



Digital Accessibility and Research Methods

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Agenda

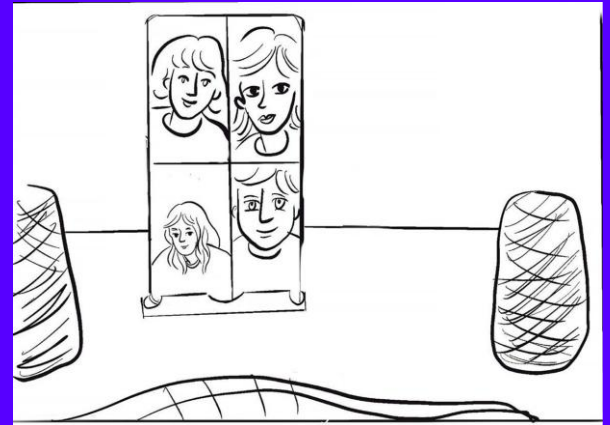
1. A short introduction (2 minutes)
2. Why is digital accessibility essential? (10 minutes)
3. Case study: An accessibility assessment of the Urban Belonging app (10 minutes)
4. Exercise (20 minutes)
5. Wrap-up (3 minutes)

A short introduction

I study how people of different backgrounds, bodies, and minds use digital technologies in meaningful and creative ways.

I used ethnographic methods to study human-technology relations including:

- Video ethnography
- Collaborative comics and image description
- Participatory observations
- Collaborative design interventions



Field of study

My research is located across the fields of science and technology studies, ethnomethodology, human-computer interaction and critical disability studies.













I recently joined a research project called NewWorkTech (2025-2028), where I will study how disabled people use assistive technologies and artificial intelligence in the workplace and when they work from home.



Why is digital accessibility essential?

As members of democratic societies and researchers, we must ensure that the technologies and methods we use are accessible to everyone.

Importantly, when we say *everyone*, we need to acknowledge that there is no standard way of being and communicating but that we are diverse and make sense of and navigate the world differently as we change through life and age.

	Permanent	Temporary	Situational
Touch	 One arm	 Arm injury	 New parent
See	 Blind	 Cataract	 Distracted driver
Hear	 Deaf	 Ear infection	 Bartender
Speak	 Non-verbal	 Laryngitis	 Heavy accent

Why is digital accessibility essential? A perspective from Marta.



(1) Marta, marketing assistant who is deaf and blind - YouTube.

Case study 1

The Urban Belonging app is a research tool for studying urban belonging using geolocation data, user-generated digital photos and qualitative and quantitative annotations.

In 2024 with the ECHO Lab and Uselt Denmark, we conducted an accessibility assessment of the app to make sure the tool was accessible to disabled researchers and participants.



Case 1: Findings

- The app provided no text descriptions. Visual elements had low contrast and were hard to see.
- The app was not designed for screen reader users such as blind and dyslexic people.
- Text and other elements disappeared when amplifying the content at 200 percent.
- Horizontal mode was not working.
- Keyboard navigation worked poorly.
- Buttons and sliders were too small.
- The app used jargon that was difficult to understand and felt confusing to new users.

Semantics

**Color
Contrast**

**Font resize
and
readability**

**Keyboard
Navigation**

**Alt
text**

**Multimodal
Information**

Case 1: Learnings

- Making digital content accessible requires understanding how people with disabilities adapt the web to their benefit and use assistive technologies.
- Digital research methods need to be designed with web content accessibility guidelines and digital accessibility experts from the start.
- Digital accessibility relies on the use of different modes of communication; such as text-to-speech, braille, visual communication, sign language, easy read documents and much more!
- Accessibility features beneficial to one user benefit others.



Exercise A in groups (15 minutes)

1. Explore the access materials of the illustrated book *We Move Together* by Anne McGuire, Kelly Fritsch and Eduardo Trejos
[Access Tools - We Move Together](#)
2. Pick one access tool that you find interesting and go through it together by visually describing it. Each of you describes it for one minute while a group member takes notes and times you.
3. When you are done with the describing round, discuss in your group who can benefit from the tools and how the tools could inform your methodological approaches. Write digitally or on post-it notes at least 5 applications of the tool in research.

Exercise B in groups (15 minutes)

1. Explore the website [Alt Text as Poetry](#)
2. In groups take turns to describe visually the website as you interact with it (one minute per person). One person takes notes and times the description.
3. When you are done, discuss the elements and functionalities of the website that you described together. Is it easy to understand what the website is about? How are the authors organizing the information? What kind of design considerations catch your attention and why? Is it possible to navigate the web only using the keyboard? Are there any aspects of it that do not work? List answers to these questions digitally or on post-it notes.

Thank you for today! More resources

- Color contrast checker: [WebAIM: Contrast Checker](#)
- Articles about digital accessibility: [WebAIM: Articles](#)
- Free online course W3Cx: Introduction to Web Accessibility: [W3Cx: Introduction to Web Accessibility | edX](#)
- Short videos on web accessibility: [Tools and Techniques - Presentation](#)
- Service for live captions: [Text on Tap](#)
- Newsletter on digital accessibility: [Archive | Accessibility Weekly](#)
- Guidelines for scholars: [Creating Accessible Figures and Tables – DIS 2023](#)
- History of the Web Accessibility Initiative: [WAI History](#)
- Teaching accessible computing: [Teaching Accessible Computing](#)
- Guidelines for accessible events: [Access Suggestions for Public Events | Sins Invalid](#)