

- What is a disability?
 - “A disability is any condition of the body or mind that makes it more difficult for the person with the condition to do certain activities and interact with the world around them.” - CDC
 - Can be related to mobility, cognitive function, vision, hearing, etc.
 - Can be “visible” (e.g. if someone is using a white cane, if they have a cochlear implant, if they have a limb difference) or “invisible” (e.g. if they have a traumatic brain injury, if they have epilepsy, if they have diabetes).
 - CDC Disability and Health Data System estimates that in the US, $\sim\frac{1}{4}$ to $\frac{1}{3}$ of the population has some form of disability
 - You can have multiple disabilities, you can become disabled at any time (either permanently or temporarily)
 - Even within a specific “disability” that most people think of as monolithic, people will vary (e.g. differing levels of blindness, deafness, chronic pain, etc.)
 - NO DISABILITY IS THE SAME
- Social model of disability -> need to highlight that this is what we should be targeting
 - TODO Add medical model
 - Many obstacles faced by disabled people do not directly stem from their disability
 - “As a simple example, if a person is unable to climb stairs, the medical model focuses on making the individual physically able to climb stairs. The social model tries to make stair-climbing unnecessary, such as by making society adapt to their needs, and assist them by replacing the stairs with a wheelchair-accessible ramp. According to the social model, the person remains disabled with respect to climbing stairs, but the disability is negligible and no longer disabling in that scenario, because the person can get to the same locations without climbing any stairs.”
- Disability communities
 - Person-first vs. Identity-first language
 - Person first: person with diabetes
 - Identity first: diabetic person
 - Preference varies from person to person, so you should confirm with the person you’re talking to which one they prefer
 - Disability Culture
 - Many people with specific disabilities have a strong culture and pride
 - E.g. the Deaf/HoH community
- How society views disability
 - Usually negative, with dehumanizing assumptions
 - Asexual, unintelligent, no autonomy, etc.
 - Basically, removing the humanity of the person with the disability
 - Additionally, sometimes people think disability is a monolith and assume that people with disability X has the same struggles as person with disability Y
 - Can lead to ostracization, bullying

- “Such an inspiration”, etc. comments (especially unwarranted) can be very patronizing
- Invasive questions, and expecting explanations and answers to PERSONAL MEDICAL CONDITIONS
- What is accessibility?
 - Ensuring that the widest range of people are able to access/use something
 - Accessibility is often needlessly a tireless battle to get the accommodations you need to just live your life at a baseline level
 - Additionally, there’s a lot of terrible excuses people try to come up with to not implement accommodations– “it’s only a small percentage of people”, etc.
 - The “funny” thing is that a lot of these accommodations would make life better even for people without a disability
 - Curb cut phenomenon
 - Note— accommodations shouldn’t have to be useful to non-disabled people for it to be justified. Disabled people are worth accommodating no matter what
- History of disability rights (mainly US-specific), with some computer
 - **1972 – Vinton Cerf, who had a hearing impairment and was married to a deaf woman, developed host level protocols for ARPANET. He communicated with his wife through the computer using text – the precursor to e-mail.**
 - Section 504 of the Rehabilitation Act (1973)
 - One of the first federal laws offering protections for disabilities
 - Guarantees protections and non-discrimination "any program or activity receiving federal financial assistance."
 - 1986 – Jim Thatcher created the first screen reader at IBM, called **IBM Screen Reader** (for DOS)
 - Americans with Disabilities Act (1990)
 - Prohibits discrimination based on disability, and accommodations must be provided by employers, and for public entities/transportation and telecommunications
- Accessibility and computer
 - Teletype (TTY)/TDD
 - Allow for typed content to be sent over the phone
 - Braille keyboards/displays
 - Enable braille input to computers, or “printing” text from a screen onto a raised device
 - Screenreaders
 - Enable text and UI to be read out/described
 - Alt text helps make these more useful
 - Magnifiers
 - Enable magnification of items on a screen
 - Contrast/Color modes

- Enable those with low vision to better differentiate between elements or text on a screen
 - StickyKeys
 - Allows for multi-key shortcuts to be bound to just one keypress
 - Alternative mouses, keyboards, controllers
 - Allow for different body parts, or body parts with restricted movement to be used to control the keyboard/mouse/controller
 - AAC/SGD devices
 - Device that can convert text/images/physical movement/etc to automated speech
 - Captions, captioning devices
 - Captions (open = burned in, closed = can turn on/off) are exact audio transcriptions and descriptions, including both exact dialogue and sound descriptions of non-dialogue audio
 - Captioning devices are separate devices that can be used at theaters/cinemas/etc, either as a small device that can be used in your seat, or as a separate display next to the stage/screen
 - On-screen interpreters
 - Usually embedded within broadcasts on TV or videos on the internet, a video/stream of someone interpreting the audio using ASL (or another sign language)
 - Video phones/Video Relay Services
 - Allow for people to communicate with ASL (or other sign language)
- Resources for creating accessible technology
 - ACTUALLY INVOLVE (AND PAY) DISABLED INDIVIDUALS IN YOUR DESIGN/EVALUATION PROCESS
 - Someone who uses a screenreader every day will interact with it very differently than someone using it for the first time to test it's functionality with their project
 - <https://www.w3.org/TR/wcag-3.0/>
 - <https://it.wisc.edu/learn/make-it-accessible/what-is-accessible-technology/>
 - <https://www.w3.org/WAI/people-use-web/tools-techniques/>

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Resources

- <https://dusc.ucsd.edu/?faq=faq-disability-and-disabilism>
- <https://dusc.ucsd.edu/>
- <https://cs.stanford.edu/people/eroberts/courses/soco/projects/2005-06/accessibility/firstwave.html>