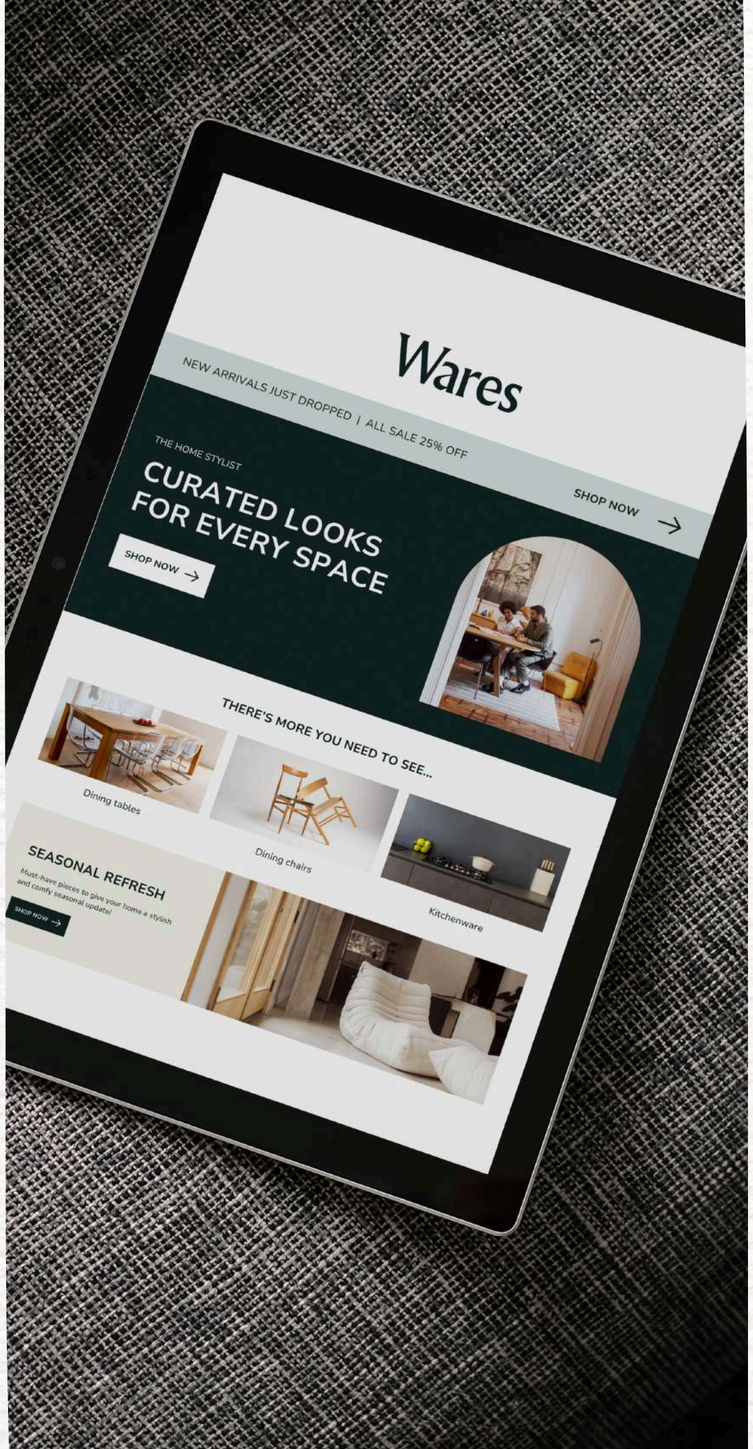
1.1 TEXT SIZE

DEFINITION

The **body text**, which forms the majority of content on a webpage, should be **large enough to be comfortably read** without straining the eyes.

WHY IT IS IMPORTANT

One of the fundamental principles of accessible and **user-friendly web design** is ensuring that **text is easily readable by all users**, regardless of their **device** or **visual ability**.



1.1 TEXT SIZE

1 min

BEST PRACTICE

- Correct size ensures readability for all users, **improving accessibility**
- Text under **16 px** can be hard to read

Minimum of 16 pixels for an easy to read text content.

1.1 TEXT SIZE

MORE EXPLANATION

Text smaller than 16 px can **become difficult to read**, particularly for people with certain **disabilities, such as:**

- **Low vision:** users with reduced visual acuity may **struggle to read** small or tightly spaced text
- But also **cognitive disabilities:** people with dyslexia or other cognitive conditions may **benefit from larger, clearer text** that reduces visual clutter and **improves comprehension**

Minimum of 16 pixels for an easy to read text content.

1.1 TEXT SIZE

DO'S

- A commonly **recommended size for body text is 16 pixels**. This size strikes a balance between fitting enough content on the screen and maintaining legibility
- The **text bloc** on the page should be **between 600 and 800 pixels** for the **desktop** screen and **about 320 pixels** for the **mobile** screen

DONT'S

- **Don't use too many font size** on one page (*one per title level max*)
- Don't forget to **test on other devices** (*desktop but also mobile*)
- Don't excessively **tight line spacing** (*at least 22px for a 16px text size*)

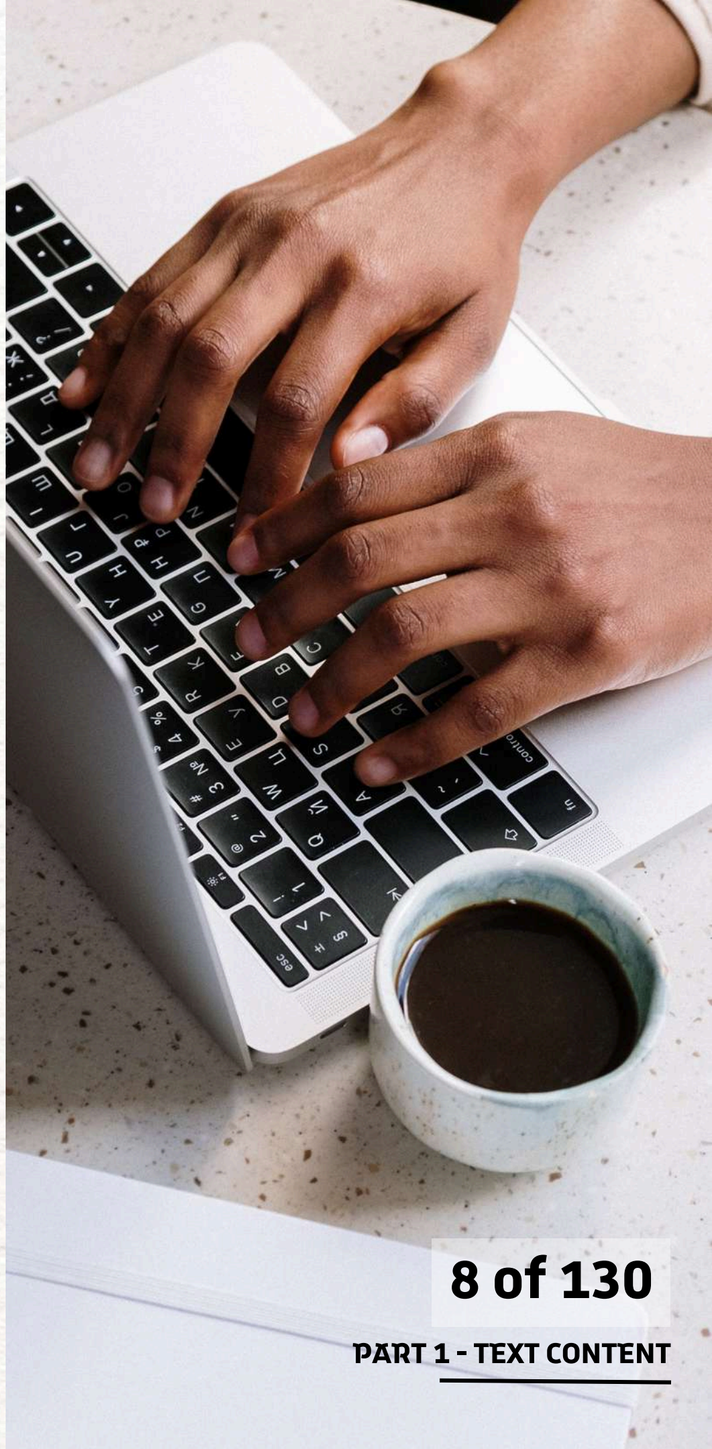
1.2 WRITING STYLE

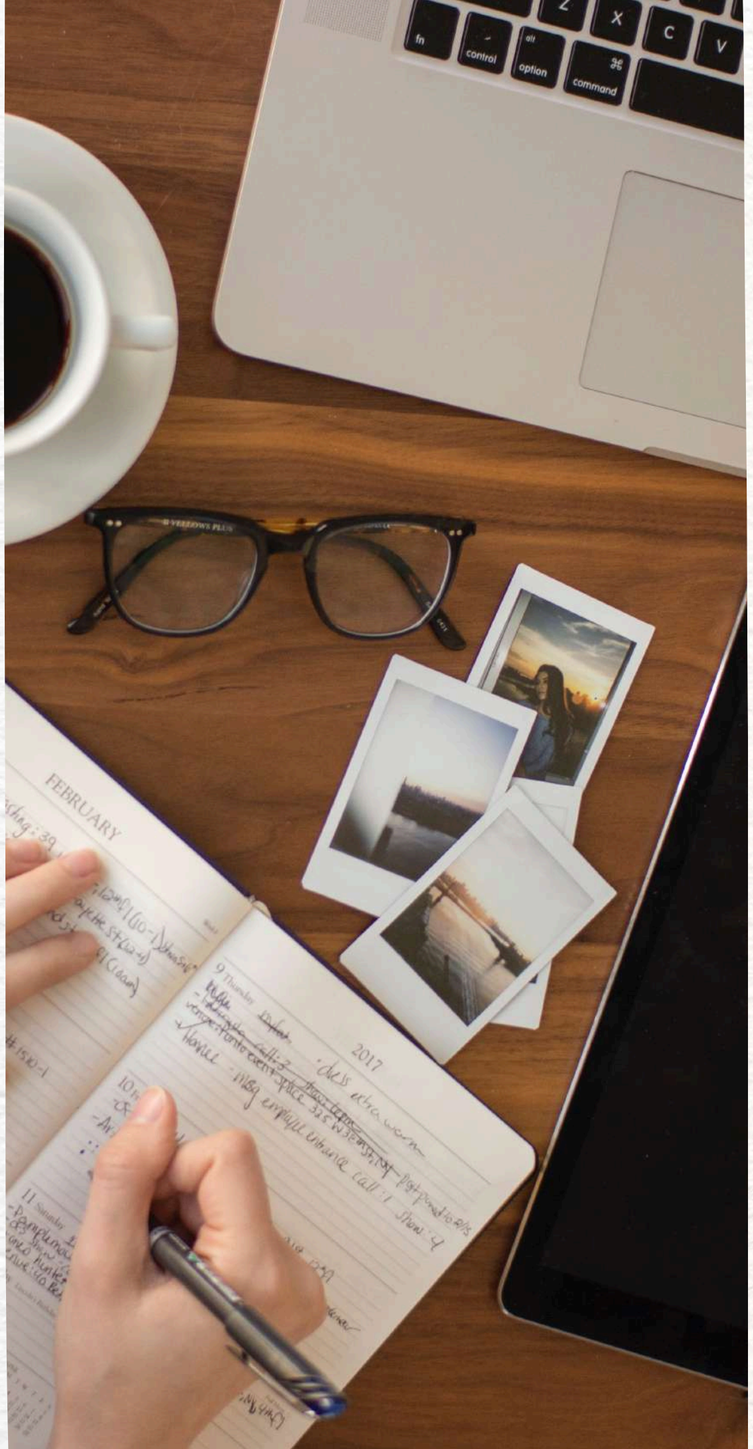
DEFINITION

The **content and tone** of your text **must align with the purpose of the website** and the **expectations** of its users.

WHY IT IS IMPORTANT

The **structure is essential to help people** with low vision but also with cognitive issues like a lack of focus due to ADHD or any other disability.





1.2 WRITING STYLE

1 min

BEST PRACTICE

- **Clear content** makes it more accessible for people with disabilities
- Keep **simple and structured** language
- **Highlight important information** with bold or underlined text

Clear content, with a simple and structured language in addition to highlighted informations.

1.2 WRITING STYLE

MORE EXPLANATION

The language you choose should be adapted to:

- The **context**
- The **audience**
- And **subject matter** of the site

It **ensures clarity, relevance, and engagement**.

Try to use a **good text structure** to **make your content as clear as possible** for your readers.

1.2 WRITING STYLE

DO'S

- **Break content into multiple paragraphs**: Avoid large blocks of text. Short paragraphs help users process information more easily and reduce cognitive load.
- **Use bullet points or numbered lists**: Lists make content more scannable and are especially useful for summarizing key ideas, instructions, or features.
- **Include headings and subheadings**: Clear, descriptive headings guide the reader and make it easier for screen readers to navigate the page structure.

1.2 WRITING STYLE

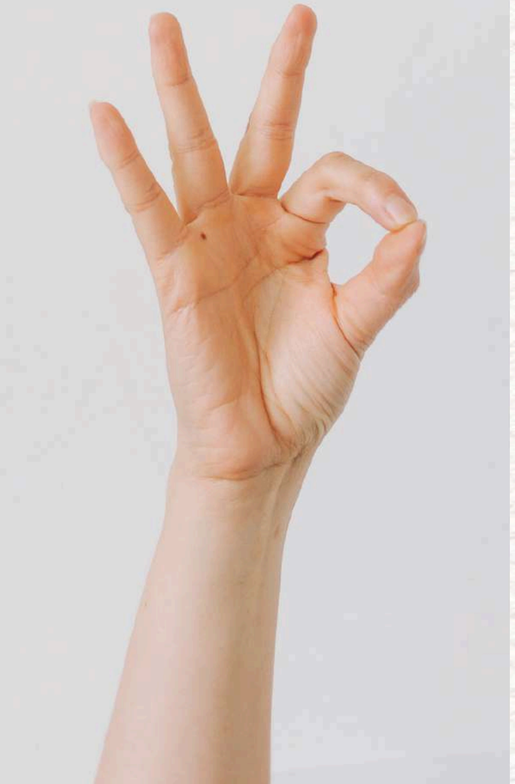
DO'S

- **Add visual aids when relevant**: Diagrams, schemas, icons, or illustrations **can help explain complex concepts** or processes, especially for visual learners.
- **Highlight key information**: Use bold or italic text (*sparingly*) to emphasize important terms or actions, but **avoid using color alone to convey meaning**.
- **Use consistent voice and tone** : pronouns should be the same throughout all the content for example

1.2 WRITING STYLE

DONT'S

- Don't write too **long and dense paragraphs**
- Don't use **passive voice** too much
- Don't use too much **abbreviations** and don't forget to **indicate the meaning of the abbreviations** if you use some



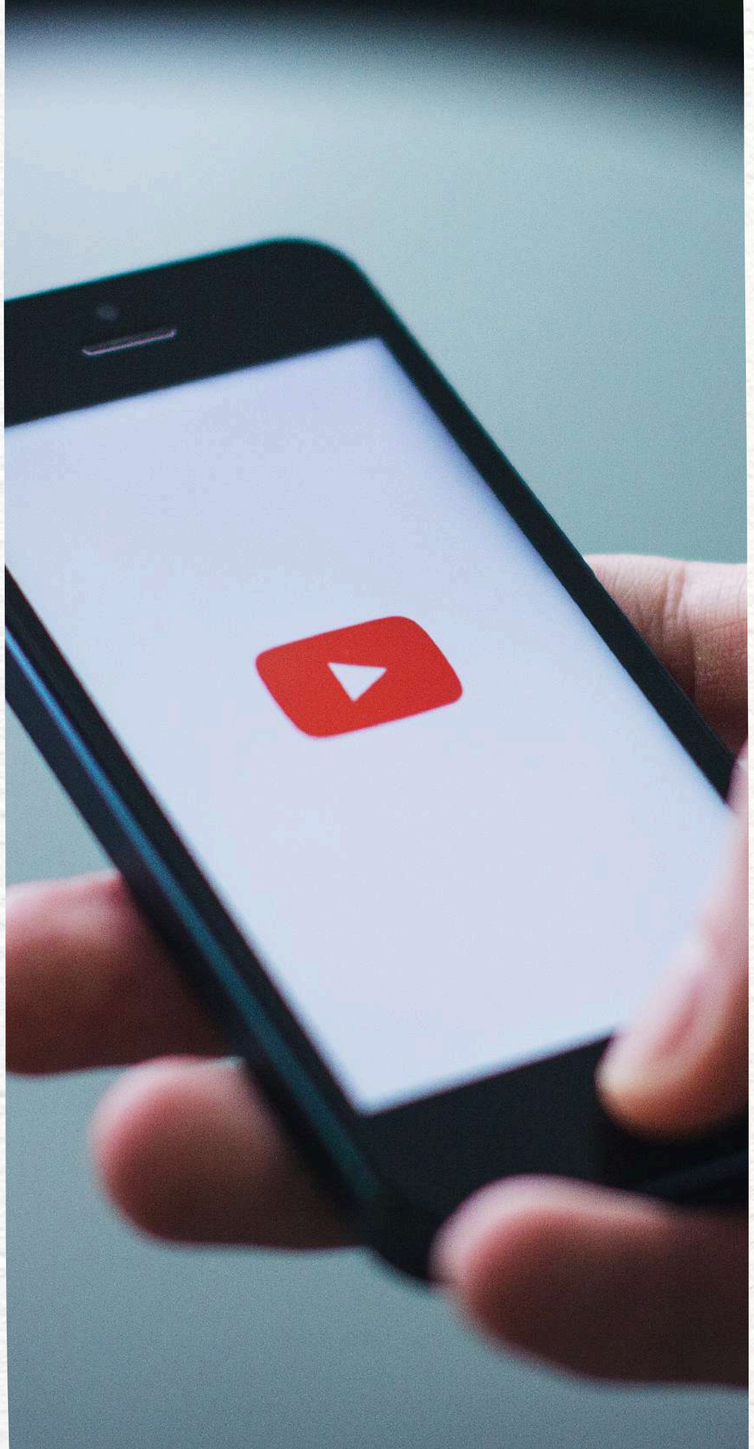
1.3 CAPTIONS & TRANSCRIPTS

DEFINITION

Captions are **text versions of the spoken words** and **important sounds in a video**. They are typically **synchronized with the audio** and **appear on screen as the content plays**.

WHY IT IS IMPORTANT

When creating accessible multimedia content, captions and transcripts are essential for ensuring that users who are deaf, hard of hearing, or in sound-sensitive environments **can still access the information.**



1.3 CAPTIONS & TRANSCRIPTS

1 min

BEST PRACTICE

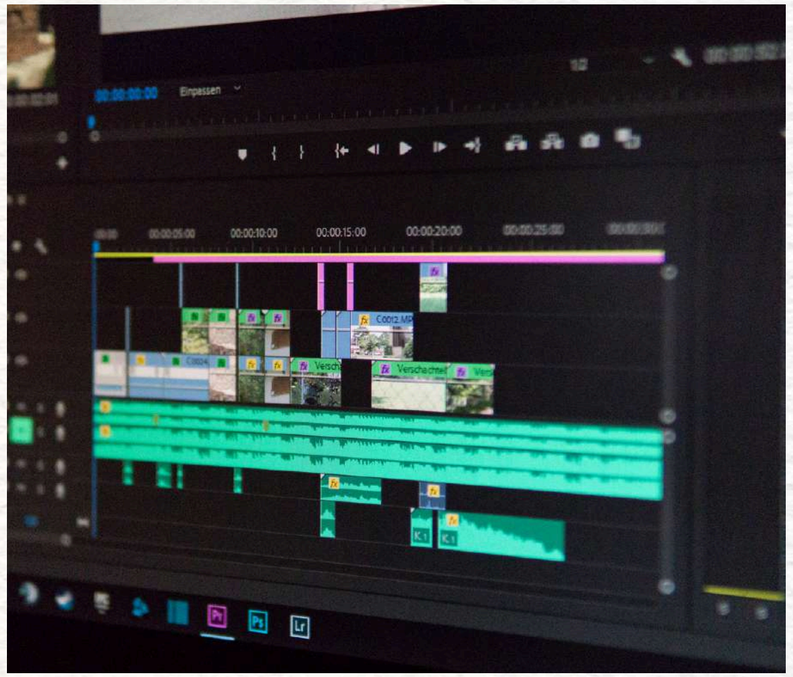
- Transcripts are **text versions** of audio or video content
- They are essential for people with **hearing or cognitive disabilities**
- They should be **written in a clear, short and simple style** to convey the important information

1.3 CAPTIONS & TRANSCRIPTS

MORE EXPLANATION

Transcripts are **written versions of audio or video content** presented as a **separate block of text**, not embedded into the video itself.

But accessibility isn't just about having captions, it's also about **how they're written**.



1.3 CAPTIONS & TRANSCRIPTS

DO'S

- **Short and simple**: Keep sentences **brief** and use **plain language** whenever possible. This makes the content easier to follow, especially for users with cognitive disabilities or for whom the language isn't native.
- **Accurate and precise**: Your goal is to **faithfully represent the audio**. This means including spoken words **as well as important non-verbal sounds** (*like [laughter], [applause], or [door slams]*) that **contribute to the context**.

1.3 CAPTIONS & TRANSCRIPTS

DO'S

- **Synchronized** *(for captions)*: On-screen text should appear **in time with the audio** so users can follow along naturally.
- **Well-structured** *(for transcripts)*: Break content into paragraphs or speaker labels when appropriate, especially for interviews or multi-speaker videos.

1.3 CAPTIONS & TRANSCRIPTS

DONT'S

- Don't display **too much content on the video at once** to keep the captions readable
- Don't rely on automatic translation **without reviewing**

1.4 COLOR CONTRAST

DEFINITION

Color contrast is the **difference in lightness between the text and its background**. The higher the contrast, the more readable the text is.

WHY IT IS IMPORTANT

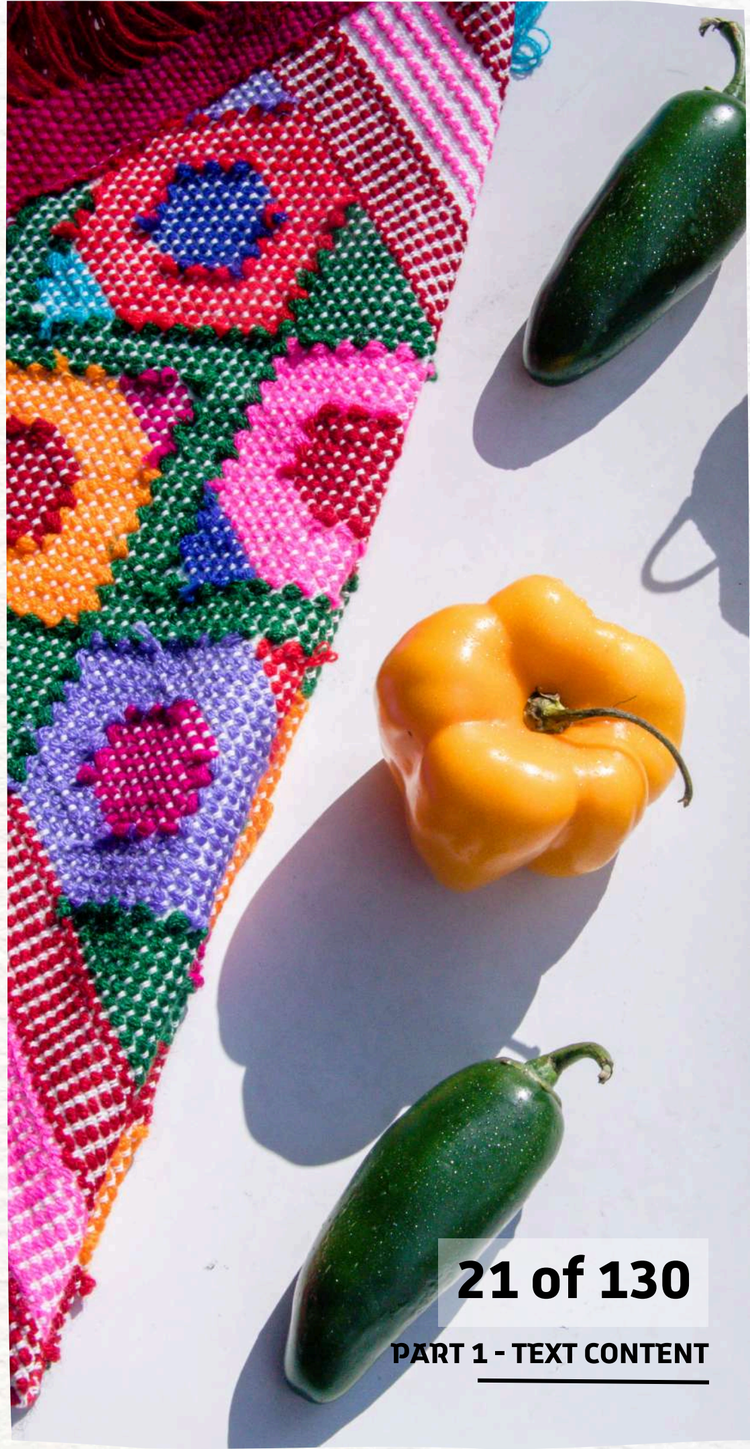
Good contrast makes the text **easier to read**, especially **for people with visual impairments** like color blindness or low vision.

1.4 COLOR CONTRAST

1 min

BEST PRACTICE

- Color contrast is the difference in color lightness between text and background
- It ensure the readability for color blindness
- Check the color contrast with the website : https://webaim.org/resources/contrastchecker/



1.4 COLOR CONTRAST

MORE EXPLANATION

Proper color contrast **enhances the readability of text**, ensuring that it's **accessible to people with various visual conditions** like color blindness, low vision, and age-related decline.

Text that lacks contrast **can be difficult to read for many users**, leading to frustration, misunderstanding, or even **abandonment of the content**.

1.4 COLOR CONTRAST

DO'S

- Use **dark text on light background** or **vice versa**
- Aim for a **contrast ratio of at least 4.5:1** for normal text
- Use **high contrast colors** (*e.g., black text on white background*)
- **Test** your color contrast **using online contrast checkers**
- Use **bold or larger text** if contrast is **lower**, with at least **3:1 ratio**
- Provide contextual clues like **icons** or **shapes** in addition to colors

1.4 COLOR CONTRAST

DONT'S

- Don't use **colors that are too similar** in luminance (*e.g., light gray text on light gray background*)
- Don't rely solely on **color to convey meaning**
- Don't use **low contrast color combinations** (*e.g., yellow text on white background*)
- Don't ignore accessibility standards (*e.g., WCAG*)
- Don't use **red-green combinations** for important content
- Don't ignore **colorblind accessibility**: use tools to simulate color blindness

-02- AUDIO & VIDEO CONTENT

QUICK TABLE OF CONTENTS

CHAPTER 2: AUDIO & VIDEO CONTENT

Indicates the usefull links to get to know more about the subject

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Indicates the bad ways of doing it

Indicates the tips and tricks we provide

2.1 CAPTIONS

DEFINITION

Captions are **on-screen text** that **displays the spoken words** and important sounds in a video.

WHY IT IS IMPORTANT

Captions are essential for **deaf or hard-of-hearing users**. They also help viewers in noisy environments, non-native speakers, or those with cognitive disabilities who **benefit from reading along**.

2.1 CAPTIONS

BEST PRACTICE

1 min

- **Synchronized** with spoken content
- Accurate **spelling** and grammar
- Includes **non-speech elements** (*for example music or laughter*)
- **Easily toggled on/off** in the video player

MORE EXPLANATIONS

When you **audit** video content, check if captions are **present** and **correctly timed with the speech**. Captions should include **everything being said**, as well as **key sounds**.

Auto-generated captions are a **start**, but they must be **reviewed for accuracy**. Without correct captions, **viewers can miss critical information** or get **confused** by misinterpretations.

2.1 CAPTIONS

2.1 CAPTIONS

DO'S

- Use **high-quality**, reviewed captions
- Include captions **on all videos**
- Make captions **easy to turn on/off**

DONT'S

- Don't **rely** solely on **unedited auto-captions**
- Don't **assume** users **can hear everything**
- Don't **hide** caption **options in menus**

2.2 TRANSCRIPTIONS

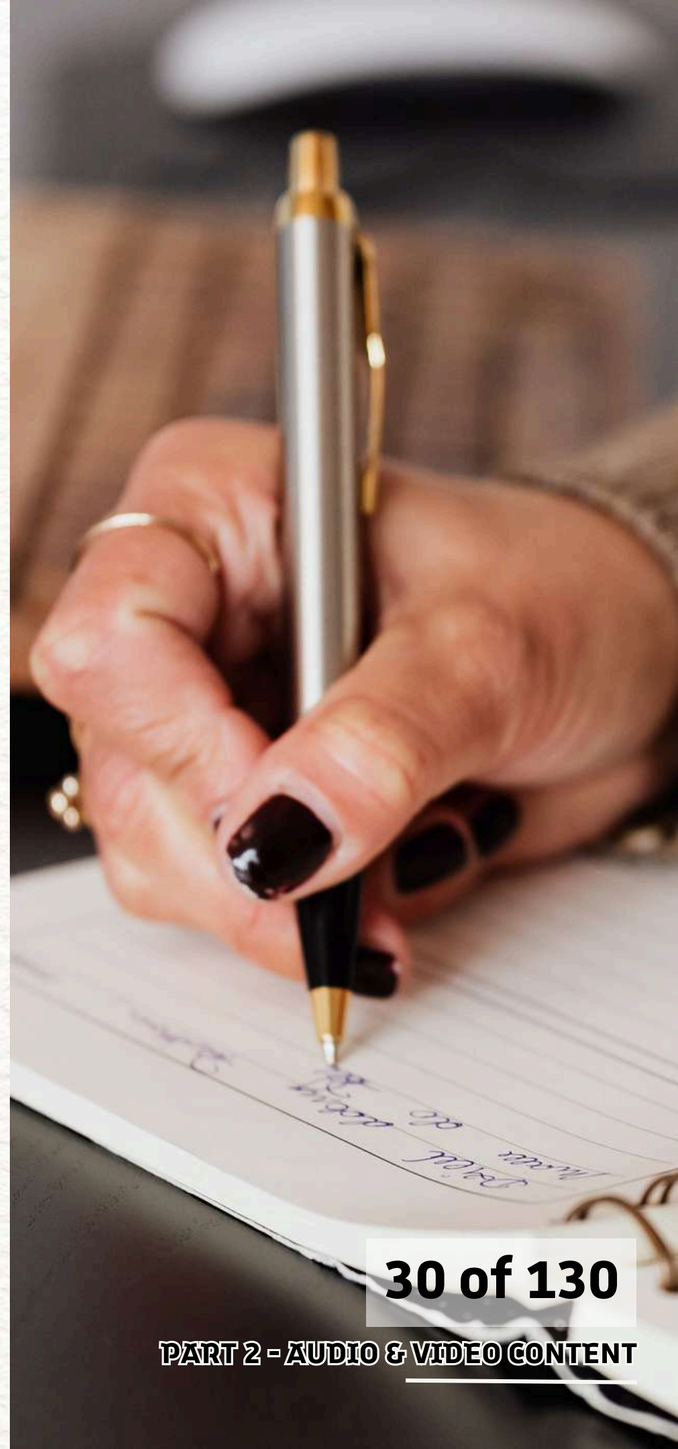
DEFINITION

A transcript is a **written version** of all the **spoken and relevant non-verbal content** in an **audio** or **video** file.

WHY IT IS IMPORTANT

Transcripts make content **accessible** to users who cannot or **prefer not to watch/listen to media**.

They're also **helpful for note-taking**, **translation**, and **screen reader users**.



2.2 TRANSCRIPTIONS

1 min

BEST PRACTICE

- **Complete** and accurate text
- **Easy to find** (*on the page or as a download*)
- Includes speaker **labels** and sound **effects**
- Useful for **audio-only content** like podcasts

MORE EXPLANATIONS

Look for transcripts **beneath the media** or on a linked page. They should include all **dialogue** and **meaningful sounds**.

For audio-only content, transcripts are often the **only way** users with hearing disabilities **can access the material**.

2.2 TRANSCRIPTIONS

2.2 TRANSCRIPTIONS

DO'S

- Use **high-quality**, reviewed captions
- Include captions **on all videos**
- Make captions **easy to turn on/off**

DONT'S

- Don't **rely** solely on **unedited auto-captions**
- Don't **assume** users **can hear everything**
- Don't **hide** caption **options in menus**

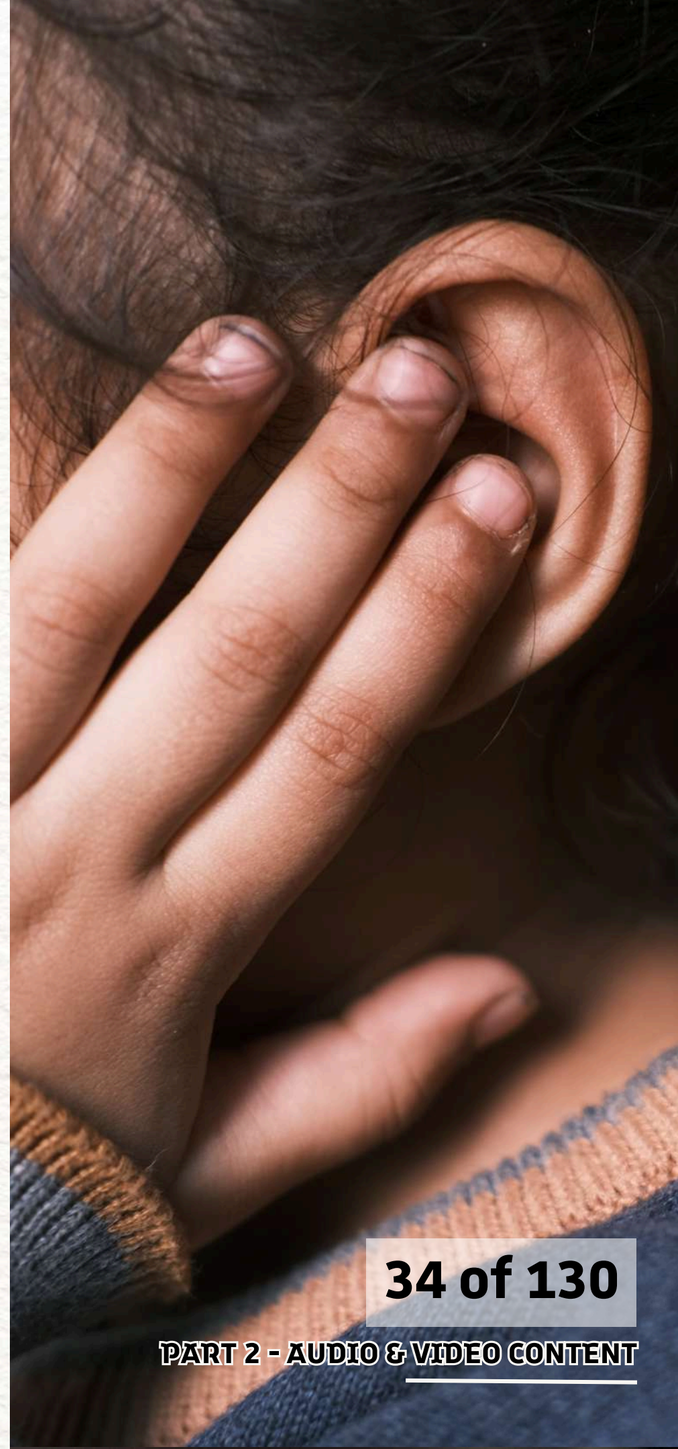
2.3 CLEAR AUDIO QUALITY

DEFINITION

This refers to **how easy it is to hear and understand the audio content** in a video or audio file.

WHY IT IS IMPORTANT

Unclear audio makes it **hard for all users** (*especially those with hearing impairments or auditory processing* difficulties) **to follow** what's being **said**.



2.3 CLEAR AUDIO QUALITY

BEST PRACTICE

- Speakers are **easy to hear and understand**
- No **overlapping voices** or loud background **noise**
- **Consistent volume** throughout
- **No echo**, static, or technical **glitches**

MORE EXPLANATIONS

Info

Listen to a sample of the media. Is the audio **crisp and balanced**? Poor sound quality is a **barrier to accessibility**, even if captions or transcripts are present.

Content should sound professional and not distract from the message.

2.3 CLEAR AUDIO QUALITY

2.3 CLEAR AUDIO QUALITY

DO'S

- Use clear, high-quality recordings
- Test sound before publishing
- Maintain consistent volume

DONT'S

- Don't use distorted or noisy audio
- Don't assume "good enough" is accessible
- Don't let background music overpower speech

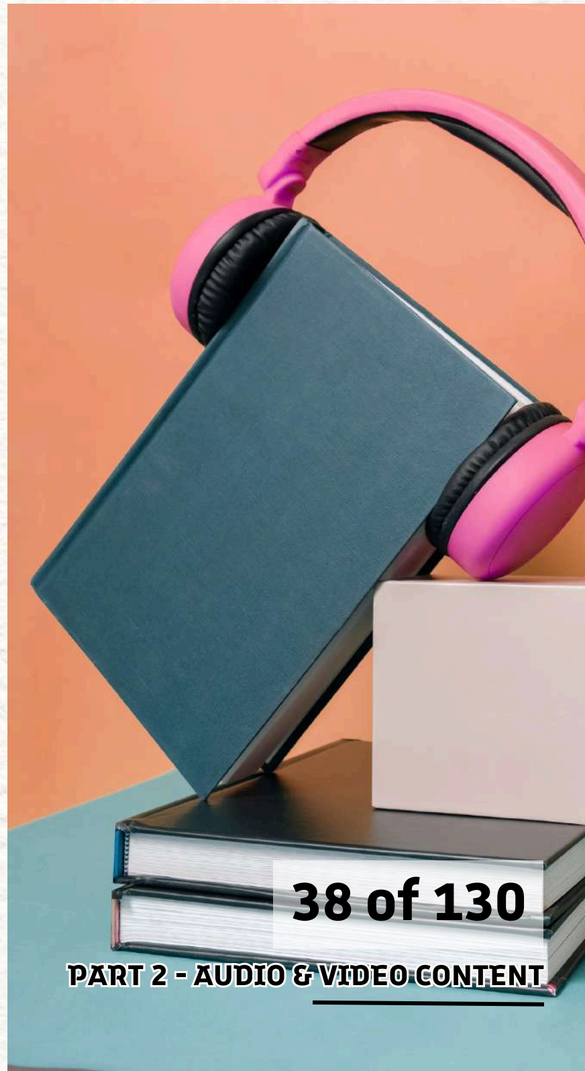
2.4 MEDIA PLAYER ACCESSIBILITY

DEFINITION

This refers to whether the **audio/video player itself can be used by people with disabilities,** including **keyboard-only users** and **screen reader users**.

WHY IT IS IMPORTANT

If users can't **press play, pause, or adjust the volume** with their assistive tech or keyboard, they can't access the media at all.



2.4 MEDIA PLAYER ACCESSIBILITY

1 min

BEST PRACTICE

- **Navigable with keyboard** (*Tab*, *Enter*, *etc.*)
- **Screen reader compatible** (*labels for buttons*)
- Play, pause, volume, captions **toggles accessible**
- Works across **devices and browsers**

MORE EXPLANATIONS

Info

Test the player using **only your keyboard**. Can you reach and use all the controls? Try a **screen reader** if available.

The player should **announce what each button does** (*for example "Play," "Volume," "Enable captions"*). If it can't be accessed without a **mouse**, it **fails accessibility**.

2.4 MEDIA PLAYER ACCESSIBILITY

2.4 MEDIA PLAYER ACCESSIBILITY

DO'S

- Use players that **support keyboard and screen readers**
- Don't use media players with **unlabeled or inaccessible controls**
- **Test** with **assistive tech** if possible

DONT'S

- Don't **assume** compatibility **without testing**
- **Make** controls **visible** and **easy** to use
- **Don't hide key features** like captions or volume

2.5 LOCALIZATION AND TRANSLATION

DEFINITION

Localization means **adapting content** for **different regions** or **languages**.

Translation makes content **available in multiple languages**.

WHY IT IS IMPORTANT

Prospective students may **speak different languages**. Offering translations and localized content ensures **everyone can understand and access** the information, regardless of native language.

2.5 LOCALIZATION AND TRANSLATION

1 min

BEST PRACTICE

- Captions and transcripts **available in multiple languages**
- Interface and media player **localized when possible**
- Videos created with **cultural sensitivity**
- **Clear indication** when translations are **available**

2.5 LOCALIZATION AND TRANSLATION

MORE EXPLANATIONS

Check if **non-English versions** of captions, transcripts, or audio are **available**. It's a bonus if a video is **dubbed or subtitled** in other languages.

Translated materials should also be **accurate and culturally respectful**. This helps international and multilingual **users feel included and informed**.

2.5 LOCALIZATION AND TRANSLATION

DO'S

- Provide **translated captions** or transcripts
- Label content clearly in other **languages**
- **Localize design** and examples when possible

DONT'S

- Don't **limit access** to English-only users
- Don't **mix languages** without clarity
- Don't forget **global accessibility** needs

-03-

ICONOGRAPHY AND PICTURES

QUICK TABLE OF CONTENTS

CHAPTER 3: ICONOGRAPHY AND PICTURES

Indicates the usefull links to get to know more about the subject

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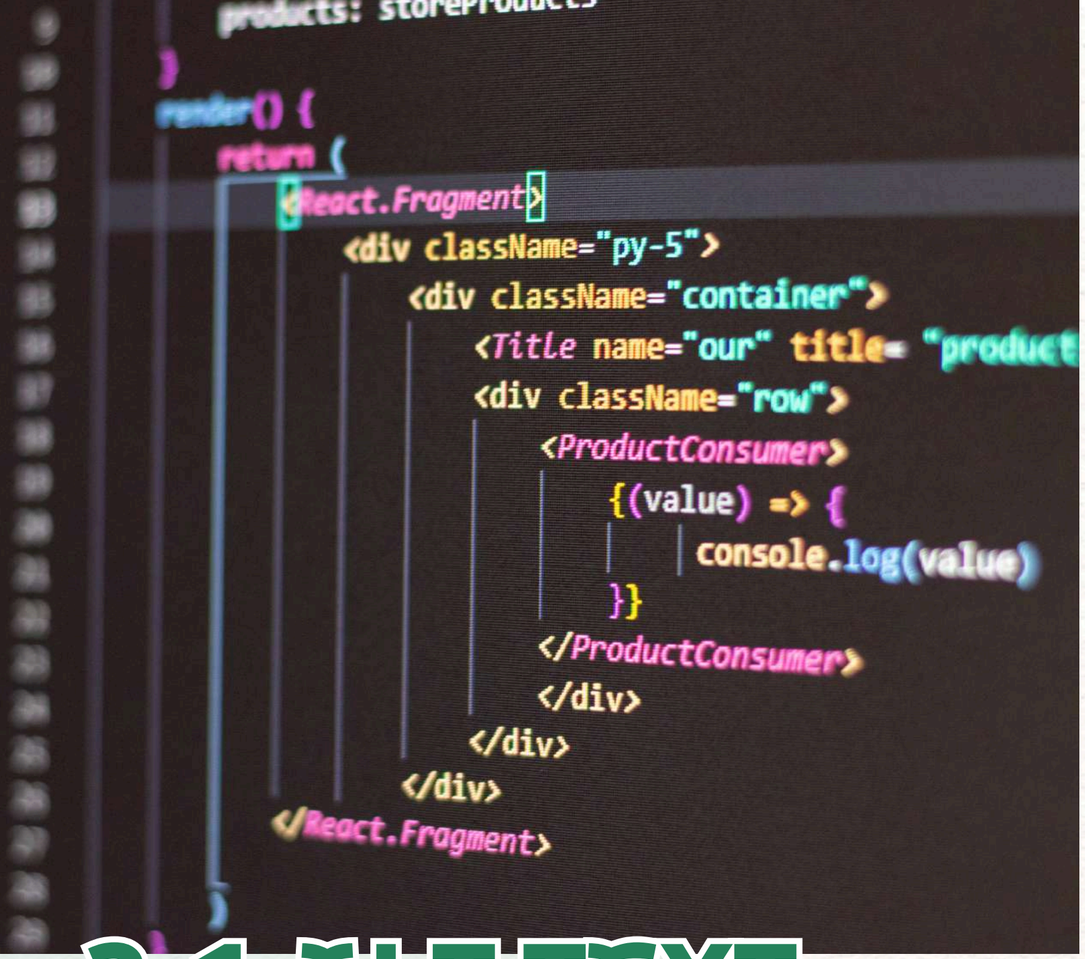


3.1 ALT TEXT

Definition

DEFINITION

Alt text (*alternative text*) is a **short written description** that **explains what an image shows or means**.

This text is not always visible on the screen, but it is **read out loud by screen readers** for people who are blind or have low vision.

3.1 ALT TEXT

WHY IT IS IMPORTANT

Many users **can't see images on a screen**, either because:

- They use **screen readers** to read the website out loud
- The image didn't **load** (*poor connection or technical issue*)
- They have **visual impairments**

Without alt text, these users **miss the meaning or function of the image**, sometimes making the entire page useless or confusing.

3.1 ALT TEXT

BEST PRACTICE

- Every meaningful image must have a **short and clear description**
- If an image is **decorative only**, it can be **skipped** (*but must be marked that way*)
- Alt text should describe **what's important** about the image, not every detail
- Images that are also **links or buttons must have alt text** that describes the action, not just the picture

3.1 ALT TEXT

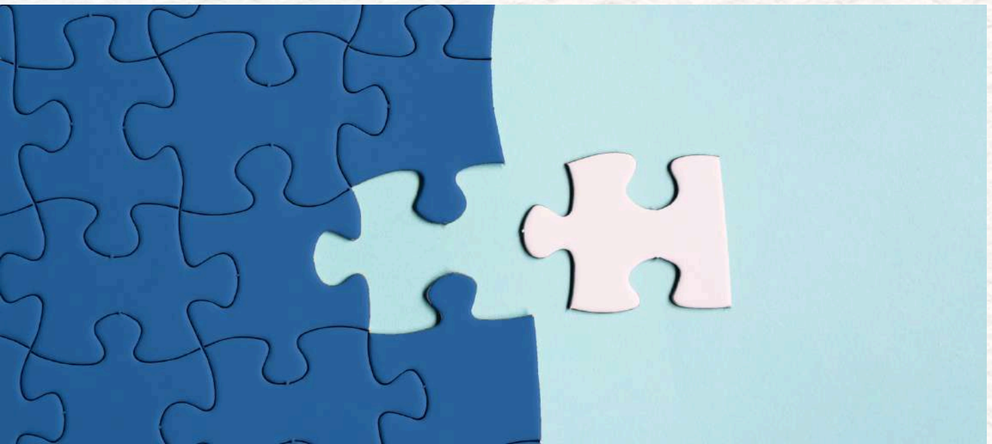
MORE EXPLANATIONS

What makes an image **meaningful**?

If the image **helps users understand something**, gives instructions, shows content, or acts as a button, it **must have alt text**.

What about **decorative images**?

If the image is **just for style** (*like a background shape or texture*), it **should be hidden from screen readers** so it doesn't interrupt the user experience.



3.1 ALT TEXT

DO'S

- Add alt text to every **important image**
- Keep alt text **short and meaningful**
- Think about what the image tells the user
- **Skip** alt text for purely **decorative** images
- Use descriptions that **fit the context**

DONT'S

- Don't leave important images without descriptions
- Don't use filenames or **placeholder text**
- Don't describe irrelevant details or colors
- Don't let screen readers **read decorative images**
- Don't reuse the **same alt text everywhere**, regardless of meaning

3.1 ALT TEXT

USEFUL TOOLS

- WebAIM WAVE Tool

→ https://wave.webaim.org

Checks your website and highlights missing or incorrect alt text.

- Alt Text Tester (Chrome Extension)

→ Lets you hover over images and instantly see their alt text. Useful to test what screen readers might read out loud.

- Alt Text Tester (Chrome Extension)

→ Lets you hover over images and instantly see their alt text.
Useful to test what screen readers might read out loud.

USEFUL TOOLS

- Figma (for designers)

→ Use plugins like “Able” or “Stark” to check alt text descriptions and accessibility in your mockups.

- Microsoft Word / PowerPoint

→ Right-click any image → “Edit Alt Text”
Good practice when making accessible PDFs or presentations.

- Google Docs

→ Right-click an image → “Alt Text”
Great for collaborative projects and student work.

3.1 ALT TEXT

3.2.A CLEAR MEANING

Definition

DEFINITION

Icons are small symbols used in interfaces to represent actions or objects.

Icons must have **clear meaning**, with **text labels** when needed.

WHY IT IS IMPORTANT

Not all users will instantly recognize what an icon means. For example:

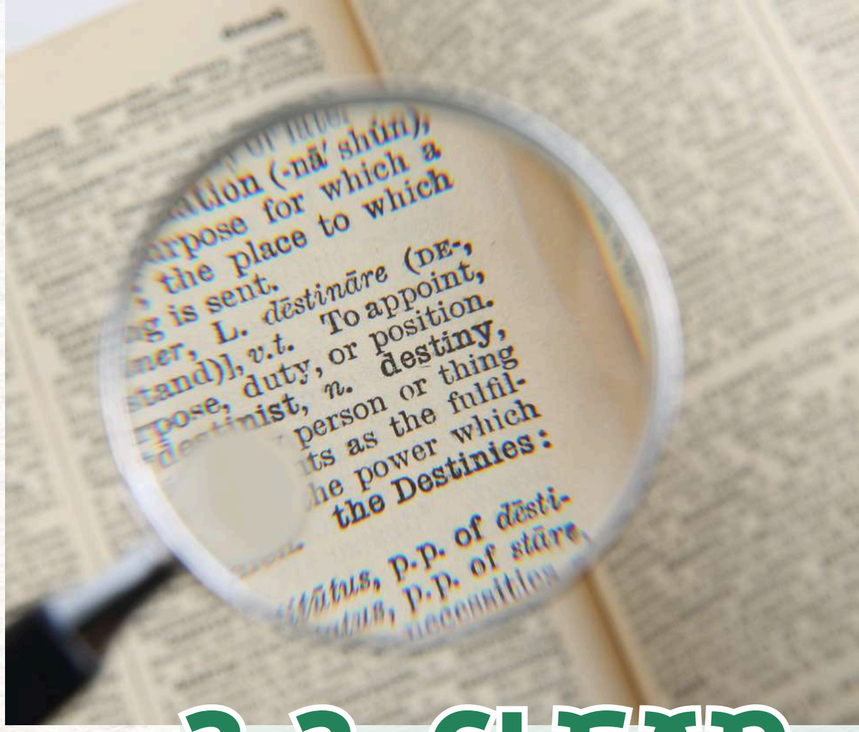
- Not everyone knows that a gear means “settings”
- Icons can look different across cultures or platforms
- Cognitive disabilities, unfamiliarity, or learning difficulties make interpretation harder
- Screen reader users may not get any info if there’s no label

Without clear text support, **users may feel confused**, frustrated, or excluded.

3.2.A CLEAR MEANING

BEST PRACTICE

- Use icons that follow **universal or commonly known patterns**
- When an icon is used **alone** (*without visible text*), **include** a **text label**, tooltip, or aria-label behind the scenes
- **Avoid abstract or custom icons** that users may not recognize
- Always **provide context,** even simple symbols may not mean the same thing to everyone
- Icons that perform **important actions** (*like Submit*, *Delete*, *Save*) should **never be icon-only**



3.2 CLEAR MEANING

3.2 CLEAR MEANING

DO'S

- Use **recognizable**, widely understood icons
- Add **text labels** to important icons
- Use **tooltips or screen reader labels** when needed
- Keep **icon meanings consistent** across the site
- **Test** if users understand the icon meaning

DONT'S

- Don't use abstract symbols **without explanation**
- Don't assume all users **will "just know"** what it means
- Don't rely only on **hover states** (*which don't work on mobile*)
- Don't change **icon meanings** in different places
- Don't leave **icons unlabelled** if they trigger important actions

USEFUL TOOLS

- Figma or Adobe XD

→ Use design plugins like Able or Contrast to check readability and spacing between icon and label

- UserTesting or Maze

→ Run a quick test with 3–5 people: “What do you think this icon means?” You’ll be surprised how different answers can be.

- Stark (for Figma/Sketch/Chrome)

→ Helps you simulate what users with visual or cognitive differences might experience.

- Screen reader simulation

→ Try your interface with built-in tools like VoiceOver (Mac) or Narrator (Windows) to check how icons are interpreted.

3.2 CLEAR MEANING

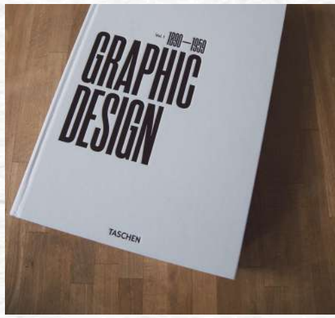
3.2.B HIGH CONTRAST

DEFINITION

Definition

Contrast refers to the **difference in brightness and color** between an **image (*or icon*) and its background**. To ensure accessibility, icons and images **must have sufficient contrast to be visible** for all users, including those with low vision or color blindness.

Icons and images must have **high contrast** against their backgrounds.



Important

WHY IT IS IMPORTANT

Without sufficient contrast, users with visual impairments may struggle to see or recognize icons, text, and images. This can lead to:

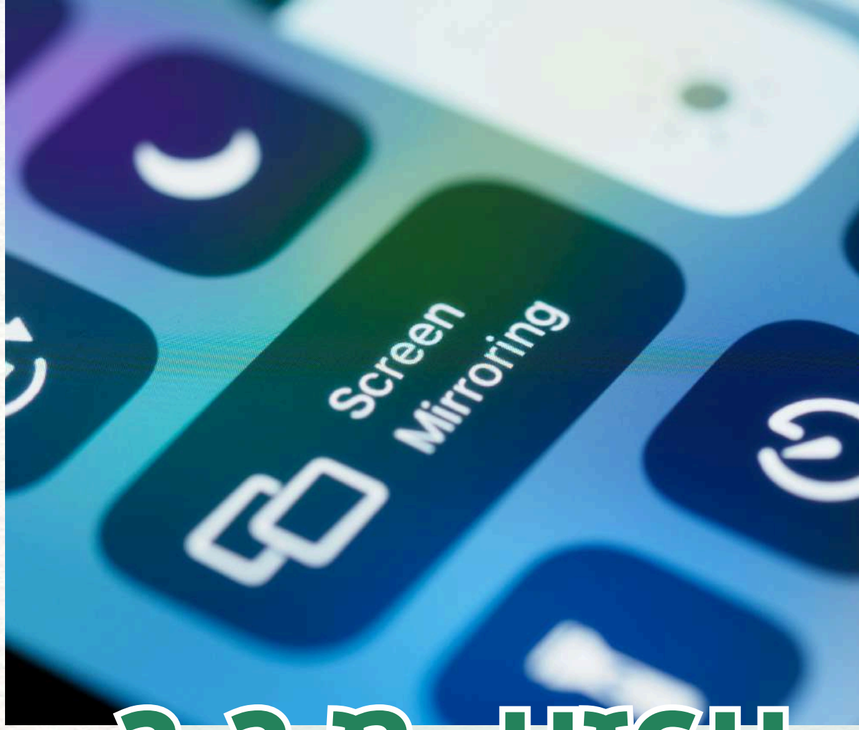
- Difficulty interacting with important features
- Overall frustration and reduced usability of your website or app

Ensuring high contrast makes content **clearer and easier to navigate** for a wider range of users.

3.2.B HIGH CONTRAST

BEST PRACTICE

- Icons and images must have at least a 4.5:1 contrast ratio against their background (for text and non-text elements like icons)
- Ensure contrast between important elements (like buttons, links, or navigation icons) and their background
- Avoid using color alone to convey meaning, as users with color blindness might miss important information
- Test your designs using contrast checkers to confirm accessibility



3.2.B HIGH CONTRAST

3.2.B HIGH CONTRAST

DO'S

- Use at least **4.5:1 contrast ratio** for icons and text against their background
- **Test** icons and images with a high-contrast background **to check visibility**
- **Combine** contrasting **colors with texture or shapes** to convey meaning
- Ensure **interactive elements** (*e.g.*, *buttons*) stand out clearly

DONT'S

- Don't use **low contrast colors** that make text/icons hard to see
- Don't rely on color alone **to show important information**
- Don't ignore **colorblind users** by using colors that can be easily confused
- Don't make **interactive icons blend** into the background without enough contrast

USEFUL TOOLS

- WebAIM Contrast Checker

→ https://webaim.org/resources/contrastchecker/

Check the contrast between any two colors (*text and background*) to make sure they meet the minimum ratio.

- Contrast Ratio by Lea Verou

→ https://contrast-ratio.com

A quick tool to test the contrast between any two color values.

- Color Oracle

→ A free app that simulates how your website looks for users with various types of color blindness.

3.2.B HIGH CONTRAST

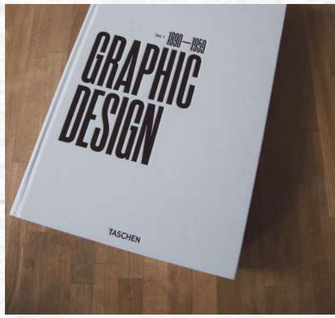
3.2.C CONSISTENT IN SIZE

Definition

DEFINITION

Icons used on websites and digital products **should follow a consistent size standard** (commonly **16x16 pixels** for UI icons).

This means all icons used in a set or layout are the same dimensions and **have equal visual weight**.



Important

WHY IT IS IMPORTANT

Consistent sizing of icons makes the design feel:

- **Clean** and professional
- Easier to **scan** and understand
- More **predictable** for users navigating with assistive technology

Inconsistent icon sizes **can distract users**, create confusion, and make your **design look messy or broken**, especially for people with cognitive disabilities or those using screen magnifiers.

3.2.C CONSISTENT IN SIZE

BEST PRACTICE

- Use a **standard size like 16x16px** for UI icons (*e.g.*, *close*, *menu*, *search*)
- Keep icon **sizes consistent** across similar functions and layouts
- **Don’t stretch**, squish, or distort icons
- **Align icons** properly with surrounding text and controls
- Make sure icons **remain readable** at different screen sizes and resolutions

3.2.C CONSISTENT IN SIZE

3.2.C CONSISTENT IN SIZE

DO'S

- Use a **consistent standard** like 16x16px for UI icons
- Keep all icons **visually balanced** and properly aligned
- Stick to a **design system** or **icon library**
- Test icons at **different screen sizes** (*desktop*, *mobile*, *zoomed*)
- Make sure icon **weight and style** are uniform

DONT'S

- Don't mix **multiple icon sizes** without purpose
- **Don't stretch**, squash, or distort icons to "fit" a space
- Don't use icons that are **too small to be visible**
- Don't break visual rhythm by using **unaligned** or mismatched icons
- Don't let icons **overflow** or get cut off on small screens

USEFUL TOOLS

- Figma / Sketch

→ Use grids and components to keep icons uniform in size and spacing.

- Icon Libraries (Material Icons, Font Awesome, Heroicons)

→ These libraries offer professionally designed icons in consistent sizes (*e.g., 16px, 24px, 32px*).

- Design Tokens & Component Libraries

→ Store icon sizes as tokens so developers/designers follow the same rules.

- Figma Plugin: “Icon Resizer”

→ Quickly scale and align icons to match your design system standards.

3.2.C CONSISTENT IN SIZE

3.2.D BE RESPONSIVE

Definition

DEFINITION

A responsive image **automatically adjusts its size** and resolution **to fit the screen** it's being viewed on, whether it's a desktop monitor, tablet, or smartphone.

Responsive images scale without breaking the layout, going off the screen, or becoming blurry.

3.2.D BE RESPONSIVE

WHY IT IS IMPORTANT

For accessibility, responsive images **ensure that everyone can view them clearly** and without frustration, **no matter how or where they browse**.

Today, users access websites on **all kinds of devices**. If an image is not responsive:

- It may **be cut off**, overflow, or **disrupt content** on small screens
- It can **slow down loading time** if it's too large
- Users may **miss important information** if the image is not properly scaled

3.2.D BE RESPONSIVE

BEST PRACTICE

- Images **should resize automatically** based on screen width
- They should **not exceed the width of the container** they're in (*no "overflow"*)
- Maintain **good resolution at different sizes** (*avoid pixelation*)
- Keep important visual information centered or readable when scaled
- Ensure images do not require horizontal scrolling on mobile devices
- Text that is part of an image should still be readable on small screens (*or avoided entirely*)

3.2.D BE RESPONSIVE

DO'S

- Use images that **resize to fit** screen size
- **Center key information** visually in the image
- Check images on both **desktop and mobile**
- Use high-resolution images that **stay clear when scaled**
- **Avoid large images** that slow down loading

DONT'S

- Don't use **fixed-width images** that break layouts
- Don't let images **overflow off** the screen
- Don't put **important text** only inside an image
- Don't use **large file sizes** that cause slow loading
- Don't ignore how your images look **on mobile**

USEFUL TOOLS

- Figma or Adobe XD

→ Use responsive layout features to test image behavior in mobile and desktop mockups.

- Chrome DevTools (*Inspect Tool*)

→ Simulate different screen sizes and test how images resize or behave.

- TinyPNG / TinyJPG

→ Compress images for web without affecting visible quality.

- Cloudinary or Imgix (*for advanced users*)

→ Services that serve responsive image sizes automatically based on the device.

- Squoosh App

→ https://squoosh.app

Compress your images without losing quality, perfect for fast loading on mobile.

3.2.D BE RESPONSIVE

3.2.D BE COMPATIBLE

Definition

DEFINITION

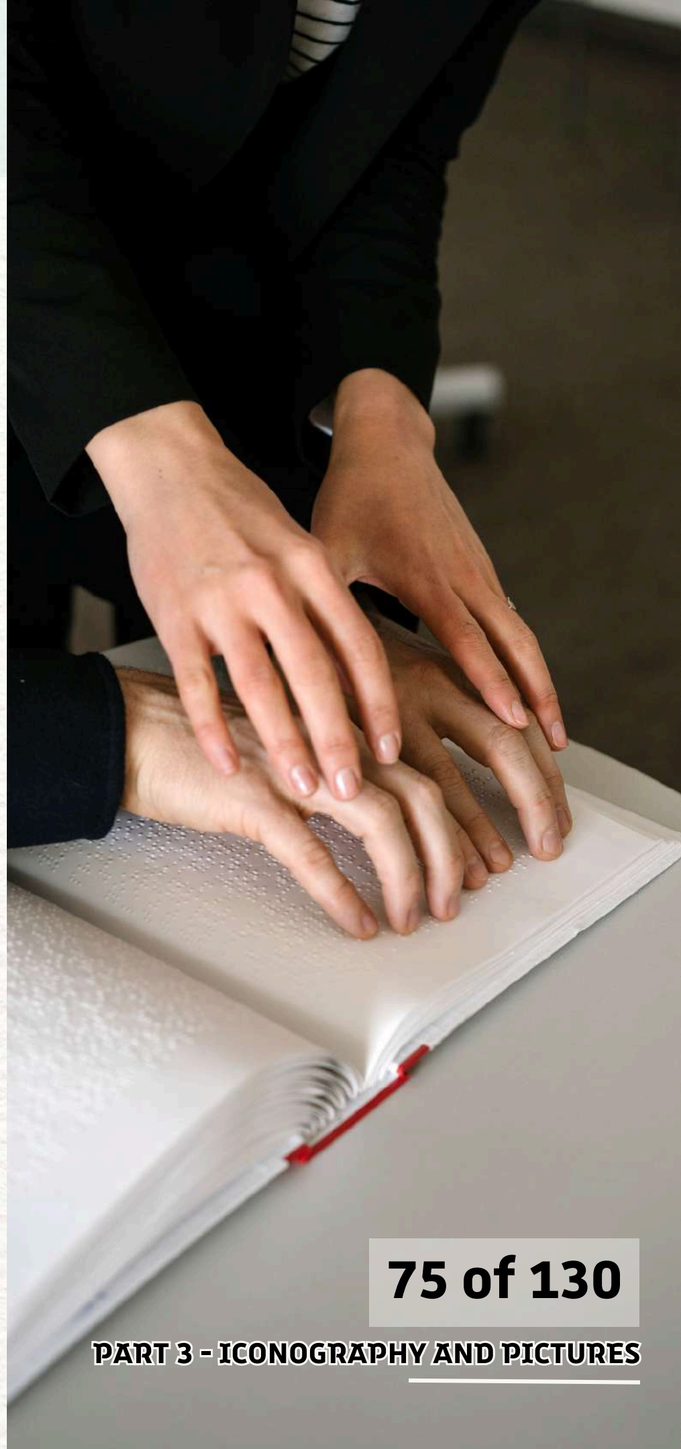
Screen readers are **assistive technologies** that convert **on-screen content into speech or Braille**. Icons and images must be **marked up** properly so these tools can **describe them clearly** and help users navigate.

3.2.D BE COMPATIBLE

WHY IT IS IMPORTANT

People who are **blind** or have severe vision impairments **rely entirely on screen readers**. If an image or icon is not labeled correctly, it's **invisible to them**.

They also **may miss key info** or not understand **how to interact** with the page.



BEST PRACTICE

- Every meaningful image **must have alt text** describing its purpose
- Icons that perform actions (*like "search", "close", "share"*) **must be labeled with their function**
- **Decorative images should be hidden** from screen readers
- Grouped images/icons should **have clear structure** and order for navigation
- Avoid using images **without any labels** or hints

3.2.D BE COMPATIBLE

3.2.D BE COMPATIBLE

DO'S

- Use **accurate and simple alt text** for all important images
- Label icons **based on their function**, not shape
- Use **empty** alt (*alt=""*) for **decorative** graphics
- **Test** how screen readers **interpret** your images/icons
- Make all **interactive** icons keyboard navigable

DONT'S

- Don't leave important images **without alt text**
- Don't describe what the icon "looks like" instead of **what it does**
- Don't use **filenames** or vague descriptions
- Don't force screen reader users **to guess** icon purposes
- Don't make **clickable images** that are not accessible by keyboard

-04- NAVIGATION

QUICK TABLE OF CONTENTS

CHAPTER 4: NAVIGATION

Indicates the usefull links to get to know more about the subject

Indicates an easy / fast to read list

Indicates a more detailed text

Indicates an important information

Indicates a definition

Indicates the good ways of doing it

Indicates the bad ways of doing it

Indicates the tips and tricks we provide

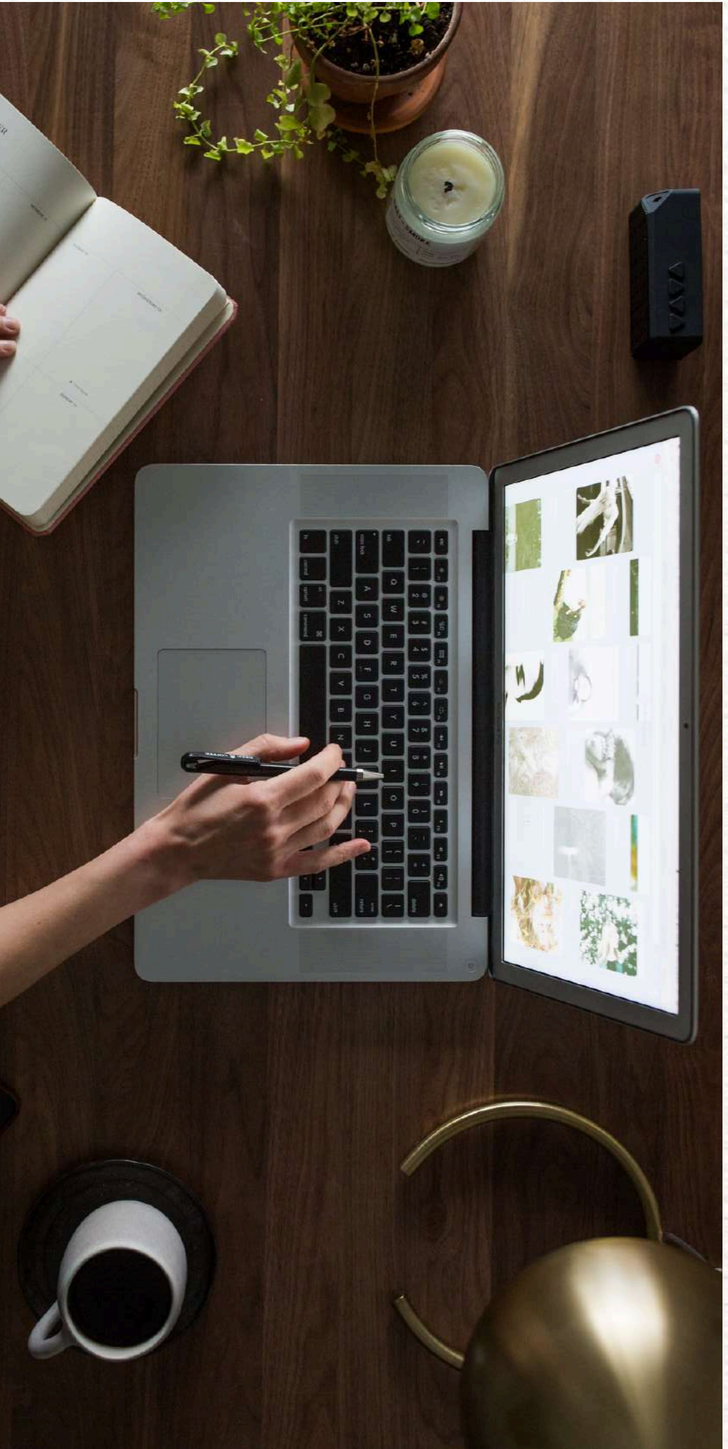
4.NAVIGATION

Definition

DEFINITION

The aim of navigation accessibility guidelines is to make websites easier to move around. The user should also be able to easily figure out where they are on the website at any time. This includes building a website with an information structure that is friendly toward disabled people.

For instance, some people who are blind or have view deficiency would use tools like **screen readers** (which read the page out loud), so it's important that websites are organized in a way that makes sense **one step at a time**.



4.NAVIGATION

WHY IT IS IMPORTANT

Making website navigation accessible is essential because it ensures that all users—including those with visual, motor, or cognitive disabilities—can easily find, understand, and move through content. By using clear information architecture, semantic code, logical focus paths, skip links, descriptive links, and multiple navigation options, we reduce confusion, support screen readers and keyboard navigation, and create a smoother, more inclusive user experience for everyone.

NEXT PART: INFORMATION ARCHITECTURE

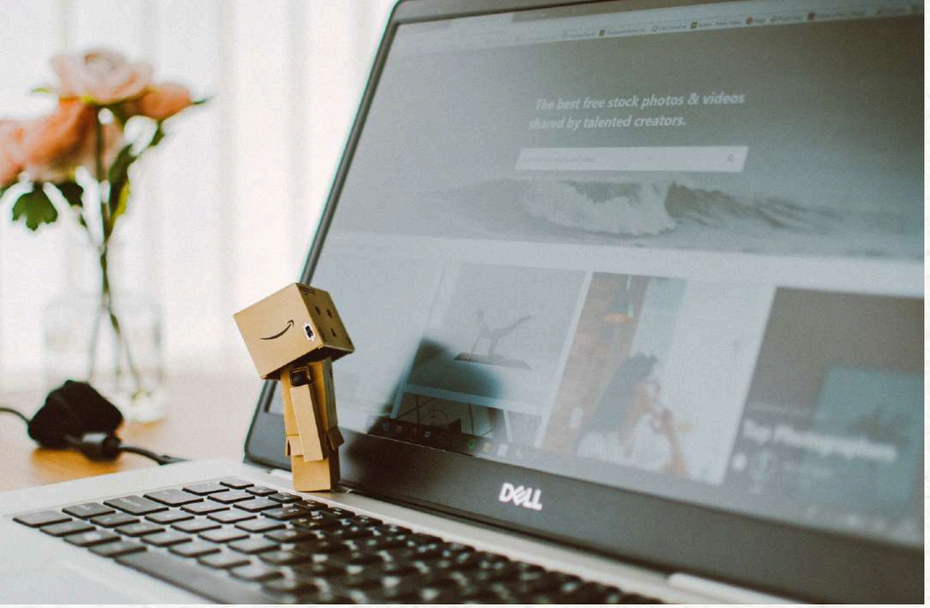
4.1 INFORMATION ARCHITECTURE

DEFINITION

Information architecture refers to how information is **organized**, **structured**, **and labeled** on a website so users can **easily understand and navigate** the content.

WHY IT IS IMPORTANT

A well-organized website helps all users—especially those with cognitive or visual difficulties or disabilities —**find content quickly** and **understand the relationship between sections**.



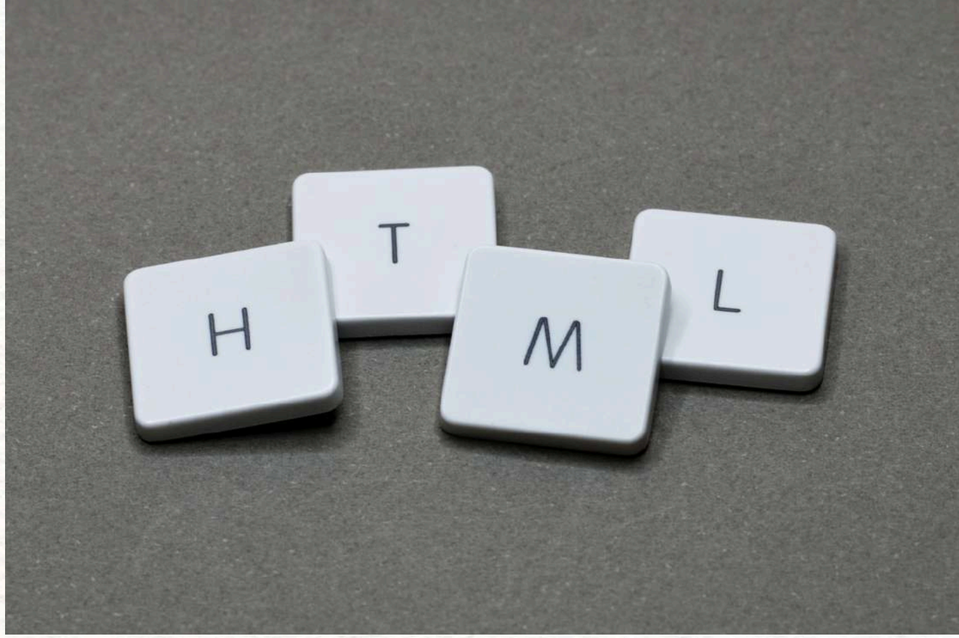
4.1 INFORMATION ARCHITECTURE

BEST PRACTICE

1 min

- Use **clear, descriptive titles and subtitles** to help users quickly understand which section of the page contains the information they're looking for.
- Ensure **headings and subheadings** are properly structured and marked in the code (e.g., <h1>, <h2>, etc.) so screen readers can interpret the hierarchy.
- **Labels** should always be visible and not used only as placeholders (placeholders disappear when the user types, making them inaccessible).

4.1 INFORMATION ARCHITECTURE



MORE EXPLANATIONS

In order to display labels for input fields that would be visible at any time, see the following **HTML form example:**

```
<div class="form-group">
    <label for="email">Email Address</label>
    <input type="email" id="email" name="email" required />
</div>
```

4.1 INFORMATION ARCHITECTURE

DO'S

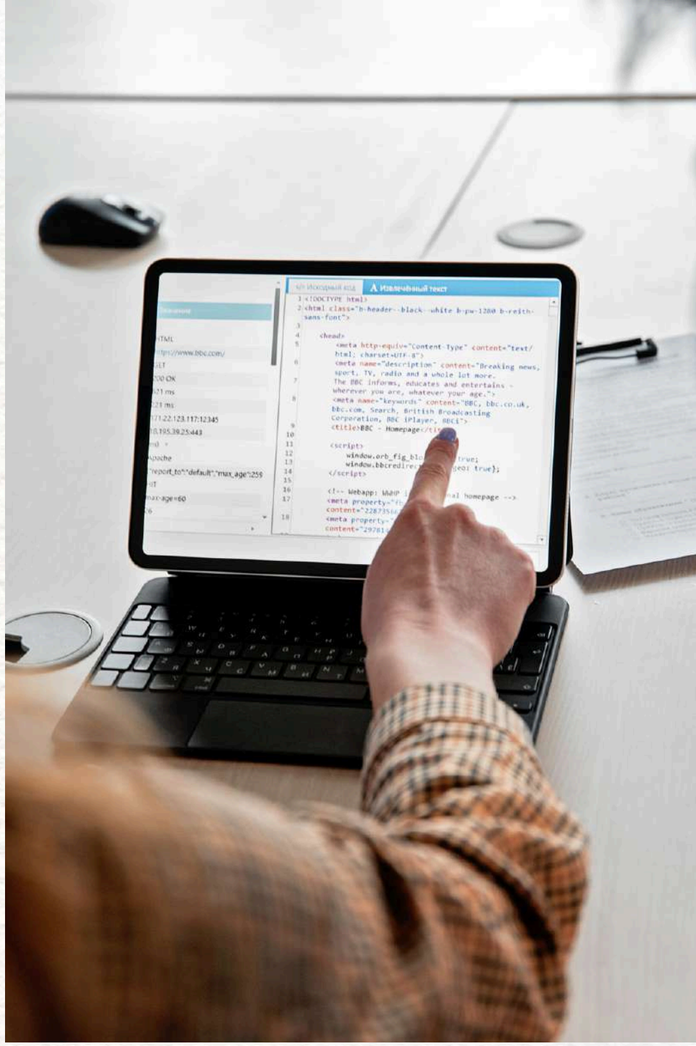
- Use semantic headings (<h1>, <h2>, etc.)
- Write clear, informative titles and labels
- Keep labels visible outside form fields

DONT'S

- Use styling only (e.g.,)
- Use vague titles like "Section 1" or "Click here"
- Use placeholders that disappear on focus

NEXT PART: CODE AND INTERACTION

4.2 CODE AND INTERACTION



Definition

DEFINITION

"Code and interaction" in accessibility refers to how HTML, CSS, and JavaScript are written so that **interactive content is usable by everyone**—including people who rely on assistive technologies like screen readers, keyboard navigation, or motion-reduction settings.

It involves using **semantic elements**, writing **descriptive alternative text**, ensuring **keyboard operability**, and **respecting user preferences** for animations or interactions.

4.2 CODE AND INTERACTION

BEST PRACTICE

- Use semantic HTML to **correctly define the type of each element** (e.g., buttons, images).
- Provide meaningful **alt text** inside of the html elements tags and make sure that it describes what an image or button etc. does or represents.
- Ensure **all functions can be used with a keyboard** (e.g., by adding JavaScript listeners for the Enter key).
- For animations, use the prefers-reduced-motion CSS media query to let users **reduce or turn off motion effects** that could cause dizziness.

4.2 CODE AND INTERACTION

MORE EXPLANATIONS

Use Semantic HTML:

Use elements like <button>, <nav>, <header>, <main>, <img> appropriately.

WCAG Ref: 1.3.1 Info and Relationships

Provide Meaningful Alt Text:

All images must have alt attributes that describe their purpose or content. Functional images (like icons in buttons) must describe the action, e.g., "Search" for a magnifying glass.

WCAG Ref: 1.1.1 Non-text Content

4.2 CODE AND INTERACTION

MORE EXPLANATIONS

Reduce Motion Sensitivity:

Use the CSS media query @media (prefers-reduced-motion) to detect users who prefer minimal animations. This is useful for people with vestibular disorders who may feel dizzy from motion.

WCAG Ref: 2.3.3 Animation from Interactions (AAA)

Keyboard Operability:

All functionality (menus, buttons, sliders, etc.) must be usable via keyboard alone. Common practices are: add Enter or Space key triggers in JavaScript.

WCAG Ref: 2.1.1 Keyboard, 2.1.2 No Keyboard Trap

4.2 CODE AND INTERACTION

DO'S

- Use <button> for clickable actions
- Provide descriptive alt text
- Support Enter/Space key in JS events
- Use @media (prefers-reduced-motion) in CSS

DONT'S

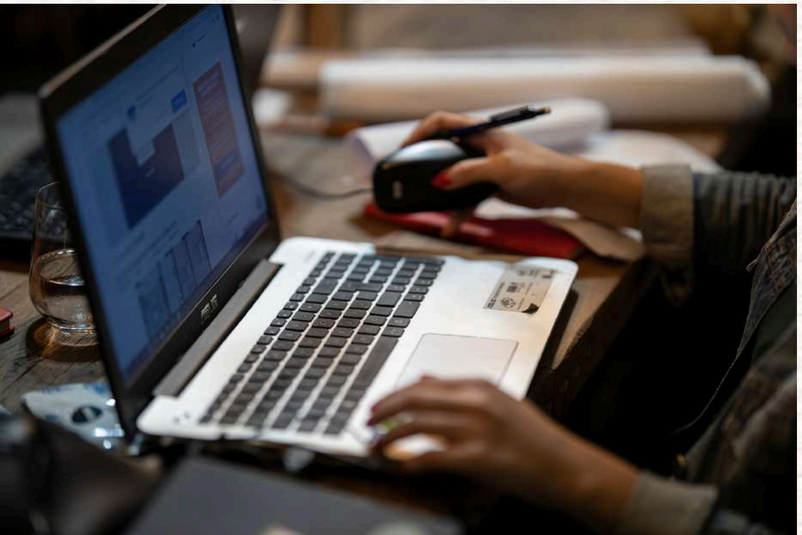
- Use or with JavaScript only
- Leave alt empty or generic (alt="image")
- Only rely on mouse click events
- Force motion effects without respecting user settings

4.3 ORIENTATION AND WAYFINDING

Definition

DEFINITION

Orientation and wayfinding refer to the techniques used to help users **understand their location within a website** and **navigate it confidently**, especially when using assistive technologies like screen readers or keyboards.



This includes features like **sitemaps**, **breadcrumb trails**, and a **logical tab/focus order**, which guide users through the site and reduce confusion or disorientation.

4.3 ORIENTATION AND WAYFINDING

BEST PRACTICE

- Help users understand where they are on the site by including a **site map** or **breadcrumb navigation**.

- Ensure the **focus order** (what's read or highlighted when using the keyboard) follows a logical path.

4.3 ORIENTATION AND WAYFINDING

MORE EXPLANATIONS

Logical Focus Order:

Tab navigation should follow a **natural reading order**: headers, main content, forms, navigation, footer. Users should not be jumped around the page unexpectedly when using Tab or Shift+Tab. Make sure interactive elements (buttons, links, forms) are focusable and appear in sequence.

WCAG Ref: 2.4.3 Focus Order

Site Map or Breadcrumbs:

Breadcrumbs show the user's path within the site structure (e.g., Home > Services > Accessibility). Find concrete example there:

Providing a breadcrumb trail

Sitemaps offer a complete overview of the site structure and help with orientation and backtracking—especially for screen reader users.

4.3 ORIENTATION AND WAYFINDING

DO'S

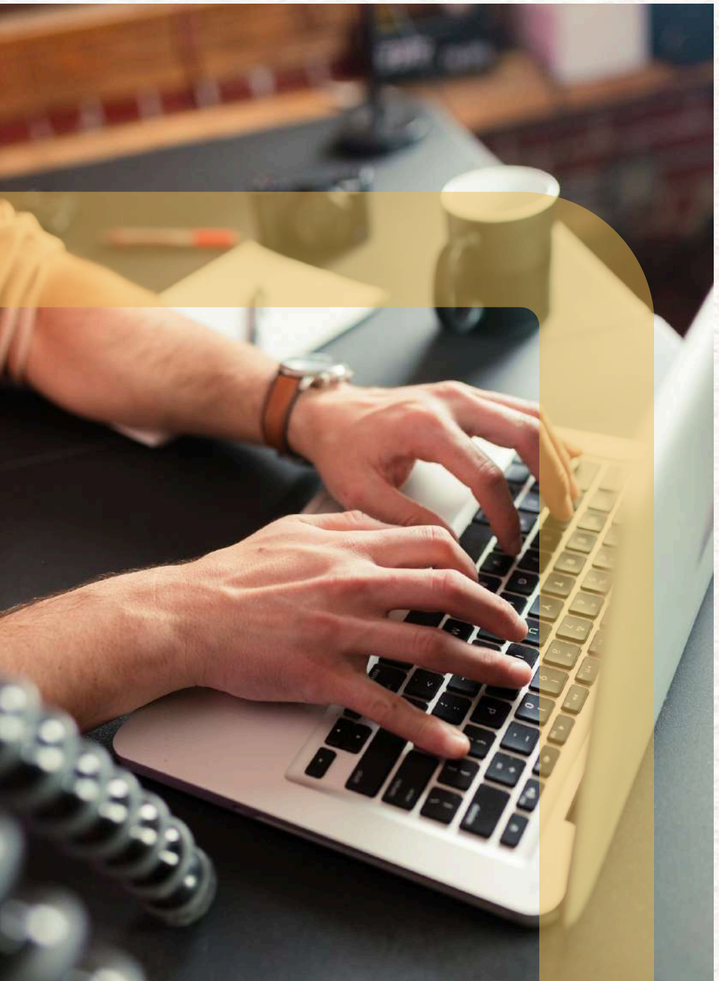
- Use breadcrumbs or visual indicators of location
- Include a logical focus path for keyboard users
- Test keyboard navigation with Tab and Shift+Tab
- Use HTML5 landmarks (<main>, <nav>) to aid structure

DONT'S

- Leave users guessing where they are
- Let the focus jump randomly across elements
- Assume everyone is using a mouse
- Structure pages with only and no semantics

NEXT PART: BYPASS REPEATED CONTENT

4.4 BYPASS REPEATED CONTENT



Definition

DEFINITION

Bypassing repeated content means giving users a way to **skip over content that appears on every page**, such as navigation menus or headers, so they can jump directly to the **main content**. This is especially important for users who rely on **screen readers** or **keyboard navigation**, as they otherwise have to move through the same content again and again on each page.

4.4 BYPASS REPEATED CONTENT

BEST PRACTICE

- Enable users to skip over repeated content, like navigation menus.
  - Add a “Skip to main content” link at the top of the page.
  - Clearly identify bypass blocks using visible skip links or ARIA landmarks (like role=”navigation”).

4.4 BYPASS REPEATED CONTENT

MORE EXPLANATIONS

Skip to Main Content Link:

This is a hidden (but accessible) link at the top of the page that becomes visible when focused via keyboard. It allows keyboard users to jump directly to the main section, avoiding repeated navigation.

WCAG Ref: 2.4.1 Bypass Blocks

HTML example

```
<a href="#main-content" class="skip-link">Skip to main content</a>
  <!-- Later in the page -->
  <main id="main-content">
  <!-- Page content here -->
</main>
```

4.4 BYPASS REPEATED CONTENT

MORE EXPLANATIONS

Use ARIA Landmarks or Semantic Elements

Tag content areas with landmarks like <nav>, <main>, <header>, <footer> or use role="navigation", role="main". These help screen readers understand the layout and offer quick region navigation.

WCAG Ref: 1.3.1 Info and Relationships

4.4 BYPASS REPEATED CONTENT

DO'S

- Add a "Skip to main content" link
- Use HTML5 elements or ARIA roles for regions
- Make skip links visible on keyboard focus
- Test your pages using keyboard-only navigation

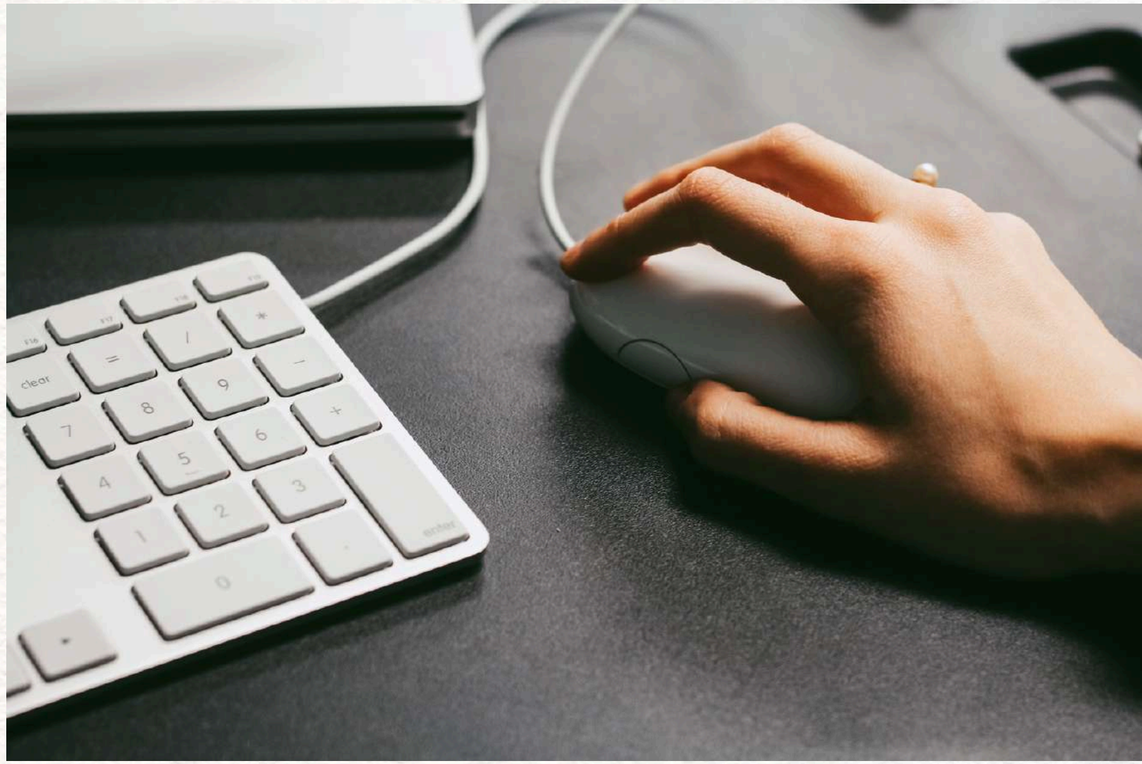
DONT'S

- Force users to tab through the entire nav menu every time
- Only use s with no meaningful structure
- Hide them completely or make them unreachable
- Assume users can always use a mouse

NEXT PART: LINK PURPOSE AND CLARITY

4.5 LINK PURPOSE AND CLARITY

BEST PRACTICE



- All links should clearly describe **what will happen when clicked**.
    - Example: Instead of “Click here,” use “Apply to the program” or “Go to application form.”
- Ensure links make sense both **visually and when read out of context** (screen readers often read links independently).

4.5 LINK PURPOSE AND CLARITY

MORE EXPLANATIONS

Descriptive Link Text

Avoid generic phrases like “Click here,” “More,” or “Read this.” Instead, use text that describes the action or destination of the link, e.g., “Download the syllabus,” “Register for the workshop.”

WCAG Ref: 2.4.4 Link Purpose (In Context), 2.4.9 Link Purpose (Link Only) (AAA)

Links Should Be Understandable on Their Own

Users with screen readers often navigate by tabbing through links only. If a link says “here” or “this,” it becomes meaningless in isolation. Instead, provide enough context within the link text itself.

4.5 LINK PURPOSE AND CLARITY

MORE EXPLANATIONS

Contextual Clarity:

If link text is part of a sentence, ensure that it still makes sense when scanned or read out by assistive tech. You can add extra information using visually hidden text if needed.

HTML example

```
<a href="/apply">
  Apply <span class="sr-only">to the master's
program</span>
</a>
```

4.5 LINK PURPOSE AND CLARITY

DO'S

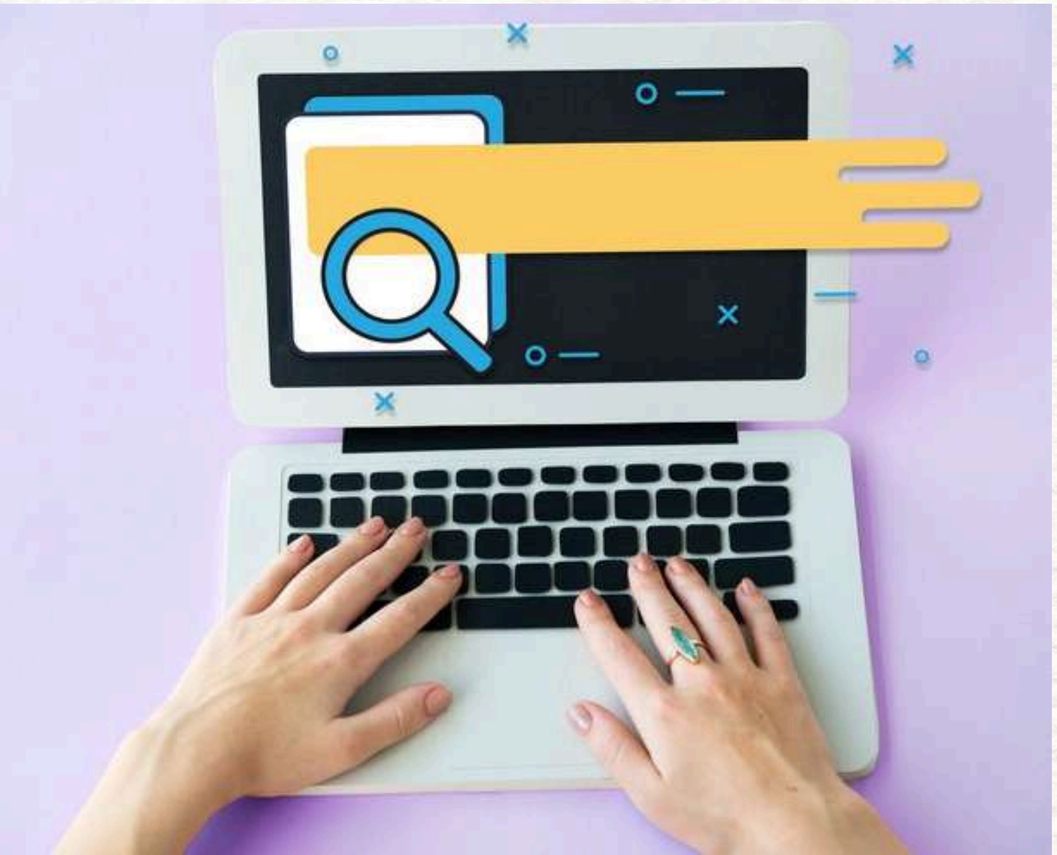
- Use links like "Apply to the program"
- Make sure each link makes sense on its own
- Use hidden text to add screen reader context
- Test your links with a screen reader or by tabbing

DONT'S

- Use "Click here" or "More" with no context
- Use "Click here" or "More" with no context
- Add long, repetitive link labels
- Ignore how links sound when isolated

NEXT PART: MULTIPLE NAVIGATION PATHS

4.6 MULTIPLE NAVIGATION PATHS



Definition

DEFINITION

Multiple navigation paths refer to the practice of providing users with **more than one way to access the same content or page** within a website. This might include using a top navigation menu, in-page links, search functionality, or CTAs (Calls to Action) across different sections.

4.6 MULTIPLE NAVIGATION PATHS

BEST PRACTICE

Let users reach the same content in more than one way.

Example: Users should be able to find the "Programs" page through the top menu, a CTA on the homepage, or a link in the footer.

4.6 MULTIPLE NAVIGATION PATHS

MORE EXPLANATIONS

Make Search Available

For large websites, a search function acts as an additional path and supports people with cognitive or memory-related disabilities who may struggle with navigation structures.

Provide Redundant Navigation Options

The same destination should be available from multiple points:

Main menu, Homepage sections or CTAs, Footer links, Search functionality

This supports users who might miss one path or prefer a different interaction method.

WCAG Ref: 2.4.5 Multiple Ways

4.6 MULTIPLE NAVIGATION PATHS

MORE EXPLANATIONS

Consistency Matters

Use consistent link text and headings across these paths so users can recognize they lead to the same place.

For example, “Programs,” “View Programs,” or “Our Courses” should clearly reference the same section if they go to the same destination.

4.6 MULTIPLE NAVIGATION PATHS

DO'S

- Offer multiple paths to key pages (menu, CTA, footer)
- Label navigation items consistently
- Include a search bar for quick access
- Test navigation with different user journeys

DONT'S

- Force users to rely on only one method to find info
- Use vague or inconsistent terms that confuse users
- Expect users to dig through the site tree every time
- Assume everyone navigates the same way

-05- ERROR MANAGEMENT

QUICK TABLE OF CONTENTS

CHAPTER 4: NAVIGATION

Indicates the usefull links to get to know more about the subject

Indicates an easy / fast to read list

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Indicates a definition

Indicates the good ways of doing it

Indicates the bad ways of doing it

Indicates the tips and tricks we provide

5. ERROR MANAGEMENT

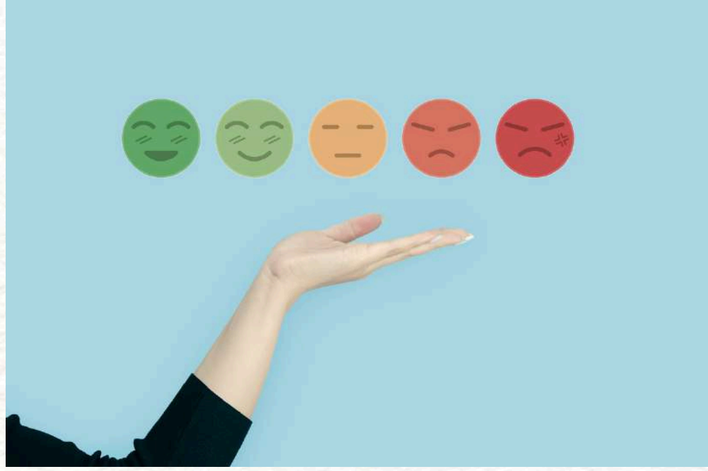
DEFINITION

Error management refers to the way a website or app helps users identify, understand, and fix mistakes they make, especially in forms. An accessible error system ensures that everyone, including people with disabilities, can complete tasks without confusion, frustration, or having to start over.

WHY IT IS IMPORTANT

Forms are everywhere online: sign-ups, checkouts, contact pages... and errors are bound to happen. How we handle these errors can be the difference between a smooth experience and someone giving up completely.

5. ERROR MANAGEMENT



GOOD ERROR MANAGEMENT

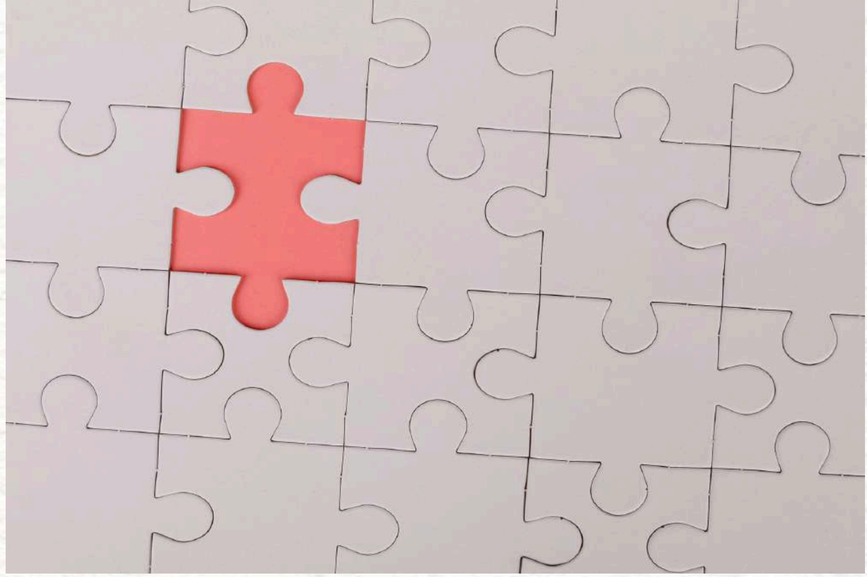
- Helps everyone complete tasks independently
- Builds trust in your website or service
- Complies with accessibility guidelines

Usefull links (for example : WCAG 3)

BAD ERROR DESIGN

- Excludes users with disabilities
- Causes stress and confusion
- Wastes time, especially if data is lost
- Makes users feel like they are the problem

5. ERROR MANAGEMENT



DO'S

- Write error messages that are clear, specific, and helpful
- Show errors while the user interacts with the form, not after submitting
- Automatically focus on the first error field to guide keyboard users
- Make error messages screen reader-compatible
- Preserve user input when an error occurs
- Use textual descriptions alongside visual cues (color, icons)
- Give precise instructions to help users fix their mistakes

5. ERROR MANAGEMENT

Not to do

DONT'S

- Use error codes or vague messages
- Wait until form submission to show errors
- Let the user hunt for the error manually
- Show errors only visually
- Clear the form when there's a mistake
- Rely on red borders alone
- Just say "invalid" or "incorrect"

5.1 CLEAR AND SPECIFIC ERROR MESSAGES

DEFINITION

When an error occurs (like a form not being filled out properly), the message shown to the user should be written in plain, everyday language. It should clearly say what's wrong, where, and how to fix it.

WHY IT IS IMPORTANT

Some users might be new to the internet, struggle with reading, or use translation tools. Others might have cognitive disabilities or be in a stressful situation. A message like "Invalid input" is not helpful. It doesn't explain the problem or how to solve it.

5.1 CLEAR AND SPECIFIC ERROR MESSAGES

BEST PRACTICE

- Identify the field: “In the email address field...”
- Explain the issue: “...you forgot to add the ‘@’ symbol.”
- Suggest a fix: “Please enter a valid email like yourname@example.com.”

GOOD EXAMPLE

“Your email is missing the ‘@’ symbol. Try typing something like user@example.com.”

BAD EXAMPLE

“Error 400.
Invalid field.”

NEXT PART: IMMEDIATE FEEDBACK DURING INTERACTION

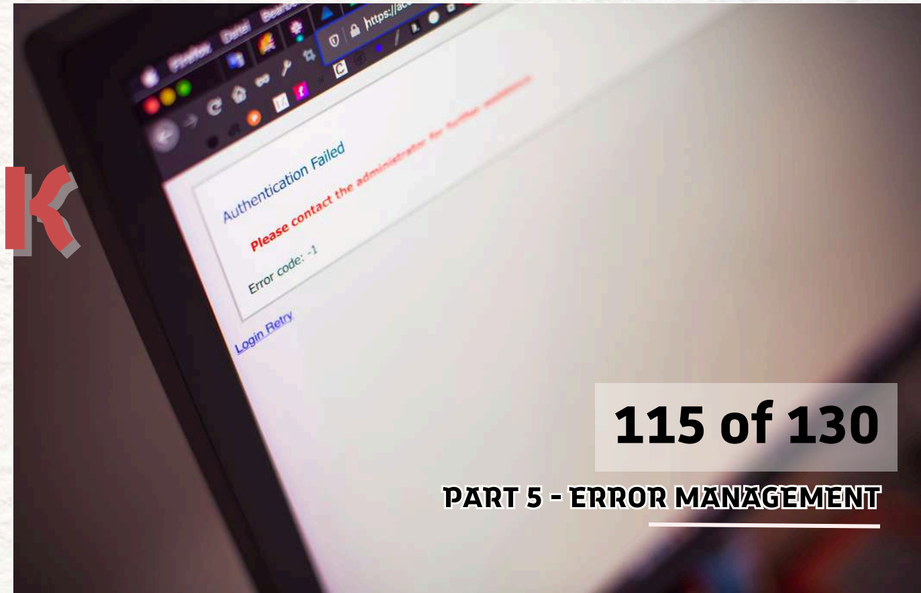
DEFINITION

Instead of waiting until the user submits the entire form to reveal errors, show problems as soon as they happen, while the user is typing or when they leave a field (e.g. clicking into the next one).

WHY IT IS IMPORTANT

- Users with memory issues or attention disorders can fix things one step at a time.
- Users won't repeat mistakes throughout the form.
- It saves time and reduces frustration.

5.2 IMMEDIATE FEEDBACK DURING INTERACTION



5.2 IMMEDIATE FEEDBACK DURING INTERACTION

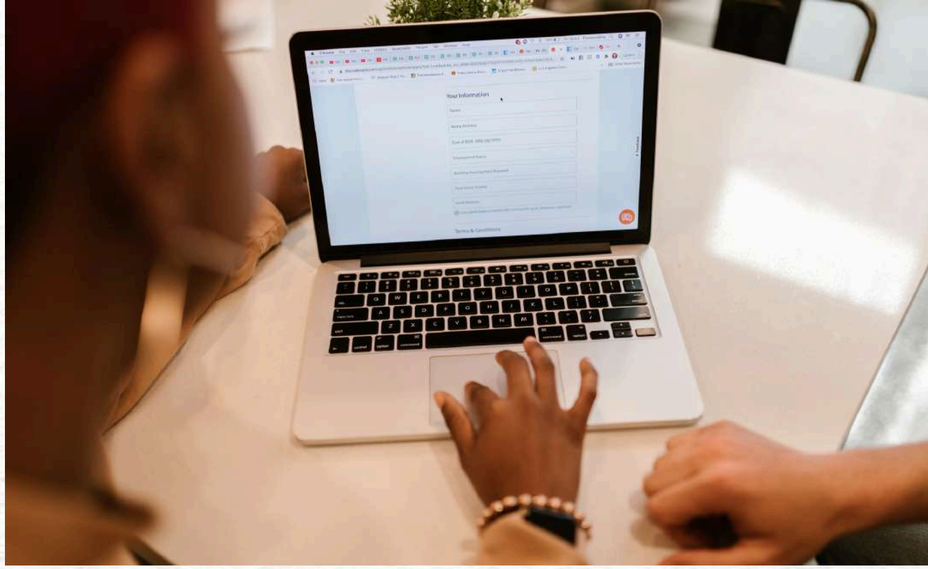
BEST PRACTICE

- Use real-time validation (e.g. when the user exits a field).
- Show the error below or next to the field.
- Update the message live if the issue is fixed.

EXAMPLE

A user is typing a phone number. As soon as they enter 4 digits instead of 10, an error appears: “Phone numbers in France must have 10 digits.”

5.3 FOCUS ON THE FIRST ERROR FIELD



DEFINITION

When there are multiple errors in a form, your website should automatically move the keyboard focus to the first problematic field once the user submits the form.

WHY IT IS IMPORTANT

- People who use only a keyboard (e.g. blind users, motor-impaired users) can't use a mouse to find where the problem is.
- Automatically placing them in the right spot helps them fix things quickly and independently.

5.3 FOCUS ON THE FIRST ERROR FIELD

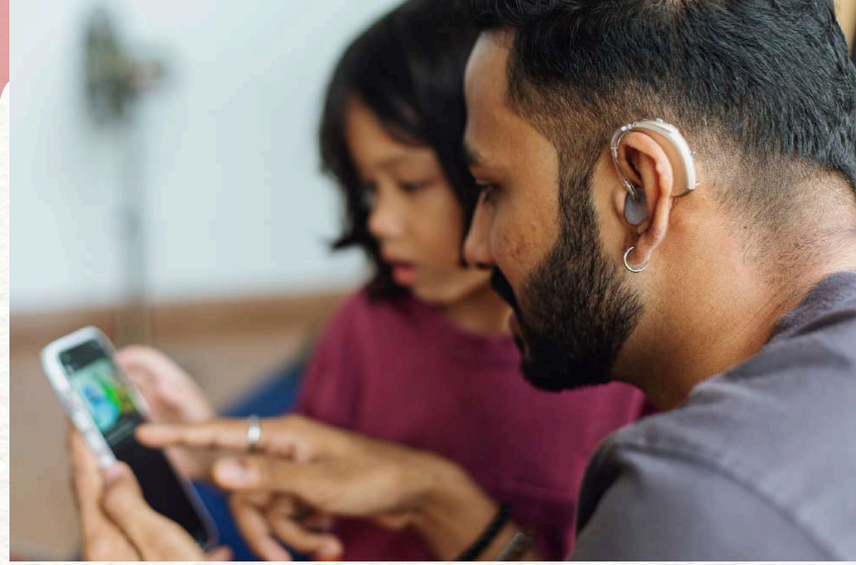
BEST PRACTICE

- After showing error messages, use a script that places the cursor on the first error field.
- Make sure the screen reader also announces the message attached to this field.

GOOD UX FLOW

- User clicks “Submit.”
- An error appears near the email field: “Please enter your email.”
- Focus jumps to the email field.
- The screen reader announces: “Please enter your email.”

5.4 SCREEN READER COMPATIBILITY



DEFINITION

Some users rely on screen readers—software that reads web content aloud. Your error messages must be coded in a way that these tools can detect and announce them.

WHY IT IS IMPORTANT

- Users with visual impairments can't see red borders or warning signs.
- Without accessible error messages, these users won't know anything went wrong.

5.4 SCREEN READER COMPATIBILITY

BEST PRACTICE

- Use aria-live="polite" so screen readers are alerted when a new message appears.
- Use aria-describedby to link the field to its error text.

HTML

```
<label for="email">Email</label>
<input id="email" aria-describedby="email-error" required>
<p id="email-error" aria-live="polite">Please enter a valid email address.</p>
```

This lets the screen reader say something like:
"Email, edit text. Please enter a valid email address."

NEXT PART: PRESERVE INPUT DATA

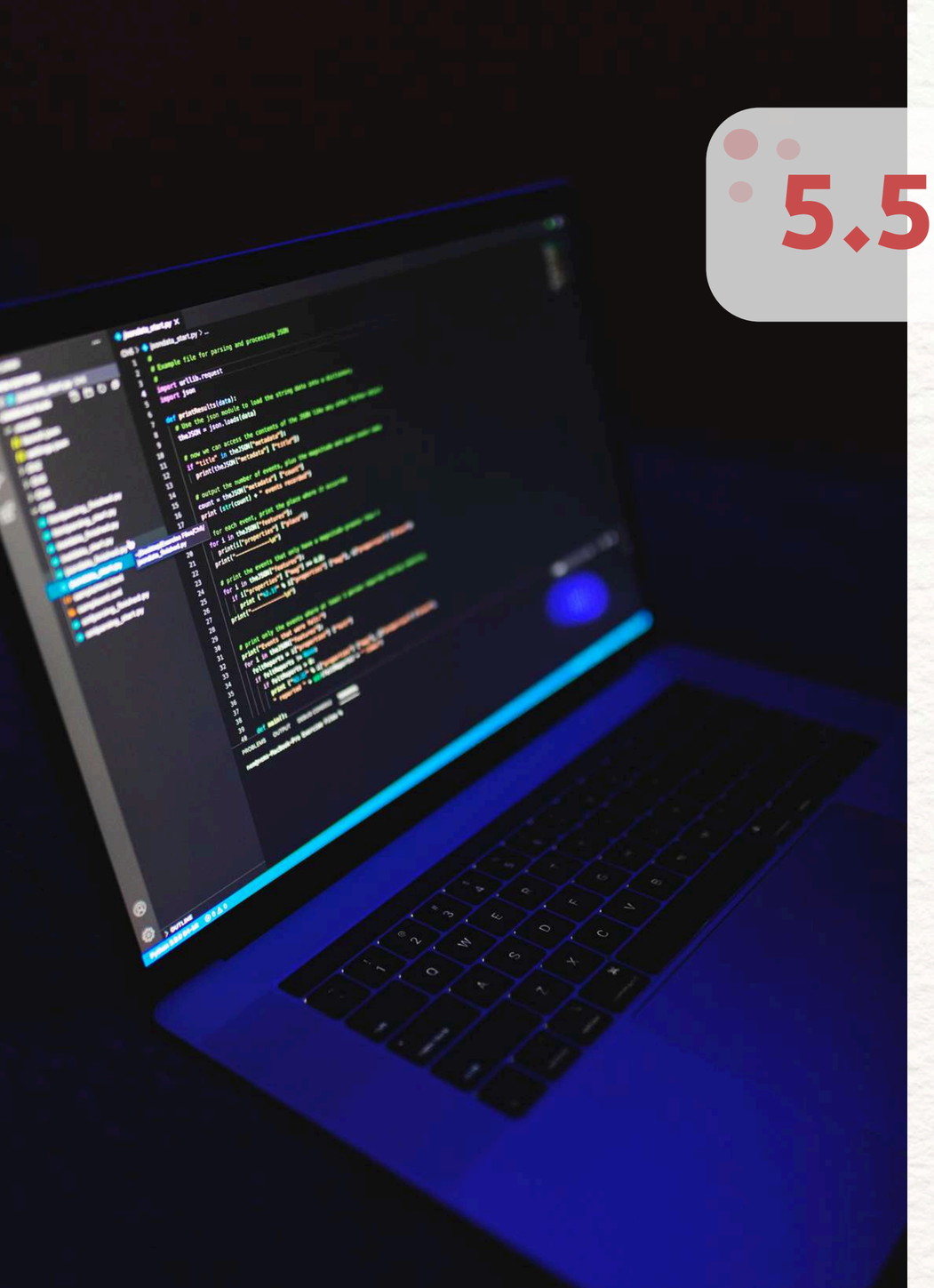
5.5 PRESERVE INPUT DATA

DEFINITION

If a user makes a mistake and gets an error, their already-filled-out form shouldn't be wiped clean. All their valid entries should still be there.

WHY IT IS IMPORTANT

- Losing data is extremely frustrating.
- Users with mobility or vision issues may take longer to fill forms.
- It's a huge accessibility issue to force people to retype everything.

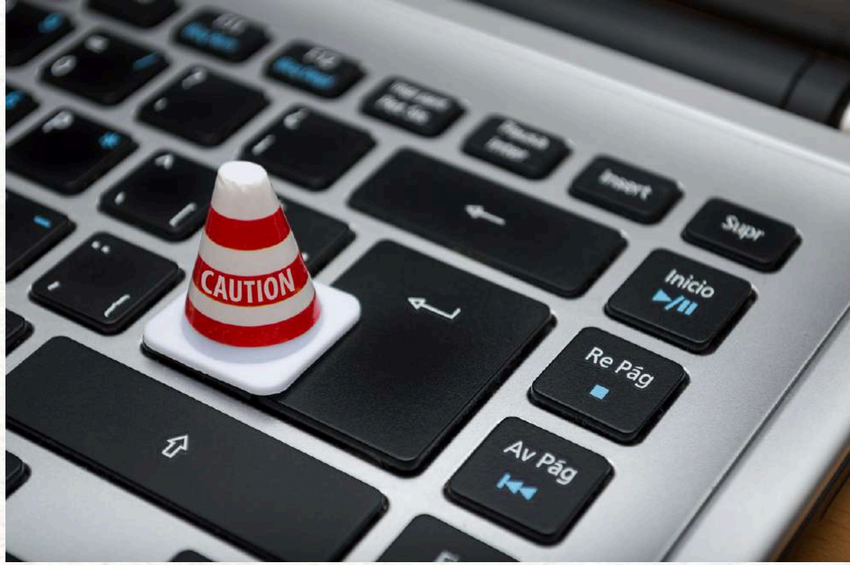


5.5 PRESERVE INPUT DATA

BEST PRACTICE

- Use JavaScript or backend logic to keep data unless the form is successfully submitted.
- Never reset the form unless the user clicks “Clear” or “Start over.”

5.6 VISUAL AND TEXTUAL ERROR CUES



DEFINITION

When you highlight errors in a form, don't rely on just one method — especially not just color.
Add text, symbols, and contrast so everyone can understand what's wrong.

WHY IT IS IMPORTANT

- People with color blindness may not see red.
- Low-vision users need strong contrast.
- Icons or text give extra context that helps everyone.

BEST PRACTICE

- Use a red border + a warning icon + a clear text message.
- Example: A red exclamation mark icon appears next to the field, and under it:
  “This field is required.”
- Use accessible colors (contrast ratio of at least 4.5:1)
- Add aria-hidden=”true” to icons so they don’t confuse screen readers

NEXT PART: HELPFUL SUGGESTIONS

5.6 VISUAL AND TEXTUAL ERROR CUES

5.6 HELPFUL SUGGESTIONS

DEFINITION

Error messages shouldn't just point out the problem—they should guide the user to fix it.

WHY IT IS IMPORTANT

- People with cognitive disabilities or people unfamiliar with tech may not know what's expected.
- Providing guidance turns errors into learning opportunities.

5.6 HELPFUL SUGGESTIONS

BEST PRACTICE

- Show examples of the correct format.
- Use friendly tone, not blaming.

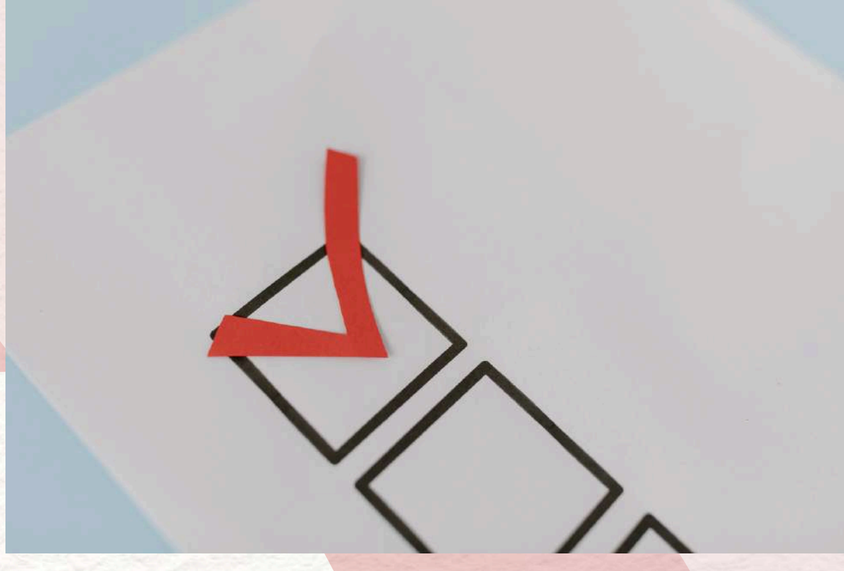
BAD EXAMPLE

"Password too weak."

GOOD EXAMPLE

"Password must be at least 8 characters and include a number. Example: TeaLover2025."

5.7 USEFUL TOOLS



TESTING AND VALIDATION TOOLS

Usefull links

axe DevTools

- Browser extension for Chrome and Firefox
- Tests live web pages or local dev environments
- Offers suggestions for fixing accessibility issues in forms and error feedback

Usefull links

WAVE (Web Accessibility Evaluation Tool)

- Chrome extension or online scanner
- Detects missing form labels, contrast issues, and missing ARIA attributes
- Highlights problems directly on your webpage with visual feedback

5.7 USEFUL TOOLS

CODE AND DEVELOPMENT TOOLS

Usefull links

Inclusive Components by Heydon Pickering

- Real examples of accessible components (forms, error messages, etc.)
- Explains the why behind best practices
- Open-source and easy to adapt for your own projects

Usefull links

ARIA Authoring Practices Guide (WAI-ARIA)

- Official guidelines from W3C
- Shows how to make dynamic components (like popups or error alerts) accessible
- Great reference when adding aria-* attributes

5.7 USEFUL TOOLS

SIMULATION AND EMPATHY TOOLS

Usefull links

Color Oracle

- Simulates how your page looks to people with color blindness
- Essential to make sure you don't rely on color alone to indicate errors

5.7 USEFUL TOOLS

LEARNING RESOURCES

Usefull links

Deque University

- Free courses on accessibility, including form design and error handling
- Great for beginners and advanced users alike

Usefull links

Accessibility Insights for Web (by Microsoft)

- Another browser extension with step-by-step guided tests
- Focuses heavily on keyboard and screen reader compatibility

Université de Strasbourg

THANK YOU FOR READING!

BIP – Blended Intensive Program

Advancing Accessibility in Digital Communication

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BIP accessibility audit handbook - Group 1