

Access in the Making (AIM) Lab
Accessible Website Design

Acknowledgement¹

As we write our Lab Principles, we want to acknowledge in bold letters that it was the methodological work of **the Civic Laboratory for Environmental Action Research (CLEAR)** that has inspired and guided us throughout the process.² We are extremely grateful to CLEAR Lab for the incredible amount of work that they have done in how to run a feminist and anti-colonial lab,³ and their generosity in sharing this know-how with others. **We cannot cite you and thank you enough.**

Citation

Inspired by CLEAR Lab's work, AIM Lab has worked on this document over almost a process of ten months (and we are still and will be working on it). This document is the result of *labour*, including doing research, collective conversations, and editing. This document is a research output. This document is *a publication*. If you quote, use, or in any way benefit from this document, cite it.

¹ Please note that in our *Manifesto* and *Protocols*, we make the deliberate decision to use, not endnotes, *but footnotes*. In order to subvert the design hierarchy scripted into footnotes (which automatically decreases their font size vis-a-vis the font size of main text) we choose to use the same font size for both footnotes and the main body of the text, with the same line spacing. These design choices reflect our commitments to feminist ethics of citation. Through these choices, we seek to emphasize the shoulders we stand upon, and the various intellectual genealogies, activist, and artistic traditions that we draw from. Thank you, Annemarie Mol, Sara Ahmed, and Max Liboiron for teaching us about the importance of citations and the politics of footnotes (Mol, *The Body Multiple*; Ahmed, "Making Feminist Points, "; Liboiron, *Pollution is Colonialism*).

² CLEAR, *CLEAR Lab Book: A living manual of our values, guidelines, and protocols*.

³ For methodological projects of the CLEAR Lab, see:

<https://civiclaboratory.nl/methodological-projects/>

Cite as:

AIM Lab. *Access in the Making (AIM) Lab Accessible Website Protocol*. Montreal: Access in the Making Lab, 2022.

As a lab committed to disability justice and feminist citational practices, we are especially concerned that the intellectual labour of marginalized folks (including BIPOC, disabled artists, activists, scholars) and those occupying precarious positions in the academia (graduate students, adjuncts, emerging scholars) are not properly (sometimes, never) recognized. Our own citational practices seek to dismantle that ignorance and erasure, and we hope that you, the reader, will do the same.

Principles publication co-authorship

This publication emerged out of a series of numerous conversations within AIM as well as from a litany of members' own experiences in various academic and community spaces as well as activist and social movements. The writing of this manifesto was by and large produced by Prakash Krishnan, Jessie Stainton, and Sabrina Ward-Kimola in consultation with AIM's Steering Committee.

Accessible Website Design

Primary Features

1.1. Menu Items, Titles, and Headings

- Breadth-first user interface, key information should be visible without scrolling.
 - A website interface that provides an overview of all material prior to introducing detail e.g. squares with each section (<https://creativegrowth.org/>)
- Make headings practical
 - Use inverted pyramid writing structure (H1>H2>H3...Hn)
 - Some screen readers will announce “heading one”, “heading two”, etc. before reading the text itself

1.2. Images and Multimedia

- Add alt text on all images
 - Always include a descriptive summary of an image – from social media icons to photographs and everything in between.
 - Use Alt Text AND written Image Descriptions
 - Avoid images of text (remember voiceover apps cannot read images, even if they contain texts!)
- Transcripts and captions
 - Include what is being said in the multimedia files, but also any other additional sound cues like background or noises or music (and the type of music being played etc). [Here is a great brief from Christine Sun Kim](#) for how to improve your captions.
- Magnifying tool (ability to focus on content when hovering over it) or increased zoom functionality

1.3. Functionality (Usability/Dynamic Considerations)

- Focus Indication
 - Make it clear where the cursor focus is at any given time through size or colour.
- Adaptability for different orientations and size screens (i.e. for mobile devices and tablets as well as computers).

- Entire site should be navigable through only tab, space and arrow keys, as these inputs are central to the functioning of most switch or input devices.
- Avoid:
 - Design that necessitates scrolling
 - Gestures as the only way to do something (hover, click and drag etc.)
 - Time limits
 - Enable skip to page's main content
 - Provide clear instruction
- Not only should you provide clear instructions to avoid error messages, make sure that your error messages are as clear and easy to understand too. Generally speaking, avoid using technical jargon. Don't forget to describe the input requirements.

1.4. Text and Font

- Because line length, font size, and character distinguishability have an increasing impact readability:
 - Use a Sans Serif font
 - 14px- 20px for body text
 - No underlines for non-links to avoid confusion
 - Long ascenders and descenders, wide letters
 - Use html semantic markup `` instead of `` for bold and `` (emphasis) instead of `<i>` for italics. This ensures that the emphasis is readable with a screen reader
- Bold tag, ``, and the italic tag, `<i>`, are listed as a WCAG compliance Level A error because most screen readers will NOT announce these changes to the screen reader user.
- Varied text-spacing options (Font size should be defined with a relative value (ex. %, rem, or em) to allow easy resizing).
- Things to avoid:
 - fonts with high similarities between characters
 - Limit number of fonts: 1 font for headers, 1 for body

- fonts with similar l, L and i characters (e.g. l [lower case L] and I [uppercase i] are identical)
- fonts that have narrow openings to discern letters (e.g. in C O vs C O, the first is more difficult to read due to the narrow gap in the C)
- fonts with exact mirrors in letter (e.g. p/q and b/d is much easier to discern than p/q and b/d)

1.5. Text spacing and alignment

- According to WCAG guidelines there should be no loss of content or functionality when the user overrides the following page style properties:
 - Line height (spacing) to at least 1.5 times the font size;
 - Spacing following paragraphs to at least 2 times the font size;
 - Letter spacing (tracking) to at least 0.12 times the font size;
 - Word spacing to at least 0.16 times the font size.
 - Left aligned text is easiest to read in western languages; avoid long blocks of center aligned text
 - Empty space around blocks of text easier to read than indent
 - Line Lengths between 51-120 characters for optimal readability

1.6. Colour and Contrast

- While no specific color combinations are proven more accessible, **contrast is key.**
 - We will use the WCAG AAA Contrast Minimum Ratio of 7:1 ratio
 - Level AAA provides compensation for the loss in contrast sensitivity experienced by users with approx.. 20/80 vision who do not use assistive technology as well as contrast enhancement for users with color deficiency
 - To Ensure Contrast Check Here: <https://contrast-finder.tanaguru.com/>
- Allow users to toggle different a few pre-set colour contrasts with these specifications in mind, as well as a dark mode.
- Avoid:
 - Green/red and blue/yellow colour combinations
 - Grey scales

- Using colour to convey information (e.g pie charts)
- Busy (patterned or image-based) backgrounds

WCAG 2 checklist: <https://webaim.org/standards/wcag/WCAG2Checklist.pdf>

1.7. Screen Reader Requirements

- The screen reader language should be English
- Implement Accessible Rich Internet Applications (ARIA) tags, which improve screen reader compatibility by adding extra information to elements on your website.

2. Secondary Features

2.1. Functionality (Usability/Dynamic Considerations)

- Multiple language toggle options (both for visible copy and integrated into screen reader, multiple lang tags)
- If the website is bilingual, (let's say it is both in English and French), then more information should be delivered through ASL and LSQ. This maybe initially feasible for more static pages.

2.2. Extras

- Accessible calendar ([The Events Calendar is a good option](#)) Consider:
 - Colour customizability
 - ARIA label details
 - Keyboard accessible

References

- CLEAR. *CLEAR Lab Book: A living manual of our values, guidelines, and protocols, V.03*. St. John's, NL: Civic Laboratory for Environmental Action Research, Memorial University of Newfoundland and Labrador, 2021.
- Sun Kim, Christine. 2020. "Artist Christine Sun Kim Rewrites Closed Captions" <https://www.youtube.com/watch?v=tfe479qL8hg> [YouTube video 7.46 min]