



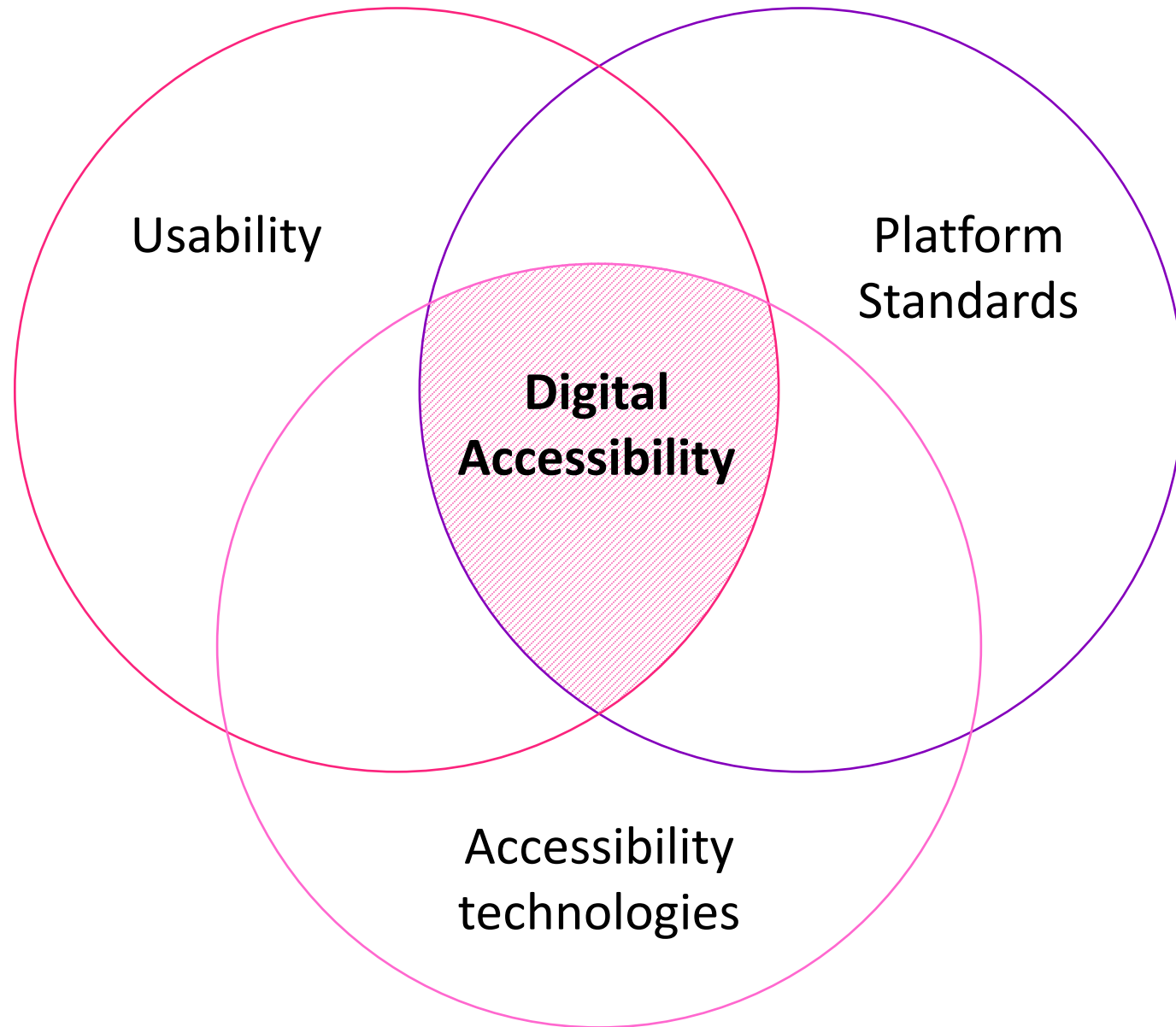
WCAG 2.2

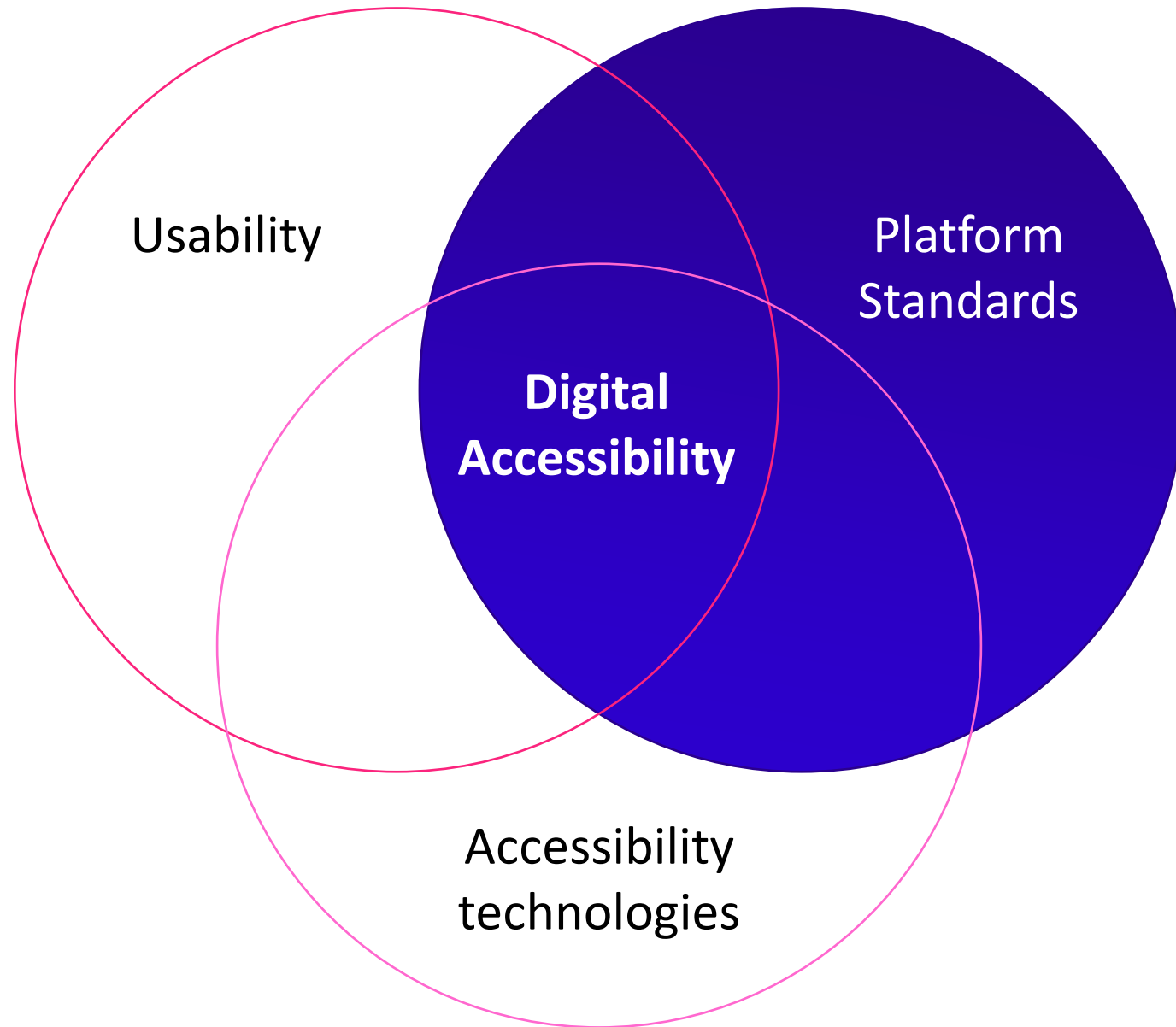
Alastair Campbell
Director of Accessibility at Nomensa

nomensa
Humanising Technology

- Intro to “Web Content Accessibility Guidelines”
- What is new in WCAG 2.2
- What to do next?



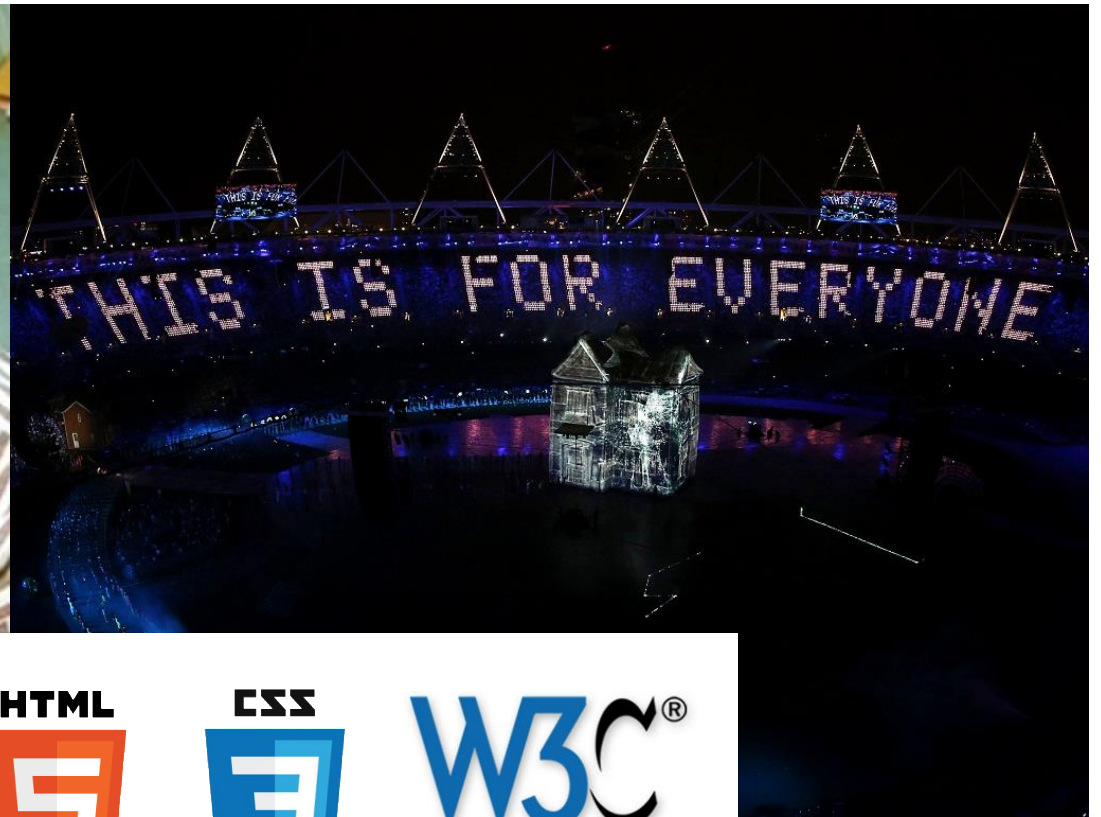
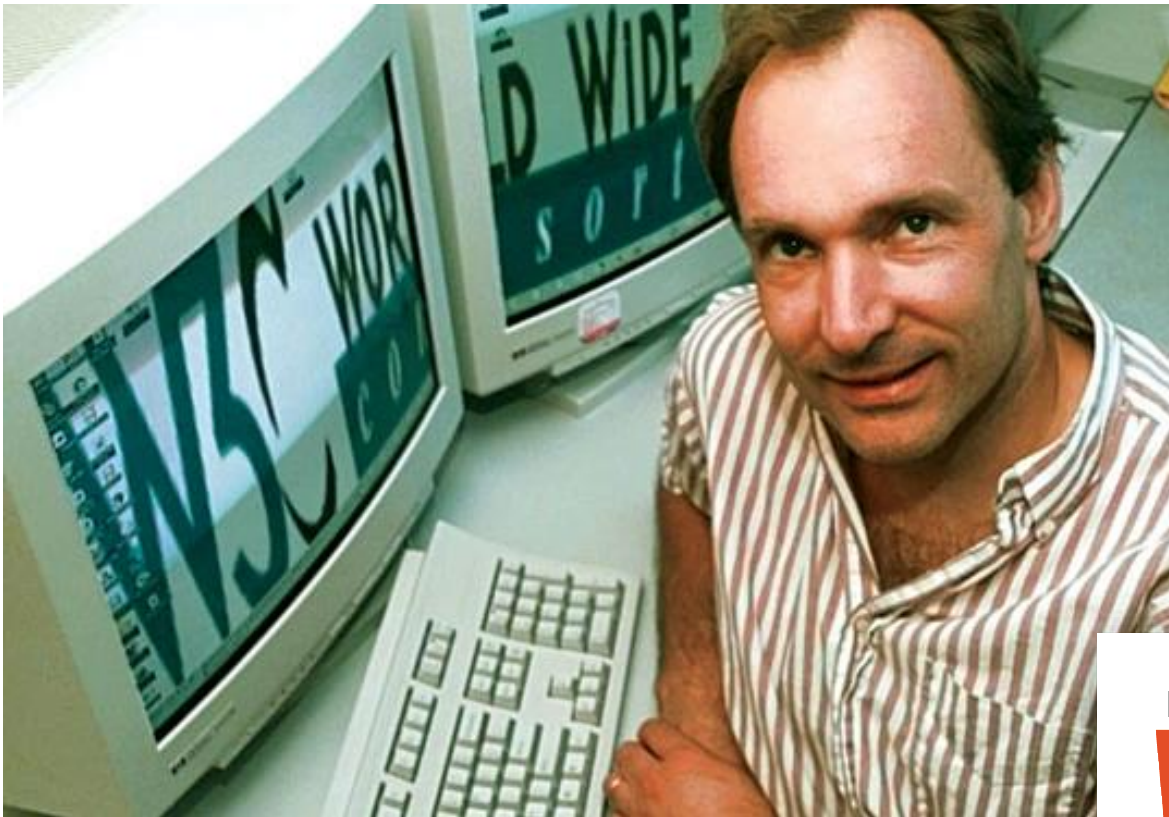




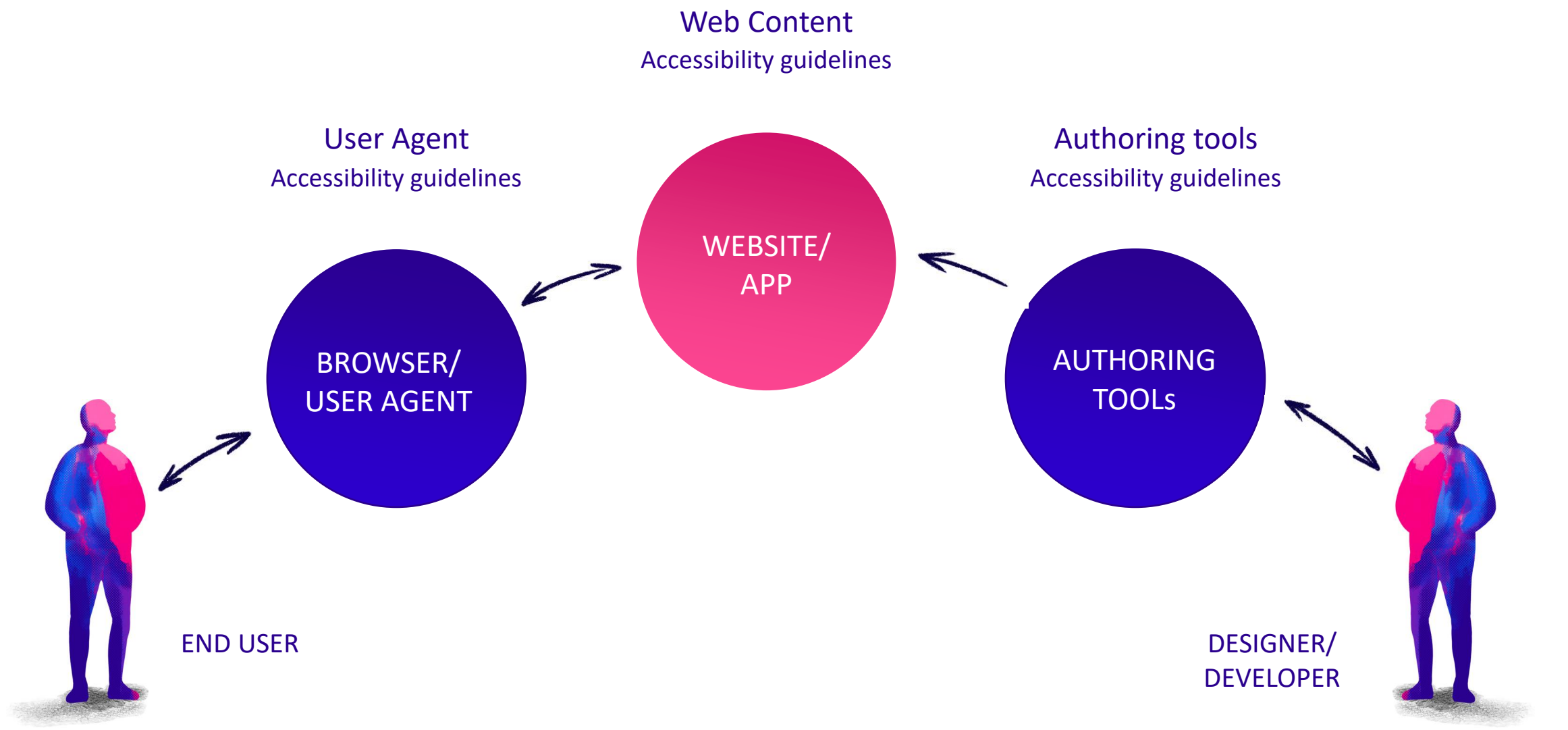


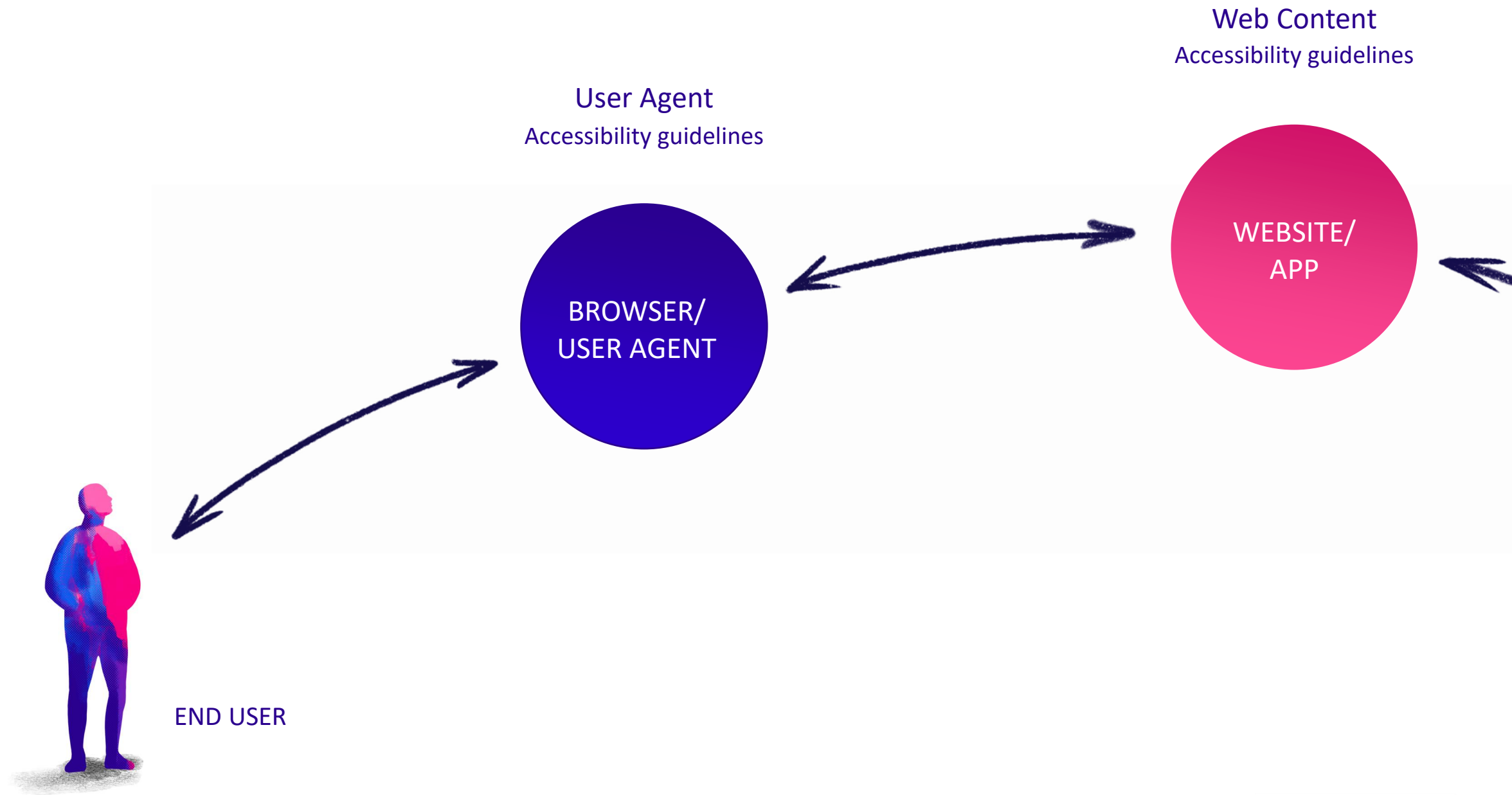
**Where do the guidelines
come from?**

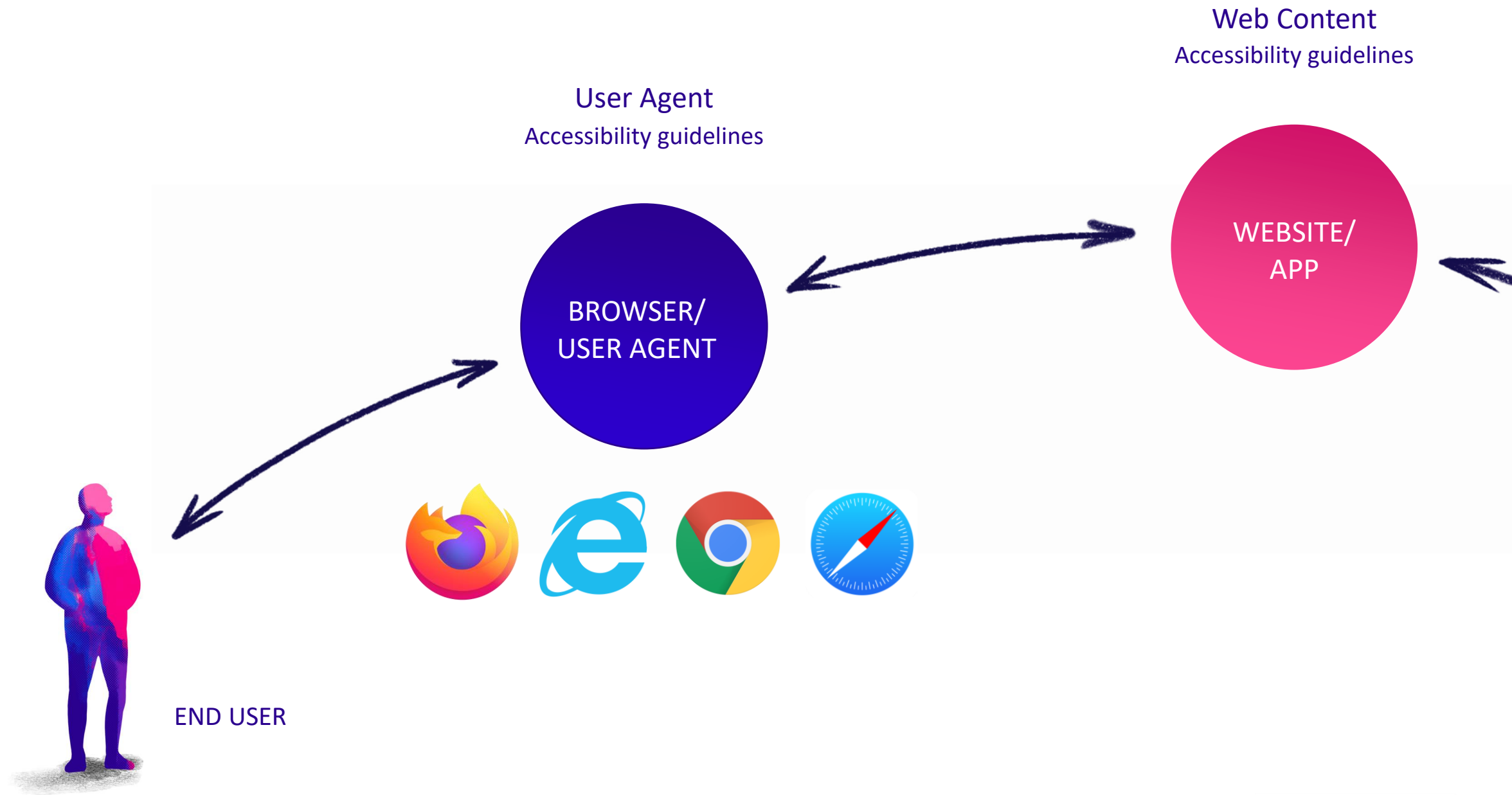
World Wide Web Consortium (W3C)

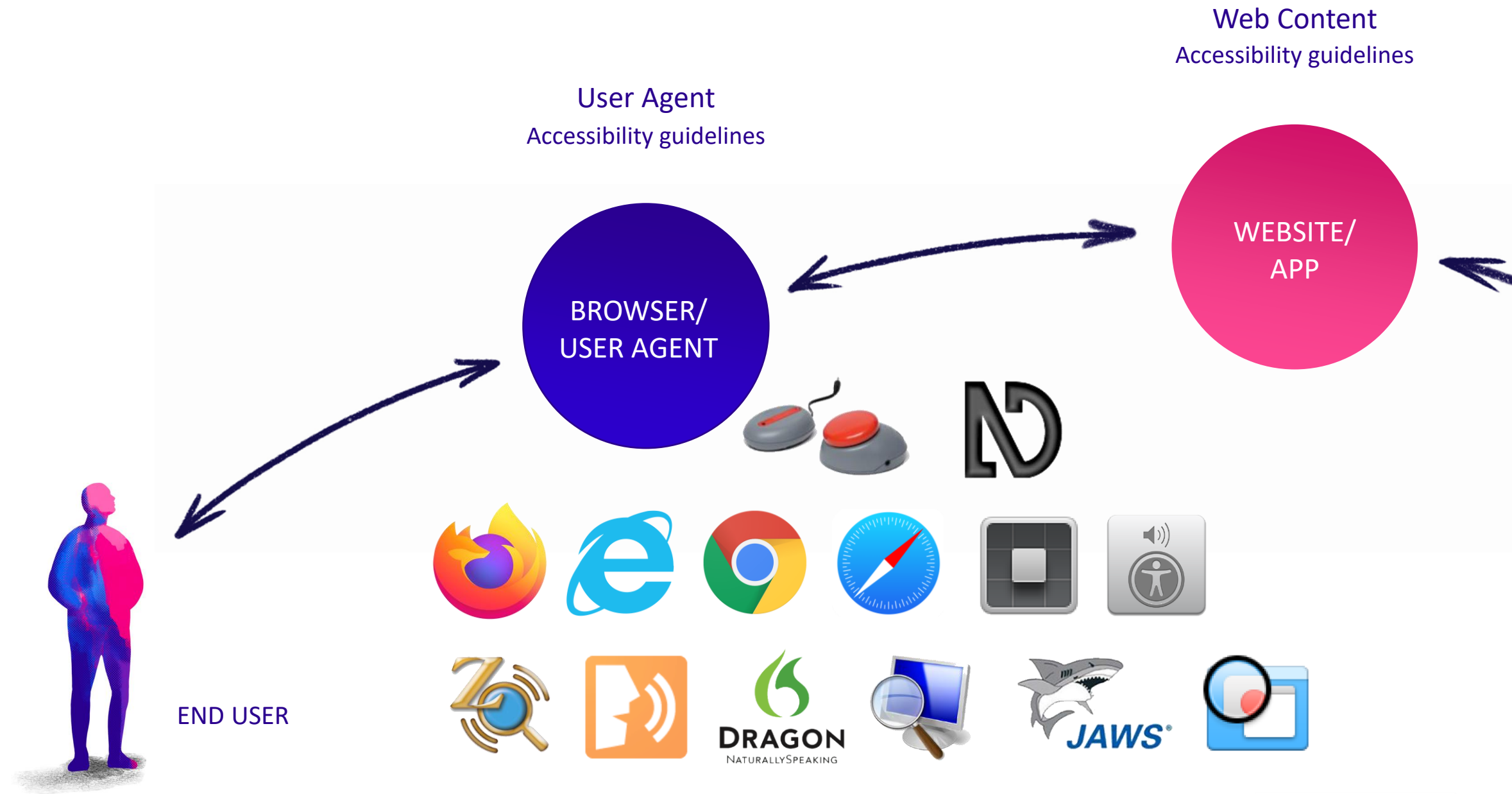








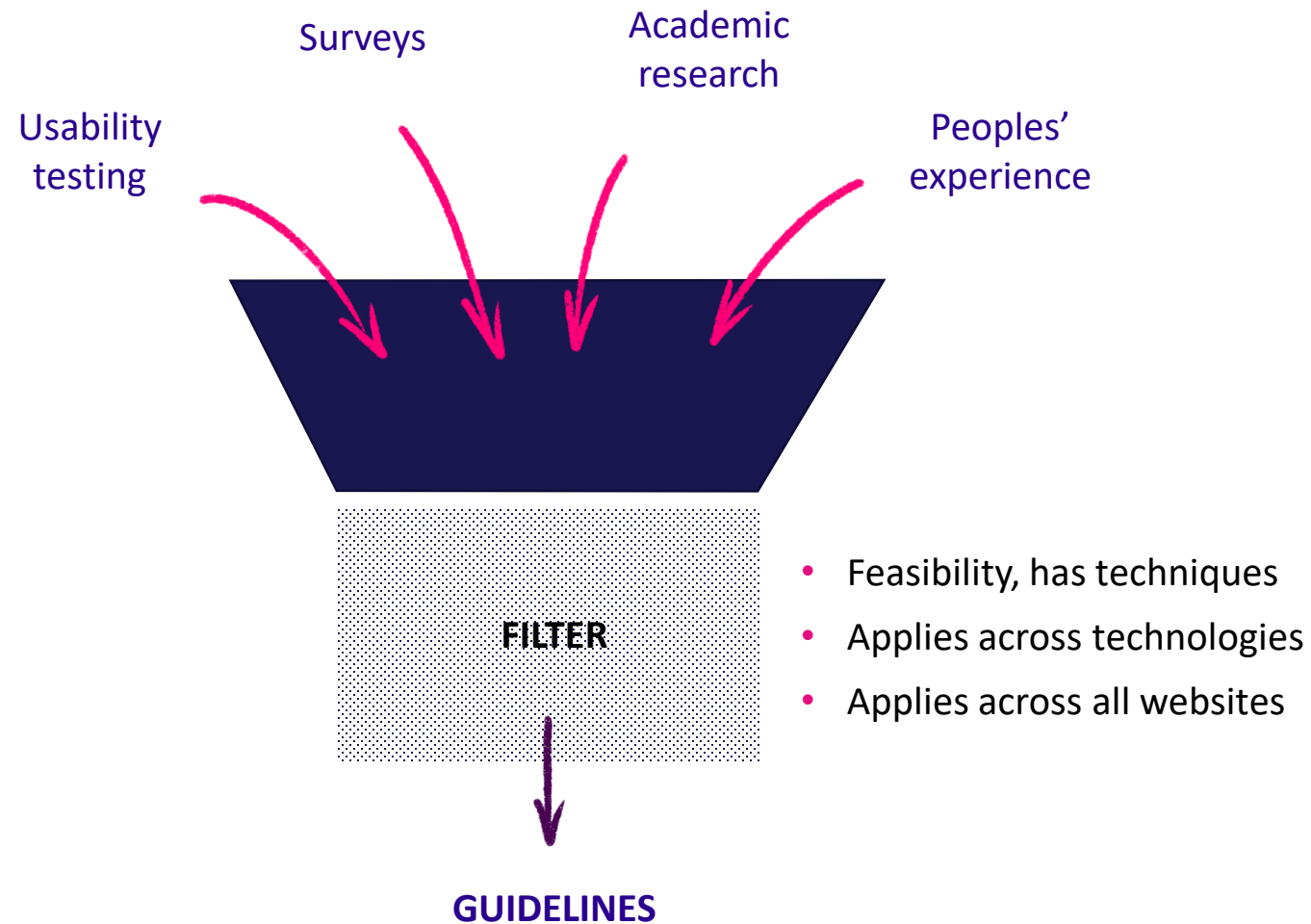




Designing to user-agents doesn't work



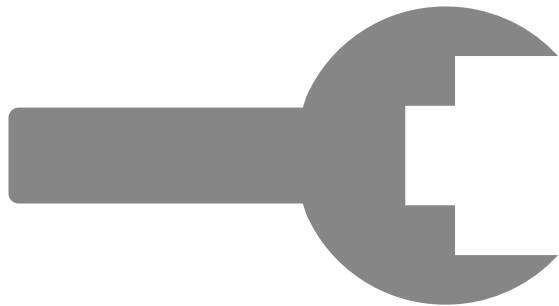
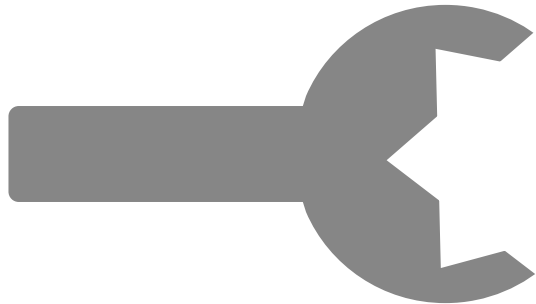
Creation process



**What is a content
guideline?**

Guidelines as antibodies

Guidelines



Interface features



Poor colour contrast



Inappropriate structure

Our workWhat we doCareersBlogContact usNav

BannerMain

H1 Nomensa

STRATEGIC EXPERIENCE DESIGN.
WE ARE HUMANISING TECHNOLOGY.

We deliver experience excellence and connect brands to their customers through our human-centric approach.

H2 GREAT DESIGN STARTS HERE

We create groundbreaking experiences that make a measurable difference to the way people live.

H2 What is stopping your organisation from delivering excellent User Experience (UX)?

Discover the answer and improve your UX capability to market-leading levels with the Nomensa Experience Assessment.

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[Skip to content](#) [Menu](#) Nomensa Strategic Experience Design. We are Humanising Technology. [Play video](#) We deliver experience excellence and connect brands to their customers through our human-centric approach. Great design starts here

We create groundbreaking experiences that make a measurable difference to the way people live. What is stopping your organisation from delivering excellent User Experience (UX)? Discover the answer and improve your UX capability to market-leading levels with the Nomensa Experience Assessment. [Start your free Experience Assessment](#) We think bigger

[UX Strategy drives award-winning website](#) [£2.9 million increase in donations](#) [264% increase in page views for optimised content](#) [Pan-European retail transformation](#) [Humanising the weather for the Met Office](#) See our ideas in action below. [Great design starts here transcript](#) [Get in touch](#) Just some of the clients we work with AA Admiral Alzheimer's Society Argos British Red Cross Compare The Market Eden Project Empirix Gov.uk Innovate UK John Lewis Just Eat Liberty Global National Trust NHS Blood and Transplant nimbl Npower Parent Pay RCoA, Royal College of Anaesthetists Royal Mail Saga Sky unicef Virgin Media Our approach We are respected experts We use insight to create experiences Humanising Technology Not technologising humans Our services [UX Strategy](#) [UX Research](#) [UX Design](#) [Content Strategy](#) [Social Media Strategy](#) [Web Accessibility](#) [Service Design](#) [Web Development](#) [Public Sector](#) Our thoughts, ideas and solutions [Improving your UX capability \(opens in a new window\)](#) by Simon Norris and Alex Metcalf

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It's an exciting time for UX illustration. It's easy to see, and enjoy the benefits of a well executed illustration within a digital... Discover more ... [go to our blog](#) Our events [Contact us Bristol \(Head office\)](#) King William House 13 Queen Square Bristol BS1 4NT [Telephone +44 \(0\) 117 929 7333](#) [hello@nomensa.com](#) 51.450657 -2.593048500000009 [Get directions \(opens in a new window\)](#) London 91 Wimpole Street Marylebone London W1G 0EF [Telephone +44 \(0\) 203 967 4061](#) [hello@nomensa.com](#) 51.517880 -0.148120 [Get](#)

nomensa

What is a content guideline?

“

Users can navigate by headings and lists when appropriate.

”

✗ Unworkable

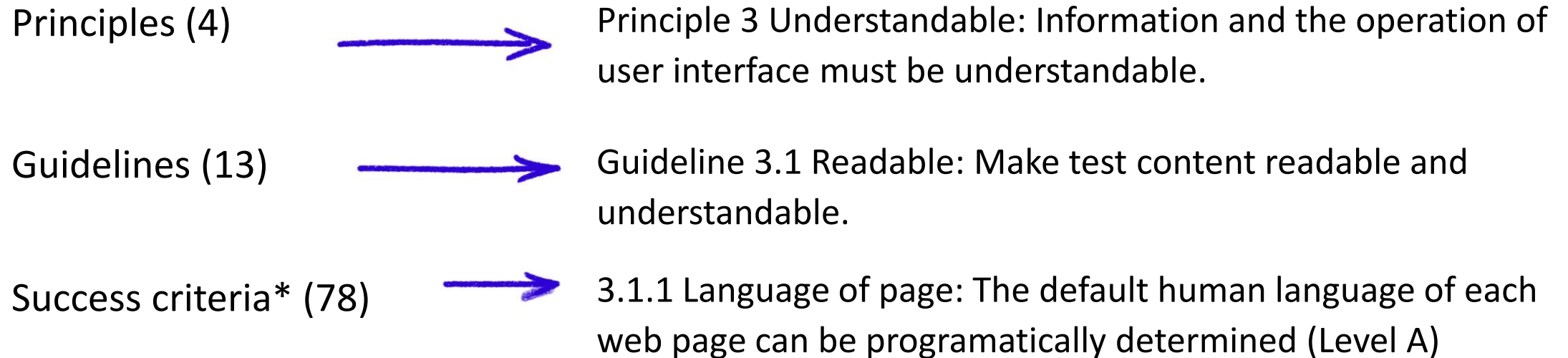
“

Information, structure, and relationships conveyed through presentation can be programmatically determined or are available in text.

”

✓ Difficult to understand, but works

WCAG 2.1: Principles, Guidelines, Success Criteria



*Success criteria: A testable statement about any web content that is known to improve access for people with disabilities.

Levels: A, AA, AAA

Not meeting a SC means:

- Level A (30): Critical, people will not be able to access the content.
- Level AA (20): Essential, significant barriers would remain for some people.
- Level AAA (28): Useful, possibly essential to some.

Not officially defined, in practice:

↑ Barrier that cannot be overcome by user's technology

↓ Difficult or infeasible in practice

↓ Does not apply to all content

↓ Requires a change to look & feel for everyone

“Understanding”

Success Criterion 1.3.1 Info and Relationships

(Level A)

Information, [structure](#), and [relationships](#) conveyed through [presentation](#) can be [programmatically determined](#) or are available in text.

[Understanding Info and Relationships](#)
[How to Meet Info and Relationships](#)

The most important link for each guideline!



WCAG 2.x updates



Web Content Accessibility Guidelines 1.0

W3C Recommendation 5-May-1999

This version:

<http://www.w3.org/TR/1999/REC-WCAG10-19990505/>
(plain text)

Latest version:

<http://www.w3.org/TR/2008/REC-WCAG20-20081210/>

Previous version:

<http://www.w3.org/TR/2006/REC-WCAG20-20061210/>

Editors:

Wendy Chisham
Gregg Vanderheiden
Ian Jacobs

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All rights reserved. No rules apply.

Abstract

These guidelines are intended to help developers of web content to make their content more accessible to people with disabilities. However, following these guidelines does not guarantee that people using (e.g., screen readers, etc.) will be able to find information.



Web Content Accessibility Guidelines (WCAG) 2.0

W3C Recommendation 11 December 2008

This version:

<http://www.w3.org/TR/2008/REC-WCAG20-20081211/>

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<http://www.w3.org/TR/2018/REC-WCAG21-20180605/>

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Editors:

Ben Calvert
Michael Glaser
Loretta Guaratoni
Gregg Vanderheiden

Previous Editors:

Wendy Chisham
John Slatin
Jason Vanderheiden

Please refer to the

See also [transition](#)

This document is part of the W3C Web Content Accessibility Guidelines (WCAG) 2.0.

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Web Content Accessibility Guidelines (WCAG) 2.1

W3C Recommendation 05 June 2018

This version:

<https://www.w3.org/TR/2018/REC-WCAG21-20180605/>

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Abstract

Web Content Accessibility Guidelines (WCAG) 2.1 cover content more accessible. Following these guidelines will help people with disabilities, including accommodations for blindness, limited movement, speech disabilities, photosensitivity, and learning disabilities and cognitive limitations; but will not address all disabilities. These guidelines address accessibility of web content. Following these guidelines will also often make



Web Content Accessibility Guidelines (WCAG) 2.2

W3C Candidate Recommendation Snapshot 06 September 2022



▼ More details about this document

This version:

<https://www.w3.org/TR/2022/CR-WCAG22-20220906/>

Latest published version:

<https://www.w3.org/TR/WCAG22/>

Latest editor's draft:

<https://w3c.github.io/wcag/guidelines/22/>

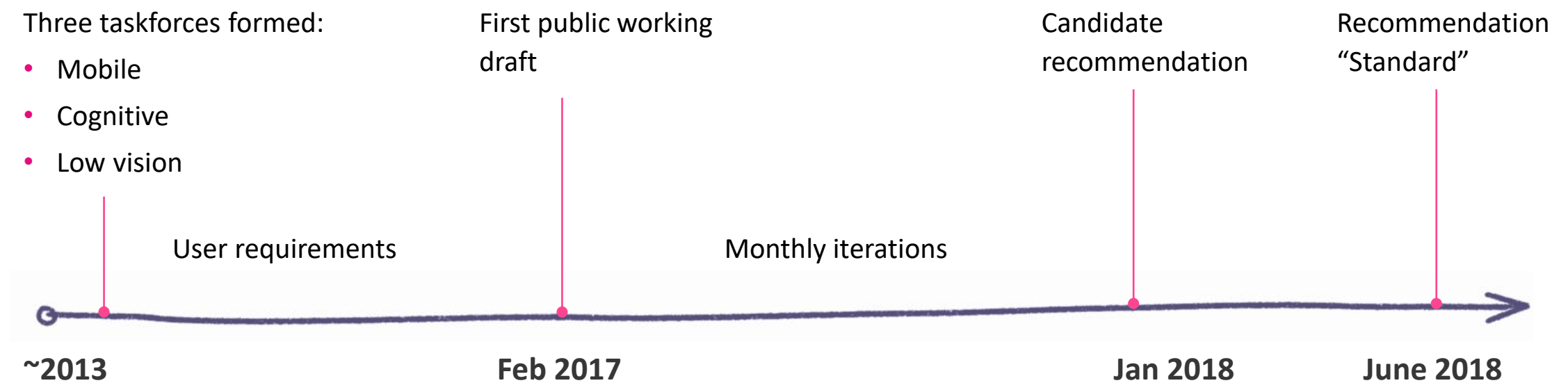
History:

<https://www.w3.org/standards/history/WCAG22>

[Commit history](#)

WCAG 2.1 timescale

(NB: WCAG 2.0 was unchanged, and some policies will likely reference it for some time)



Over 60 proposals for new criteria
(A or AA), 29 worked on during iterations!

17 new criteria

Mobile/voice input:

- Orientation (AA)
- Character key shortcuts (A)
- Pointer gestures (A)
- Pointer cancellation (A)
- Label in name (A)
- Motion actuation (A)
- Target size (AAA)
- Concurrent input mechanisms (AAA)

Low vision:

- Reflow (AA)
- Non-text contrast (AA)
- Text spacing (AA)
- Content on hover or focus (AA)

Cognitive:

- Identify input purpose (AA)
- Identify purpose (AAA)
- Timeouts (AAA)

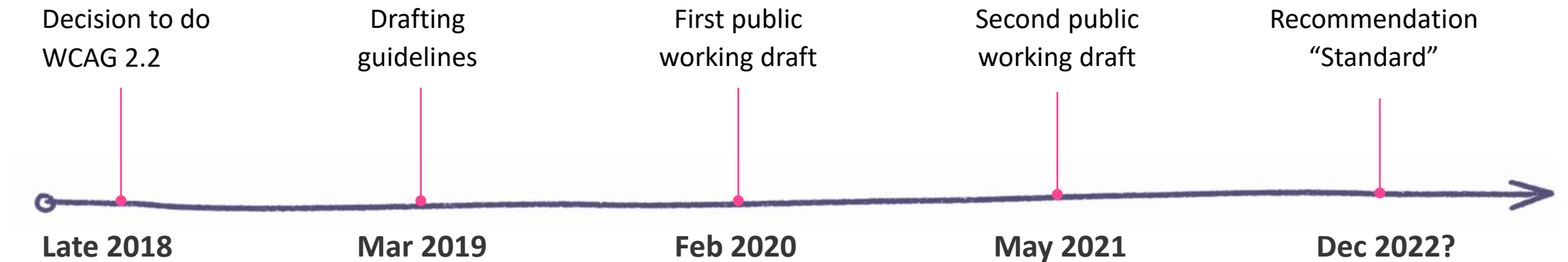
Miscellaneous:

- Animation from interactions (AAA)
- Status messages (AA)

WCAG 2.2 timescale (proposed)

Sources:

- Mobile
- Low vision
- Cognitive
- Github issues



Fewer than 20 proposals for new criteria

The background features a series of overlapping, expressive brushstrokes in shades of blue and green. The strokes are thick and textured, creating a sense of movement and depth. The colors transition from a deep blue on the left to a vibrant green on the right, with some areas showing a mix of the two colors.

It's still in the final stage...

Possible new criteria

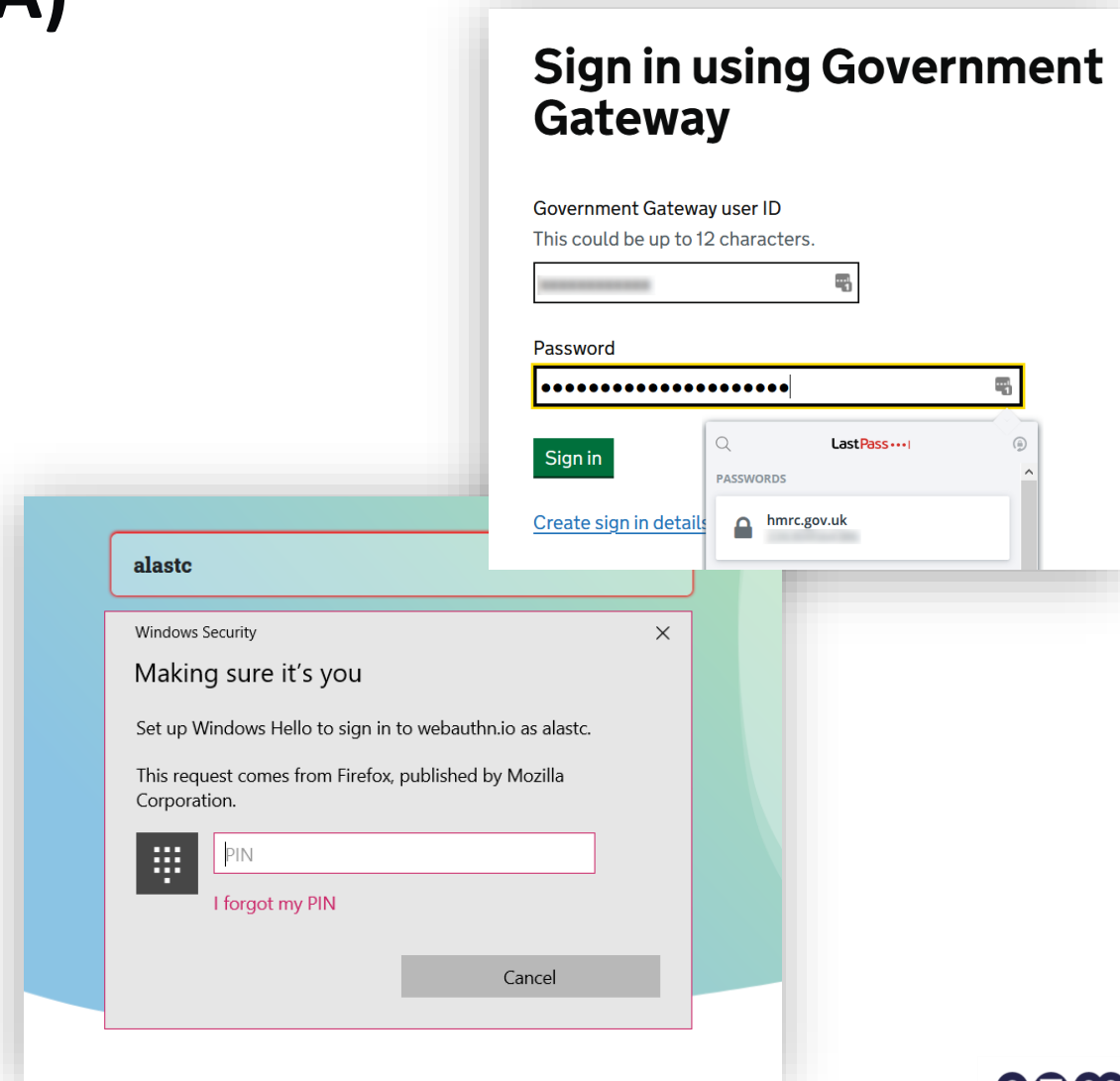
- Accessible Authentication
- Accessible Authentication (No Exception)
- Consistent Help
- Dragging Movements
- Focus Appearance
- Focus Not Obscured (Enhanced)
- Focus Not Obscured (Minimum)
- Redundant Entry
- Target Size (Minimum)

Accessible Authentication (AA)

Don't make people memorise or transcribe something to login.

For example:

- Don't block password managers for username/password entry
- Use WebAuthn – login with your device
- Use a 3rd Party O auth method



Accessible Authentication (AA)

A cognitive function test (such as remembering a password or solving a puzzle) is not required for any step in an authentication process unless that step provides at least one of the following:

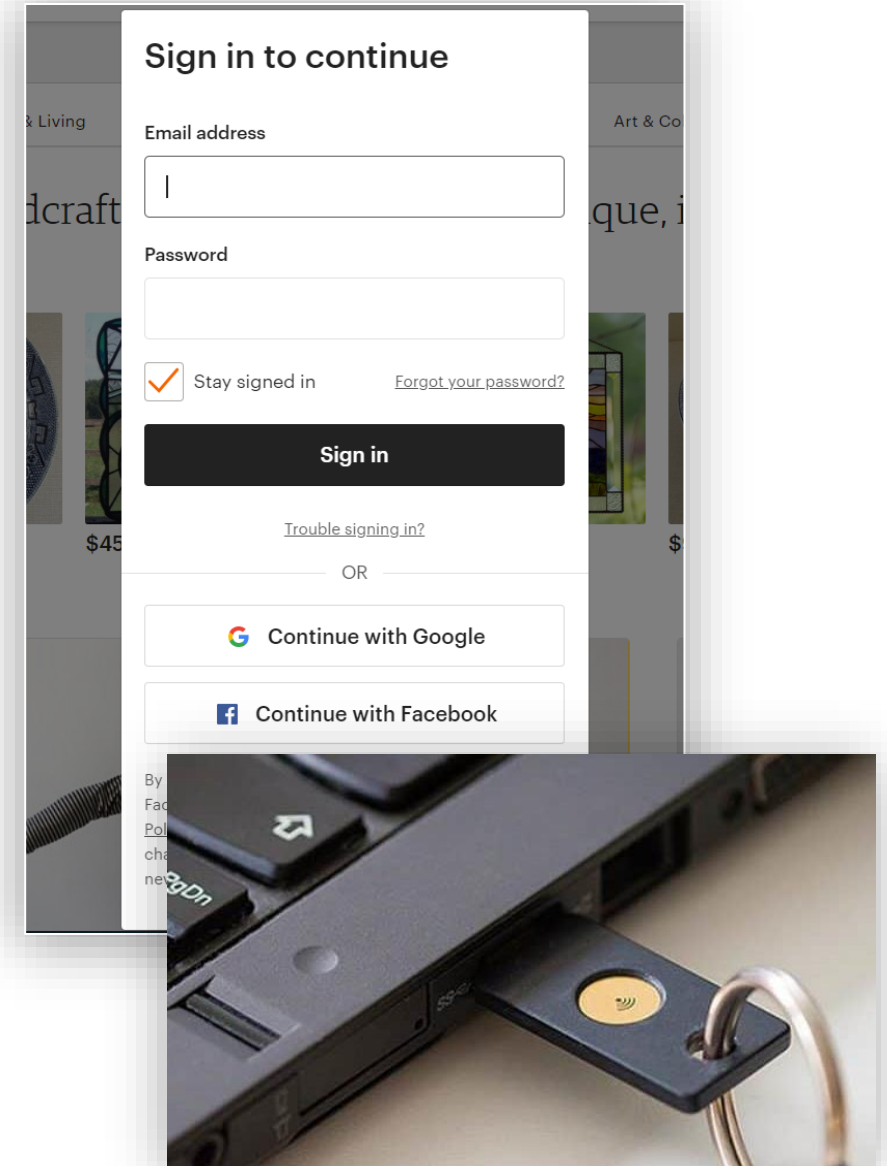
Alternative: Another authentication method that does not rely on a cognitive function test.

Mechanism: A mechanism is available to assist the user in completing the cognitive function test.

Object Recognition: The cognitive function test is to recognize objects.

Personal Content: The cognitive function test is to identify non-text content the user provided to the website.

Cognitive function test: A task that requires the user to remember, manipulate, or transcribe information.



Accessible Authentication (AAA)

Just removes the exceptions for object based CAPTCHAs, and recognising your own content:

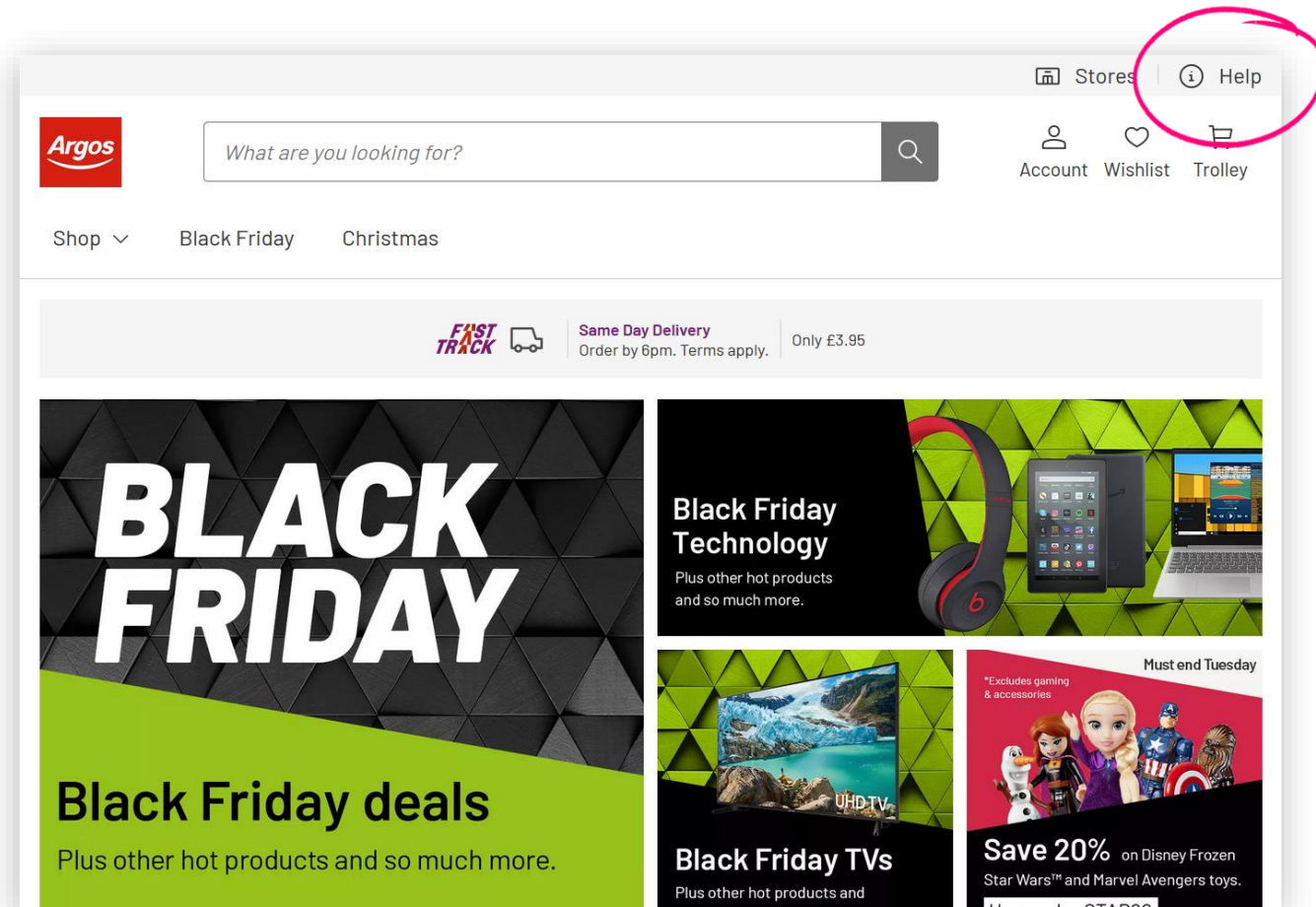
A cognitive function test (such as remembering a password or solving a puzzle) is not required for any step in an authentication process unless that step provides at least one of the following:

Alternative: Another authentication method that does not rely on a cognitive function test.

Mechanism: A mechanism is available to assist the user in completing the cognitive function test.

Consistent help (A)

If you provide a help mechanism, provide it in a consistent location across pages.



Consistent help (A)

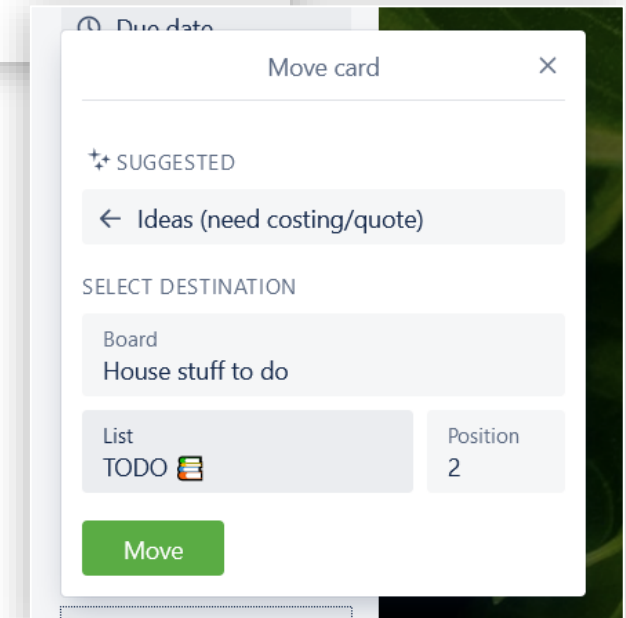
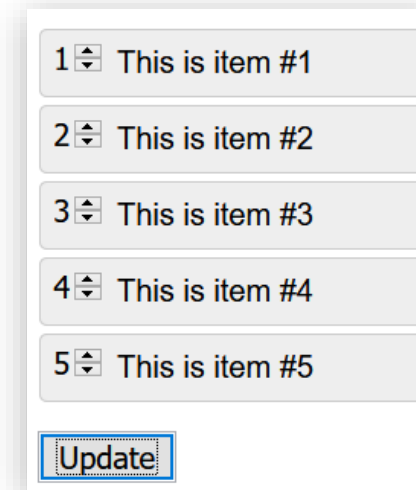
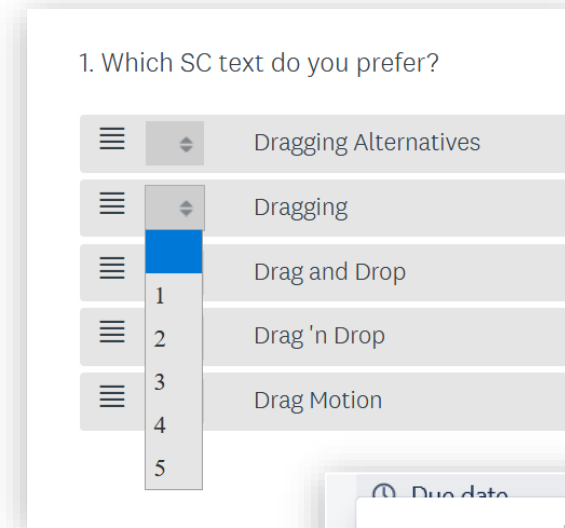
"If a web page contains any of the following help mechanisms, and those mechanisms are repeated on multiple web pages within a set of web pages, they occur in the same relative order to other page content, unless a change is initiated by the user:

- Human contact details;
- Human contact mechanism;
- Self-help option;
- A fully automated contact mechanism."

Dragging movements (AA)

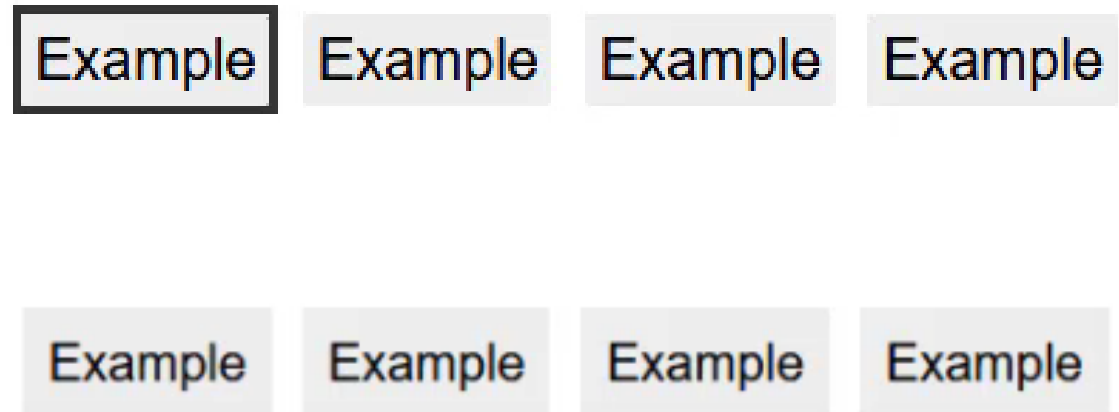
Don't rely on dragging, include buttons or an alternative method.

"All functionality that uses a dragging movement for operation can be achieved by a single pointer without dragging, unless dragging is essential or the functionality is determined by the user agent and not modified by the author.



Focus appearance (AA)

Ensure the focus indicator is contrasting, and reasonably sized.



Focus visibility factors

Three things seem to affect the visibility of the indicator:

1. The change of colour (contrast) from the original colour
2. The size and thickness of the change
3. The difference of colour (contrast) from the surrounding colours

✗ Poor examples



Example Example Example Example

Example Example Example Example

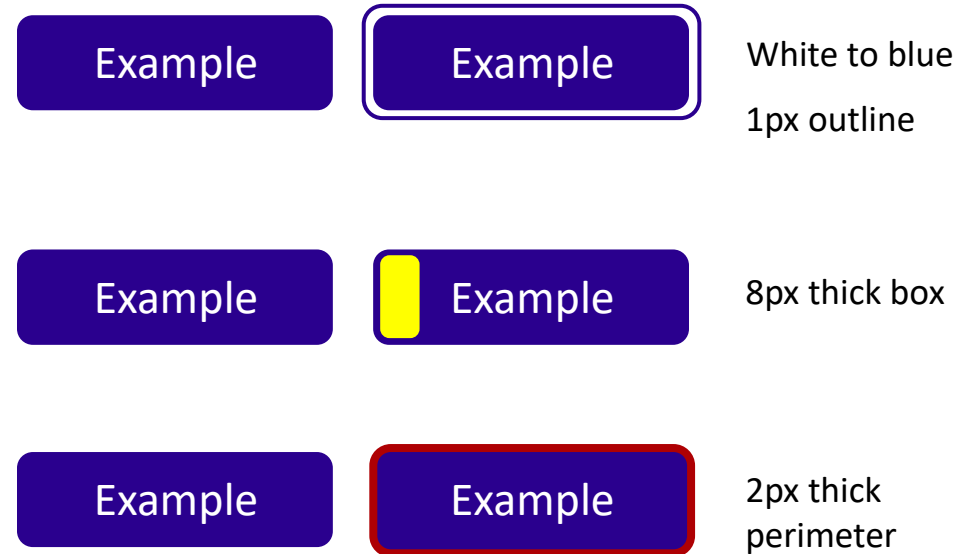
Example Example Example Example

Safe focus indicators

“Safe” focus indicators:

- A contrasting line slightly separated from the button.
- A block inside (or out) of the button that contrasts.
- A thick line around the button.

NB: Focus appearance is marked “at risk”. If it seems to be too complex to implement, it may be removed from WCAG 2.2 before publication.



Focus appearance – Criteria text 1

When the keyboard focus indicator is visible, one or both of the following are true:

1. The entire focus indicator meets all the following:
 - encloses the user interface component or sub-component that is focused, and
 - has a contrast ratio of at least 3:1 between the same pixels in the focused and unfocused states, and
 - has a contrast ratio of at least 3:1 against adjacent non-focus-indicator colors.

AND/OR

Focus appearance – Criteria text 2

2. An area of the focus indicator meets all the following:
- is at least as large as the area of a 1 CSS pixel thick perimeter of the unfocused component or sub-component, or is at least as large as a 4 CSS pixel thick line along the shortest side of the minimum bounding box of the unfocused component or sub-component, and
 - has a contrast ratio of at least 3:1 between the same pixels in the focused and unfocused states, and
 - has a contrast ratio of at least 3:1 against adjacent non-focus-indicator colors, or is no thinner than 2 CSS pixels.

Exceptions:

- The focus indicator is determined by the user agent and cannot be adjusted by the author, or
- The focus indicator and the indicator's background color are not modified by the author.

Focus Not Obscured (Minimum) (AA)

Not fully obscured:

- The item with focus is not entirely hidden by author-created content.



Focus Not Obscured (Enhanced) (AA)

Not fully obscured:

- no part of the focus indicator is hidden by author-created content.



Redundant entry (A)

- Don't ask for the same information twice in the same process;
- If you do, auto-populate it or make it available for the user to select (and copy).



Redundant entry (A)

Information previously entered by or provided to the user that is required to be entered again in the same process is either:

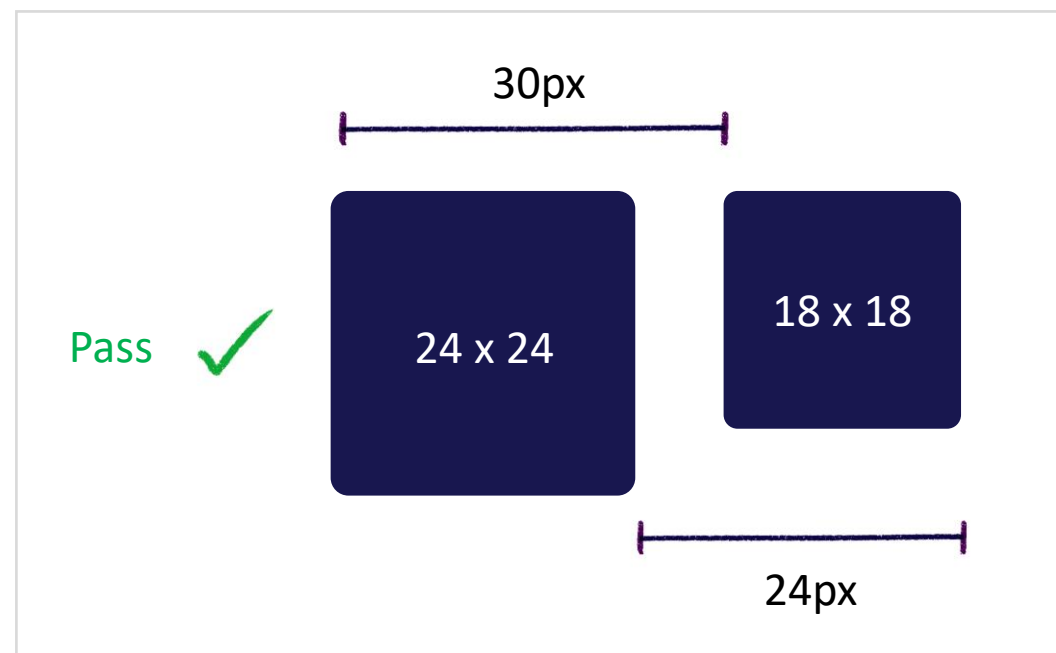
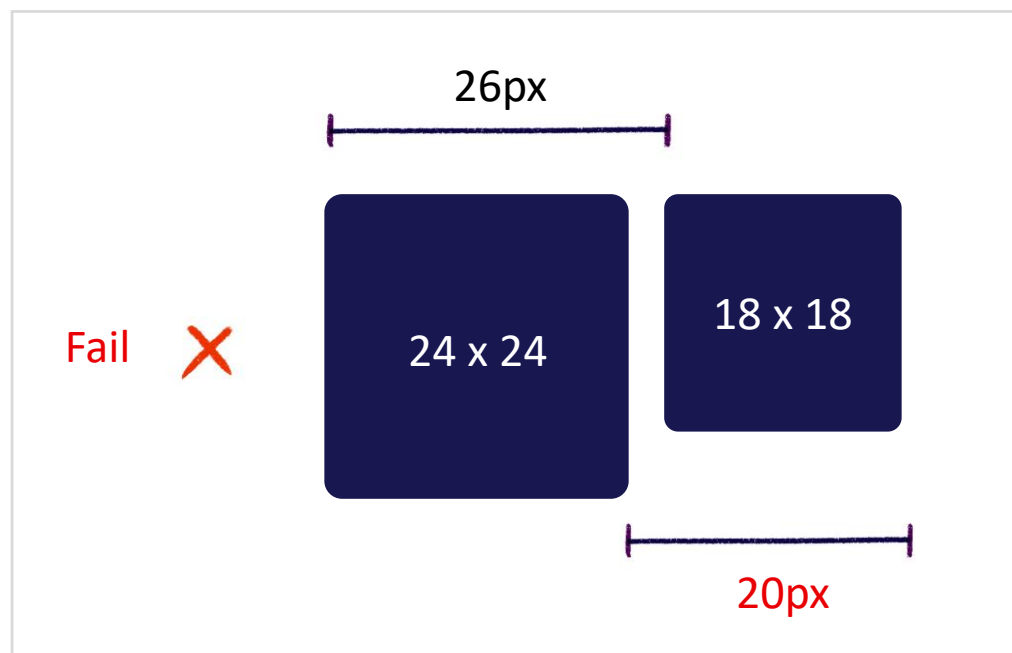
- Auto-populated, or
- Available for the user to select.

Except when:

- re-entering the information is essential,
- the information is required to ensure the security of the content, or
- previously entered information is no longer valid.

Target size (minimum) (AA)

Make sure all targets (links, buttons etc.) are at least 24px by 24px, or have spacing around them to the same level.



Target size (minimum) (AA)

The size of the target for pointer inputs is at least 24 by 24 CSS pixels, except where:

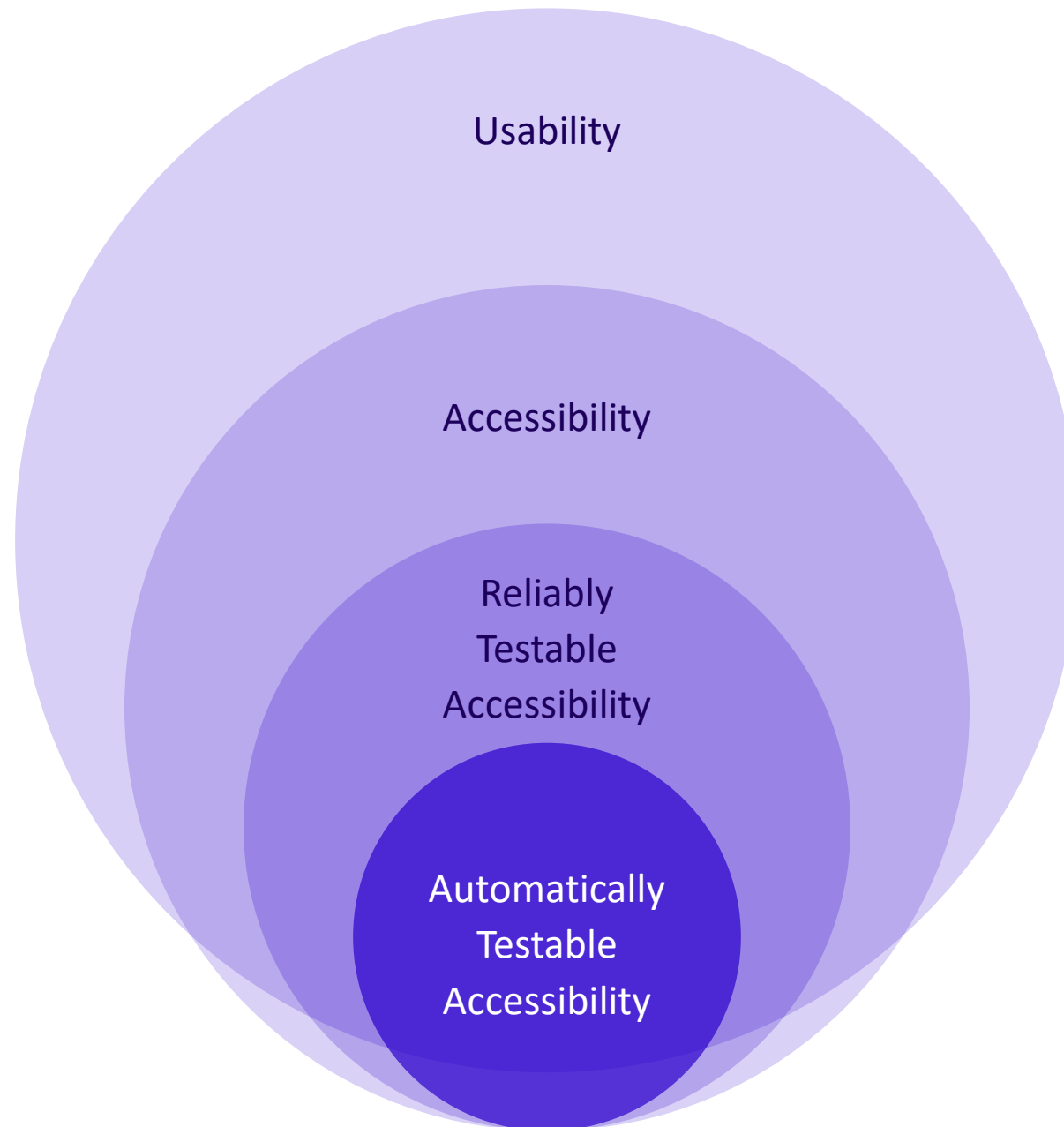
- **Spacing:** The target offset is at least 24 CSS pixels to every adjacent target;
- **Equivalent:** The function can be achieved through a different control on the same page that meets this criterion.
- **Inline:** The target is in a sentence or block of text;
- **User agent control:** The size of the target and target offset is determined by the user agent and is not modified by the author;
- **Essential:** A particular presentation of the target is essential or is legally required for the information being conveyed;

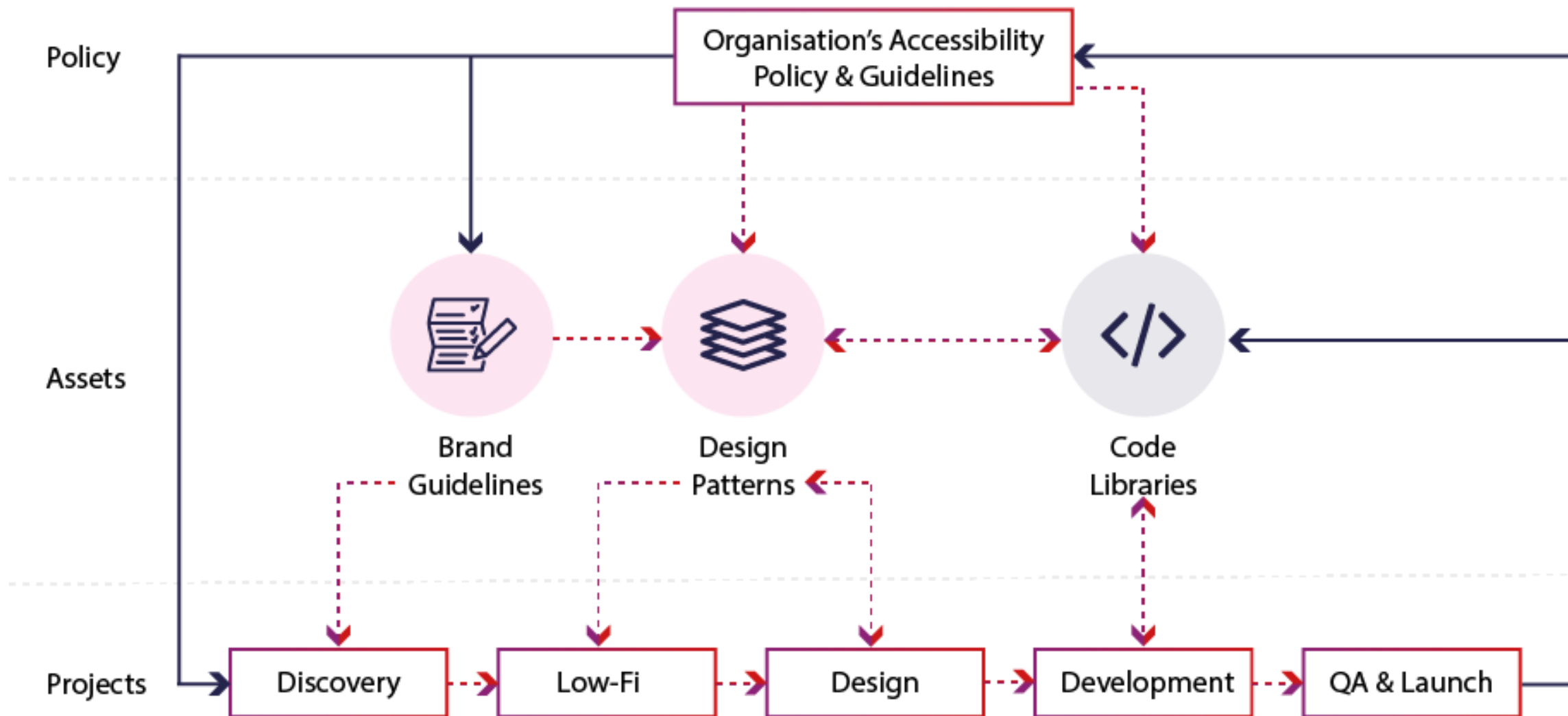
An abstract graphic featuring thick, expressive brushstrokes in vibrant red and deep blue. The strokes are layered and overlap, creating a sense of movement and depth. The background is a light, off-white color with a subtle texture.

What should you do?

Making use of the guidelines

- Guidelines are a **baseline** for avoiding accessibility issues
- Work out when and who should apply each
- Make them your own
- Test little and often
- Feed the results back into your artefacts and process





<https://w3c.github.io/wcag/guidelines/22/>

W3C Candidate Recommendation

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Numbering in WCAG 2.2

Conformance to WCAG 2.2

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1.2.2 Captions (Prerecorded)

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1.3.6 Identify Purpose

Web Content Accessibility Guidelines (WCAG) 2.2

W3C Candidate Recommendation Snapshot 06 September 2022

▼ More details about this document

This version:
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Implementation report:
<https://www.w3.org/WAI/WCAG22/implementation-report/>

Latest Recommendation:
<https://www.w3.org/TR/WCAG/>

Editors:
[Chuck Adams](#) (Oracle)
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[Rachael Montgomery](#) (Invited Expert)
[Michael Cooper](#) (W3C)
[Andrew Kirkpatrick](#) (Adobe)

Feedback:
[GitHub w3c/wcag](#) (pull requests, new issue, open issues)

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Abstract

Web Content Accessibility Guidelines (WCAG) 2.2 covers a wide range of recommendations for making Web content more accessible. Following these guidelines will make content more accessible to a wider range of people with disabilities, including accommodations for blindness and low vision, deafness and hearing loss,

<https://github.com/w3c/wcag/issues>

The screenshot shows the GitHub interface for the repository `w3c/wcag`. The top navigation bar includes links for Pull requests, Issues, Marketplace, and Explore. The repository name `w3c / wcag` is displayed, along with statistics: 112 Unwatch, 279 Unstar, and 93 Fork. The main navigation tabs are Code, Issues (241), Pull requests (35), Actions, Projects (1), Wiki, Security, and Insights. The Issues tab is active, showing a search bar with the query `is:issue is:open label:"WCAG 2.2"`. Below the search bar, there are filters for Labels (62) and Milestones (1), and a green button for **New issue**. A link to **Clear current search query, filters, and sorts** is also present. The list of issues is displayed with columns for checkboxes, status (19 Open, 4 Closed), Author, Labels, Projects, Milestones, Assignee, and Sort. The issues listed are:

- Focused element not visible: Violation of SC 2.4.7?** (2.4.x Focus visible (enhanced), WCAG 2.2) - #952 opened 12 days ago by JAWS-test. 9 comments.
- Formatting of Exceptions** (Survey - Ready for, WCAG 2.0, WCAG 2.1, WCAG 2.2) - #895 opened on Sep 10 by bruce-usab. 1 comment.
- Draft of new 2.2 SC "Dragging"** (MATF, WCAG 2.2) - #835 opened on Jul 25 by detlevhfischer.
- WCAG 2.2 Focus more visible - can a visible change only in size be a failure?** (Discussion, Public Comment, WCAG 2.2) - #812 opened on Jul 3 by eschafer. 4 comments.
- Phrasing used in 1.2.1, 1.2.2, and 1.2.3 is not consistent with similar SC in Guideline 1.2** (Normative, WCAG 2.2) - #796 opened on Jun 20 by bruce-usab. 3 comments.

Silver – the next iteration of accessibility guidelines

- W3C WCAG 3.0
- Worked on by a task force, in parallel
- Completely new ‘conformance’ model.
- More coverage of disabilities
- Easier to cover non-browser technologies



Solid to virtual?



Thank you

 @alastc

