Accessibility / Usability

It is when the content is available to everyone and the functionality can be operated by anyone, including those who use assistive technology.

Eliminate obstacles when interacting, transmitting, receiving, or understanding information.

A world that includes everyone

Organizations seek to offer their users and customers a good user experience, but many fail to consider people with disabilities.

Benefits

- Social responsibility.
- Competitive advantage.
- Improves SEO positioning and compatibility.
- Complies with the legislation.

Security

Accessible online services offer efficient and secure options for everyday tasks.
Autonomy

Web accessibility improves everyone’s quality of life.

Simulator

Normal Vision

Safety starts with community

Circulos helps connect you to a reliable network of ski peers, establish protocols, send alerts and keep those in your circle informed.

Sunshine

Safety starts with community

Simulator

Sunshine

Dyslexia

Safety starts with community

Circulos helps connect you to a reliable network of ski peers, establish protocols, send alerts and keep those in your circle informed.

Tunnel Vision
Statistics

In the world, one in seven people has a disability. United Nations.

Understanding accessibility is understanding new User Personas

Assistive technologies: high contrast keyboard, switches & mouse big track
Use respectful language

Use person-first language

<table>
<thead>
<tr>
<th>Person-first</th>
<th>Not this</th>
</tr>
</thead>
<tbody>
<tr>
<td>person with disability</td>
<td>person with a disability</td>
</tr>
<tr>
<td>person who is deaf or hard of hearing</td>
<td>handicapped person</td>
</tr>
<tr>
<td>person who is blind or has low vision</td>
<td>crippled</td>
</tr>
<tr>
<td>person who is mentally disabled, person with psychological disability</td>
<td>invalid</td>
</tr>
<tr>
<td>person with a psychiatric condition</td>
<td>incapacitated</td>
</tr>
<tr>
<td>person with intellectual disability, person with developmental disability</td>
<td>mad</td>
</tr>
<tr>
<td>person with learning disability</td>
<td>mute</td>
</tr>
<tr>
<td>person with cognitive disability</td>
<td>deaf and dumb</td>
</tr>
<tr>
<td>person who uses a wheelchair or mobility device</td>
<td>deaf person</td>
</tr>
<tr>
<td>person with autism/spectrum disorder</td>
<td>blind person</td>
</tr>
<tr>
<td>person with a physical disability</td>
<td>person without sight</td>
</tr>
</tbody>
</table>
Who to engage in your Accessibility Plan

- Directors and executives
- Product owners and project managers
- UI/UX designers
- Marketing and content teams
- Developers
- QA
- Customer service team

Legislation

- Web Content Accessibility Guidelines (WCAG) 2.2
- 4 Principles
- 13 Guidelines
- 3 Levels of accessibility
- A, AA y AAA

United States

- Americans with Disabilities Act (ADA)
- Section 508 of the Rehabilitation Act
- 21st Century Communications and Video Accessibility Act (CVAA)
- Air Carrier Access Act (ACAA)

Hundreds of lawsuits

- Web Accessibility
  - Bed, Bath & Beyond
  - The Home Depot
  - Target
  - Domino’s Pizza
- Closed Captions
  - Netflix
  - Massachusetts Institute of Technology
  - Harvard University
Lawsuits

DEFENDANT LAWYERS
“We will defend you, but you should be accessible.”

PLAINTIFF LAWYERS
“We will sue you if you do not provide an accessible website.”

Canada

- Web Standards for the Government of Canada
- Ontario: The Accessibility for Ontarians with Disabilities Act (AODA)
- Quebec: Standards sur l’accessibilité du Web

Europe

- Accessibility requirements suitable for public procurement of ICT products and services in Europe.
- Standard EN 301 549

Web Content Accessibility Guidelines 2.1

1. Perceivable principle

- Information and user interface components must be presentable to users in ways they can perceive.
Alternative text

1.1.1 - Level A

alt="Panda eating bamboo"

Social Media

Facebook

Twitter

LinkedIn

Instagram

Youtube logo

Facebook

Captions

Twitter

Facebook

LinkedIn

Instagram

Youtube logo

Facebook Captions

Twitter
For all prerecorded videos:

1.2.2 - Level A Captions

1.2.3 - Level A Audio-description or textual description

Example CC and transcript

How Can We Encourage Students with Disabilities to Pursue Computing?

Audio-description

Audio description example
Live captions
1.2.4 - AA Level
Captions (live):
For all live audio.

Sign language
1.2.6 - AAA Level
Sign Language (pre-recorded):
For all videos.

Textual description
1.2.9 - AAA Level
Audio-only (live): provide a textual description.

Info and relationships
1.3.1 - Level A
Information, structure, and relationships conveyed through
presentation can be programmatically determined or are
available in text.

1.3.3 - Level A
Sensory Characteristics:
Instructions provided for understanding and operating
content do not rely solely on shape, color, size, visual
location, orientation, or sound.

Orientation
1.3.4 - Level AA
Content does not restrict its view and operation to a single
display orientation, such as portrait or landscape
Identify input purpose

1.3.5 - Level AA - Examples
A contact form using autofill

A contact form auto-fills in the fields for name, street, post code, city, telephone number and email address from autofill values stored in the user’s browser.

Color

1.4.1 - Level A
Use of color: Color is not used as the only visual means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.

Accessible VS not accessible pie chart
Audio control

1.4.2 - Level A
Audio control: If any audio plays automatically for more than 3 seconds, either a mechanism is available to pause or stop the audio, or a mechanism is available to control audio volume.

Color contrast
1.4.3 - AA Level & 1.4.6 -AAA Level

Contrast Checker

Resize text

1.4.4 - Level AA
Resize text: text can be resized without assistive technology up to 200 percent without loss of content or functionality.

Images of text

1.4.5 - Level AA
If the technologies being used can achieve the visual presentation, text is used to convey information rather than images of text.

Low or no background audio

1.4.7 - Level AAA
For prerecorded audio-only content that contains primarily speech in the foreground...

Visual presentation

1.4.8 - Level AAA
For the visual presentation of blocks of text, a mechanism is available to achieve the following:
1. Foreground and background colors can be selected by the user.
2. Width is no more than 80 characters or glyphs (40 if CJK).
3. Text is not justified (aligned to both the left and the right margins).
4. Line and paragraph spacing...
Example color presentation

Dark theme

Reflow

1.4.10 - Level AA Responsive Web Design

1.4.11 Level AA - Non-text Contrast

Inputs and links examples

Name:
Name:
Name:

Button and icon examples

Menu
Menu
2. Operable principle

User interface components and navigation must be operable.

Keyboard accessible

2.1.1 - Level A
Keyboard: All functionality of the content is operable through a keyboard interface...

Enough time

2.2.1 - Level A
Timing Adjustable: For each time limit that is set by the content, at least one of the following is true...

Moving, blinking, scrolling

2.2.2 - Level A
For any moving, blinking or scrolling information that starts automatically, lasts more than five seconds, and is presented in parallel with other content, there is a mechanism for the user to pause, stop, or hide it.

No timing

2.2.3 - Level AAA
Timing is not an essential part of the event or activity presented by the content.

Interruptions

2.2.4 - Level AAA
Interruptions can be postponed or suppressed by the user.
Re-authenticating

2.2.5 - Level AAA
When an authenticated session expires, the user can continue the activity without loss of data after re-authenticating.

Timeouts

2.2.6 - Level AAA
Users are warned of the duration of any user inactivity that could cause data loss, unless the data is preserved for more than 20 hours when the user does not take any actions.

Seizures and physical reactions

2.3.2 - Level AAA
Web pages do not contain anything that flashes more than three times in any one second period.

Bypass blocks

2.4.1 - Level A
A mechanism is available to bypass blocks of content that are repeated.

Page title

2.4.2 - Level A
Web pages have titles that describe topic or purpose.

Focus order

2.4.3 - Level A
Focusable components receive focus in an order that preserves meaning and operability.