

Introduction to Accessibility

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Summary



- 1. Return on Investment of Accessibility**
- 2. Legislation**
- 3. Auditing/Testing**
- 4. Manage**
- 5. Conclusions**

“

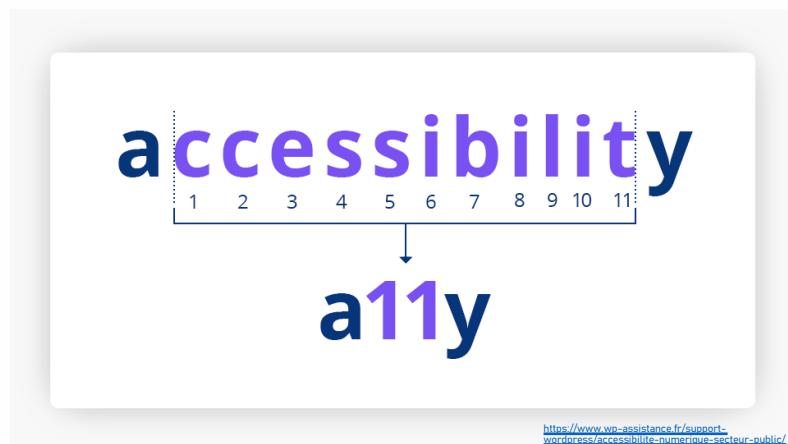
**The only thing worse than being
blind is having sight but no vision.**

Hellen Keller

<https://france-handicap.info.com/international/actualites-internationales/journees-mondiales/980-journee-mondiale-#034-le-braille-nous-de-si-cela-d-existence-a-t-il-encore-un-avenir-a-l-heure-du-tout-numerique>



A11y?



a11y stands for accessibility

1. ROI of Accessibility



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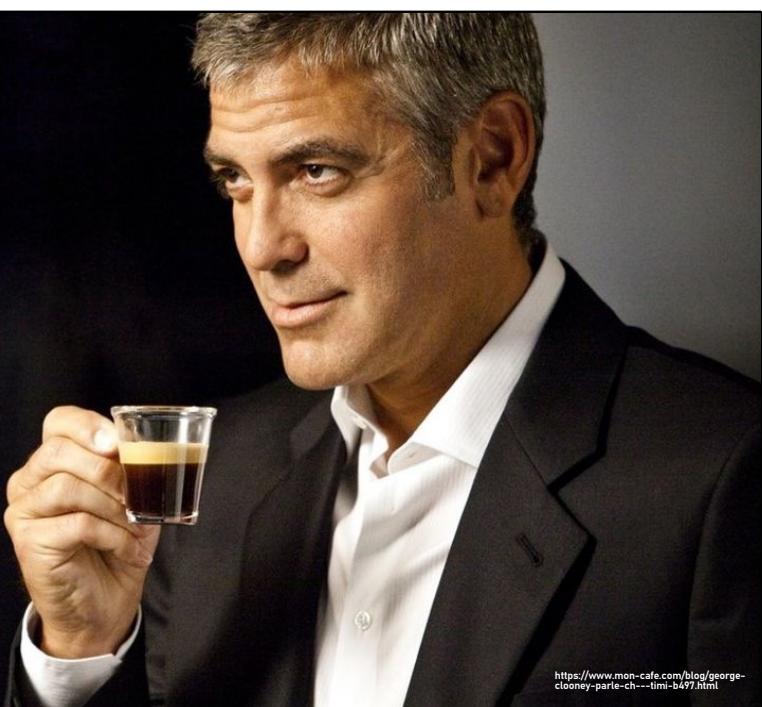
Accessibility isn't just about inclusion, it's also a real **business opportunity**. It can help reach more users, improve SEO, and reduce development costs in the long run.

Beyond Disability

Around 15% of the population has a disability... Yes, but...

- Not everyone goes online / uses a smartphone (especially the mentally handicapped)
- Not every handicap is a hindrance (e.g. leg amputation)
- Obstacles differ depending on the disability (risk of wanting to address only one disability)
- "Not my target audience".
- "Only 15%?"

Disability,
and much more



<https://www.mon-cafe.com/blog/george-clooney-partie-chine-2471.html>

Beyond Disability, accessibility can:

Supporting innovation:

- Accessibility features integrated into products and services solve unexpected problems.

Accessibility isn't only for people with disabilities—it benefits everyone. Think about **voice assistants** like Siri or Alexa. Originally designed for accessibility, now they're used by millions.

Ready for the future?



<https://www.newegg.com/logitech-915-000148x-universal/p/N82E1688011047>
<https://www.macuisinesante.com/recipe-items/curry-de-courge-butternut-autres-legumes/>

What is common between a TV remote control and a vegetable peeler?

From an accessibility perspective, the commonality between a TV remote control and a vegetable peeler lies in their design, which is intended for easy use by a wide range of people, including those with physical limitations.

Here are a few aspects to consider:

- **Ergonomics:** Both items may be ergonomically designed to fit comfortably in the hand, making them easier to use for people with dexterity or strength issues.
- **Ease of Use:** They generally feature intuitive characteristics, such as clearly identified buttons on a remote control or a properly aligned blade on a peeler, allowing users to understand and use the device without requiring extensive training. The remote control for tv allows users to change channels, adjust the volume, and control other functions without having to move to the TV, which is especially helpful for people with limited mobility.
- **Accessibility for People with Disabilities:** Both objects can incorporate design elements that make them usable by individuals with disabilities. For example, a remote control can have raised buttons for visually impaired users, and a peeler can include a non-slip grip.

By incorporating accessibility principles into their design, these objects become more inclusive, offering an enhanced user experience for everyone, including those living with disabilities.

Ready for the future?



Accessibility is closely linked to **overall usability**.

Both want to define and serve a more intuitive user experience.

<https://www.newegg.com/logitech-915-000148x-universal/p/N82E1688011047>

<https://www.macuisinesante.com/recipe-items/curry-de-courge-butternut-autres-legumes/>

This slide highlights the close relationship between **accessibility** and **usability**.

Accessibility is not just about compliance but about creating intuitive and usable experiences for all users.

It shows how accessibility has influenced usability and vice versa, to advance progress and provide solutions not just for the disabled community, but so that everyone can benefit from accessibility improvements.

Ready for the future?

Voice interaction



1998
Dragon Speech-to-text

2011
Samsung Smart TV

2013
TESLA

2013+
Dragon Pro

https://www.nuance.com/content/nuance/sites/nuance/files/Products/Dragon/Products/Products_Dragon_NaturalSpeaking_Home_Edition.html
https://www.samsung.com/in/support/by-audio-video/te_my-voice_ne_data_sold-to-third-parties-for-marketing-purposes/
<https://www.splinterfa.com/line/eiri-eyes-free-sign-ampliando-su-radio-de-silencio-cheveles-en-el-2016>

Accessibility has played a key role in the emergence and innovation of these voice technologies.

By making it easier for people with disabilities or motor, visual, or auditory limitations to use their devices, these solutions were designed to meet a need for inclusion, while also driving the development of new natural interfaces.

Voice interaction has thus become a vector for accessibility that has innovated in how we interact with technology, making these devices more intuitive, universal, and adaptable for all users.

Their development illustrates how accessibility has been a catalyst for innovation, expanding interaction possibilities and rethinking the user experience for everyone.

Ready for the future?

Quality code +
semantics



Voice
interaction



<https://www.hol.com/be/nl/g/google-home-smart-speaker-wit-nederlandstaal/9200000100219755/>

In the field of accessibility, especially with voice assistants like Google Home, the importance of **quality code** and **semantic structure** is fundamental to ensuring effective and inclusive voice interactions.

Explanation:

High-quality code, following best practices in accessibility, ensures that content structure and behavior are reliable and predictable for assistive technologies. Semantic structure—that is, the proper use of HTML tags or other structuring languages—enables devices like Google Home to understand content accurately and interpret user voice requests correctly. In other words, well-structured and semantically correct content allows the voice assistant to detect and convert speech into appropriate actions or responses. This also guarantees that content remains accessible to everyone, including those with visual or auditory impairments, by providing precise, relevant, and easily understandable answers.

In summary:

Good code quality and a carefully implemented semantic structure make voice interactions more natural, accurate, and inclusive, allowing assistants like Google Home to deliver an optimal user experience that complies with accessibility standards.

Ready for the future?

Quality code +
semantics



Machine-
machine
interaction



Quality code ensures that communication between the application and the device is stable, error-free, and that each command or data is processed reliably. Semantics—that is, the correct use of structure and instructions within the code—allows the device to **understand** the precise context of interactions.

In summary:

Good quality code with clear **semantics** makes machine-to-machine voice interactions more fluid, precise, and accessible, by ensuring that each instruction is correctly understood and executed, even in complex environments or for users with specific needs for autonomy.

Ready for the future?

Gaze interaction



1986
LC Technologies



2011
Eye Tribe



2015
EyeWink

<https://theeyetribe.com/dev/theeyetribe.com/dev.theeyetribe.com/general/index.html>

Accessibility has been a major catalyst in the development of these gaze interaction or eye-tracking interaction technologies.

Aiming to make computing more accessible and inclusive for people with motor disabilities or other impairments, these innovations have been created to allow control of a computer or device for instance through only eye movements.

Thus, accessibility not only addressed a specific need but also led to innovative solutions that push the boundaries of human-machine interaction.

These technologies exemplify this approach: they have turned the necessity of inclusion into groundbreaking technological advancements, offering a more universal and accessible experience for everyone.

Ready for the future?

Brain interaction



2008
LC Technologies

2011
BrainDriver

2015
Muse

<https://www.tecnologiasaccesibles.com/en/catedra/sicse-project>
<https://www.actinnovation.com/innovation-technologie/brain-driver-conduire-une-voiture-par-la-pensee-1792.html>
https://choosemuse.com/?srsltid=AfmBQop7QYRCbA7lv0VOCdmzBrIX3BCB8hcG_bXU6vZ4Ad5KpDmbCWkN

We can say that accessibility has been a driving force behind the emergence of these brain-computer interaction technologies. By aiming to make neural interfaces usable by a broader audience, especially for people with motor or neurological impairments, these innovations have transformed assistance needs into real technological advances.

By tailoring these interfaces to meet the specific needs of people with neurological or motor disabilities, these innovations have paved the way for more inclusive usages. Accessibility has thus not only been a necessity but also a genuine driver of innovation, making brain communication more universal, accessible, and deeply innovative.

Accessibility is the NASA of the web



**Accessibility,
it's the NASA of the web**

<https://seeklogo.com/vector-logo/97034/nasa>

The comparison "Accessibility is the NASA of the web" is a metaphor highlighting the idea that accessibility, like NASA, represents exploration, innovation, and pushing boundaries—particularly within the digital universe. Here's why this analogy can be made:

- **Pioneering Spirit:** Just as NASA is known for exploring uncharted space frontiers, accessibility is about exploring new horizons in human-computer interaction, aiming to include everyone, especially those with disabilities.
- **Innovation and Advancement:** NASA has driven technological innovation that often benefits society at large. Similarly, accessibility drives the development of cutting-edge solutions (like brain-computer interfaces, eye-tracking, voice recognition) that push the limits of technology and usability.
- **A Quest for Inclusion:** NASA's mission is to explore and expand human knowledge of space. In the digital world, accessibility expands the "space" of technology to include all users, regardless of their limitations, promoting a universal experience.
- **Complex and Challenging:** Just as space exploration involves overcoming significant technical and scientific challenges, creating accessible digital environments requires solving complex problems involving design, technology, and standards—demanding innovation, expertise, and perseverance.

In brief:

Saying "Accessibility is the NASA of the web" emphasizes that accessibility is a frontier of innovation and exploration, constantly pushing the boundaries of what's possible, aiming for inclusivity, and inspiring technological breakthroughs that benefit everyone.

The most famous blind man



is the most famous blind man

https://www.iconfinder.com/icons/7123025/logo_google_g_icon

The comparison of Google to "the most famous blind man" in an accessibility approach is a metaphor highlighting how Google, through its products and services, has become a symbol of universal accessibility and inclusivity. Here's why this analogy resonates:

- **Universal Accessibility:** Google's tools—like search, voice assistants, and screen readers—act as accessible gateways for people with visual impairments, helping them navigate and interact with the digital world effortlessly, much like a blind person relies on familiar guiding tools.
- **Global Reach and Recognition:** As one of the most widely used and recognizable technology companies in the world, Google has set standards for inclusive design, making accessibility a central feature of its ecosystem.
- **Innovator in Assistive Technology:** Google has pioneered and integrated advanced assistive technologies, such as voice recognition, AI-driven image descriptions, and navigational aids, making it a "leader" in accessible solutions.
- **Symbol of Assistance:** The phrase positions Google as a "famous blind man" — a figure that symbolizes a trusted guide, helping all users, especially those with disabilities, to "see" and explore the web, much like the metaphorical blind person navigating the world.

In summary:

Saying "Google is the most famous blind man" emphasizes that Google has become an emblem of accessible, inclusive technology—an aid that's widely recognized, relied upon, and essential for navigating the digital universe for everyone, particularly for users with visual impairments.

WCAG ?

- Web Content Accessibility Guidelines (WCAG) set the global standard for making digital content usable for everyone, including people with disabilities. While often seen as a developer's responsibility, WCAG is just as crucial for designers.
- Visual elements like color, contrast, typography, and layout directly impact accessibility. By following WCAG, designers ensure their work is inclusive, user-friendly, and compliant.

WCAG Principles for Accessible Web Design ?

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WCAG Principles

The Web Content Accessibility Guidelines (WCAG) work on four principles—Perceivable, Operable, Understandable, and Robust (POUR).

Here's how these principles shape accessible design:

- 1. **Perceivable:** Content must be presented in ways users can perceive. Add text alternatives for images, captions for videos, and adaptable layouts for different devices and assistive technologies.
- 2. **Operable:** Users must be able to navigate and interact with the interface. This includes keyboard accessibility, clear navigation, and avoiding content that causes seizures or physical discomfort.

WCAG Principles

Example:

- A user should be able to navigate a website using only a keyboard.
 - Good Practice: Buttons, menus, and forms can be accessed with the Tab key and activated with Enter/Space.
 - Why it matters: Some users cannot use a mouse due to motor impairments.

WCAG Principles

3. **Understandable:** Information and interface must be easy to understand. Use clear language, consistent layouts, and help users avoid and correct errors.

Example:

- Form fields are clearly labeled, and error messages are easy to read, explaining how to fix the issue.
 - Good Practice: A message like "Please enter a valid email address" instead of just highlighting a field in red.
 - Why it matters: Users with cognitive or learning disabilities benefit from clear guidance.

WCAG Principles

4. **Robust:** Content must be compatible with current and future user tools—including assistive technologies—by using clean, well-structured code.

Example:

- A website uses proper HTML tags so that screen readers can interpret headings, lists, and buttons correctly.
 - Good Practice: Using `<button>` instead of a styled `<div>` for clickable elements.
 - Why it matters: Assistive technologies rely on semantic code to function properly.

Additional reading



- WCAG Guidelines for Creating Accessible Web Design & Benefits of WCAG for Designers :

<https://www.browserstack.com/guide/wcag-for-designers>

Cross-reference A11Y + Potential market

1. Increasing market reach:

More than a billion people worldwide live with a disability, which represents vast untapped market potential.



<https://www.leb-cib.org/nl/nieuws/begin-van-het-leven/eugenetica/personen-met-een-handicap-de-vn-wilst-oo-een-liberale-eugenetica-1790.html>

An accessible site = open doors to this diverse audience = broaden your customer base = **generate revenue**.

Cross-reference A11Y + Potential market

2. Improving the user experience:

The "user-friendly" design benefits everyone, not just the disabled.

Accessible websites are often easier to navigate for all users, leading to greater satisfaction, commitment and loyalty to the brand or company.



<https://www.mhlnews.com/labor-management/article/22055700/tell-employees-lose-the-emojis>

The "user-friendly" design benefits everyone because it is built around simplicity, clarity, and ease of use—principles that improve the overall user experience.

When interfaces are intuitive, accessible features such as clear navigation, readable fonts, and straightforward workflows are easier for all users to understand and navigate, regardless of their abilities or limitations.

This universal design approach reduces confusion, saves time, and creates a more efficient and enjoyable interaction for everyone, including the elderly, non-native speakers, or those with temporary impairments, ultimately making digital experiences more inclusive and effective.

Cross-reference A11Y + SEO

3. Improved search engine optimization (SEO):

Search engines like Google reward websites that are accessible.

These sites are propelled higher in search results.



https://seeklogo.com/vector-logo/381721/google-lighthouse_.png

Accessibility is essential not only because it ensures that digital content is usable by everyone, regardless of disabilities, but also because it directly influences a website's visibility and ranking on the web.

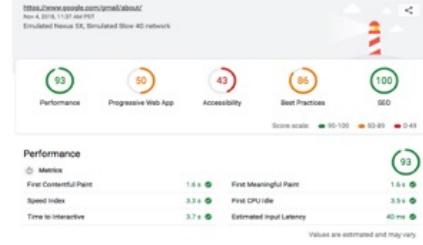
Search engines like Google prioritize accessible websites because they provide a better user experience—fast, navigable, and easy to understand—benefiting all users.

When a site adheres to accessibility best practices, it often results in improved SEO performance, higher search rankings, and increased organic traffic, demonstrating that inclusive design is a smart strategy for long-term online success.

Cross-reference A11Y + SEO



The scores that you see at the top of your Lighthouse report represent the page's score for that particular category. This guide explains how Lighthouse calculates those scores.



Google Search Quality Evaluator Guidelines - Lighthouse

<https://seeklogo.com/vector-logo/381721/google-lighthouse>

Google Lighthouse is an open-source, automated tool developed by Google that helps developers evaluate the quality, performance, and accessibility of web pages.

Please note, this automated tool will only check a maximum of 30% of the accessibility points.

A comprehensive check requires verification through a combination of automated tools, semi-automated tools, and manual inspection.

Crosscheck A11Y + Cost Dev

4. Reduced development costs:

Integrating accessibility into the development process from the outset is far more cost-effective than integrating it at the end of development.

This proactive approach saves time and resources, and avoids potential legal problems.



<https://boomi.com/blog/growing-importance-of-integration-developers/>

Crosscheck A11Y + Brand Image

5. Positive brand image:

Demonstrating your commitment to inclusivity through a truly accessible website promotes a positive perception of your brand and company.

Consumers increasingly appreciate companies that focus on responsible and ethical practices, which improves reputation and trust in the brand or company.



<https://www.cleantech.com/one-markkula-center-for-applied-ethics-organization-a-2966304/>

Return On Investment: Measurement & Calculation

Calculating the exact ROI of Web accessibility is complex, but several indicators offer valuable information on its overall impact.



<https://depositphotos.com/photo/return-on-investment-roi-concept-illustration-122759336.html>

Return On Investment: Measurement & Calculation

- **Increase website traffic:** track user visits from various demographic groups and **measure growth** after implementing accessibility features.
- **Improve conversion rates:** monitor the impact of accessibility changes on user engagement, **form submissions and purchases**.
- **Bounce rate reduction:** Analyze how long users stay on the website and the impact of accessibility on **reducing abandonment**.



Google Analytics



<https://www.pinterest.com/pin/google-logo-google-analytics-png--611434086925786010/>

<https://seeklogo.com/vector-logo/443589/matomo>

Return On Investment: Measurement & Calculation

- Improving brand awareness: use online reviews and mentions on social networks to assess user perception and brand image improvement.
- Savings: compare the costs of accessibility and compliance testing with the potential legal fees and website redesign costs associated with non-compliance.



<https://www.pinterest.com/pin/google-logo-google-analytics-png--611434086925786010/>

<https://seeklogo.com/vector-logo/443589/matomo>

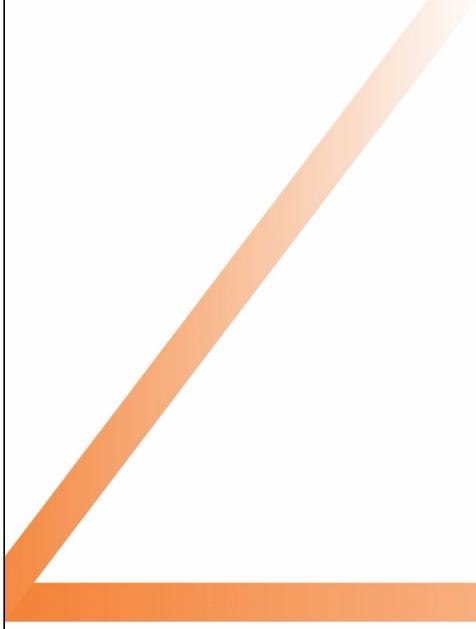
Return On Investment: Measurement & Calculation

Don't forget that the real return on investment in accessibility goes beyond quantifiable measures.

Positive impact on:

- **brand reputation,**
- **employee morale**
- **and social responsibility**

contributes significantly to an organization's overall success.



2. Legislation

5



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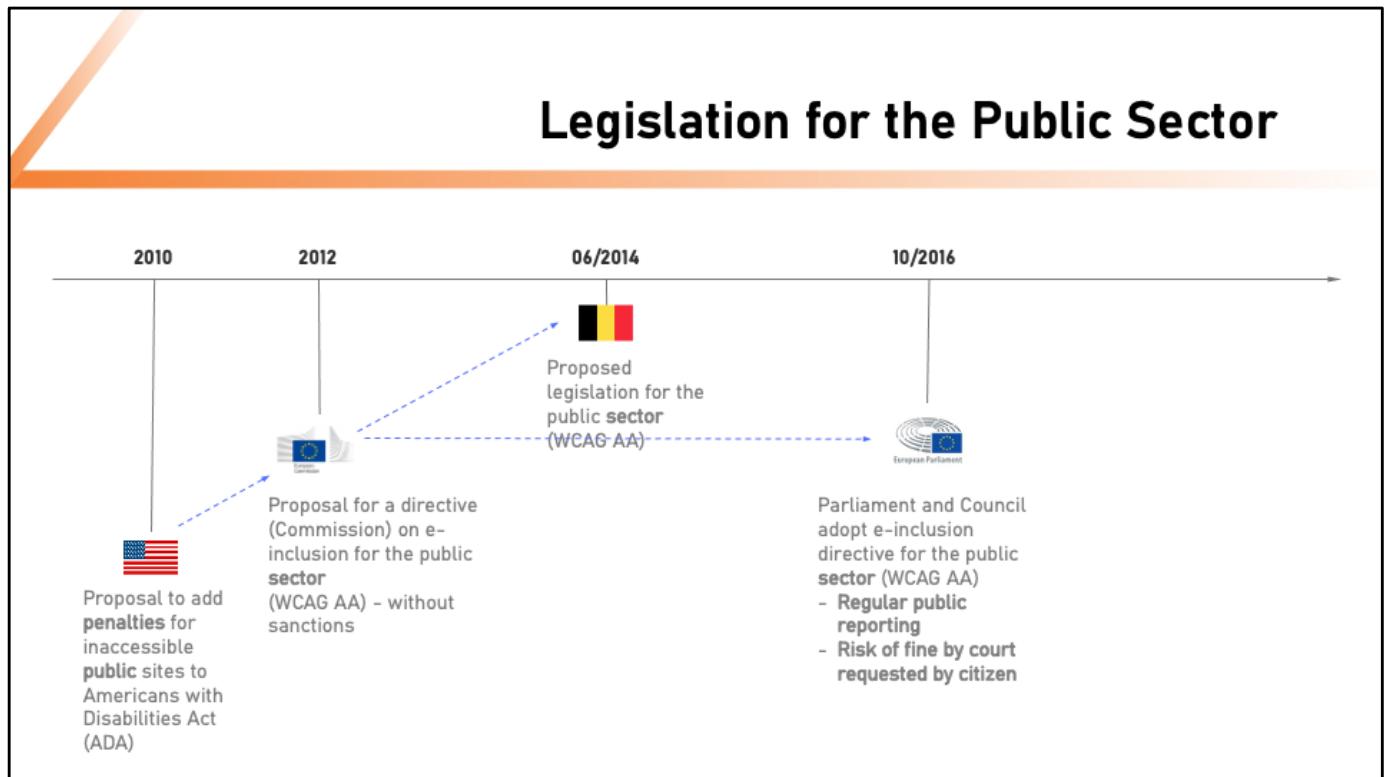
**Accessibility is not
a constraint.**

It's a strategy.

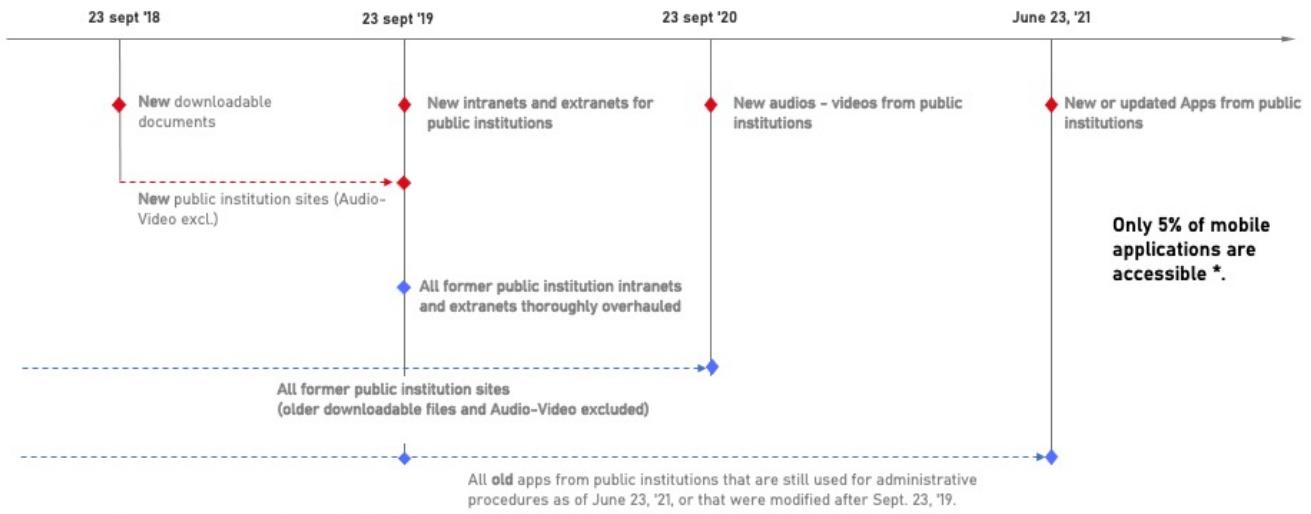
<https://france-handicap-info.com/international/actualites-internationales-journees-mondiales/180-journee-mondiale-/5034-le-braille-plus-de-siecles-d-existence-a-t-il-encore-un-avenir-a-l-heure-du-tout-numerique>



Legislation for the Public Sector



Deadlines for the Public Sector



Legislation for the Public Sector

Who's concerned?

- State (regions, communities, federal)
- Regional and local organizations (Tax-on-web, STIB...)
- Public-sector bodies (CPAS, etc.)

What content needs to be accessible?

- Websites, intranet and extranet
- Mobile applications
- Downloadable documents
- Video and audio content

What are the first deadlines?

- All new sites set up after September 23, 2018 must be accessible by September 23, 2019, including downloadable documents.
- September 2020: all public sites must be accessible.
- All videos published after September 2020 must be accessible
- June 2021: all public apps must be accessible

Legal texts:

EU: <https://eur-lex.europa.eu/legal-content/FR/TXT/HTML/?uri=CELEX:32016L2102&from=EN>

BE: http://www.ejustice.just.fgov.be/cgi/article_body.pl?language=fr&caller=summary&pub_date=18-09-03&numac=2018040577

Since 2020...

Few official figures...

September 2021:

The "Collectif Accessibilité Wallonie Bruxelles" (CAWaB) and the non-profit organization Eqla (ex-Œuvre nationale des aveugles) denounce an "unacceptable delay" in this area. According to the two associations, "**95% of public body websites and apps** contain flaws that make surfing and, above all, administrative procedures extremely complicated, if not impossible, for people with disabilities".

<https://www.rtbf.be/article/accessible-numerique-95-des-sites-web-des-services-publics-non-conformes-10847168>

Public Sites: The Obligation

Publication of an accessibility declaration, explaining the extent to which the site or application is accessible or not:

- **Level of compliance** with the standard (AA, WCAG 2.2)
- What parts of the site or application are not yet accessible and what **alternatives** are available?
- **Improvements planned for the short and medium term**
- **How accessibility was tested**
- Who can people **contact** if they encounter difficulties, and how?

Additional Obligations

Checks on the SNCB website (<https://www.belgiantrain.be/fr>):

1. Publication of an accessibility declaration.
2. Level of compliance (not compliant, partially compliant, fully compliant)
3. Target level and standard (A or AA, WCAG 2.1 or 2.2)
4. What's not accessible
5. Publication of the current year's action plan.
6. Indication on the home page whether the site is compliant or not.
7. The ability for users to easily report accessibility issues.



https://fr.freepik.com/photos-premium/signe-point-interrogation-ampoule-fond-rose_14489402.htm

Disproportionate Load

- Conduct an **audit + assess compliance costs**.
- The assessment may result in a "disproportionate burden", i.e. excessive compliance costs, justifying inaccessibility.
- Specify in the accessibility declaration which content is not accessible and why.

Art. 6. Public sector bodies may refrain from complying with the accessibility requirements referred to in Article 5 insofar as the measures to be taken to meet them impose a disproportionate burden on the public sector body, taking into account:

a) the size, resources and nature of the public sector body concerned, and
b) the estimated costs and benefits to the public sector body concerned in relation to the estimated benefit to disabled people, taking into account the frequency and duration of use of the specific website or mobile application.

The public sector body concerned **shall make an initial** assessment of the extent to which compliance with the accessibility requirements set out in Article 5 entails a disproportionate burden.

Where a public-sector body makes use of this derogation, it shall **specify, in the declaration** referred to in Article 7, which parts of the accessibility requirements could not be met and the reasons for this, and, where appropriate, it shall present accessible alternatives.accessibility requirements have not been met and the reasons for this non-compliance, and, where appropriate, presents accessible alternatives.

http://www.ejustice.just.fgov.be/cgi/article_body.pl?language=fr&caller=summary&pub_date=18-09-03&numac=2018040577

Legislation for the Non-Public Sector

What digital content will be accessible in JUNE 2025?

- Transportation services
- Telephone service
- E-commerce
- Banking services
- Digital books (e-books) and specialized software
- Street furniture transmitting digital information
- Services providing access to audiovisual media

NB: the health, hotel, education and insurance sectors are not included.

But they are well within the American ADA, which largely inspires European legislative progress...

28/06/2025: companies will be impacted by the European Accessibility Act (EAA)

Legislation for the Non-Public Sector

How long will it take to comply?

As of **June 28, 2025**, all new digital products and services (websites, mobile apps, etc.) must comply with the accessibility requirements set by the European regulation, specifically WCAG 2.2 levels A and AA.

For existing platforms, there is typically a gradual compliance period, often until 2028 or 2030, depending on national regulations (For instance: 2028 for France).

This provides companies with several years to audit, correct, and document their site or application, while avoiding penalties. Therefore, it is crucial to start these efforts now to meet the deadline and mitigate risks.

Legal text:

EU: <https://eur-lex.europa.eu/legal-content/FR/TXT/HTML/?uri=CELEX:32019L0882&from=EN#d1e2776-70-1>

Impact Timeline:

- **Starting June 2025:** New products and services must be compliant.
- **Existing products/services:** Companies typically have until around 2028-2030 for gradual compliance, depending on national transposition of the regulation.

Non-compliance can lead to legal penalties, reputational damage, and exclusion from public tenders, so it's crucial for companies in these sectors to prepare now.

France goes further in Europe (fyi)

Main obligations:

- Compliance with RGAA, aligned with WCAG 2.1 AA
- Accessibility statements must be published online.
- A user feedback mechanism must be available for reporting issues.

Enforcement & Penalties:

- Non-compliance can lead to fines up to €50,000.
- Organizations must conduct regular audits to ensure accessibility.

In France, the transposition of European regulations regarding digital accessibility is mainly carried out through the RGAA (Référentiel Général d'Amélioration de l'Accessibilité).

- RGAA is a French regulatory framework transposing the WCAG guidelines into national law.
- It specifies how French public websites and digital services must meet accessibility standards—aligning primarily with WCAG 2.1 level AA.
- The RGAA includes practical rules, methods for testing compliance, and obligations for reporting and declaration, tailored to the French legal context.

In summary:

- WCAG provides the *guidelines and technical criteria* accepted worldwide.
- RGAA is *France's specific implementation* of those guidelines, with concrete rules, testing procedures, and legal requirements to ensure compliance within France.

France plans a transition period until the end of 2028, during which existing websites must progressively improve their accessibility.

The Most Effective Reason for Accessibility



WebAIM's Hierarchy for
Motivating Accessibility Change

<https://webaim.org/blog/motivating-accessibility-change/>

- **Guilt:** If you cared about people with disabilities, you'd...
- **Punishment:** You risk a fine if you don't.
- **Requirement:** Accessibility is part of UX, period.
- **Reward:** You'll get a badge to display
- **Illumination:** There are plenty of ancillary benefits: for everyone, for Google, for code maintenance...
- **Inspiration:** Accessibility is essential for some, with a real impact on life

Accessibility is a state of mind

Accessibility is a state of mind, not a checklist

<https://france-handicap.info.com/international/actualites-internationales-journees-mondiales/380-journee-mondiale-5034-le-braille-plus-de-milliers-d-existence-a-t-il-encore-unavenir-a-l-heure-du-numerique>



We say that "**Accessibility is a state of mind, not a checklist**" because true accessibility goes beyond simply ticking off a list of technical requirements. It reflects a mindset—or an approach—centered on inclusion, empathy, and the continuous commitment to creating a digital environment that considers the diverse needs of all users.

In other words, accessibility is about embedding inclusive thinking into every stage of design, development, and content creation, rather than just completing a set of predefined tasks. It involves a culture of responsibility and awareness, where designing for accessibility becomes a fundamental value rather than a one-time compliance exercise.

3. Auditing / Testing



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There are different ways to check if a website is accessible:

- **Automated tools** – quick but only detect some issues.
- **Manual testing** – slower but finds more problems.
- **User testing** – the best way to understand real challenges.

01. Supports and levels

<https://france-handicap-info.com/international/actualites-internationales-journees-mondiales/80-journee-mondiale-5034-le-braille-plus-de-siecles-d-existence-a-t-il-encore-un-avenir-a-l-heure-du-tout-numerique>



01. Supports and Levels | The origin of the guidelines

Disability



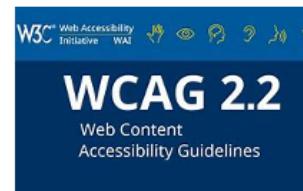
Tools



International rules



European rules



Source : <https://simple.wikipedia.org/wiki/Disability> <https://itaccessibility.uiowa.edu/articles/2023/10/w3c-officially-recommends-wcag-22>

The EAA (European Accessibility Act) currently requires that websites and mobile applications comply with **WCAG 2.1** at the AA level. However, **WCAG 2.2** was published in October 2023, but it has not yet been officially incorporated into European or national legislation. It is therefore likely that, in the near future, compliance will need to evolve towards WCAG 2.2, especially when regulations are revised or updated.

In summary, **the EAA currently mandates WCAG 2.1**, and the adoption of WCAG 2.2 is forthcoming.

01. Supports and Levels | Choose the level you want to reach



A

- Minimum specifications
- Most content is accessible, but not easily (e.g. no contrast constraints)

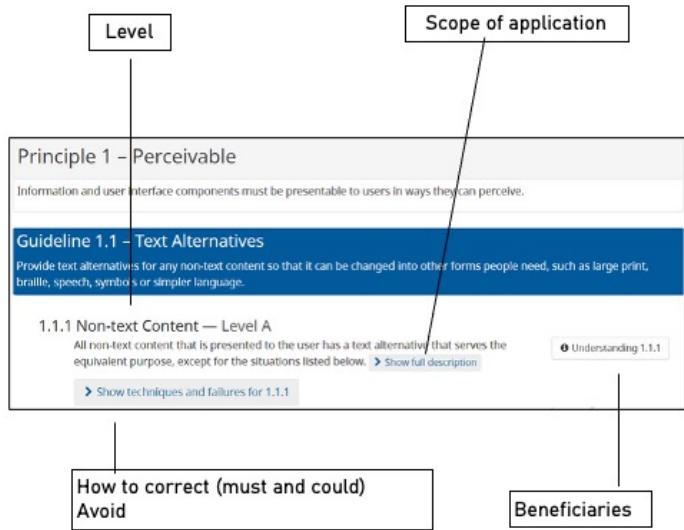
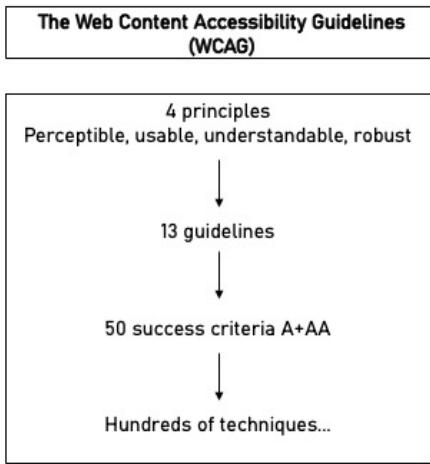
- Medium specifications
- Accessible and easy to navigate
- Ex: minimum contrast rules

AAA

- Advanced specifications
- Accessible and easy to use, even for people with more severe disabilities
- E.g.: reinforced contrast rules, sign language, etc.

Source : https://en.wikipedia.org/wiki/Web_Content_Accessibility_Guidelines

Check WCAG Compliance



Source : <https://www.w3.org/WAI/WCAG22/quickref/>

The European Accessibility Directive

The European directive

don't ask

to label a site

The European Accessibility Directive (such as the EU Web Accessibility Directive 2016/2102) **does not explicitly require** that websites be labeled with an accessibility badge or label.

However, it **requires** public sector websites and mobile applications to **publish a public accessibility statement** that details their level of compliance, ongoing efforts, and contact information for user feedback.

In other words, while there's no formal label or badge mandated, transparency and information about accessibility are compulsory, allowing users to understand the level of accessibility and how to access support if needed.

To **publish an accessibility statement** is a good way to show what kind of effort are made by the companies or organizations, it details their level of compliance, ongoing efforts, and contact information for user feedback.

02. Select

<https://france-handicap-info.com/international/actualites-internationales-journees-mondiales/180-journee-mondiale-/5034-le-braille-plus-de-siecles-d-existence-a-t-il-encore-un-avenir-a-l-heure-du-tout-numerique>



When conducting an accessibility audit, selecting the right pages is crucial to effectively evaluate the site's compliance.

02. Select pages

Page templates

Different information formats

Video

Documents to download

...

Pages for disabled visitors



A sample of
20-25 pages

02. Select pages

Indispensable pages

- Pages and functions accessible from header/footer and menu (home page, search, contact, etc.)
- Pages accessible from the home page (menu)

A sample of
20-25 pages

Pages with high business value

- Purchase funnel
- Forms
- Recording
- ...

Summary:

- Focus on high-traffic and critical pages
 - Cover different content types and functionalities
 - Prioritize user journey touchpoints
 - Limit to a manageable number, representative of the entire site
- This approach ensures your audit is both thorough and efficient, providing accurate insights into your site's accessibility status.

02. Select files



Min 1 file per type

Source : https://fr.m.wikiversity.org/wiki/Fichier:Word_2013_Icon.PNG.....

When auditing a website's accessibility, files like PDFs, Word documents, and other downloadable content are also important components to assess.

Summary:

- Select key and frequently accessed files, especially those providing vital information
- Cover various formats and content complexities
- Focus on documents linked from high-traffic pages
- Ensure they meet accessibility standards such as WCAG for PDF/Office files

Incorporating downloadable content assessment ensures a comprehensive view of your site's overall accessibility and helps prioritize remediation efforts effectively.

03. Automated testing

<https://france-handicap-info.com/international/actualites-internationales-journees-mondiales/180-journee-mondiale-/5034-le-braille-plus-de-siecles-d-existence-a-t-il-encore-un-avenir-a-l-heure-du-tout-numerique>



When conducting an accessibility audit, selecting the right pages is crucial to effectively evaluate the site's compliance.

Automated Testing



Lighthouse Chrome
Add-on

https://indexedev.com/post/maximizing-page-speed-insight-resolving-the-user-scalable-no-meta-viewport-error/#google_vignette

Automated testing plays a valuable role in accessibility audits

Benefits of Automated Testing:

- **Efficiency:** Quickly scans large parts of your website or content to identify common accessibility issues.
- **Consistency:** Provides uniform checks against established guidelines like WCAG 2.1 or 2.2.
- **Early Detection:** Helps catch issues such as missing alt text, color contrast problems, missing labels, and faulty HTML structures.

Automated Testing

Automated tests = score on up to 30% of the site



but it has its limitations....

- **Partial Coverage:** Automated tools typically cover about 30-40% of total accessibility criteria.
- **Context-Specific Issues:** They cannot evaluate content that requires human judgment, such as readability, cognitive load, or context appropriateness.
- **False Positives/Negatives:** Tools may flag issues that aren't real (false positives) or miss subtle problems (false negatives).

• **Best Practice:**

- Use **automated tools** (like Axe, WAVE, Lighthouse, Tanaguru) as *initial scans* to quickly identify obvious issues.
- Follow up with **manual testing** by experts for complex, nuanced, or subjective criteria, such as keyboard navigation, focus states, and screen reader compatibility.
- Combine both methods for a comprehensive and accurate accessibility assessment.

• **Conclusion:**

- Automated testing is a **valuable first step** but **cannot replace manual review**. Combining both approaches ensures thorough coverage and reliable results.

04. Semi-automated testing (add-ons + manual testing)

<https://france-handicap-info.com/international/actualites-internationales-journees-mondiales/180-journee-mondiale-/5034-le-braille-plus-de-siecles-d-existence-a-t-il-encore-un-avenir-a-l-heure-du-tout-numerique>



Semi-automated testing—using add-ons, browser extensions, and manual checks—serves as a crucial complement to automated accessibility audits.

Semi-Automated Testing



Web developer toolbar - Chrome

<https://seocandcopywriting.com/guia-encabezados-h1/>

The **Web Developer Toolbar on Chrome** is a collection of tools and features, often available through extensions like **axe DevTools**, **WAVE**, or native Chrome DevTools panels, that assist website developers in analyzing and improving web accessibility.

Developers can inspect elements directly on the page, see accessibility violations, and get instant guidance on how to fix them.

Semi-Automated Testing



The screenshot shows the WebAIM Contrast Checker interface. At the top, there's a navigation bar with links for 'services', 'articles', and 'resources'. Below the navigation is a search bar and three buttons: 'Introduction to Web Accessibility', 'WebAIM Training', and 'Contrast Checker' (which is highlighted). The main area is titled 'Contrast Checker' and shows the path 'Home > Resources > Contrast Checker'. It has two color pickers: one for the foreground color (Hex: #0000FF) and one for the background color (Hex: #FFFFFF). Each color picker includes an 'Alpha' input field set to 1 and a 'Lightness' slider. Below the sliders is a green box displaying the 'Contrast Ratio' as '8.59:1'. A small link 'permalink' is located at the bottom right of this box.

<https://webaim.org/resources/contrastchecker/>

Contrast and color use are vital to accessibility.

Users, including users with visual disabilities, must be able to perceive content on the page.

Contrast is a measure of the difference in perceived "luminance" or brightness between two colors.

Semi-Automated Testing



Firefox add-on a11y-outline

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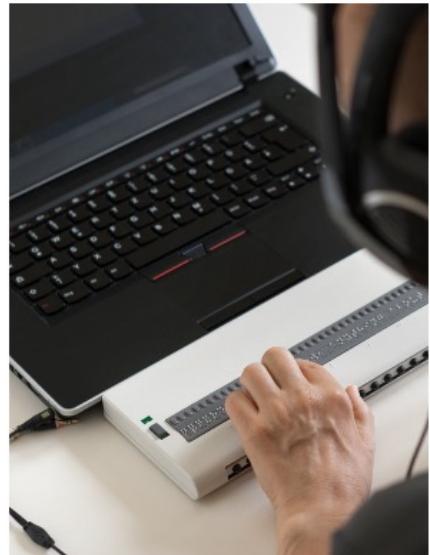
The **Firefox add-on "a11y-outline"** is a browser extension designed to help web developers and accessibility testers visualize and analyze the HTML structure of a webpage from an accessibility perspective. a11y-outline is a useful tool for visualizing and validating the semantic structure of a webpage.

Semi-automated testing bridges the gap between fully automated tools and manual testing, providing a nuanced and practical approach to accessibility audits.

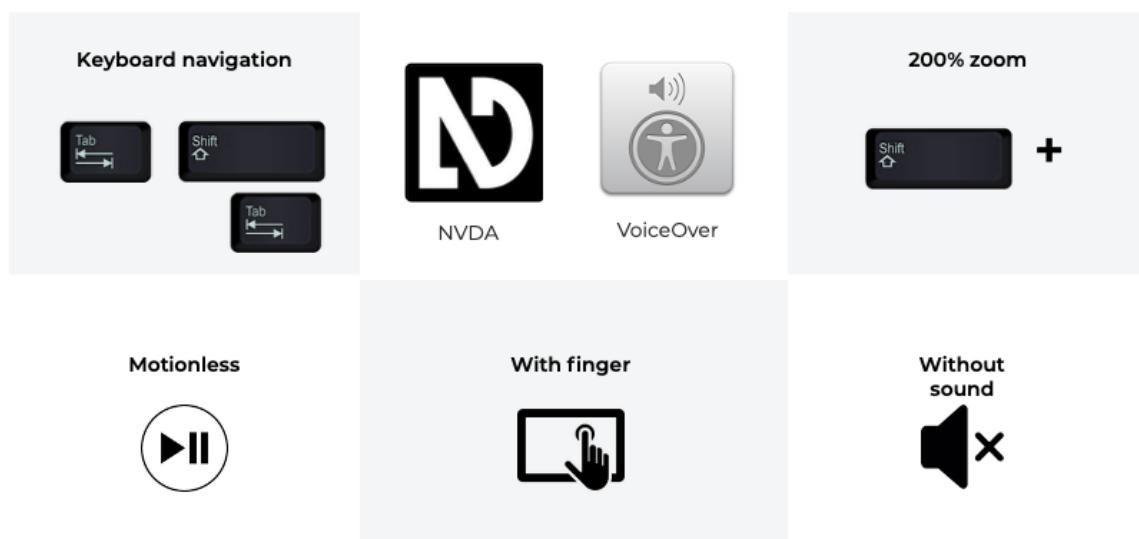
It greatly enhances accuracy and helps ensure that the site truly meets accessibility standards.

05. Simulations

<https://france-handicap-info.com/international/actualites-internationales-journees-mondiales/180-journee-mondiale-5034-le-braille-plus-de-siecles-d-existence-a-t-il-encore-un-avenir-a-l-heure-du-tout-numerique>



Simulation - Exploratory Check



In the context of accessibility targets, simulations like NVDA, VoiceOver, Zoom, and others are tools used to *simulate* how users with different disabilities experience digital content.

These tools help developers, designers, and testers understand how accessible a website or app is by mimicking the perspective of users with visual, auditory, or motor impairments.

- **NVDA (NonVisual Desktop Access):** A free screen reader for Windows that reads out content, helping check how visually impaired users navigate and understand the site.
- **VoiceOver:** Apple's built-in screen reader for macOS and iOS devices, used to test how visually impaired users experience content on Apple devices.
- **Zoom:** Accessibility feature that enlarges content, useful for users with low vision to ensure text and elements are readable at different magnifications.
- **Other tools:** Similar tools include TalkBack (Android), ZoomText (magnification and reading), and speech synthesis systems.

• Their role in accessibility targets:

- **Evaluate usability:** These simulations allow developers to verify if all content is perceivable, operable, and understandable for users with disabilities.
- **Identify issues:** By experiencing content as these tools do, teams can detect missing supports, poor contrast, non-navigable elements, or confusing

layouts.

- Improve design:** They guide adjustments, ensuring compatibility and usability for all, especially those relying heavily on assistive technologies.

- Conclusion:**

- Using these simulations as part of the testing process helps ensure that digital content truly meets accessibility standards, making products inclusive and usable by everyone, regardless of their abilities.

...

06. User tests

<https://france-handicap-info.com/international/actualites-internationales-journees-mondiales/180-journee-mondiale-5034-le-braille-plus-de-siecles-d-existence-a-t-il-encore-un-avenir-a-l-heure-du-tout-numerique>



user tests (or **user testing with people with disabilities**) are a critical step to evaluate how well your website, app, or digital content meets the needs of users with various impairments.

User Tests

Why make them?

- Empathy has its limits (how can you really imagine the difficulties of a blind person?).
- You already know the site. Even if you're browsing "blind", you already know what content to expect.
- You don't have a full command of technical support tools.
- You'll never forget your disabled user test.

User Tests

What to test, when, with whom?

Non-clickable HD mockup with real text: we test the comprehensibility, legibility and intuitiveness of zonings.

- > People who are deaf from birth, dyslexics, senior citizens, autistic people, people with concentration problems...
- > People with color blindness and other mild visual impairments
- > Screen enlarger users

Clickable HD prototype: testing interaction without personalization

- > Impaired fine motor skills (mouse) (Parkinson's, arthritis...)

Site staging: testing interactivity and machine-friendliness

- > Blind people

User Tests

Challenge #1: profiling



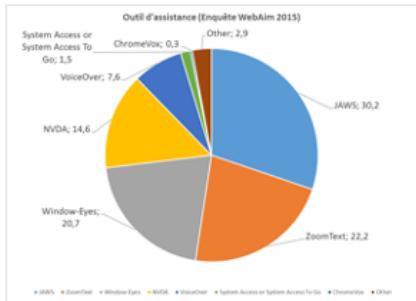
Meet at least

- a blind person
- a visually impaired person
- a senior citizen

https://commons.wikimedia.org/wiki/File:010874_noun_3918_ccjordanDelcros_blind.svg

User Tests

Challenge #2: a multitude of tools



Test with participant's equipment

User Tests

Challenge #3: recruitment



Contact associations, specialist forums, tool forums

Source : Google

- **Accessibility Targets Addressed:**

- **Perceivable:** Are the content and controls perceivable by users with visual or auditory impairments? For example, screen reader users rely on proper labeling and structure.
- **Operable:** Can users with motor disabilities navigate and operate the site using keyboards or assistive devices? User testing can reveal if controls are accessible without a mouse.
- **Understandable:** Is the content clear and easy to comprehend for users with cognitive disabilities? Feedback helps improve clarity and usability.
- **Robust:** Does the site work well across different devices and assistive technologies? User feedback ensures compatibility.

How it supports accessibility targets:

- **Real-world validation:** It confirms that accessibility features are practical and effective for actual users with disabilities.
- **Identifies usability barriers:** Helps to uncover issues like confusing layouts, non-intuitive navigation, or missing interaction cues that automated tests might miss.
- **Guides improvements:** Provides actionable insights to refine design and development, ensuring the product is truly inclusive.

Conclusion:

User testing with individuals with disabilities is vital for achieving **inclusive accessibility targets**, ensuring that digital experiences are genuinely usable by all, not just compliant on paper but effective in real-world use.

07. Audit Report

<https://france-handicap-info.com/international/actualites-internationales-journees-mondiales/180-journee-mondiale-5034-le-braille-plus-de-siecles-d-existence-a-t-il-encore-un-avenir-a-l-heure-du-tout-numerique>



An audit that combines **automatic, semi-automatic, and manual testing**, along with **user tests**, provides a comprehensive assessment of your digital content's accessibility.

Conclusions of Expert + User Tests

The screenshot displays a digital tool interface for managing issues. The main view is divided into three main sections: 'To start', 'Ongoing', and 'Blocked - see comment'. The 'To start' section contains a single card with the following details:

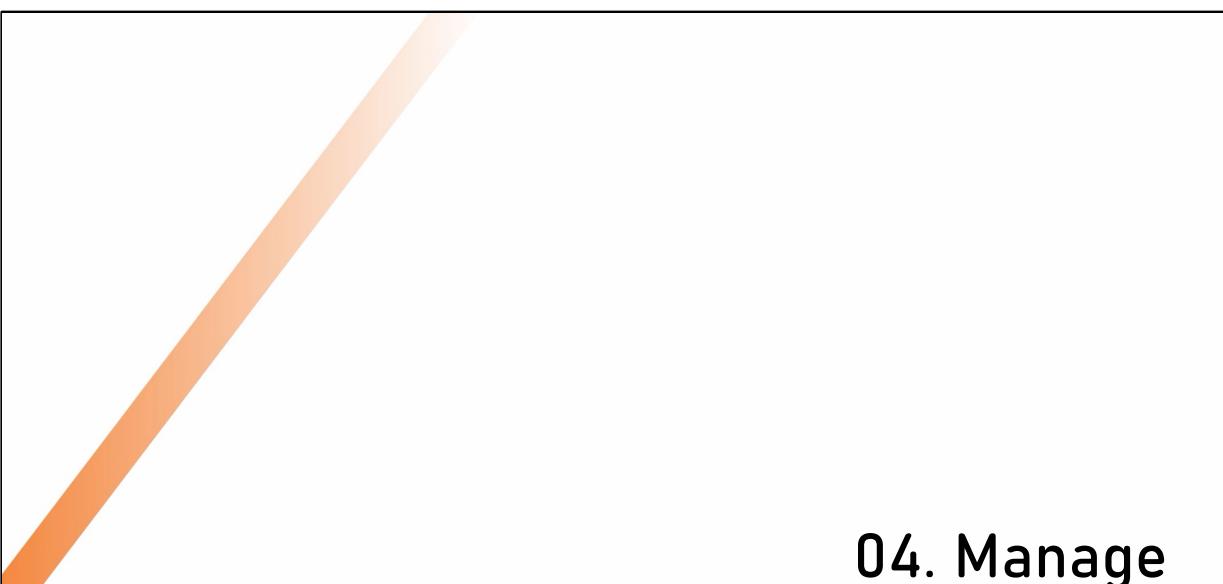
- Type of problem: Bug
- Severity: Major
- Remediation cost: \$10,000
- Description: Visual design and interaction
- Homepage
- Assessment status: Pending
- Recommendation: None
- Note: Change the icon color to #0070C4

A tooltip 'Sorted by correction manager' is shown near the 'To start' section. The 'Ongoing' section contains a filter dialog with the following conditions:

- When Type of problem = bug And Severity = major
- And Business value > 10 And Remediation cost < 10000

A tooltip 'Filter by priority' is shown near the 'Blocked' section.

Example of a presentation that shows the issue, why it is an issue, the recommendation to correct the problem, which team will correct (dev, design, editorial), and the priority of the issue (if it is a blocking, major or minor issue).



04. Manage

5



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01. Budget

<https://france-handicap-info.com/international/actualites-internationales-journees-mondiales/180-journee-mondiale-5034-le-braille-plus-de-siecles-d-existence-a-t-il-encore-un-avenir-a-l-heure-du-tout-numerique>



An accessibility budget refers to the allocated resources—financial, human, and time—that an organization commits to achieving and maintaining accessibility compliance across its digital assets.

Budget

Fixing an inaccessible site can be expensive...
But including accessibility right from the site's creation greatly reduces the cost.

Don't forget that accessibility makes the site

- Better referenced
- More usable for everyone
- More compatible with recent and future interaction methods
- Easier to manage, correct...

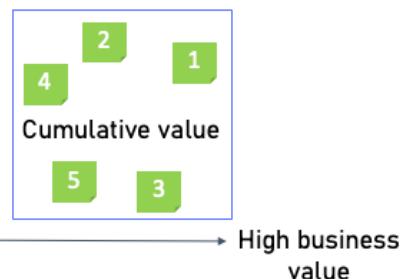
Having a clear accessibility budget allows companies to plan effectively, prioritize remediation efforts, and ensure ongoing compliance, especially in anticipation of regulations like the EU's 2025 deadline.

It also helps avoid surprises or underfunding, ensuring that accessibility remains an ongoing priority rather than a one-time expense.

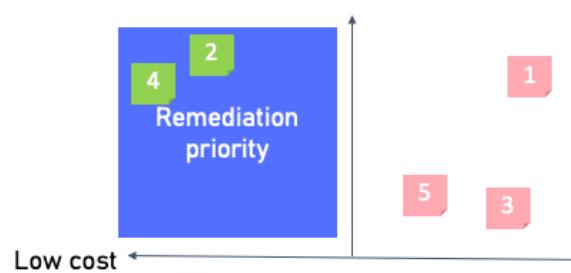
Ultimately, a well-defined accessibility budget demonstrates a strong organizational commitment to inclusivity, improves user experience for all, and mitigates legal and reputational risks.

Accessibility Priorities

Problem severity (high user value)



High cumulative value



Source : JEMS

An accessibility budget tailored to the severity of issues and their value can optimize resource allocation.

Prioritizing high-severity problems that have a high user value ensures that the most critical barriers for users are addressed first, creating an immediate positive impact on user experience.

Combining this with issues that offer high business value and high cumulative value maximizes ROI, as solving these problems can lead to increased engagement, satisfaction, and compliance benefits—often at a relatively low cost when planned strategically.

This approach helps organizations focus on impactful, cost-effective solutions that deliver maximum benefit for both users and the business.

Anticipate to Avoid Correction

Training

- Don't think you're born with it
- Don't think it's taught in the classic courses

Tooling

- CMS for accessible code
- Automatic and semi-automatic test tools
- Design system validated for accessibility
- Validated style guide for accessibility
- Text elements for multilingual templates
- ...

Having accessibility trainings is crucial because they empower teams with the knowledge and skills needed to design, develop, and maintain digital content that is inclusive for all users, including those with disabilities.

Training ensures everyone understands accessibility standards and best practices, reducing the risk of non-compliance and costly remediation later. It promotes a culture of inclusivity, fosters innovation, and helps organizations meet legal requirements more efficiently.

Ultimately, well-trained teams create better user experiences, expand their reach, and demonstrate a genuine commitment to social responsibility.

It's important to have accessibility tools because they enable organizations to identify and fix accessibility issues more efficiently and accurately.

For instance, automated tools quickly detect common problems, saving time during audits.

They help maintain compliance more consistently and reduce the risk of legal penalties.

Additionally, accessibility tools support ongoing monitoring and validation, empowering teams to build inclusive digital environments that serve all users effectively.

Ultimately, they make accessibility more manageable, reliable, and scalable across projects.

02. Time and employees

<https://france-handicap-info.com/international/actualites-internationales-journees-mondiales/180-journee-mondiale-5034-le-braille-plus-de-siecles-d-existence-a-t-il-encore-un-avenir-a-l-heure-du-tout-numerique>



An accessibility budget refers to the allocated resources—financial, human, and time—that an organization commits to achieving and maintaining accessibility compliance across its digital assets.

Anticipate to Avoid Correction

Who are our employees involved
In accessibility projects



https://stock.adobe.com/be_fr/search/images?k=meeting+comic

It is important to identify the employees involved in accessibility projects because doing so ensures that those responsible for implementing and maintaining accessibility are fully engaged and equipped with the necessary knowledge.

This targeted involvement fosters greater ownership, encourages collaboration, and helps ensure that solutions are practical, effective, and sustainable.

Ultimately, involving the right employees leads to higher quality of implementation, promotes a culture of inclusion, and demonstrates the organization's commitment to accessibility at all levels.

Anticipate

Raising employee awareness

- **Editors**, who write accessible text
- **Designers**, who create accessible interfaces
- **Developers**, who will develop accessible code
- Project managers, who will plan accessibility
- **Managers**, who will train and equip teams and include the cost of accessibility.
- ...

Accessibility isn't something you add at the end—it should be part of the process from the start. It's a shared responsibility between designers, developers, project managers...

The employees involved in accessibility projects typically include:

- **Developers and IT Teams:** Responsible for implementing technical accessibility features, ensuring WCAG compliance, and maintaining accessible code.
- **Designers and UX/UI Teams:** Charged with creating inclusive, user-friendly interfaces that consider accessibility principles from the outset.
- **Project Managers (PMs):** Oversee the planning, coordination, and delivery of accessibility initiatives, ensuring deadlines and standards are met.
- **Content Creators (Copywriters, Content Managers):** Ensure that text, images, and multimedia content are accessible—such as providing alt text and proper headings.
- **Marketing and Communication Teams:** Responsible for accessible outreach and ensuring that public-facing content, like declarations and reports, are inclusive.
- **Top Management and Leadership:** Support and champion accessibility policies, allocate resources, and foster a culture of inclusion.
- **HR and Training Managers:** Responsible for training staff, raising awareness, and integrating accessibility into ongoing professional

development.

Involving these key roles ensures that accessibility is integrated throughout the organization from design to deployment and beyond.

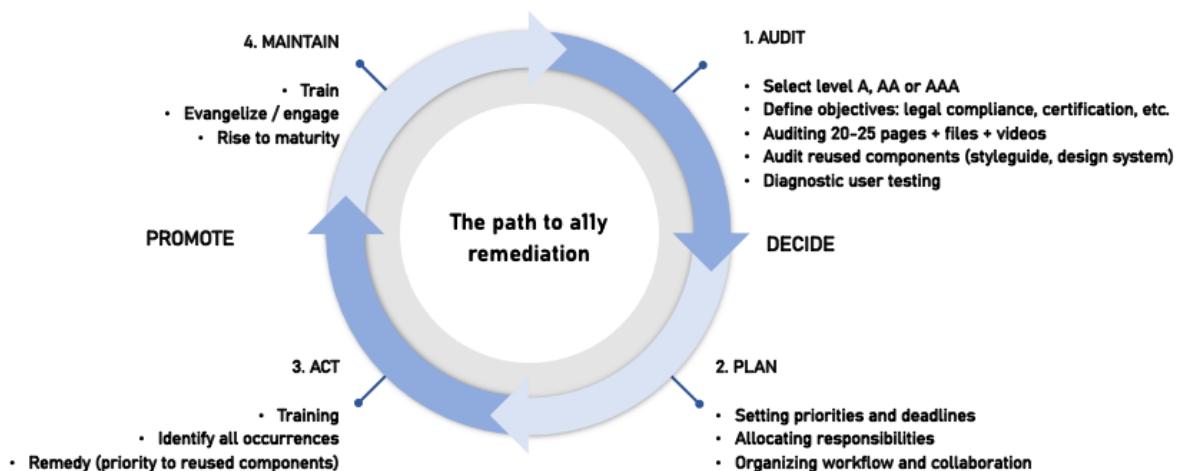
When to think about Accessibility



- Validate code
- Validate contrasts...
- Validate text, links...
- Validating interactions
- Validate terminology
- Evaluating effort
- List disability
- Select level

You should think about accessibility from the very beginning of a project — ideally, during the initial planning and requirement gathering phase. Integrating accessibility early ensures that inclusivity is built into the design, user experience, and technical architecture from the outset, rather than trying to retrofit solutions later. This proactive approach helps avoid costly rework, ensures compliance with regulations, and delivers a better experience for all users. Additionally, continuous consideration throughout development, testing, and post-launch phases is essential for maintaining and improving accessibility.

Stages



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Jew company

Building a structured path to accessibility remediation—covering audit, decision, planning, action, promotion, and ongoing maintenance—is essential because it ensures a systematic, efficient, and sustainable approach to achieving and sustaining compliance.

This process helps identify issues early, prioritize actions effectively, allocate the right resources, and track progress transparently.

It also fosters a culture of continuous improvement, making accessibility an integral part of your organization's operations rather than a one-time project. Ultimately, it leads to better user experiences, legal compliance, and an inclusive digital environment for all.

Organizing Collaboration

Information exchange

- **Copywriters, designers and developers** will have to exchange information. They must have exchange areas (e.g. meetings/sprint, Jira, etc.).

Ex: Text alternatives

- The designer imagines a page with images
- The copywriter writes text alternatives for these images (for visitors who don't see them).
- The developer has to find all these texts and integrate them into his code.



Organizing collaboration between copywriters, designers, and developers in an accessibility project involves establishing clear communication channels, shared goals, and integrated workflows.

Typically, this includes:

- **Early Planning:** Involving all stakeholders from the project's inception to define accessibility requirements, goals, and responsibilities.
- **Regular Coordination:** Holding cross-disciplinary meetings, briefings, or stand-ups to ensure everyone understands their roles and progress.
- **Shared Guidelines and Documentation:** Using common accessibility standards (e.g., WCAG) and documentation to maintain consistency.
- **Design-Development Alignment:** Designers create accessible UI prototypes and guidelines, which developers implement and verify against technical standards.
- **Content-Design Sync:** Copywriters craft accessible content (alt texts, clear language), working closely with designers to ensure visual and textual accessibility.
- **Testing and Feedback:** Incorporating frequent testing (manual, automated, user testing) with input from all roles to identify issues and iterate.

This collaborative approach ensures that accessibility is embedded at every

stage, creating a cohesive, inclusive, and compliant digital experience.

03. Agility

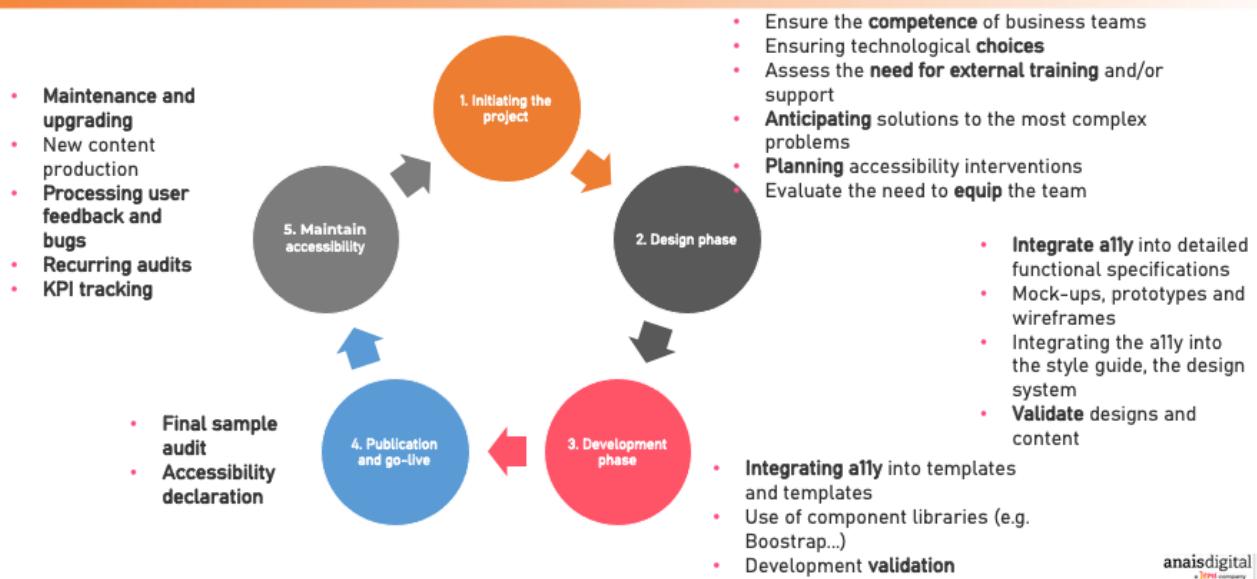
<https://france-handicap-info.com/international/actualites-internationales-journees-mondiales/180-journee-mondiale-5034-le-braille-plus-de-siecles-d-existence-a-t-il-encore-un-avenir-a-l-heure-du-tout-numerique>



An agile approach allows teams to adapt quickly, incorporate feedback frequently, and iteratively improve solutions.

This flexibility ensures that accessibility remains a priority throughout the project lifecycle, enabling proactive adjustments, faster problem resolution, and ultimately delivering inclusive digital experiences that meet current standards and user expectations efficiently.

Project Phase



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In Agile teams, accessibility should be included in every step:

- Define **accessibility requirements** in user stories.
- Use a **design system** with accessible components.

Project roles and responsibilities

Defining responsibilities by project role—such as designers, developers, content creators, testers, and project managers—ensures that each team member understands their specific tasks and contributions.

https://www.unimelb.edu.au/_data/assets/pdf_file/0005/2777567/responsibilities-20190219.pdf

When roles and responsibilities are clearly assigned, teams understand their specific tasks, deadlines, and how they contribute to the overall goal.

Defining responsibilities by project role—such as designers, developers, content creators, testers, and project managers—ensures that each team member understands their specific tasks and contributions.

This role-based clarity promotes accountability, streamlines workflow, reduces overlaps or gaps, and fosters effective collaboration.

It helps ensure that all aspects of accessibility are systematically addressed, leading to successful compliance and a truly inclusive digital experience.

Project roles and responsibilities

Product owner

1. Include accessibility as a project requirement

Test: Accessibility included in requirements documentation

Project Manager

1. Assign responsibilities to project team members

Test: Write names next to roles on this Sheet

2. Add accessibility tasks to the product backlog

Test: Tasks been added to project tracking software

3. Monitor progress and report

Test: Reporting to stakeholders about accessibility work

When roles and responsibilities are clearly assigned, teams understand their specific tasks, deadlines, and how they contribute to the overall goal.

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Project roles and responsibilities

Visual Designer

1. Provide contrast between text and background
Test: Use the Color Contrast Analyzer (CCA) to check 4.5:1 ratio
2. Provide contrast between components and background
Test: Use the Color Contrast Analyzer (CCA) to check 3:1 ratio
3. Don't use colour alone to distinguish links from body text
Test: Links are underlined or clearly distinguished from body text
4. Give an indication of keyboard focus
Test: Style guide shows focussed state of tabs, buttons and links

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Project roles and responsibilities

Visual Designer

5. Keep navigation and presentation consistent
Test: navigation items and components are used consistently
6. Allow both portrait and landscape orientation
Test: style guide shows both portrait and landscape designs
7. Avoid distractions
Test: Are users encouraged to maintain momentum?

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Project roles and responsibilities

UX/Interaction designer

1. Allow users to pause, stop or mute audio
Test: Are there buttons for controlling audio?
2. Let users extend time limits
Test: Do users receive a warning message before timeout?
3. Allow pausing of animations
Test: Do animations have a pause button or stop automatically?
4. Avoid content that flashes
Test: Is there visual content that changes 4 times per second?

When roles and responsibilities are clearly assigned, teams understand their specific tasks, deadlines, and how they contribute to the overall goal.

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This role-based clarity promotes accountability, streamlines workflow, reduces overlaps or gaps, and fosters effective collaboration.

It helps ensure that all aspects of accessibility are systematically addressed, leading to successful compliance and a truly inclusive digital experience.

Project roles and responsibilities

UX/Interaction designer

5. Group relevant content: banner, main, footer
Test: Is navigation clearly separated from content?
6. Content displayed on hover can be controlled
Test: Tab through the page. Do pop-ups obscure your view?
7. Avoid surprise changes when inputting information
Test: Are submit buttons provided for input fields?
8. Allow test resizing and spacing
Test: Press Ctrl + Plus (+) eight times. Press Ctrl + 0 to reset

When roles and responsibilities are clearly assigned, teams understand their specific tasks, deadlines, and how they contribute to the overall goal.

Defining responsibilities by project role—such as designers, developers, content creators, testers, and project managers—ensures that each team member understands their specific tasks and contributions.

This role-based clarity promotes accountability, streamlines workflow, reduces overlaps or gaps, and fosters effective collaboration.

It helps ensure that all aspects of accessibility are systematically addressed, leading to successful compliance and a truly inclusive digital experience.

Project roles and responsibilities

UX/Interaction designer

9. Make navigation order of links and forms logical
Test: Check order bij tabbing through page from top to bottom
10. Provide an index, sitemap or site search
Test: Is there a link to an index, sitemap or search?
11. Make each page navigable by keyboard alone
Test: Can you complete all tasks without using a mouse?
12. Don't trap the keyboard
Test: Can you tab through the entire page?
13. Mobile: Provide alternatives to multipoint gestures
Test: Can you operate the device using one finger?
14. Mobile: Provide alternatives to motion acuation
Test: can you operate the device without tilt and shake?

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Project roles and responsibilities

Developer

1. Use heading tags, table headings and lists
Test: Use the a11y-outline bookmarklet for Chrome/Firefox
2. Present content in a meaningful sequence
Test: Does the DOM order match the visual order?
3. Allow autocomplete by specifying input field type
Test: Do suitable input fields have an input type specified?
4. Identify input formats for form fields
Example: Date of birth (dd/mm/yyyy)
5. Clearly identify input roles and errors
Test: Do form inputs have ARIA roles and error messages?

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Project roles and responsibilities

Developer

6. Use labels, fieldsets and legends in forms
Test: Use the Siteimprove plugin for Chrome
7. Make sure visible labels match accessible names
Test: Do text labels match the component's name property?
8. Allow users to confirm/reverse changes to data
Test: Are users asked to confirm changes to important data?
9. Identify the language of the page
Test: Does the <html> tag include a lang attribute?
10. Use valid HTML and avoid duplicate IDs
Test: Use axe-core accessibility engine to automate testing

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Project roles and responsibilities

Developer

11. Provide names and roles for all components
Test: use the siteimprove plugin for Chrome
12. Keyboard shortcuts can be turned off
Test: can users useable character key shortcuts?
13. Activate functions on mouseup, not mousedown
Test: does release outside a target cancel the click action?
14. Inform assistive technologies of changes to content
Test: use NVDA with Focus Higlight plugin to track focus

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Project roles and responsibilities

Content Editor

1. Add alt text to images
Test: What does the image convey? Is it decorative?
2. Dont use images of text
Test: can you select all text with a mouse?
3. Add labels fo form fields
Test: Does each input have a label above or beside it?
4. Add transcript to audio
Test: How will a deaf person access the audio content?
5. Add captions to video
Test: Will a deaf/ non-native speaker understand?
6. Describe silent content in videos
Test: how will blind users know what is happening?

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Project roles and responsibilities

Content Editor

7. Don't make instructions reliant on vision
Example: Don't say « Click on top right of screen »
8. Add a meaningful page title
Test: Is each page title concise and unique?
9. Avoid « click here » link text
Test: Does link text match the title of the target page?
10. Add informative headings
Test: Do the headings alone describe the page content?
11. Avoid jargon
Does the web site use plain English?

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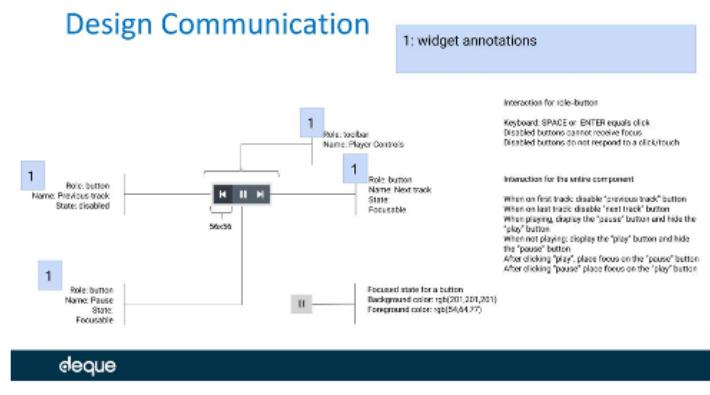
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Collaboration

Ex: Collaborative design: annotation of interactions and accessible styles

- Focus
- Alternative
- Mouse-free interaction
- Active status
- Focus status
- ...



<https://www.deque.com/blog/accessibility-in-agile-team-practices>

Artifacts and Activities

Requirements from the outset and throughout

- Participate in technical and design **choices**
- Integrating a11y into **translation**
- Integrating a11y into **QA (Quality Assurance)**

SCRUM ARTIFACTS



<https://www.atlassian.com/agile/scrum/artifacts>

Speed

Design system and patterns

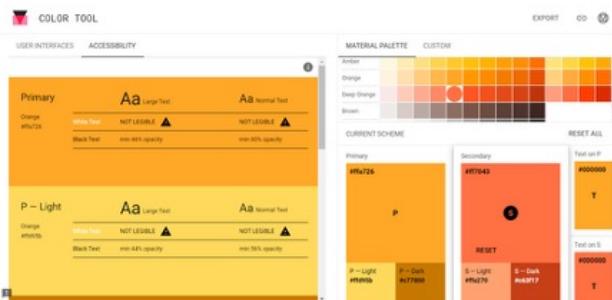
The screenshot shows the Deque Cauldron website. On the left, there is a sidebar with a dark background containing navigation links: Overview, Components, Buttons, Links, Media, Checkmarks, Media Queries, Spacing, System Metrics, Badges, Behavior Patterns, Events, and a link to the GitHub repository. The main content area has a blue header with the text "Deque Cauldron" and "A fully accessible HTML, CSS, and JavaScript front-end framework for creating web-based mobile applications." Below the header, there are two sections: "Why use Cauldron?" and "How do I contribute?". The "Why use Cauldron?" section features a black cauldron icon with colorful bubbles above it. The "How do I contribute?" section includes a GitHub icon and a link to the GitHub repository: <https://pattern-library.dequelabs.com/>.

Designing accessible systems involves incorporating accessibility principles into every phase of your design process.

- **Establish Clear Guidelines:** Integrate accessibility standards (like WCAG) into your design principles and documentation to ensure all team members are aligned.
- **Use Inclusive Components:** Develop reusable UI components that comply with accessibility best practices—such as proper labels, focus management, color contrast, and keyboard navigability.
- **Embed Accessibility in Design Tools:** Incorporate accessibility checks within design tools (Figma, Sketch) to flag issues early in the design phase.
- **Create a Shared Vocabulary:** Use common language and symbols for accessibility features across teams to promote consistent implementation.
- **Involve Accessibility Experts:** Collaborate with accessibility specialists during design reviews and testing to identify and address potential issues.
- **Conduct User Testing:** Regularly test prototypes with users with disabilities to gather real-world feedback and refine components.
- **Provide Ongoing Training:** Educate designers on accessibility best practices and keep the team updated on new standards or technologies.

Autonomy

Provide business-specific test tools



<https://material.io/resources/color/>

Autonomy in accessibility testing is valuable and crucial because it empowers teams to continuously evaluate and improve their digital products without always relying on external experts.

It fosters a culture of responsibility and awareness, enabling rapid identification and resolution of issues early in the development cycle. This independence helps maintain compliance over time, reduces long-term costs, and ensures that accessibility becomes an integral part of daily workflows—ultimately delivering more inclusive, user-friendly experiences and demonstrating genuine organizational commitment to accessibility.

04. Corporate maturity

<https://france-handicap-info.com/international/actualites-internationales-journees-mondiales/180-journee-mondiale-5034-le-braille-plus-de-siecles-d-existence-a-t-il-encore-un-avenir-a-l-heure-du-tout-numerique>



Corporate maturity in accessibility refers to the level of integration, awareness, and proactive management of accessibility practices within an organization.

It measures how advanced a company is in embedding accessibility into its culture, processes, and strategy.

Accessibility is a journey, not a stage

"Accessibility is a journey, not a stage" because true organizational maturity in accessibility is an ongoing, evolving process rather than a one-time achievement. It recognizes that accessibility involves continuous learning, improvement, and adaptation as standards, technologies, and user needs change over time. Just like a journey, it requires a long-term commitment, regular assessments, and incremental progress, rather than reaching a single point of compliance and stopping.

This mindset encourages organizations to embed accessibility as a core, ongoing part of their culture and strategy.

<https://france-handicap-info.com/international/actualites-internationales-journees-mondiales/180-journee-mondiale-5034-le-braille-plus-de-siecles-d-existence-a-t-il-encore-un-avenir-a-l-heure-du-tout-numerique>



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Roadmap A1Y



Allies

Identify supporters, leaders, evangelists.

1st successes

Correct components of commonly used templates: small task, big impact.
Find tools to systematize testing.

Features

Correct key funnels.

Development and maintenance

Perform manual tests.
Schedule regular audits.

Document and grow

Document effective processes.

Maturity Model A11Y

Unknown	Defined	Repeatable	Managed	Optimized
<ul style="list-style-type: none">• No sensitivity• No internal mandate	<ul style="list-style-type: none">• Low individual sensitivity (legal obligation)• Product action• Accessibility of new products only• No budget allocated	<ul style="list-style-type: none">• Some IT training courses• Some collaborations between teams• Involvement of management• Process documentation ally• Remediation of old products• Budget planning	<ul style="list-style-type: none">• Regular/advanced training• Public commitment• Strategic program and follow-up• Inclusive practices (not just digital)• Investment policy	<ul style="list-style-type: none">• External evangelization• Contributing to standards and innovation

In accessibility, a **mature organization** typically:

- Has clear policies and dedicated leadership around accessibility.
- Incorporates accessibility from the earliest stages of design, development, and content creation.
- Regularly trains staff and involves stakeholders across departments.
- Performs ongoing audits, testing, and improvements.
- Communicates transparently about accessibility efforts and progress.
- Complies with legal requirements and often exceeds minimum standards.

Higher maturity indicates a deep organizational commitment to inclusion, ensuring accessibility is seen not just as a compliance task but as a core value driving innovation and user-centricity.

05. Conclusion



Funded by the European Union. Views and opinions expressed are however those of the authors and do not necessarily reflect those of the European Union or Agency for Mobility and EU Program. Neither the European Union nor the granting authority can be held responsible for them.

Evaluation of a Project in A11Y

- Had you correctly assessed the accessibility load?
- Which position was the most overrun?
- Looking back, what were the mistakes?
- ...

It is also good to evaluate every project for accessibility and to ask the right questions, using the answers to improve.

My Lines of Action

As ...	I can start tomorrow...
	1.
	2.
	3.
	4.
	5.

canvas

Summary



In this lesson, we focused on making digital experiences inclusive and usable for all. You discovered that accessibility isn't just about compliance — it's about empathy and responsibility. Whether users have visual, auditory, motor, or cognitive impairments, your design choices can make a huge difference.

We explored WCAG principles (Perceivable, Operable, Understandable, Robust), common barriers, and testing.

Remember: Accessible design is better design. It improves usability for everyone and reflects a commitment to ethical, user-centered work.

Keep accessibility top of mind in every project — it's not an add-on, it's essential.

Resources & Additional reading



Online Tools & Resources

- WebAIM(<https://webaim.org/>): Accessibility testing & best practices
- Google Lighthouse (<https://developers.google.com/web/tools/lighthouse/>): Automated accessibility auditing tool
- Color Contrast Accessibility Validator (<https://www.tpgi.com/color-contrast-checker/>): Ensures sufficient contrast
- <https://www.browserstack.com/guide/wcag-for-designers>

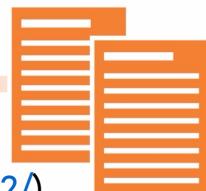
Resources & Additional reading



Books

- Accessibility for Everyone – Laura Kalbag
- Inclusive Design for a Digital World – Regine M. Gilbert
- Disability Visibility: First-Person Stories from the 21st Century – Alice Wong

Resources & Additional reading



Guidelines & Design Systems

- WCAG 2.2 Guidelines (<https://www.w3.org/TR/WCAG22/>)
- Material Design Accessibility (<https://material.io/design/usability/accessibility.html>)
- IBM Carbon Design System (<https://www.carbondesignsystem.com/>)

Resources & Additional reading



Articles & Blogs

- Deque Blog (<https://www.deque.com/blog/>): Best practices & latest trends in accessibility
- Smashing Magazine (<https://www.smashingmagazine.com/category/accessibility/>): Accessibility insights for designers & developers



Do you have any questions?



Thank you for your attention