deque

Practical approaches to digital accessibility

An intentionally plain looking presentation

Who is the presentation for?

This content focuses on digital accessibility beginners.



Our big goal for the day

Equip designers with practical strategies and approaches to common accessibility design issues.



How might we meet that goal?

- 1. Getting on the same page digital accessibility
- 2. Learn a different approach to addressing color contrast
- 3. Learn how to test for relying on color to convey meaning
- 4. Learn how to approach and document reading order
- 5. Learn how to write links that make sense on their own



Disclaimer

Let's agree that typos are a style choice. They don't reflect how well my teachers taught, and those teachers shouldn't be blamed. Even though I have an English degree, I still can't use a semicolon correctly;;;



1. Getting on the same page

Accessibility is complicated.

The end.

What do we mean when we say complicated?

Let's examine something complex that isn't about digital accessibility.



Something complicated

In the domain of architectural jurisprudence, the presence of an ingress and egress latch serves as a paramount for ensuring compliance with accessibility statutes, fortifying premises liability, and enhancing the functional efficacy of architectural constructs.



What does that mean?

What does that mean?

Doors need handles.



Back to digital accessibility

Just like we can simply say "doors need handles," WCAG helps make digital accessibility easier to understand and do. Let's be honest - it is still a smidge confusing.



Let's take a look at a WCAG example

Understanding Success Criterion 1.1.1:
Non-text Content | WAI | W3C



How might we simplify WCAG so we don't have to refer to it all the time?

2. Color contrast and design

A different approach?

What is color contrast?

Color contrast refers to the difference in **luminance** or color that makes an object (or its representation in an image or on a screen) distinguishable from other objects and the background.



Color contrast explained simply

- Color contrast is the difference in colors that makes one thing stand out from another.
- It's making sure that words and pictures are easy to see and read against the background.



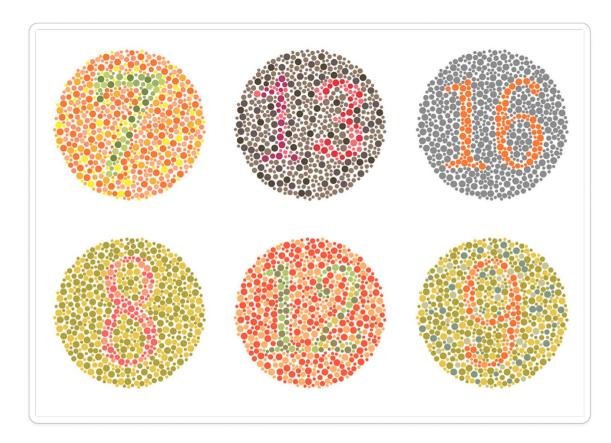
Why is color contrast important to users?

For those who can perceive color, it can help make it easier for a user to accomplish a goal.



Examples of color contrast issues

- Here are 6 circles.
- Each circle has a number inside.
- The number and circle are made from dots.
- The dots use different colors





WCAG contrast success criterion

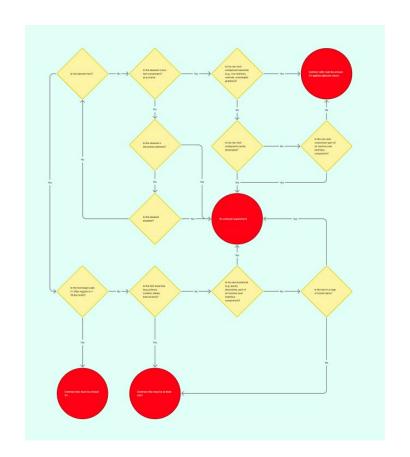
<u>Understanding Success Criterion 1.4.3: Contrast (Minimum) | WAI | W3C</u>

Understanding Success Criterion 1.4.11: Non-text Contrast | WAI | W3C



WCAG Color contrast decision tree

This decision tree shows WCAG color contrast guidance and its various exceptions.





Can we prevent color contrast issues with one simple question?

A practical approach

Needed	Contrast requirement: 4.5:1
Helpful	Contrast requirement: 3:1
Not needed	No contrast requirement



Let's try this on a button



Needed	Contrast requirement: 4.5:1
Helpful	Contrast requirement: 3:1
Not needed	No contrast requirement



Let's try this on this donut chart

Needed	Contrast requirement: 4.5:1
Helpful	Contrast requirement: 3:1
Not needed	No contrast requirement





Just remember the big question

Needed	Contrast requirement: 4.5:1
Helpful	Contrast requirement: 3:1
Not needed	No contrast requirement



3. Not relying on color to convey meaning

A practical approach to evaluating your designs

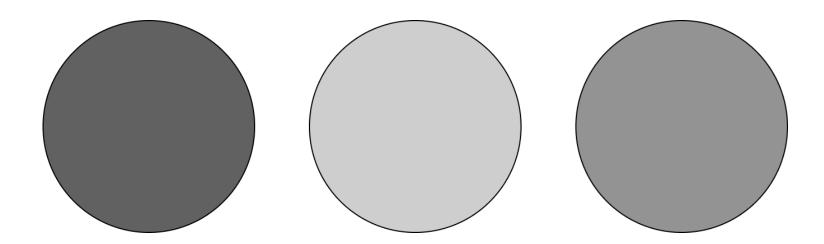
What do I mean when I say not relying on color to convey meaning?

Color should never be the only way to communicate important information in interfaces. Always add another visual element like an icon, pattern, or text label.



Three circles with luminosity applied

Do you know what status each represents?

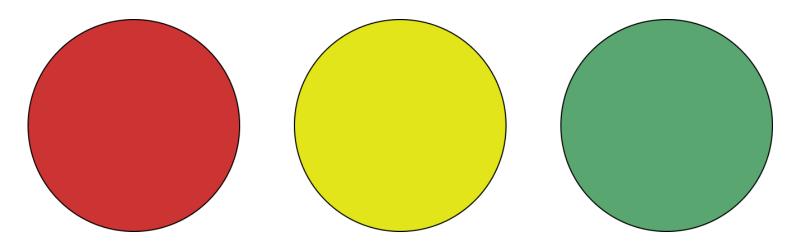




Three circles

We have three circles. From left to right, they are red, yellow, and green.

Do you know what status each represents?





Three circles - for the last time.

From left to right: the first is red with a label stating "Status: Completed." The second is yellow with a label stating "Status: In Progress." The third is green with a label stating "Status: Not Started."

Do you know what status each represents?





Let's look at more realistic example

Example of relying on color to convey meaning

Can you confidently identify all the links? What if the ability to identify links was critical to accomplishing your goal?

Email

Your data is protected in our privacy policy.



Example of relying on color to convey meaning

Can you confidently identify all the links? What if the ability to identify links was critical to accomplishing your goal?

Email

Your data is protected in our privacy policy.

Example of relying on color to convey meaning

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Example of not relying on color to convey meaning

Can you confidently identify all the <u>links?</u> What if the ability to identify links was critical to <u>accomplishing</u> your goal?

Email

Your data is protected in our privacy policy.



A practical approach to prevent this issue

- 1. Apply luminosity blend mode in your tool of choice for your final design to check if understanding the content relies on color.
- 2. Test this version with users to confirm the content is understandable.

Let's see how this works in Figma



4. Reading order

A practical approach to communicating reading order to developers

What is reading order?

Reading order is the sequence in which content is presented to users, particularly those using assistive technologies like screen readers. It's how text and other elements are read from the top of the page to the bottom, typically from left to right.



Reading order explained simply

Put content in an order that makes sense, so people can easily follow steps and get things done.



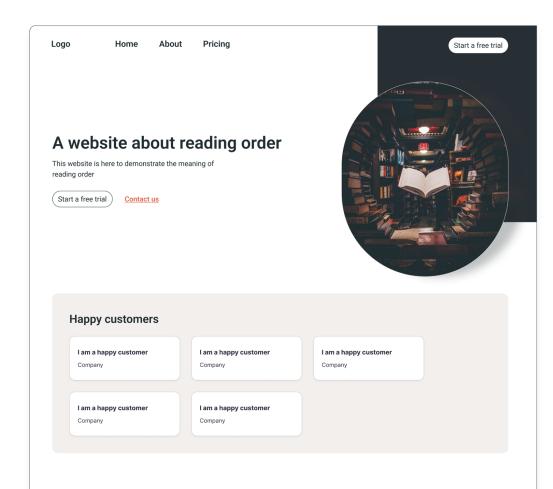
Why does it matter?

Assistive technology does not have the ability to see a visual hierarchy. We need to tell it how to see.



A website with a simple reading order

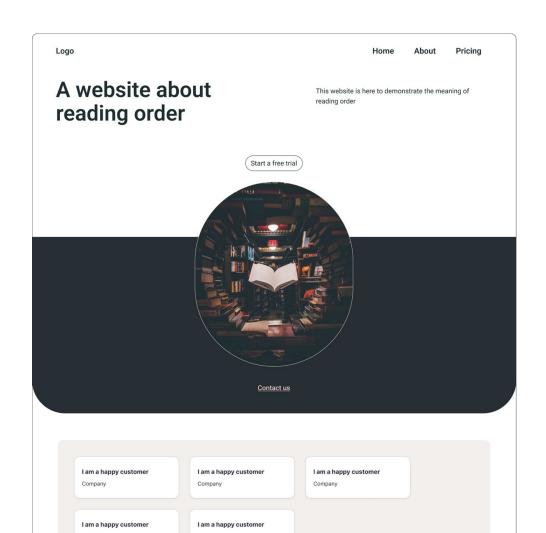
- The website shows a top bar with menu items and a CTA.
- There is also a hero with a large title, sub-title, two CTAs, and an image of books.
- Lastly, there is a testimonial section with 5 cards.
- Each card has a short line and the company name.





A website with a more challenging reading order

How should the user read this to accomplish their goal?





A practical approach to reading order

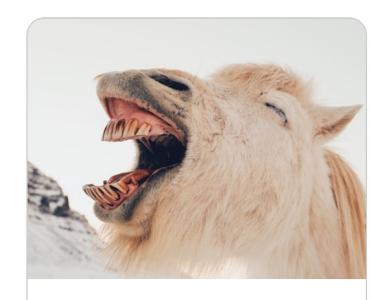
- 1. Figure out what the person needs to do.
- 2. Determine what order they need to read things to get it done.
- 3. Document this order for all breakpoints.



Applying the practical approach to reading order

What is the person trying to do?

The user is trying to read an an article that interests them.



The importance of proper teeth brushing technique

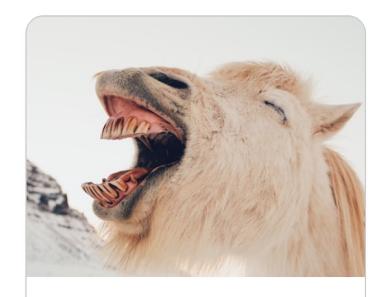
A step by step approach to brushing your teeth to make your dentist smile



Applying the practical approach to reading order

What order do they need to read the content to help them determine if the article interests them?

- The importance of proper teeth brushing technique
- 2. A step by step approach to brushing your teeth to make your dentist smile
- 3. The image



The importance of proper teeth brushing technique

A step by step approach to brushing your teeth to make your dentist smile



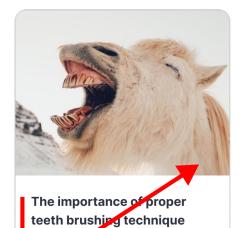
Applying the practical approach to reading order

Two approaches to documenting reading order:

- Approach 1: Use arrows to show the direction of the reading order.
- Approach 2: Use numbers to show the direction of the reading order.

Approach 1

Using arrows



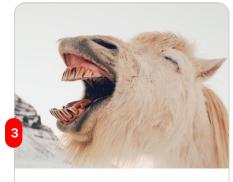
A step by step approach to

dentist smile

bryshing your teeth to make your

Approach 2

Using numbers



- The importance of proper teeth brushing technique
- A step by step approach to brushing your teeth to make your dentist smile

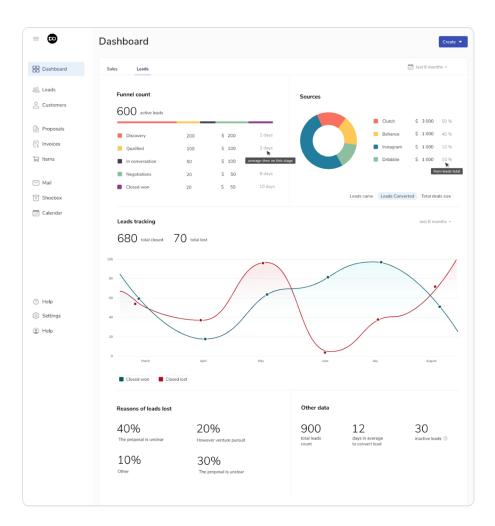
Reading order

What about a more complicated design?



A dashboard with a lot of components

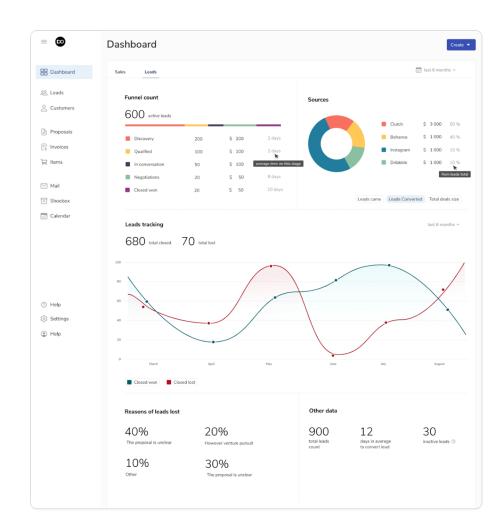
- Figure out what the person needs to do.
- Determine what order they need to read things to get it done.
- Document this order for all breakpoints.





Break it down into smaller components

First, apply the same approach to each component on the page rather than to the entire page.





Let's focus on the donut chart with the legend

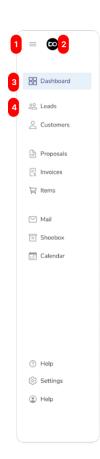
- What is the person trying to do with this chart?
- What order do they need to read things to get it done?
- Document this order for all breakpoints.





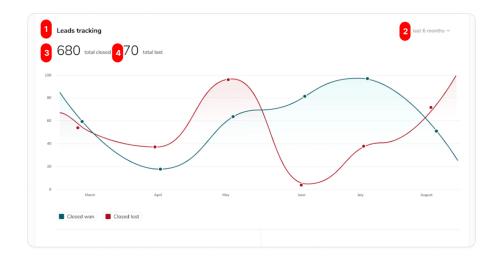
Do that for each component on the page

Bonus: If you work with a design system, you only have to document it once.









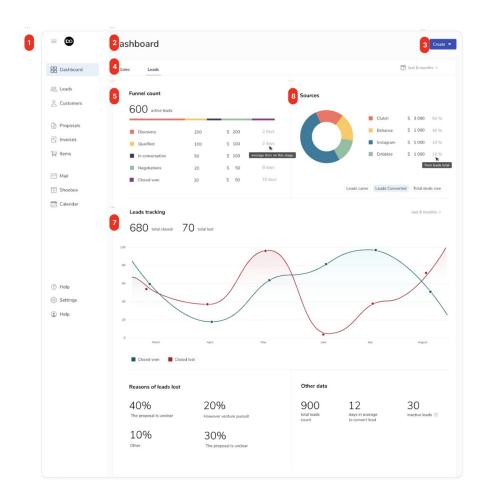


Document the view

Since you broke down the complex parts, just specify the order in which to read those parts.

Don't forget:

- What is the person trying to do with this page?
- What order do they need to read things to get it done?
- Document this order for all breakpoints.





4. Writing links that make sense on their own

A practical approach to making link text clear

What do we mean by meaningful link text?

Meaningful link text tells users their destination before they click, without requiring them to read surrounding content.

Example of unclear link text: <u>Learn more</u>



Why is this important?

Many people who use screen readers hear the words and links on a screen read out loud, instead of seeing them.



The "learn more" problem

- Here is a section of page titled "Recent articles."
- It has 3 cards representing a different article.
- Each card has an image, title, text, and a "learn more" link.
- There is also a "view all" link.

Recent articles



The importance of proper teeth brushing technique

A step by step approach to brushing your teeth to make your dentist smile

Learn more



Dogs learn to read

Scientists have learned that dogs just needed glasses

Learn more



View all

Cat yoga for cats

Yoga is not just for people anymore.

Learn more



Imagine that you experienced this just by the links

View all

<u>Learn more</u> <u>Learn more</u> <u>Learn more</u>



An example of the VoiceOver rotor on a Mac

This rotor menu for "Links" is how many using assistive technology experience that original three card design.

Can you tell where the links go just based on the text?

Links

Learn more

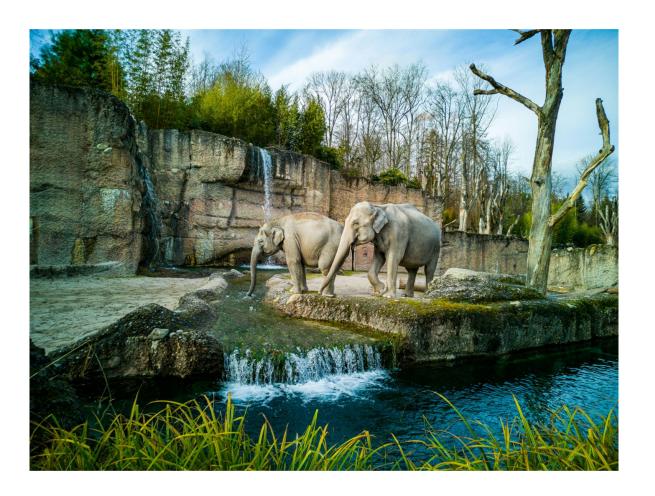
Learn more

Learn more

View all



It took me to the zoo.



A practical approach for writing meaningful link text

Think about this: If someone read just the link words to you, would you know where you'd go?



A common example

Learn more

If someone read just the link words to you, would you know where you'd go?



A more clear example

Learn digital accessibility

If someone read just the link words to you, would you know where you'd go?

Tip: Use averb and noun



A more more clear example

Open digital accessibility guide in new tab

If someone read just the link words to you, would you know where you'd go?

Tip: Use a verb and noun and clarifying statement



Summary

Overview of the practical strategies and approaches

Summary

What did we learn today?

- Learned a different way to approach color contrast
- Learned how to make designs work without depending on colors
- Learned how to determine and document the right reading order
- Learned the basics of writing meaningful link text



Summary

Question for y'all

What is the color contrast requirement if content is **needed?**



Questions, thoughts, concerns, fears, challenges, spoiler alerts, cookie recipes, favorite quotes, or incredible poems y'all want to share?