# DESIGN WITH

# Empathy

## Invisible diversity

Not all types of diversity are visible. For example:

* depression
* autism spectrum
* colour blindness

People may have more than one difference of ability. Someone could have both low mobility and low vision.

Every person is unique—design flexible services.

Characteristics and abilities that you don’t know about influence behaviour.

## Respectful interactions

* Often the greatest limitation of a person’s ability is the   
  attitudes of other people
* Pity and sympathy are unnecessary
* Terms like handicapped, impaired, crazy, mentally ill, midget, disorder and disease range from insulting to uncomfortable
* The most respectful label to call someone by is their name
* Don’t say “hearing impaired person,” do say “person with hearing impairment”
* Don’t make assumptions about someone’s limitations or abilities, do ask if you can help and how you can help
* Don’t assume people can’t hear or understand you, do raise your voice or speak slowly if you are asked
* Don’t gossip, whisper, point, stare or take photos; do treat each person with respect and professionalism

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## Gaining insight

Videos to help you gain a deeper understanding:

[Inclusion, belonging and the disability revolution: Jennie Fenton](https://www.youtube.com/watch?v=VAM9nh8WC-8)

[Why design should include everyone: Sinéad Burke](https://www.ted.com/talks/sinead_burke_why_design_should_include_everyone)

[Able privilege: Alan Larson](https://www.youtube.com/watch?v=mX9tgr7yfwo) and an [able-bodied privilege checklist](https://exposingableism.wordpress.com/2009/10/12/the-invisible-backpack-of-able-bodied-privilege-checklist/)

[What is the social model of disability?](https://www.youtube.com/watch?v=0e24rfTZ2CQ)

## Accommodations

Many accommodations are required by law under the [Ontario Human Rights Code](http://www.ohrc.on.ca/en/ontario-human-rights-code) and/or the [Accessibility for Ontarians with Disabilities Act](http://ontario.ca/accessibility). Become biased towards trying to accommodate immediately.

Don’t doubt a person’s need for accommodations. If it is an   
extreme hardship or cost to provide, explain the challenge and   
ask if there is another way you can accommodate them.

## Emotional reactions

You may interact with people who feel angry, sad, anxious, frustrated or other emotions. You may meet people who have challenges understanding facial expressions, body language, jargon, sarcasm and jokes.

Don’t make assumptions about behaviour. Remain calm and ask for clarification. Explain what you heard and how it made you feel.

# DESIGN INCLUSIVE

# Physical experiences

## In person

* converse at eye level
* ask permission to give assistance
* offer note taking or writing services if needed
* allow clients to book appointments instead of waiting in line
* provide accessible parking spots
* provide places to sit and rest
* clear pathways and mark them physically and visually
* ensure doors are easy to figure out (push or pull?) and open
* test the space for physical access

## Choose spaces with

* elevators and ramps
* wide doors and passageways
* doors that are easy to open
* low counters, shelves, sinks, toilets
* high tables, desks, toilets
* lights that don’t flicker
* even and level floors

# DESIGN INCLUSIVE

# Physical experiences

## Online

* interfaces that can be tabbed through   
  (test using a keyboard)
* check that you can always clearly see the current focus while using the tab key
* check that there are no interface elements that you can tab into, but not tab out of
* use proper heading structure
* add anchor links that skip long lists of links
* remove time limits or allow users to extend them
* create large buttons that don’t require precision to press
* avoid or provide alternatives to drag and drop, touch or hover activated interfaces

## You’ll help people with

* arms full (carrying parcels, baby, etc.)
* gloves on hands (doctor, gardener, etc.)
* eating food while they’re working
* weight and height variances
* broken bones or other injuries
* recovering from surgery
* nerve damage or degeneration
* muscle coordination and strength loss
* joint pain and reduced mobility
* full or partial paralysis
* missing limbs

# DESIGN INCLUSIVE

# Audio experience

## In person

* make eye contact and speak clearly
* speak to the person, not their interpreter
* use visual cues (i.e. wave to signal you are speaking if someone isn’t looking at you)
* designate a quiet room and offer it as needed
* don’t create background noise (music, announcements, etc.)
* offer an interpreter if someone can’t understand a person with an accent, mustache or covered face
* remove surgical masks, when speaking
* avoid chewing gum and eating hard candies
* repeat information as often as you are requested
* consider rephrasing or using a different word if you have to repeat something more than twice
* offer content in both written and audio format

## Choose spaces with

* separate, small rooms (open concept, large rooms make hearing difficult)
* sound absorption
* no external noise sources nearby (airport, highway, train tracks etc.)
* audio alerting systems (alarms, public announcement systems, etc.) that also use visual notifications
* no high pitched noises above 20KHZ

# DESIGN INCLUSIVE

# Audio experiences

## Online

* caption and transcribe videos
* provide sign language videos
* write clearly, at an elementary school level
* illustrate complex concepts, if possible
* avoid auto-playing videos or audio tracks
* pair audio alerts with a visual alert
* include volume controls for audio that are easy to find and operate using a keyboard
* don’t create experiences that require users to hear (always provide at least one alternative)

## 

## You’ll help people

* with audio turned off
* with no speakers available
* in a noisy environment
* wearing earplugs, headphones or ear protection
* with full or partial hearing loss
* whose second language is English

# DESIGN INCLUSIVE

# Visual experiences

## Online

* use header elements for headings and use them in descending order (h1, h2, h3, etc.)
* add a label to all form elements
* avoid relying on vision (e.g. identifying elements by colour or position on the page)
* ensure links also make sense if read on their own, instead of within a sentence
* let users choose to play sounds or videos
* use text colours that contrast strongly with the background
* use HTML elements as intended (e.g. avoid using divs or links styled to look like buttons)
* use abbreviation tags
* avoid opening new windows or content on top of an existing page
* don’t open links in new tabs
* use CSS backgrounds for decorative images
* use HTML images for informative images
* describe images in captions (>140 characters) or in HTML alt text (<140 characters)
* [describe images](https://webaim.org/techniques/alttext/) in a way that all users will understand the information within the image
* check content is ordered logically without CSS (test with a [Chrome](https://chrome.google.com/webstore/detail/web-developer/bfbameneiokkgbdmiekhjnmfkcnldhhm) or [Firefox](https://addons.mozilla.org/en-US/firefox/addon/web-developer/) extension or a screen reader like [NVDA](https://www.nvaccess.org/download/) or [voiceover](https://help.apple.com/voiceover/info/guide/10.12/))
* every form element must have a label
* test if the site is usable zoomed in 200%
* identify the page language and languages changes using the HTML lang attribute
* [avoid using select elements](https://www.youtube.com/watch?v=CUkMCQR4TpY) (drop-down lists)
* use a unique title on every page
* ensure IDs used in HTML are unique

# DESIGN INCLUSIVE

# Visual experiences

## 

## In person

* offer large print and braille formats
* provide bright lighting to help with reading
* don’t pet, feed or distract service dogs
* identify yourself when you enter a room
* ask before guiding someone
* don’t grab the person—touch the back of their hand and they will take your elbow
* tell them about steps or obstructions as you approach them
* give directions that don’t rely on sight—e.g. to your left or right and indicate the distance

## 

## You’ll help people with

* high glare on screen
* low lighting
* blindness
* low vision
* partial vision (one eye, partial field of vision,   
  dark or light spots blocking vision, blurring)
* colour blindness
* light sensitivity
* dyslexia

# DESIGN INCLUSIVE

# Thought experiences

## Don’t rely on user’s

* memory
* problem-solving skills
* prolonged attention
* understanding written or spoken words (offer both options)
* writing or speaking ability (offer both options)
* understanding math
* understanding imagery
* expected emotional and behavioural responses

to successfully complete a service.

## 

## Online

* use clear labels for navigation and forms
* limit navigation and other choices to eight at a time
* provide two different ways to navigate a site
* don’t break the function of the browser back button
* identify correct and incorrect text input and selections
* use plain language (avoid or explain complex terms)
* group content in sections with clear headings
* use less than 80 characters per line of text
* use left or right alignment, not full-justified text
* use consistent layout and wording on every page
* highlight important information
* use graphics to improve understanding
* don’t use high contrast stripes in your design
* avoid parallax scroll effects or automated scrolling
* don’t place moving images beneath static text
* avoid using flashing, blinking or flickering elements

# DESIGN INCLUSIVE

# Thought experiences

## In person

* identify what users need to know or bring with them in advance
* repeat information as often as you are requested
* consider rephrasing or using a different word if you have to repeat something more than twice
* don’t rush people who need more time
* offer note taking or writing services if needed

## 

## You’ll help people with

* stress
* exhaustion
* attention deficit/hyperactivity
* dementia
* stroke
* brain injury
* intellectual difficulties
* language and learning difficulties
* dyslexia
* autism spectrum
* down's syndrome
* seizures caused by flashing, flickering or strobe lights (photo epileptic)
* nausea or dizziness triggered by inner ear (vestibular) disorders