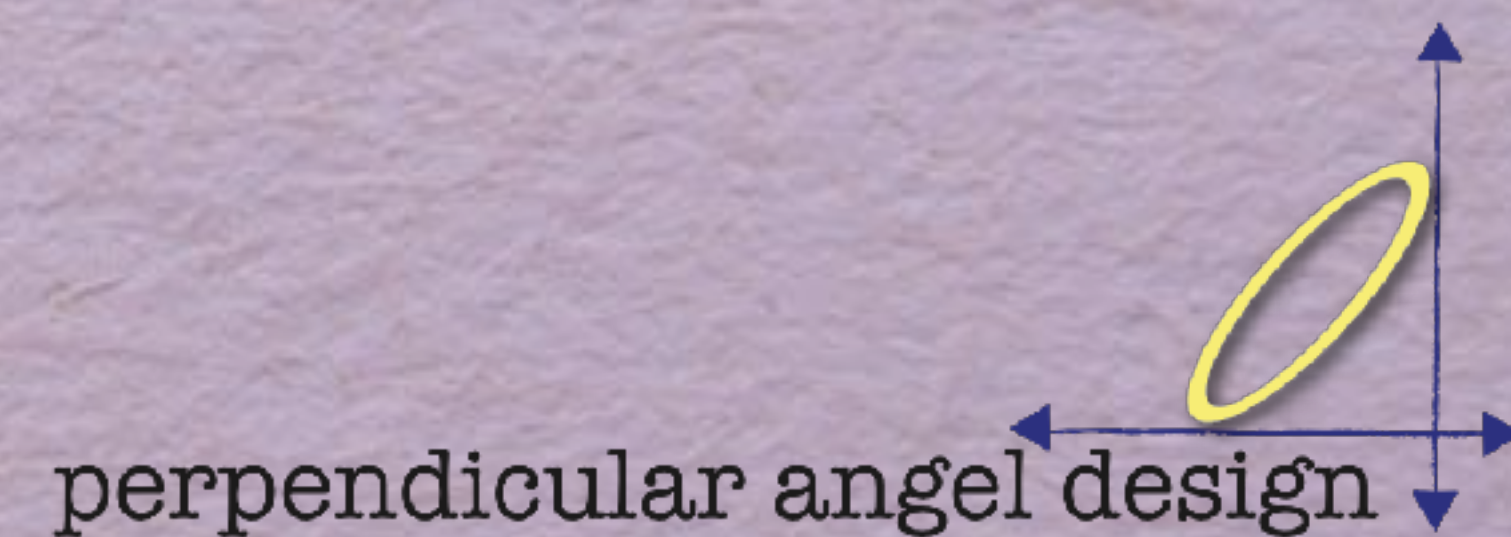
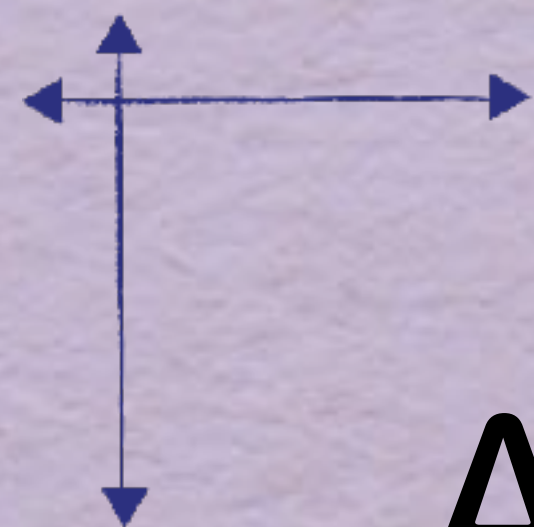


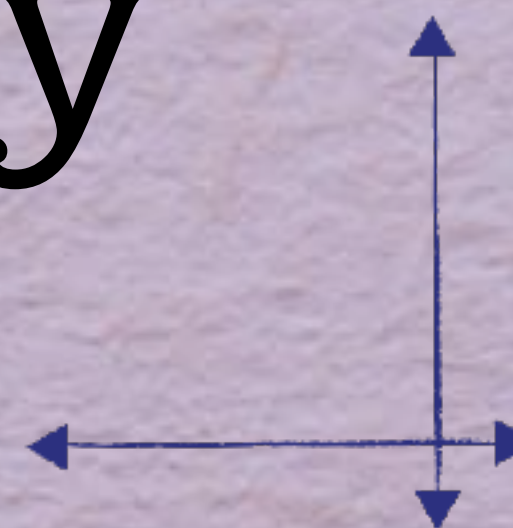
An Alphabet of Accessibility

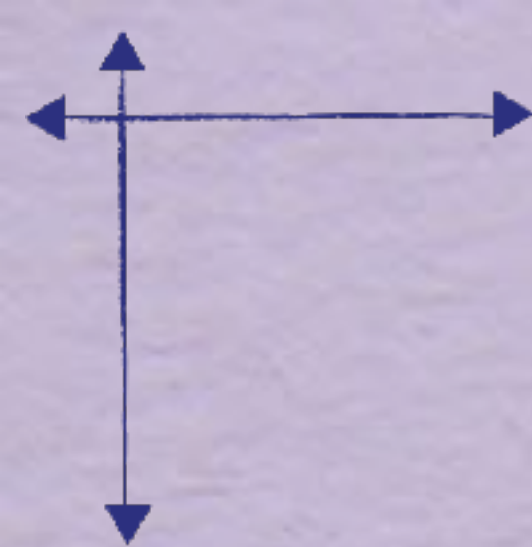
anne gibson, Boomi, 2019





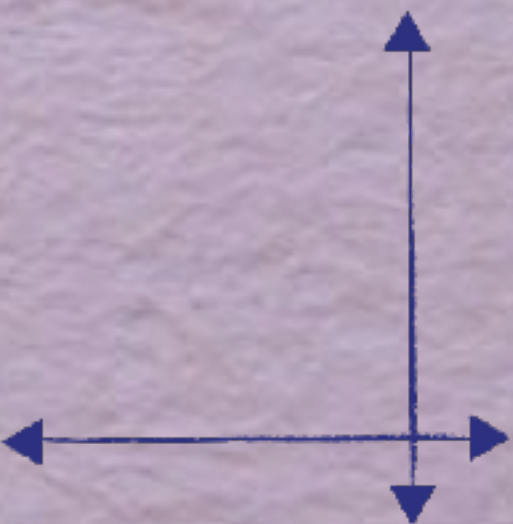
Accessibility

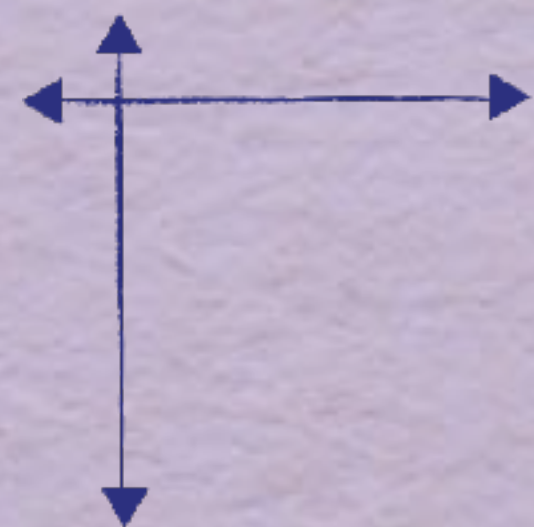




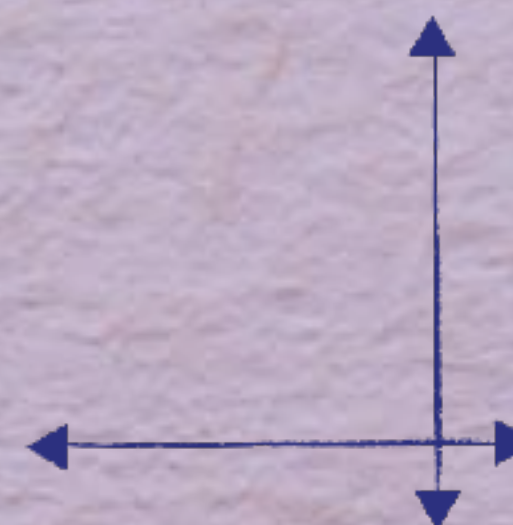
“Web Accessibility means
that people with disabilities
can use the web.”

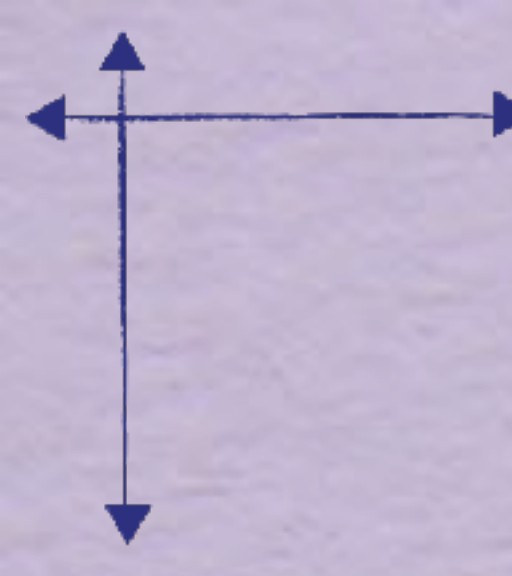
-W3G Introduction to Web Accessibility





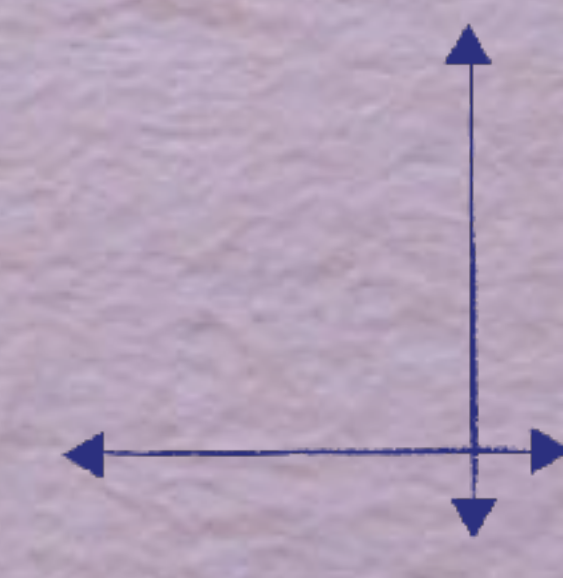
Disability

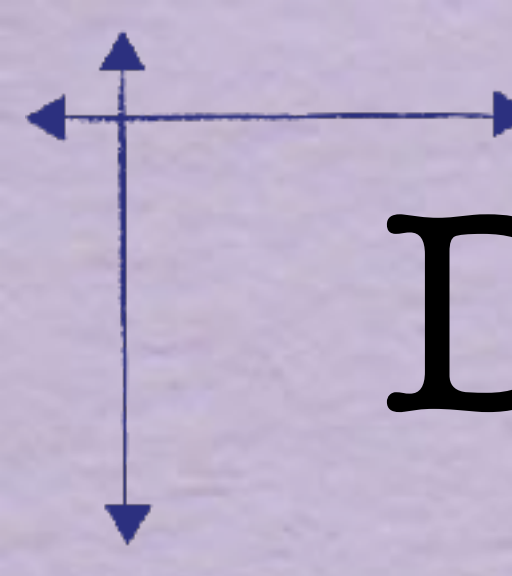




“If people with disabilities were a formally recognized minority group, at 19% of the population, they would be the largest minority group in the United States.”

- The institute on Disability



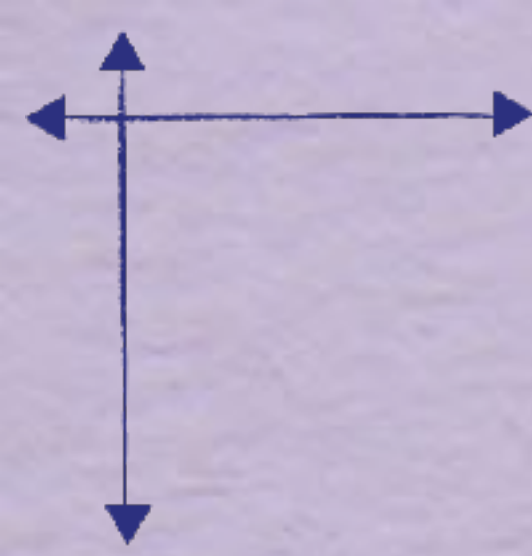


Disability Doesn't Discriminate

- Any age
- Any race
- Any gender
- Any religion



Photo by Times Higher Education

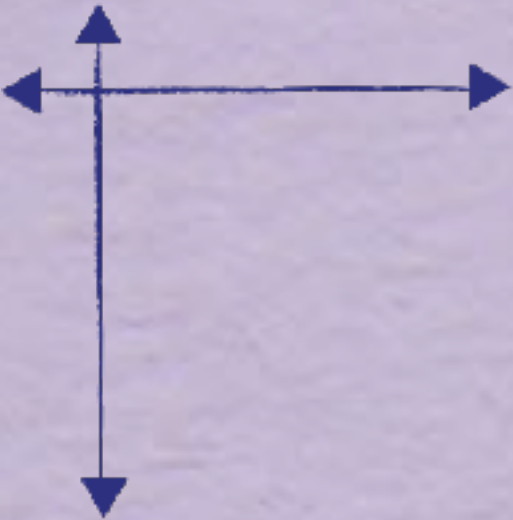


A wide range of experiences

- Some people you meet have been disabled all their lives
- Some became disabled yesterday
- Some have stable conditions
- Some grow worse over time

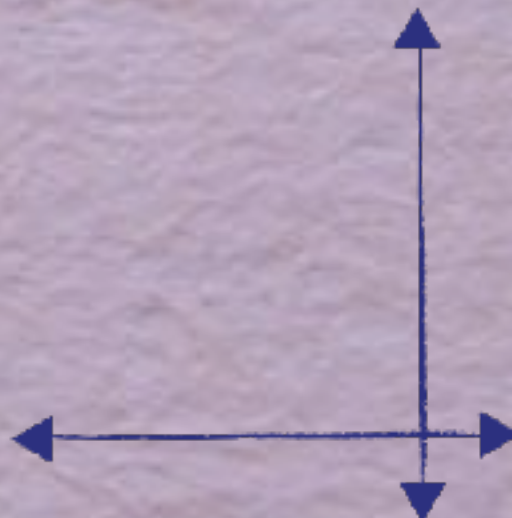


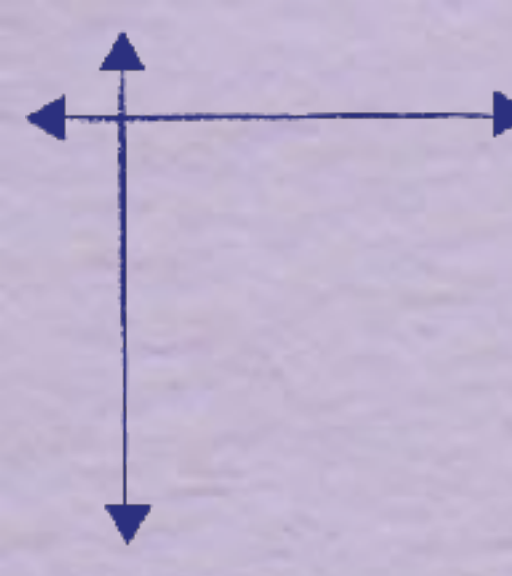
Photo by Times Higher Education



Our definition of disability

“Something about this person’s **physical characteristics** interfere with their senses and perception in a way the general population doesn’t experience.”

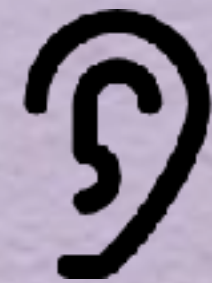




Types of disability



Visual



Auditory



Physical



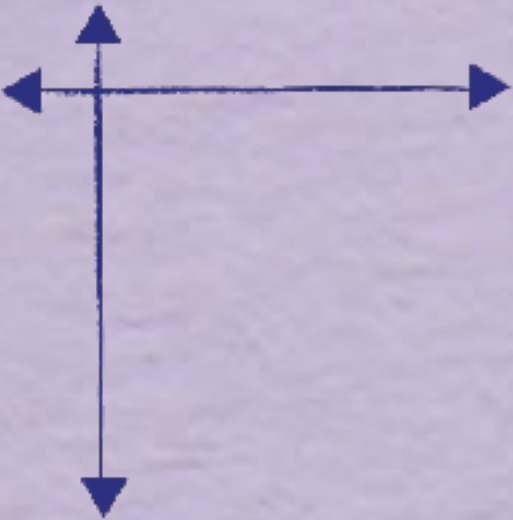
Cognitive and neurological





Let me introduce you to
26 of my friends.





A is blind.

- He's always used a screen reader, and always used a computer. He's a programmer.
- He's better prepared to use the web than most of the others on this list.

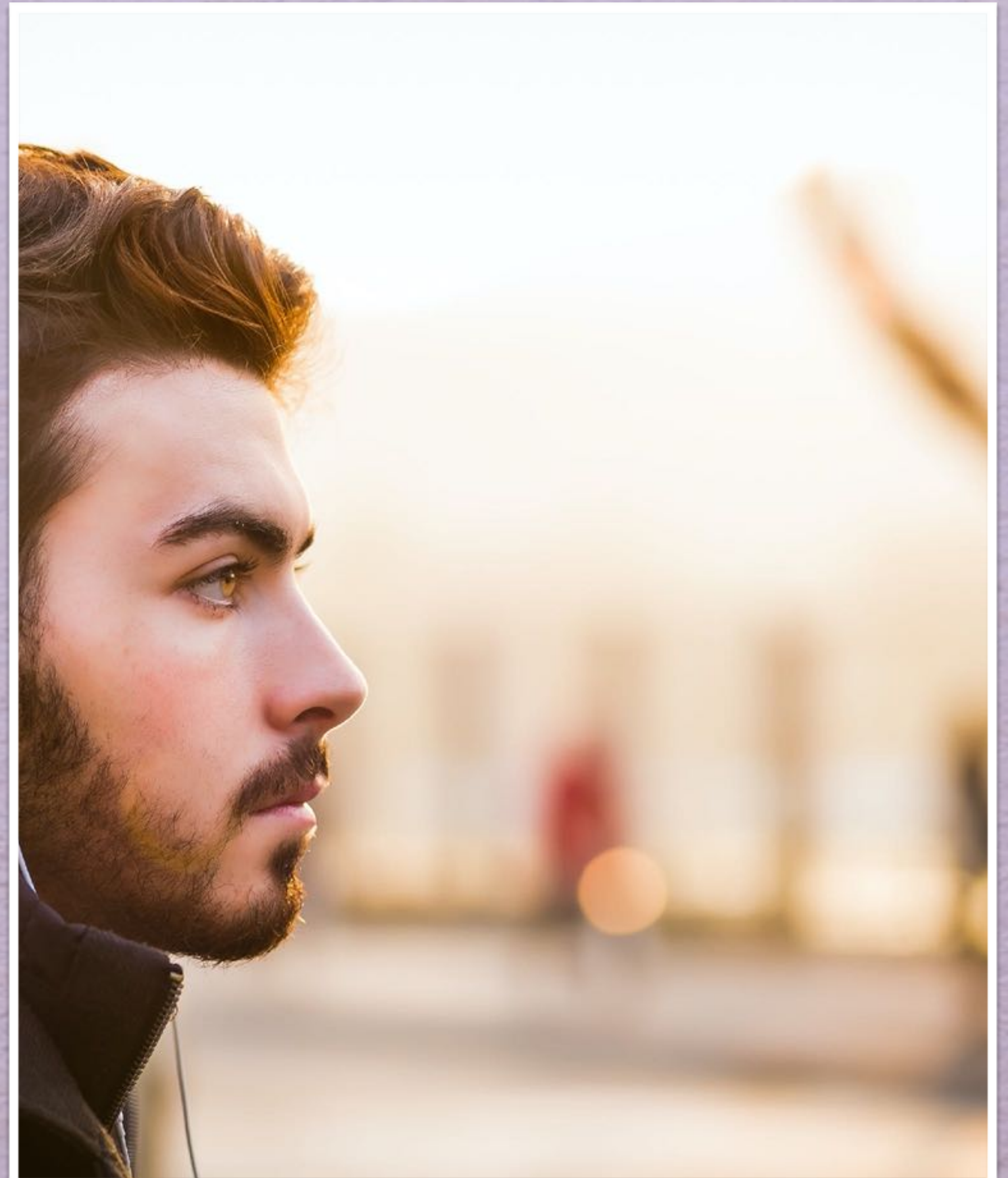
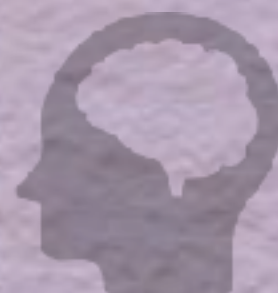
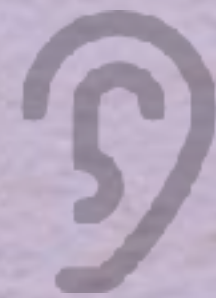
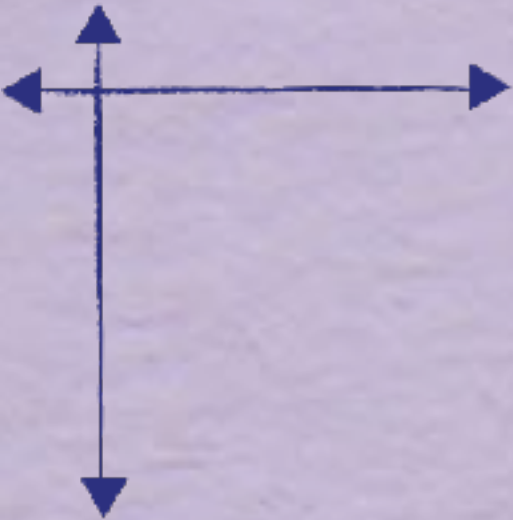


Photo by [Alex Blăjan](#) on [Unsplash](#)



B has Cystic Fibrosis.

- He spends a few hours a day wrapped in vibrating medical equipment.
- He prefers to use the keyboard or wait to do tasks that require a steady touch with a mouse.

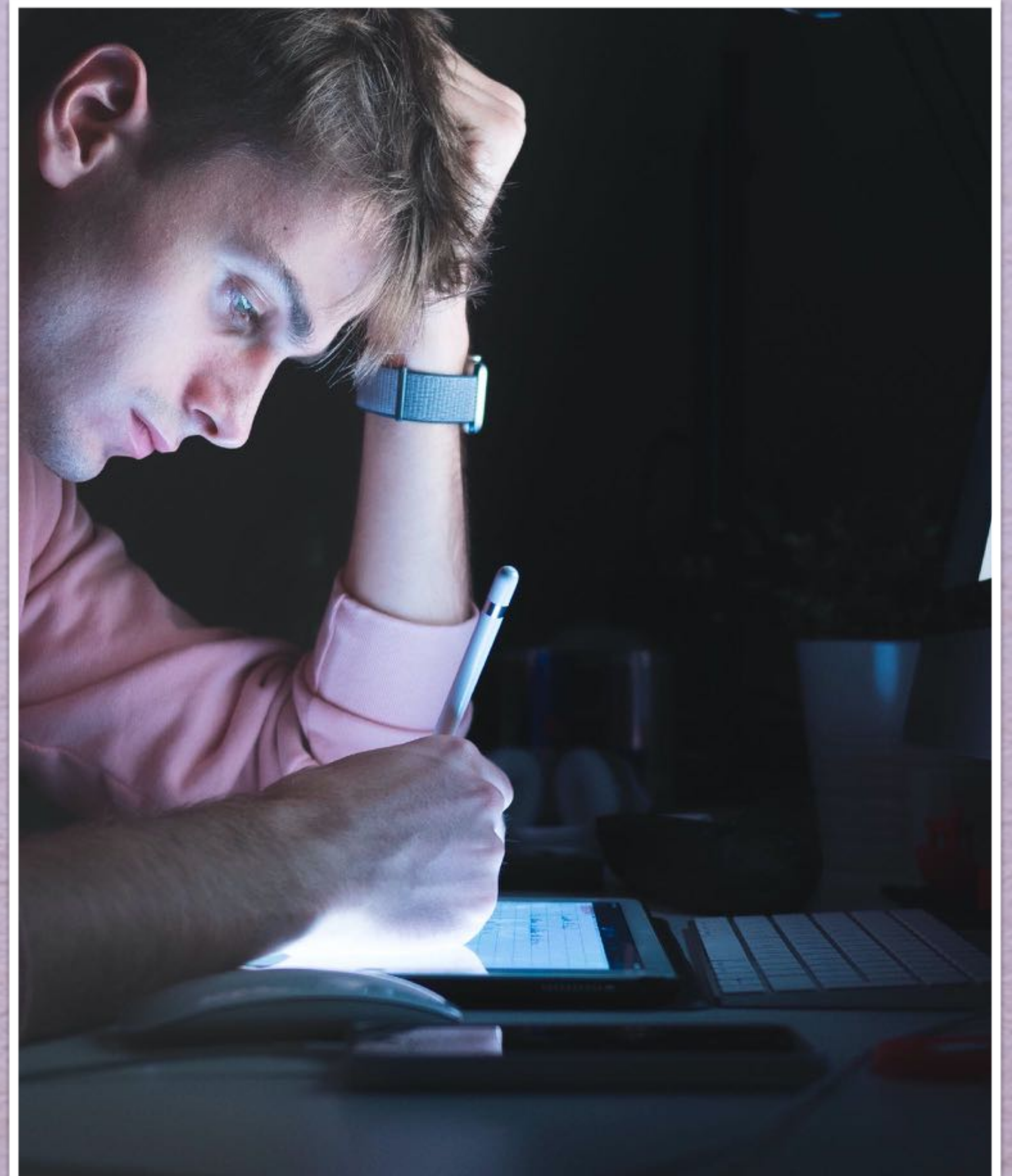
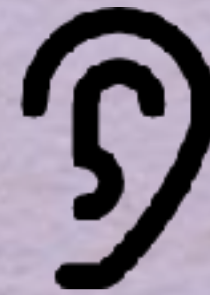
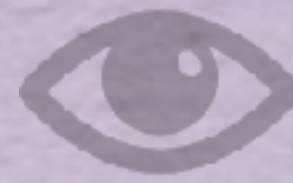


Photo by [Rietveld Ruben](#) on [Unsplash](#)



C has Multiple Sclerosis.

- The disease affects both her vision and her ability to control a mouse.
- She often gets tingling in her hands that makes using a mouse for a long period of time painful and difficult.

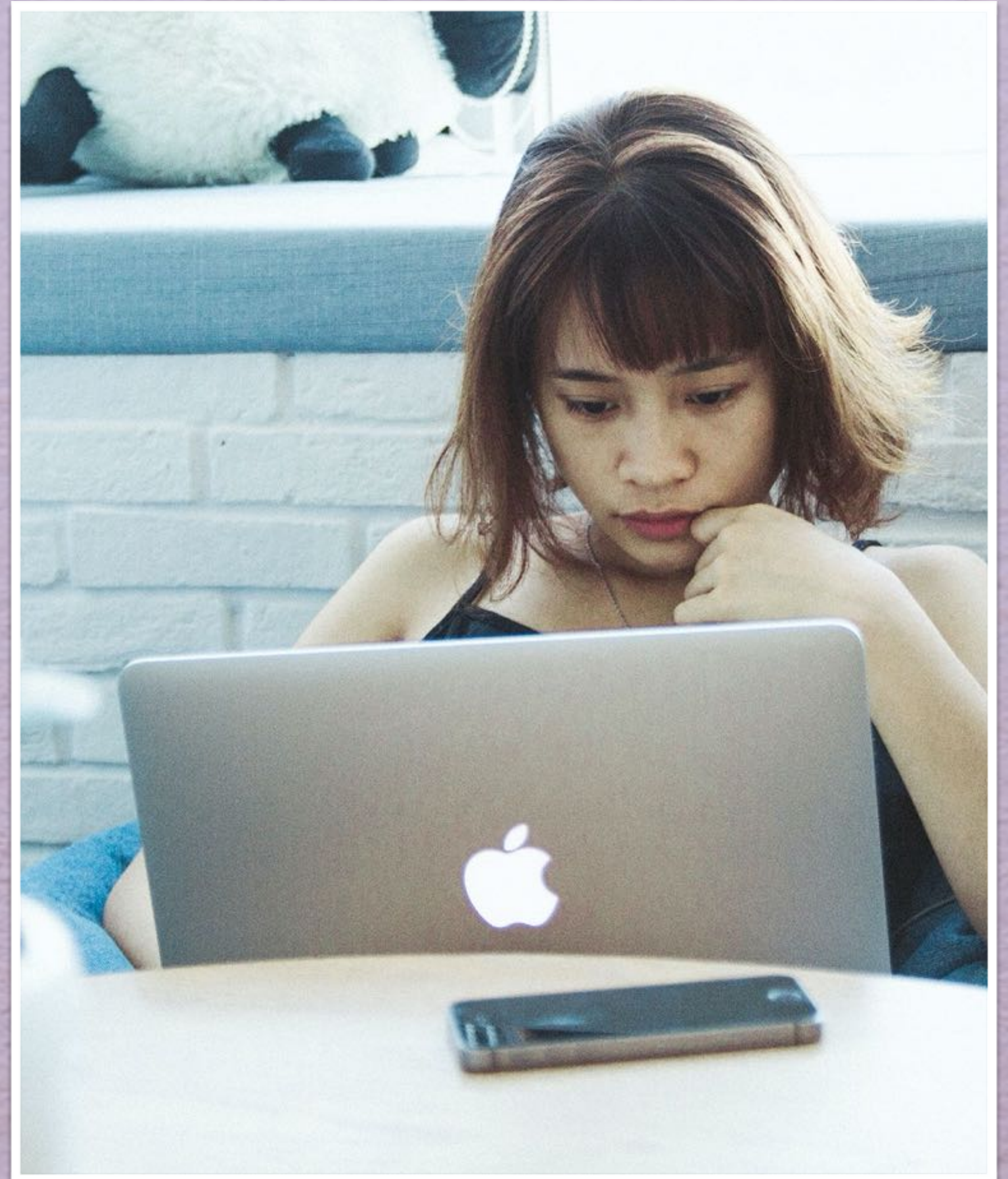
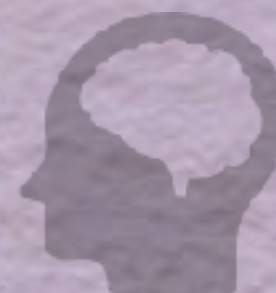
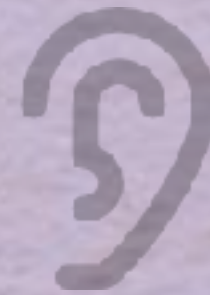
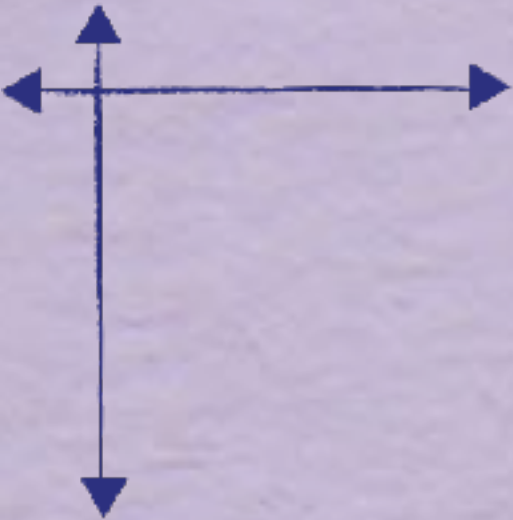


Photo by Tran Mau Tri Tam on Unsplash



D has AMD.

- Age-related Macular Degeneration is a lot like having the center of everything she looks at removed.
- She uses magnifiers and screen readers to try to compensate.

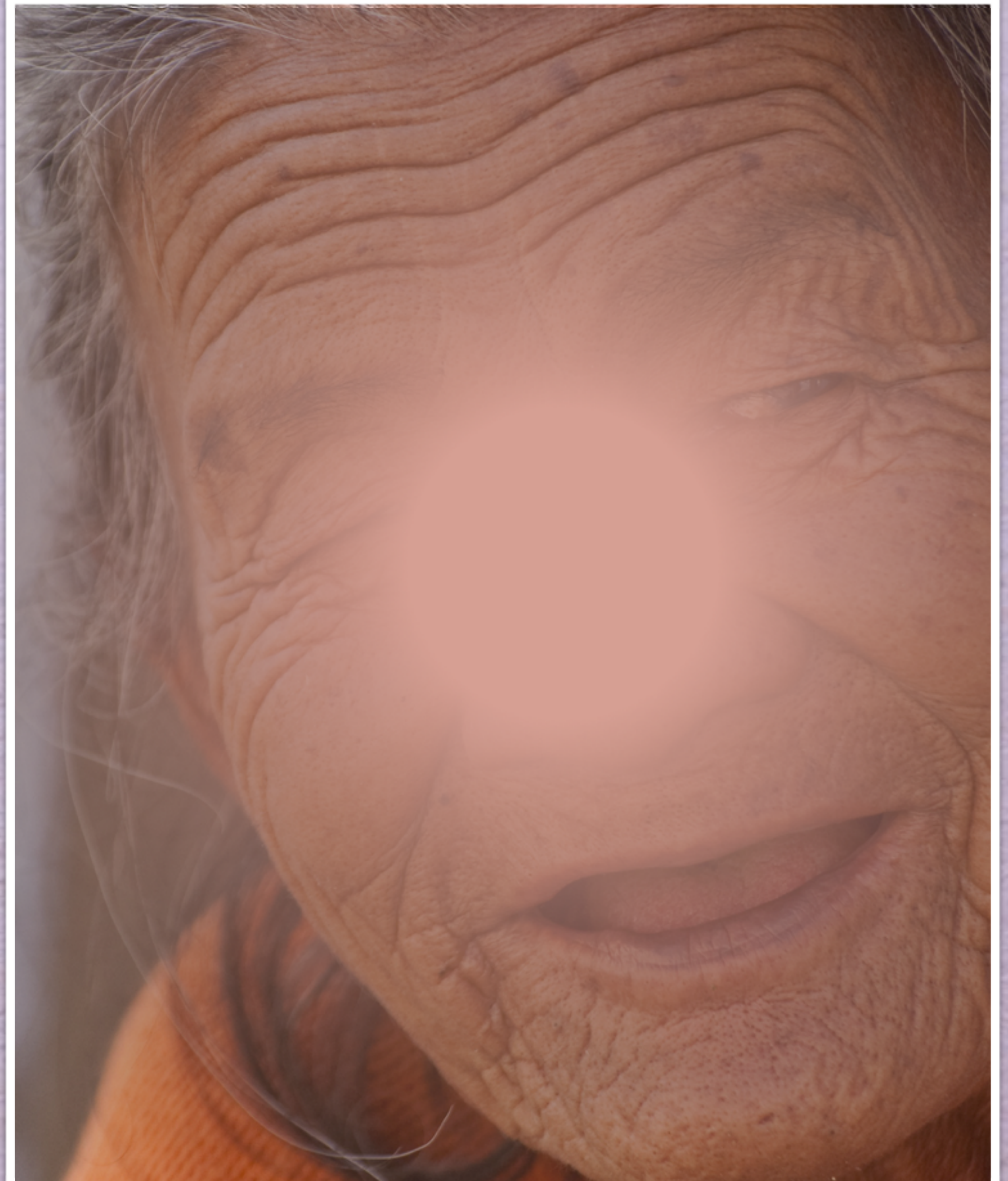
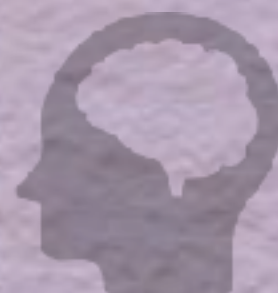
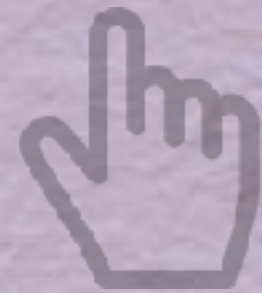
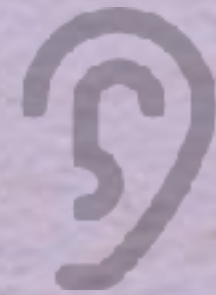
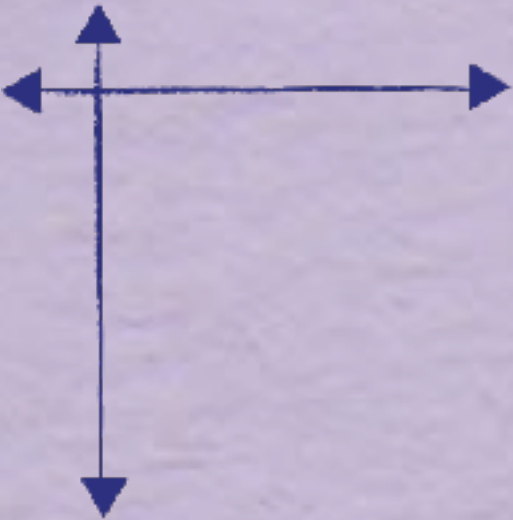


Photo by Nay Lin Aung on Pixabay



E is 101 years old.

- You name the body part, and it doesn't work as well as it used to.

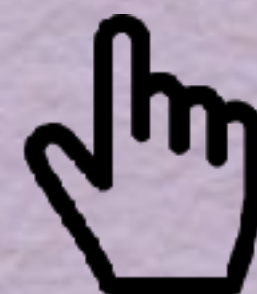
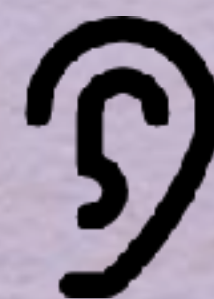
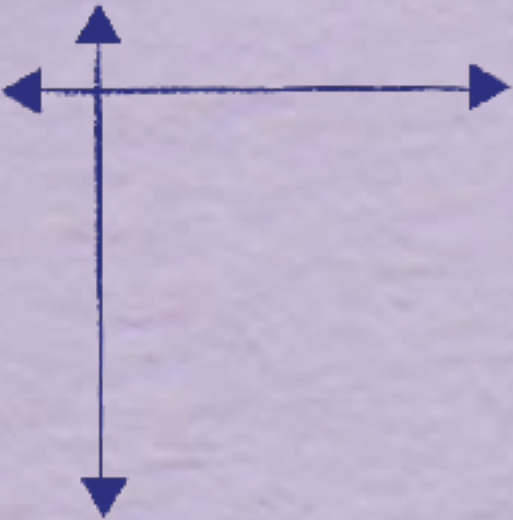


Photo by Catherine Cullen



F was a preemie.

- She has low vision in one eye and none in the other.
- She tends to hold small screens and books close to her face, and lean in to her computer screen.

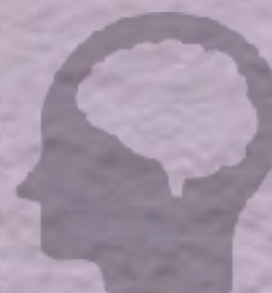
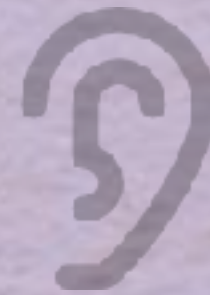
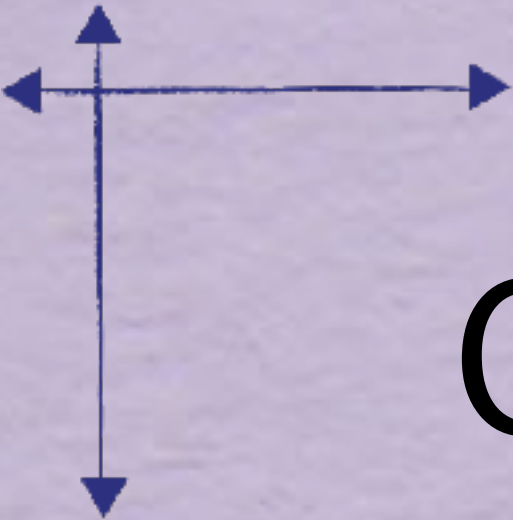


Photo by Tami Hz on Pixabay



G fractured his fingers.

- He fell down a hill while running to close his car windows in the rain.
- He's trying to surf the web with his left hand and the keyboard.

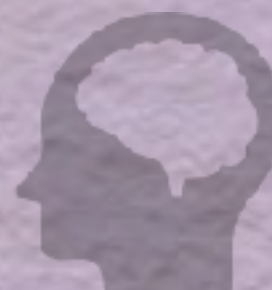
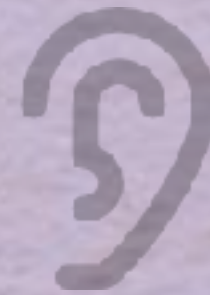
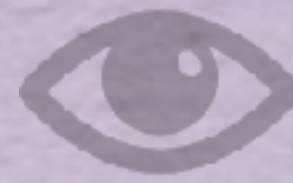
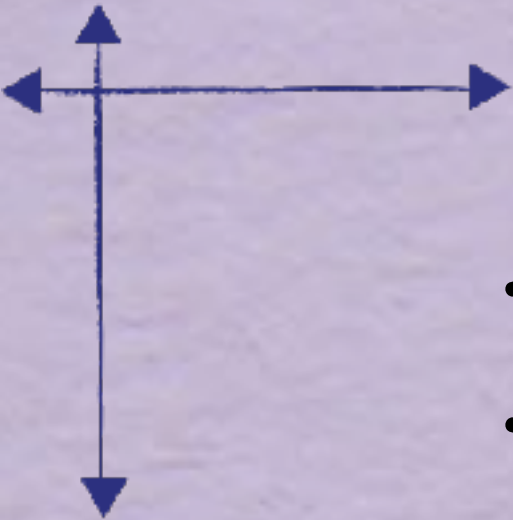


Photo by [Ayo Ogunseinde](#) on [Unsplash](#)



H has gamer's thumb.

- She just had surgery in her non-dominant hand, and will have it in her dominant hand in a few weeks.
- She's not sure yet how it will affect her typing or using a touchpad on her laptop.

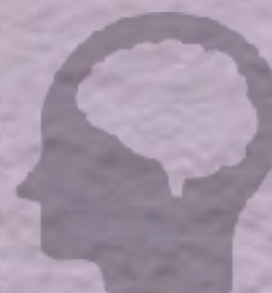
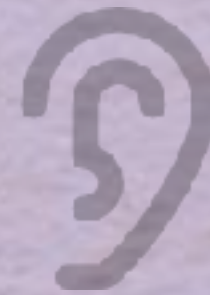
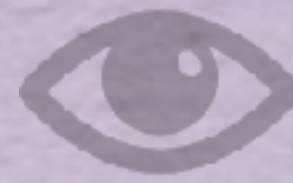
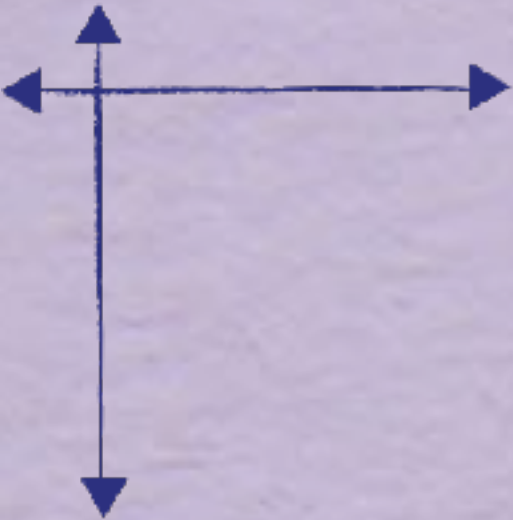


Photo used with permission from Sarah Hopkins



I has an astigmatism.

- She doesn't know it yet. She does know that by the end of the day she has a lot of trouble reading the screen.
- She zooms in the web browser to 150% after 7pm.

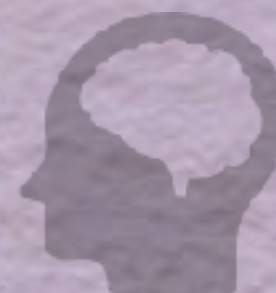
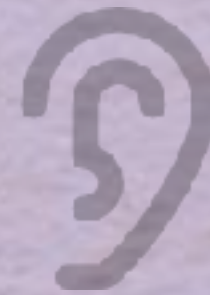


Photo used with permission from Abi Jones



Everyone's Assistive technology

- 191.7 million Americans correct their vision
- Glasses and contacts are an **assistive technology**
- What if we looked at all disabilities the way we look at vision correction?





J is Deaf.

- J has hearing aids.
- She sometimes turns the volume all the way up so she can hear videos and audio recordings on the web.
- Most of the time she just skips them.

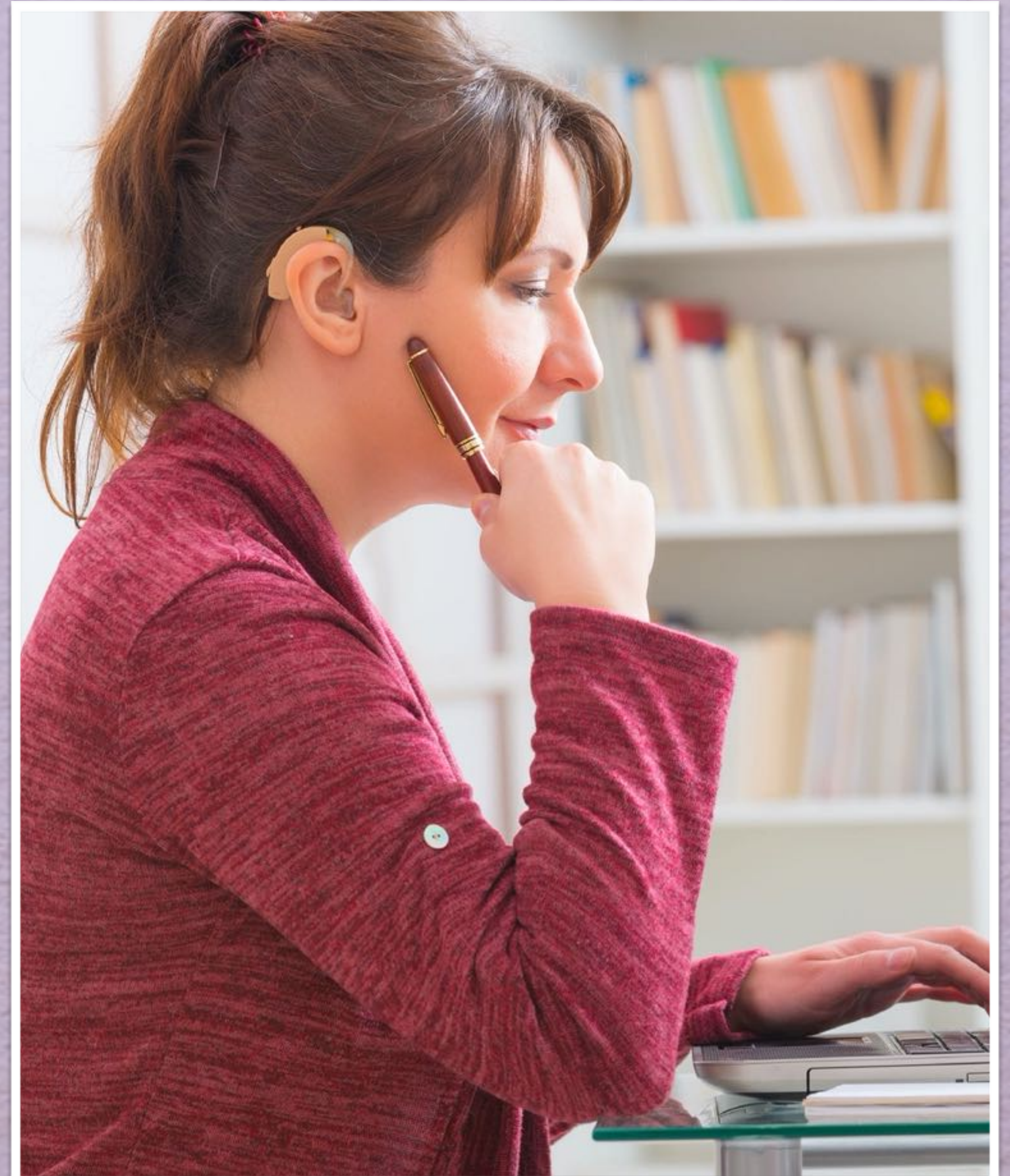
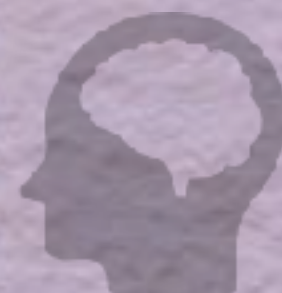
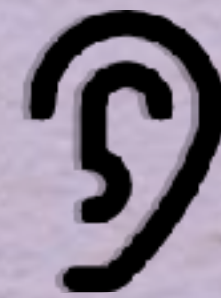
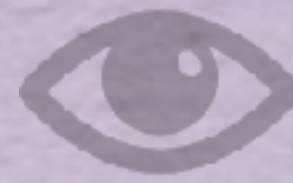


Photo by iStockPhoto



Photo by [Samantha Gades](#) on [Unsplash](#)



K has lazy-eye.

- Her brain ignores a lot of the signal she gets from the bad eye.
- She can see just fine, except for visual effects that require depth perception such as 3-D movies.

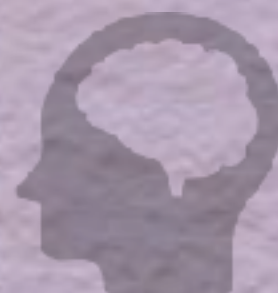
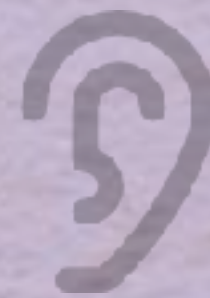


Photo used with permission from Beth Kent



L has Raynaud's Disease.

- When she's stressed, doing repetitive tasks or cold, her hands and feet go numb and sometimes turn blue.
- Even in August she has been known to wear gloves at her desk.

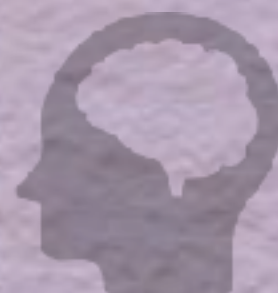
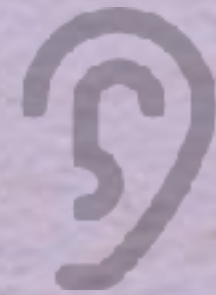
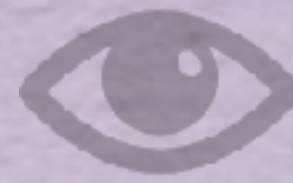
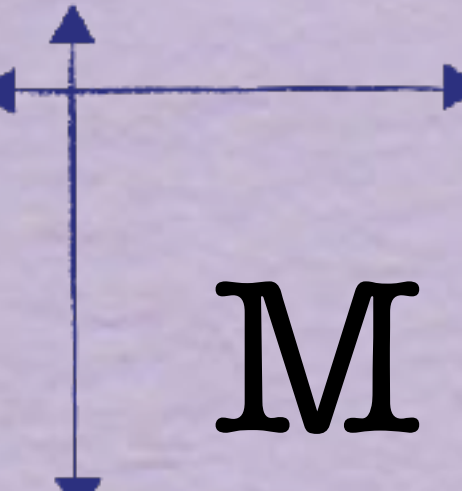


Photo used with permission from Cyd Harrell





M can't tell her left from her right.

- Neither can 15% of adults, according to some reports.
- Directions on the web that tell her to go to the top left corner of the screen don't harm her, they just momentarily make her feel stupid.

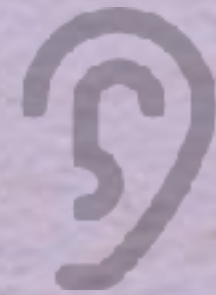
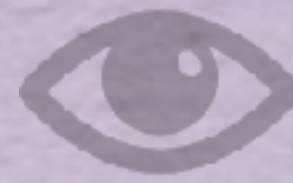
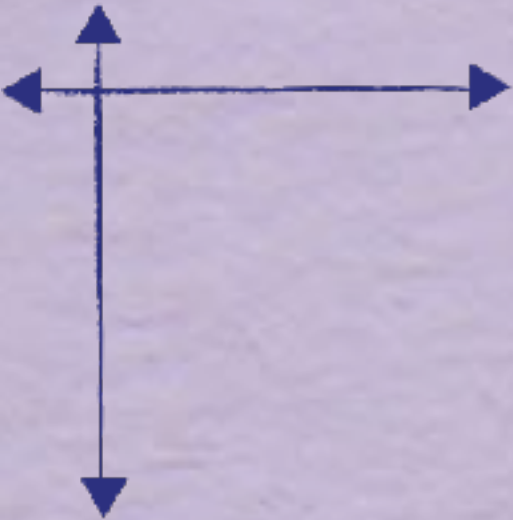


Photo used with permission from Dawn Ahukanna



N's deaf in one ear.

- N served in the Coast Guard in the 60s on a lightship in the North Atlantic. Like many lightship sailors, he lost much of his hearing in one ear.
- He prefers monophonic sound.

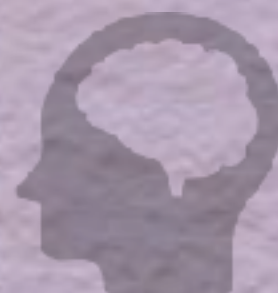
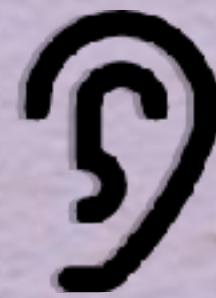
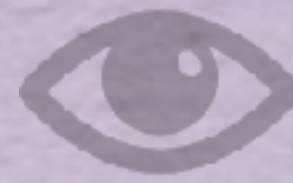


Photo by [Gus Moretta](#) on [Unsplash](#)



O is color blind.

- Most people designing websites think of him.
- Most of his co-workers, producing charts and graphs in presentations, do not.

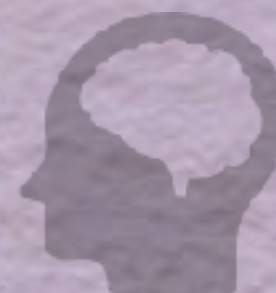
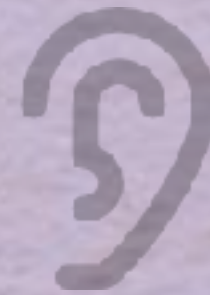
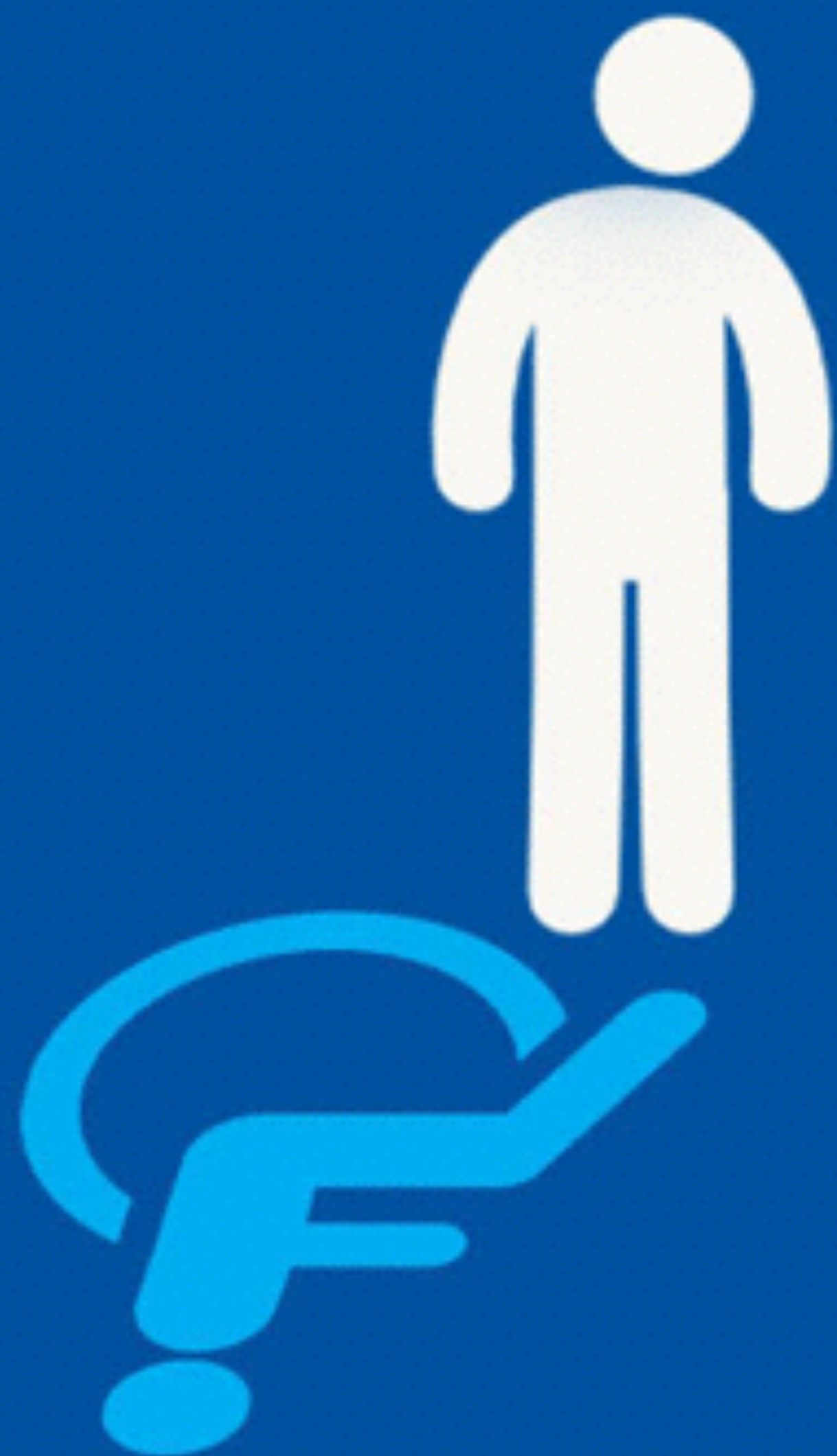
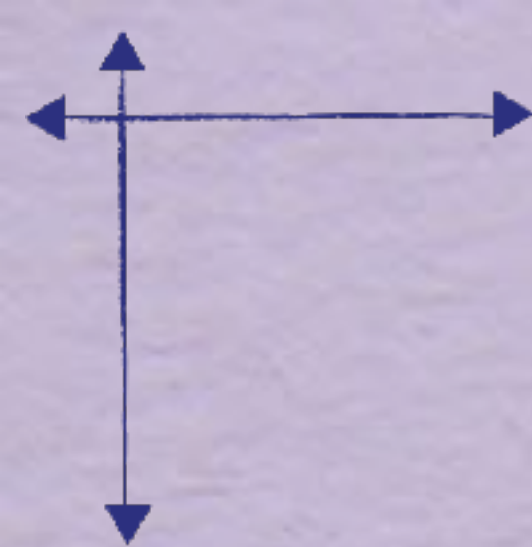


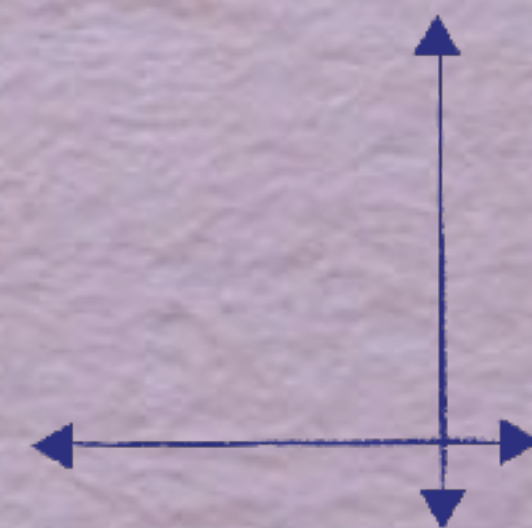
Photo by [Paul Bence](#) on [Unsplash](#)



not every disability
is visible



Nobody
is **obligated**
to tell us about their disabilities
even if we ask
really nicely.
It's none of our damn business.





P is dyslexic.

- Because of his early and ongoing treatment, most people don't know how much work it takes for him to read.
- He prefers books to the Internet, because books tend to have better text and spacing for reading.

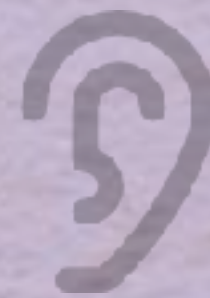
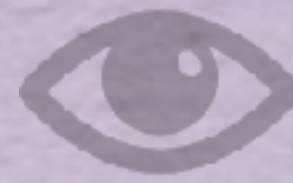


Photo by Muhammad Raufan Yusup on Unsplash



Q has epilepsy.

- Q's seizures are sometimes triggered by stark contrasts in colors, or bright colors.
- Q has to be careful when visiting brightly-colored pages or pages aimed for younger people.

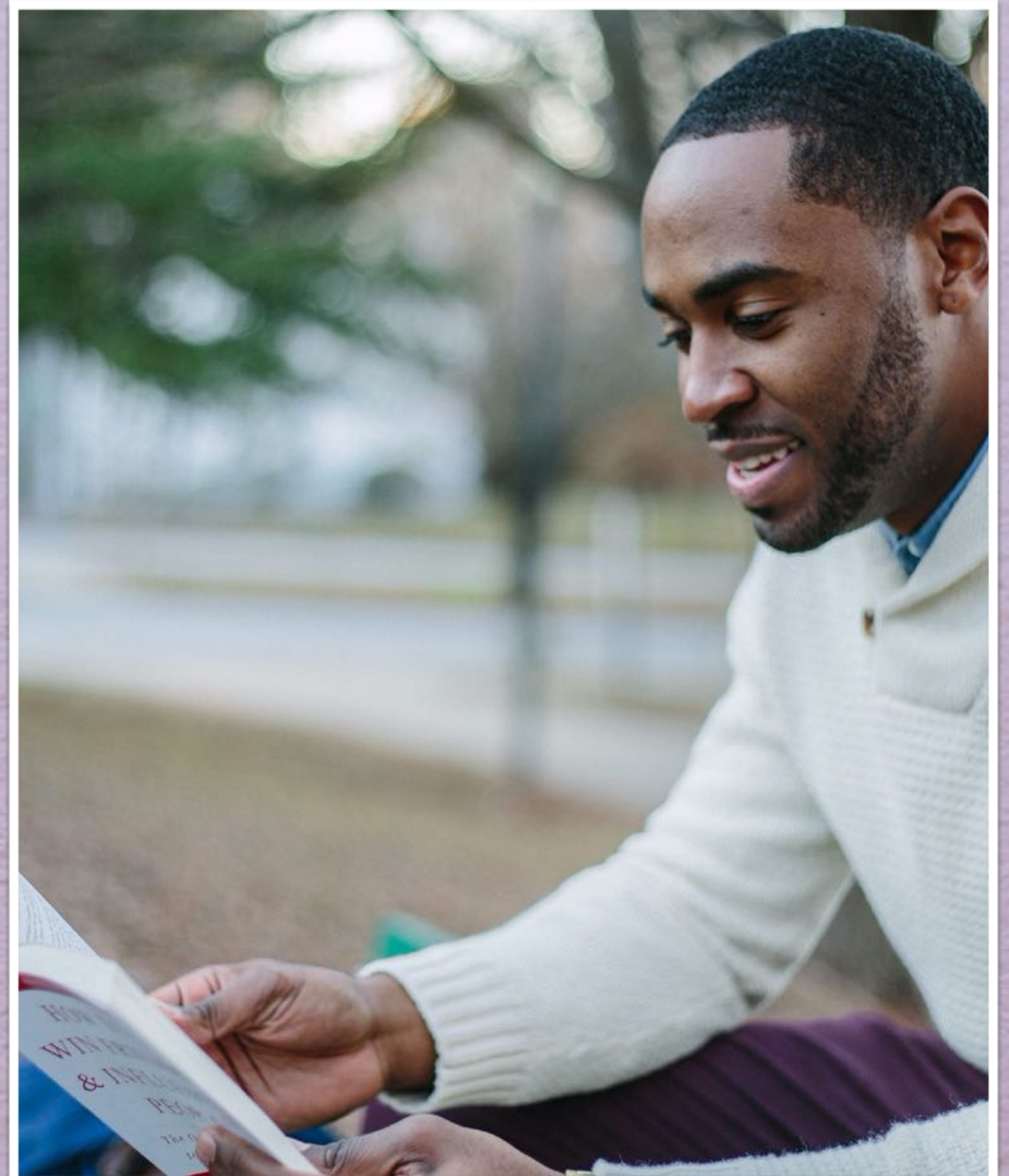
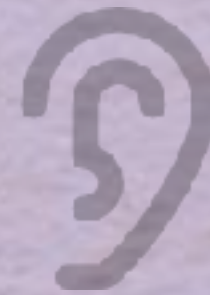
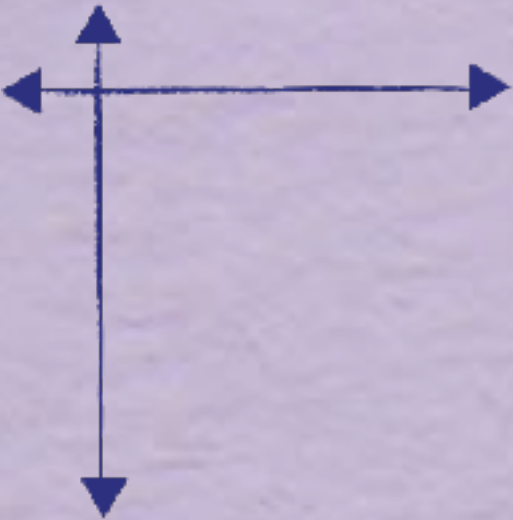


Photo by [Tamarcus Brown](#) on [Unsplash](#)



R has a reading
comprehension disability.

- He does better when sentences are short, terms are simple, or he can listen to an article or email instead of reading it.

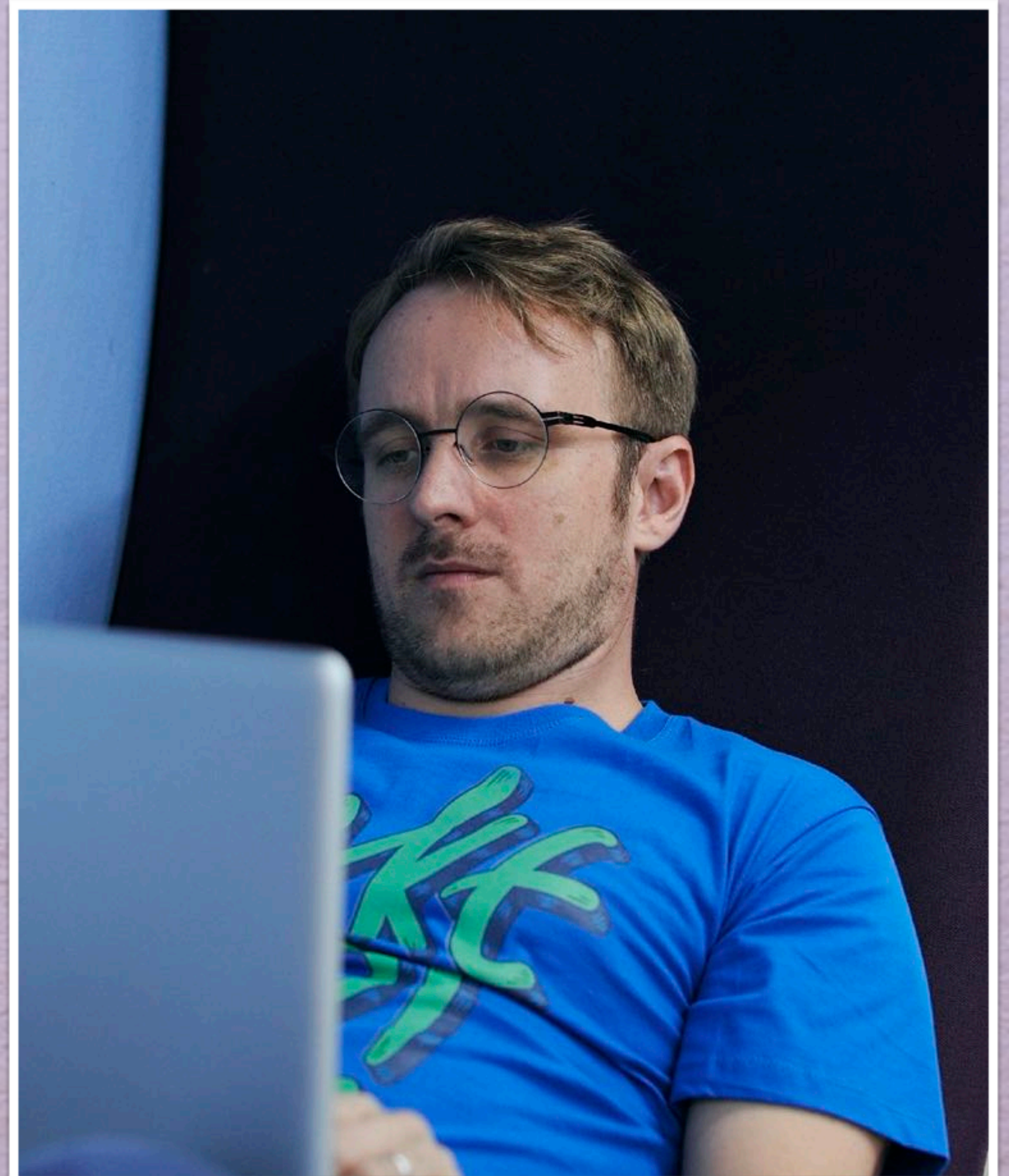
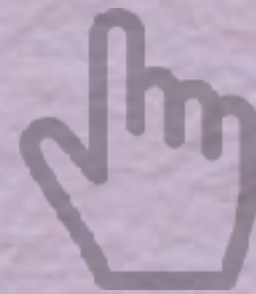
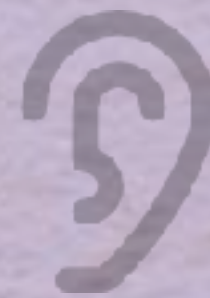
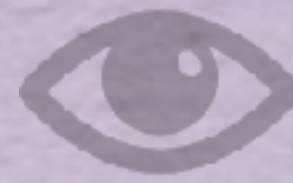


Photo by [rawpixel.com](https://www.rawpixel.com)



S has post-concussion syndrome.

- It's been six months since he was struck by a car.
- He gets frequent headaches, cognitive issues, and sensitivity to sound.
- He has a lot of trouble understanding what he's reading.

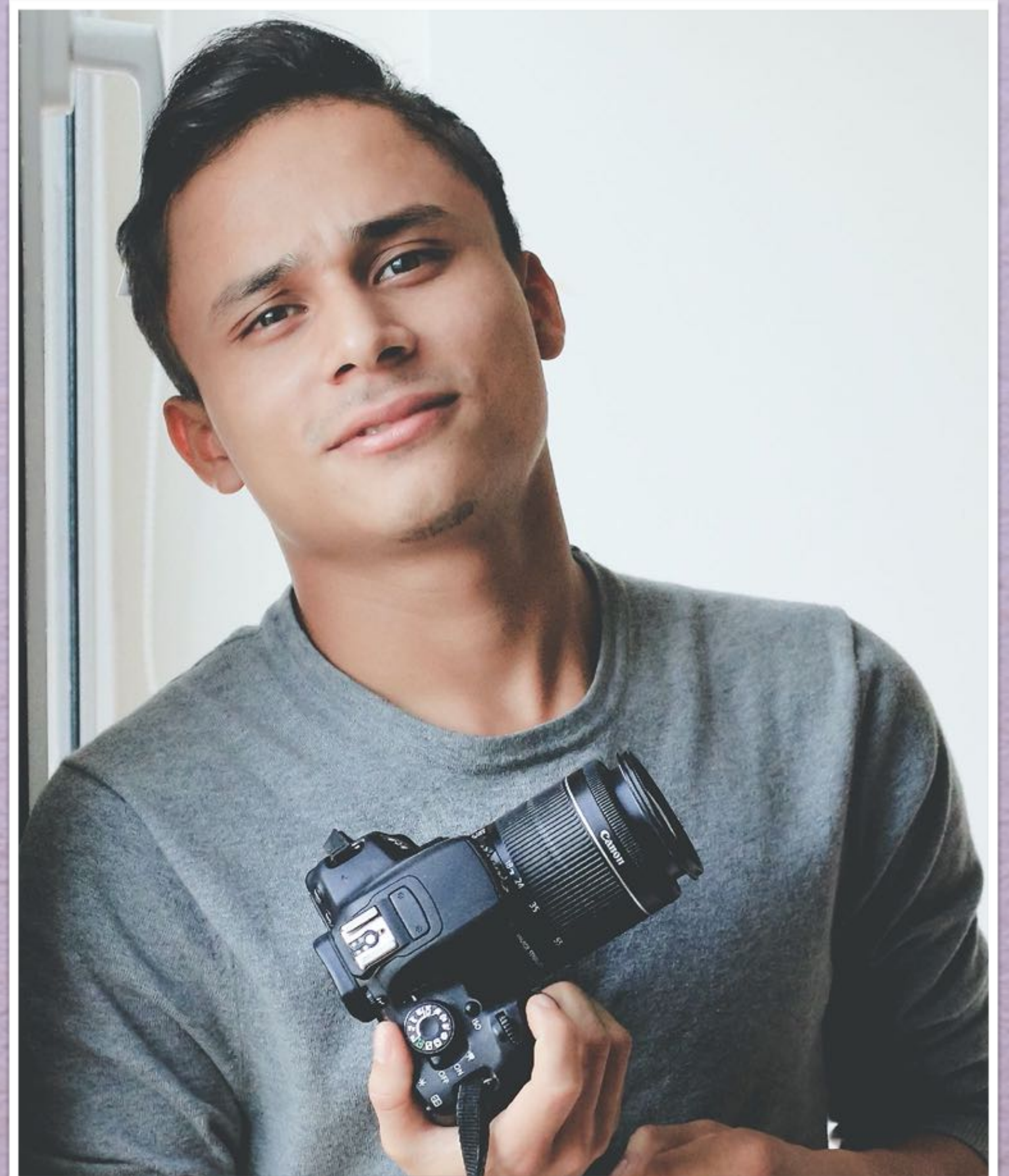
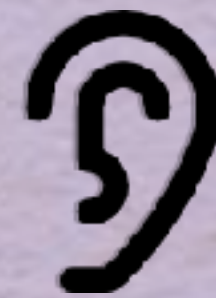
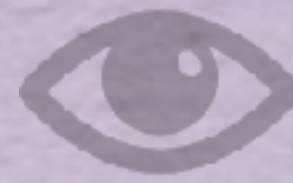
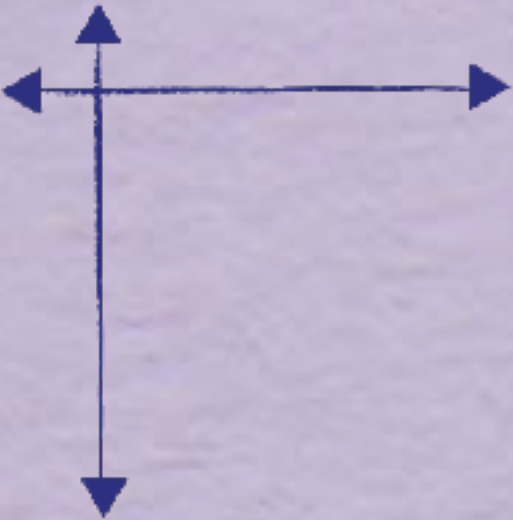


Photo by [Angello Lopez](#) on [Unsplash](#)



T had a stroke.

- He was surprised since he was only in his early 40s.
- Now he's re-learning everything from using his primary arm to reading again.

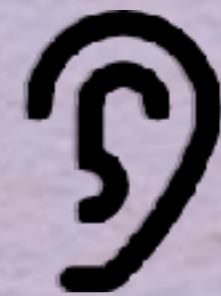
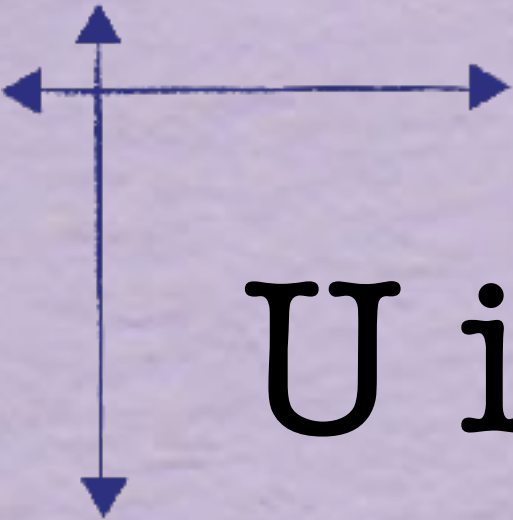


Photo by [Toa Heftiba](#) on [Unsplash](#)



U is having thyroid problems

- She has extremely low energy, and a lot of trouble concentrating.
- She likes things broken up into very short steps so she can't lose her place.

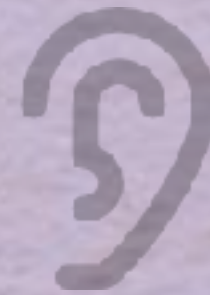
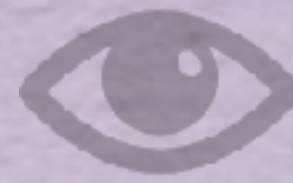


Photo by [Eye for Ebony](#) on [Unsplash](#)



V has vertigo.

- V's vertigo and dizziness are under control, but parallax scrolling makes her nauseous until she's physically ill.
- She shuts scripting off on her computer to protect herself.

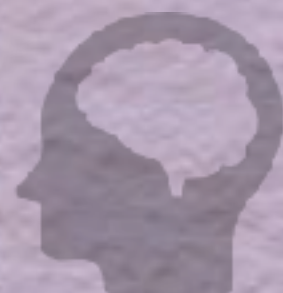
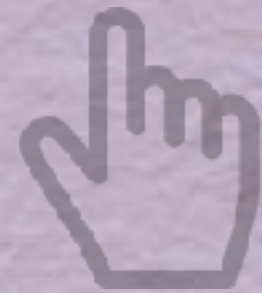
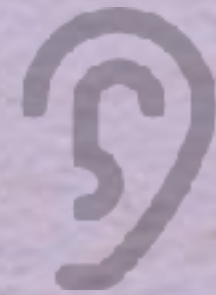
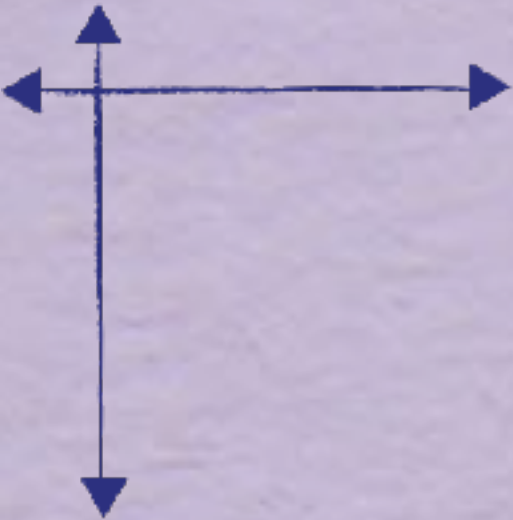


Photo by Wahyu Tanoto at Pixabay



W is new to American software.

- She is a fluent English speaker but doesn't live here. She's frequently tripped up by American cultural idioms and phrases.
- She needs websites to be simple and readable, especially when the concept is complex.

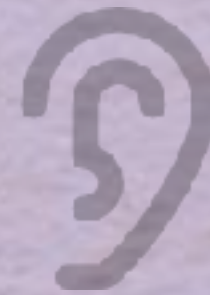
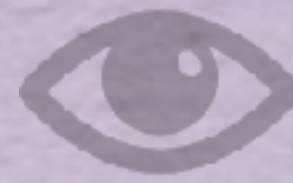
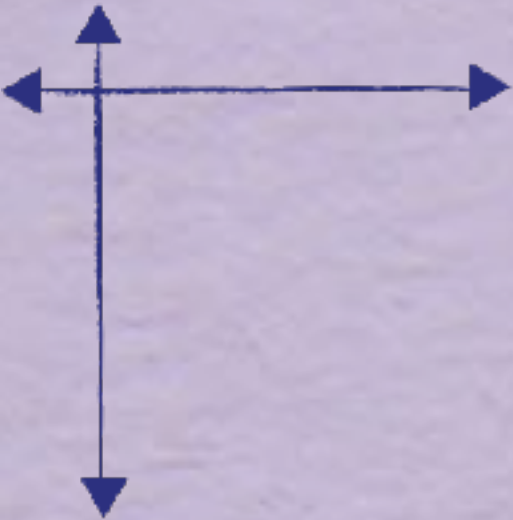


Photo by [Svetlana Pochatun](#) on [Unsplash](#)



X is sleep-deprived.

- She gets about five hours of bad sleep a night, has high blood pressure, and her doctor wants to test her for sleep apnea.
- She muddles through her workday thinking poorly and having trouble concentrating on her work.

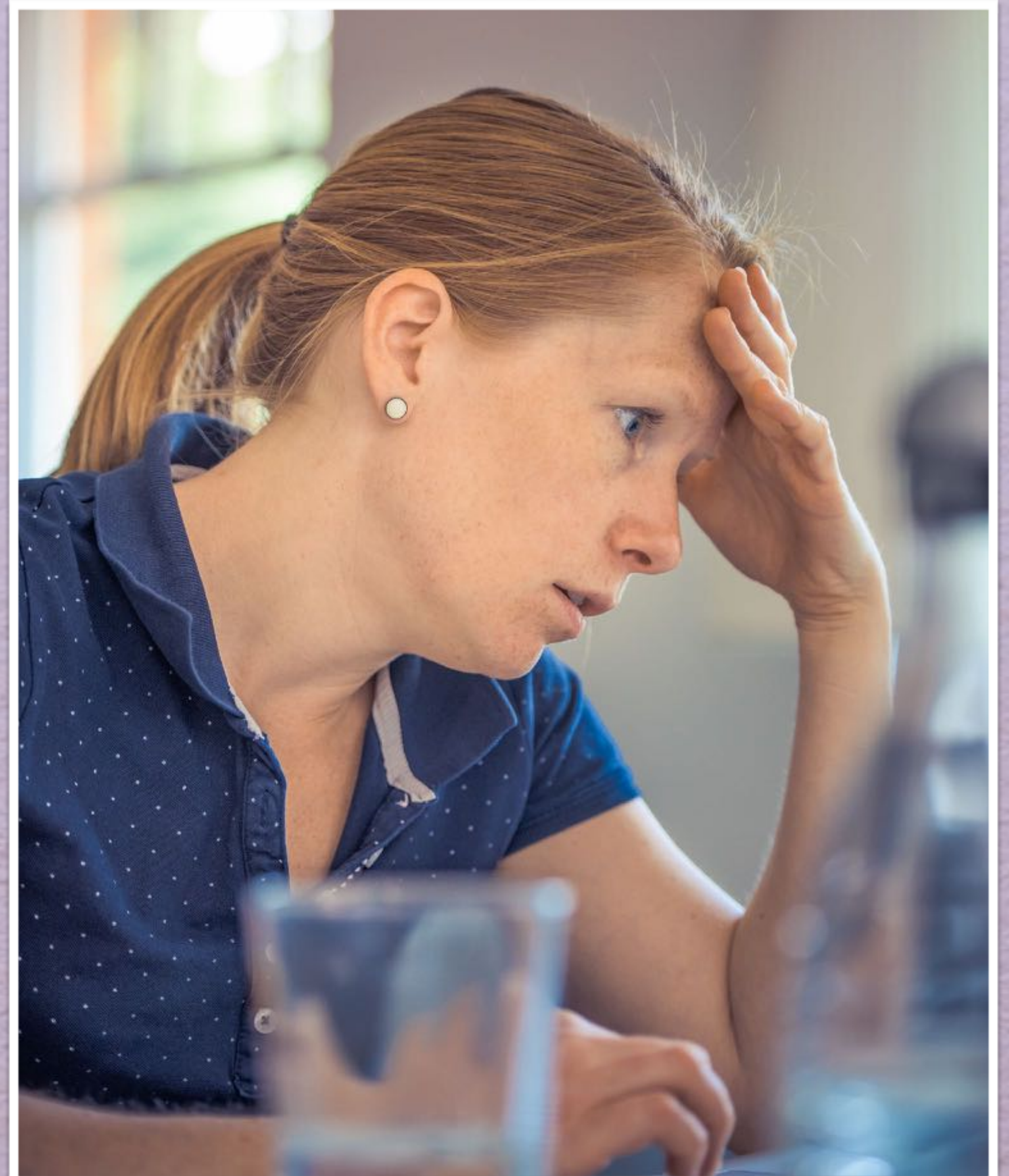
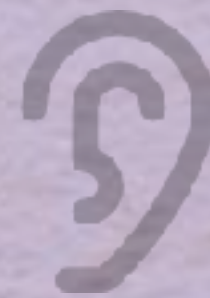
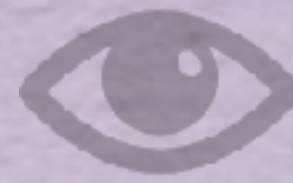


Photo by Alexander Dummer at Pexels

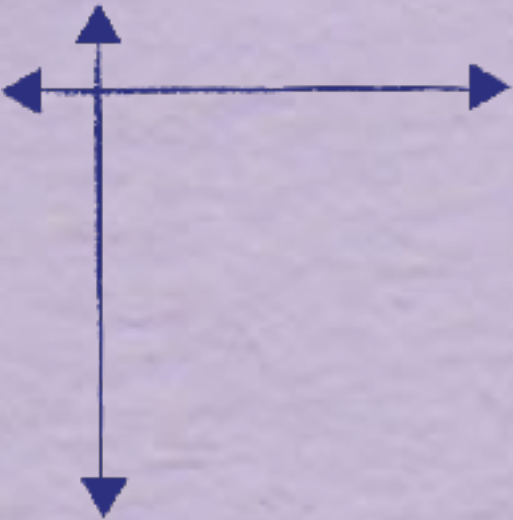


Y has twins.

- Y doesn't have a disability. He has twin boys under the age of two.
- He's a stay-at-home dad who has a grabby child in one arm and one or two fingers free on the other hand to navigate his iPad.



Photo by OJO Images Ltd / Alamy



Z has Chemo Brain.

- She's a pediatrician on medical leave.
- She's finding it harder and harder to remember things, read, or have a conversation.
- The more reliant she is on her smart phone, the harder it is for her to use.

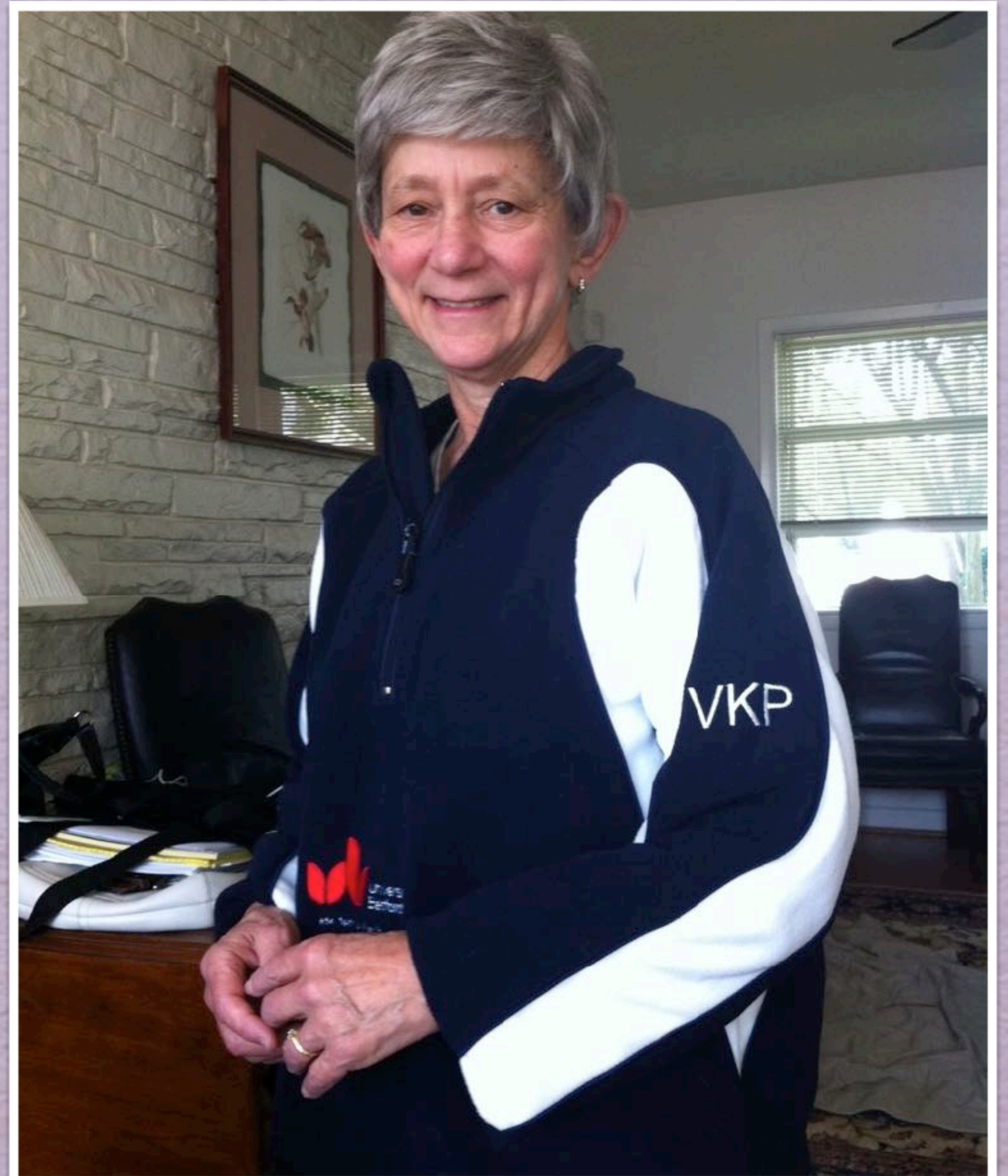
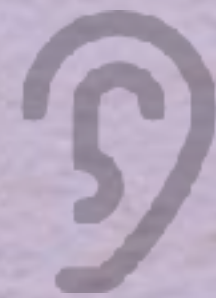
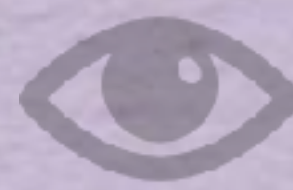
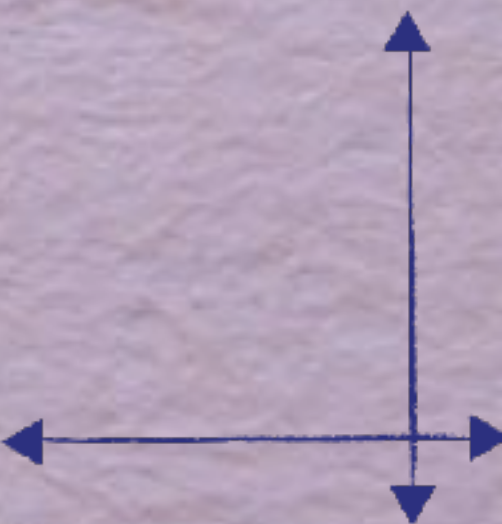


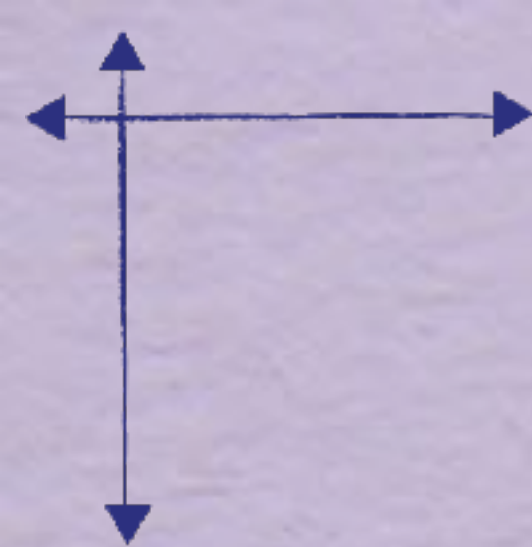
Photo by Beth Kent



Cancer is everywhere

- More than 15.5 million cancer patients in the US
- 67% diagnosed 5 or more years ago
- Have ongoing side-effects from disease or treatment



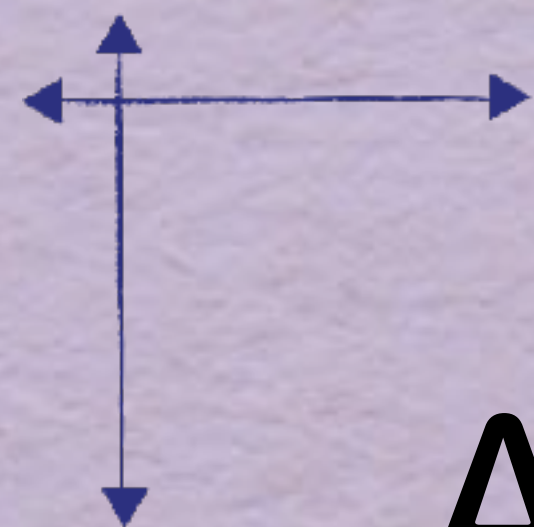


What better way, as web designers, to say
to hell with cancer
than to design products that are
so accessible
even cancer doesn't stop people
from living their lives?

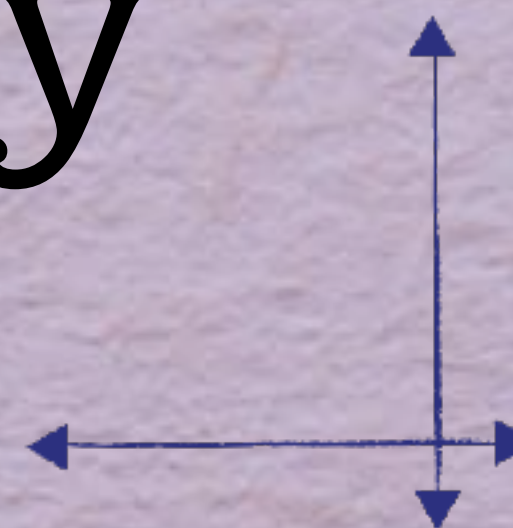


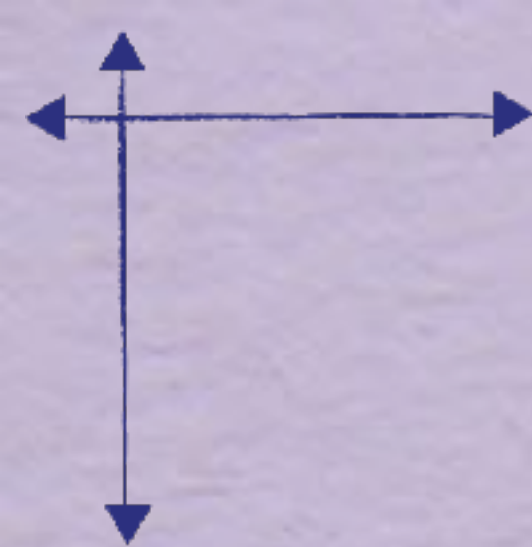
Twenty six is just the beginning





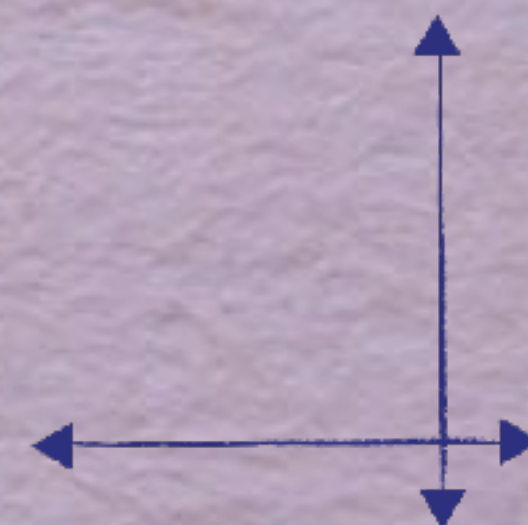
Accessibility

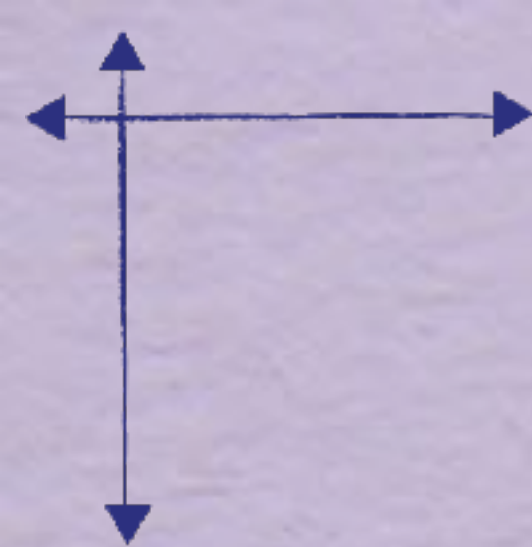




“The power of the Web
is in its universality.
Access by everyone regardless of
disability is an essential aspect.”

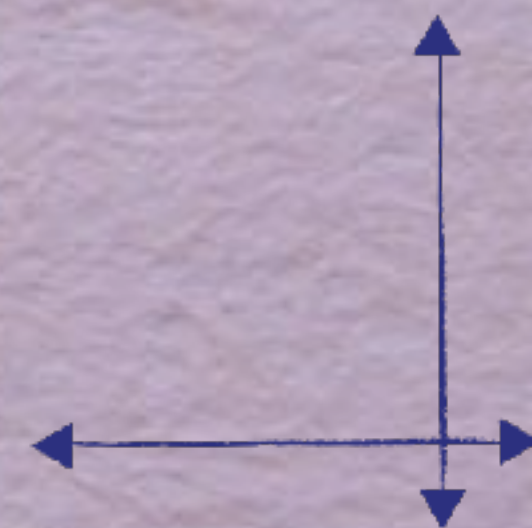
–Tim Berners-Lee, W3C Director and inventor of the World Wide Web





Accessibility is about access

- Provide more than one way to get information or do a task
- Assume people could be using anything to access your website
- Design for the extremes and everyone will benefit

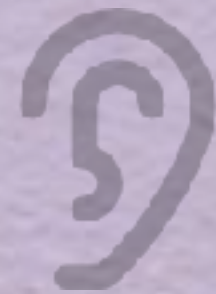




How we use our senses



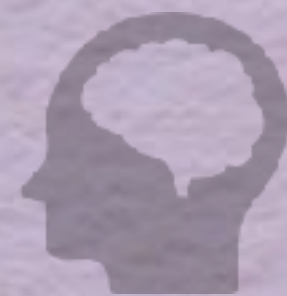
Video, graphics, charts, written words...



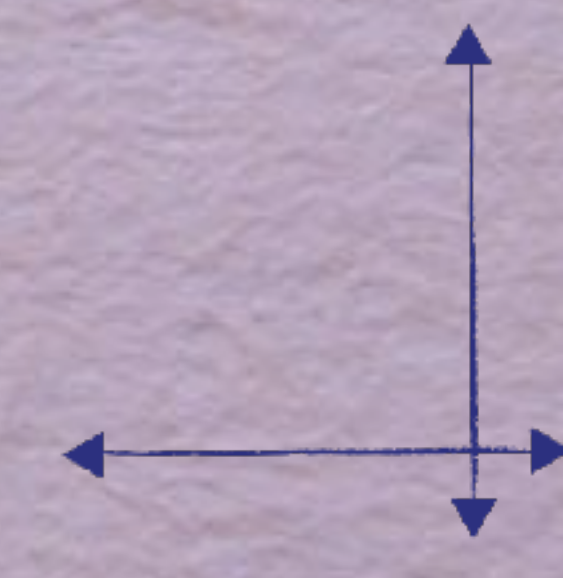
Audio, video, ambient music, sound effects...

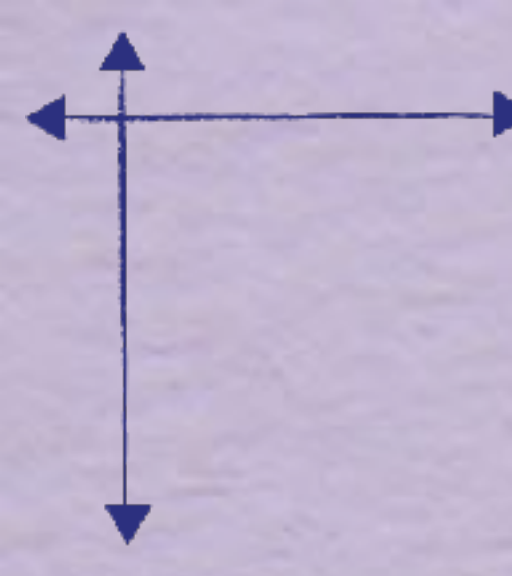


Input: mice, keyboards, touchpads, haptic feedback...



Readability, legibility, learnability, simplicity...

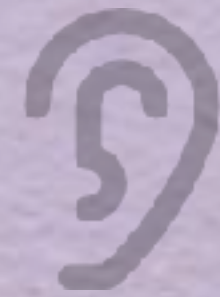




Types of inaccessibility



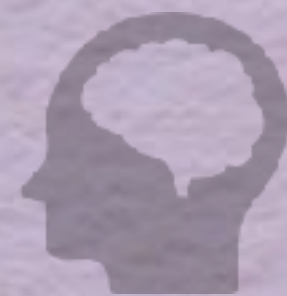
Video, graphics, charts, written words...



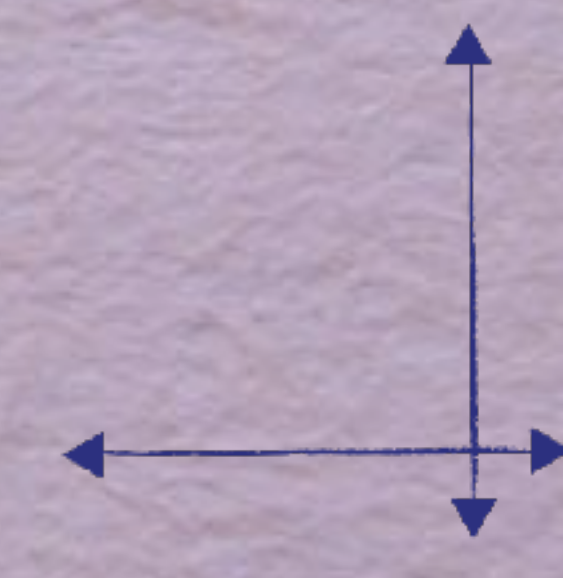
Audio, video, ambient music, sound effects...



Input: mice, keyboards, touchpads, haptic feedback...



Readability, legibility, learnability, simplicity...

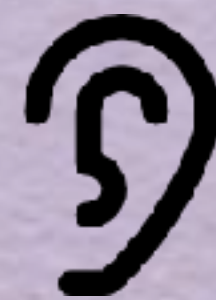




Types of inaccessibility



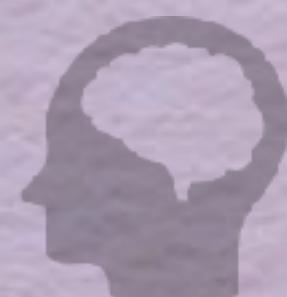
Video, graphics, charts, written words...



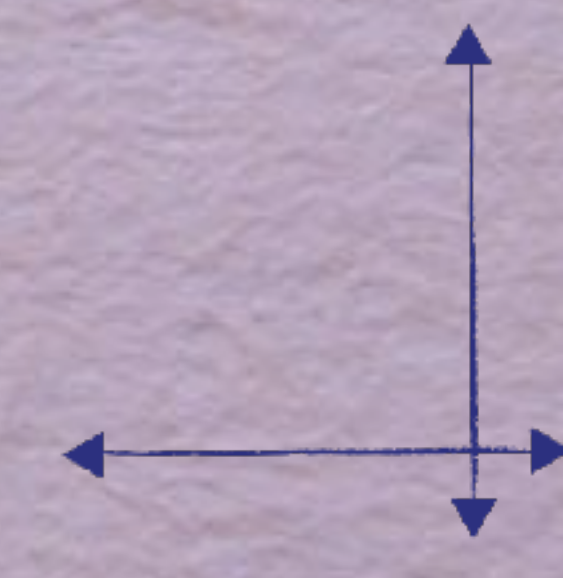
Audio, video, ambient music, sound effects...

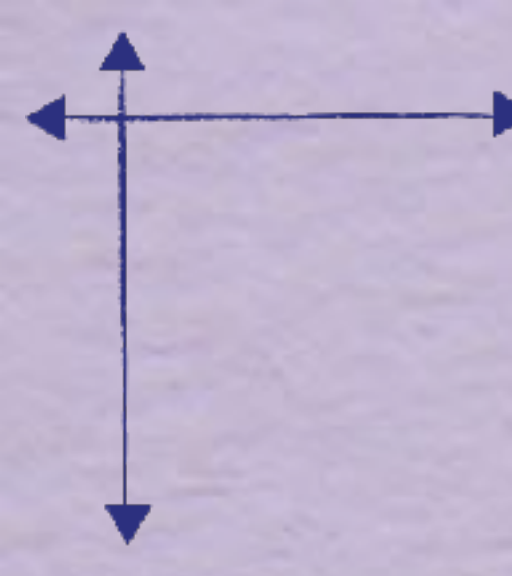


Input: mice, keyboards, touchpads, haptic feedback...



Readability, legibility, learnability, simplicity...

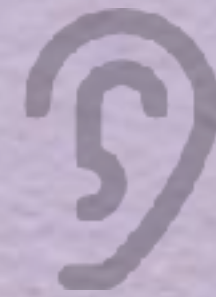




Types of inaccessibility



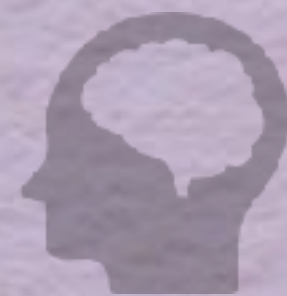
Video, graphics, charts, written words...



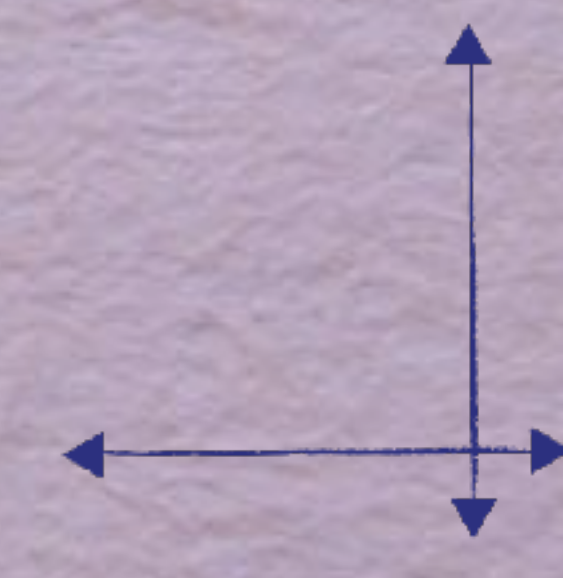
Audio, video, ambient music, sound effects...



Input: mice, keyboards, touchpads, haptic feedback...



Readability, legibility, learnability, simplicity...

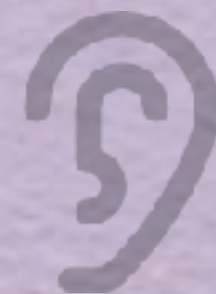




Types of inaccessibility



Video, graphics, charts, written words...



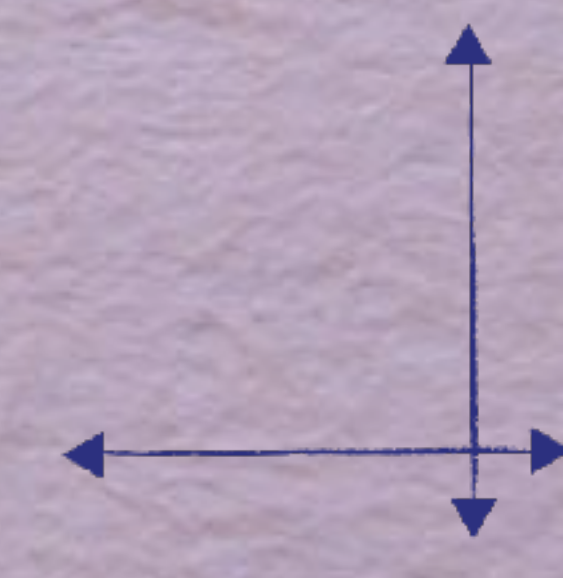
Audio, video, ambient music, sound effects...

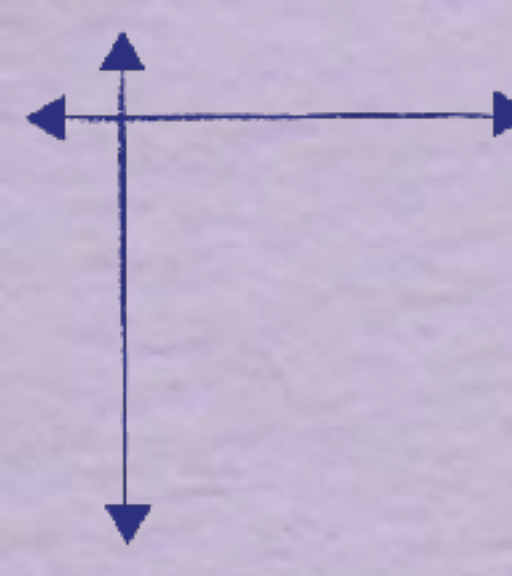


Input: mice, keyboards, touchpads, haptic feedback...



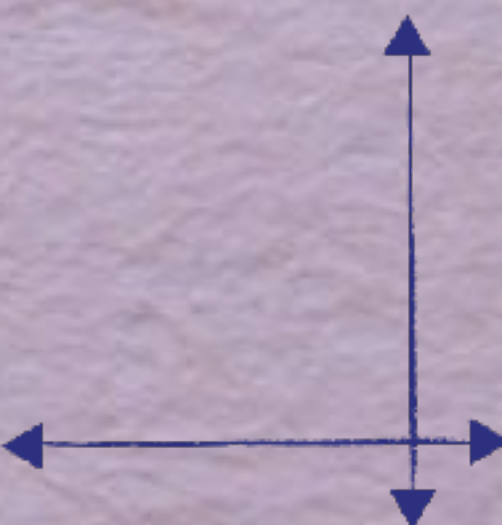
Readability, legibility, learnability, simplicity...

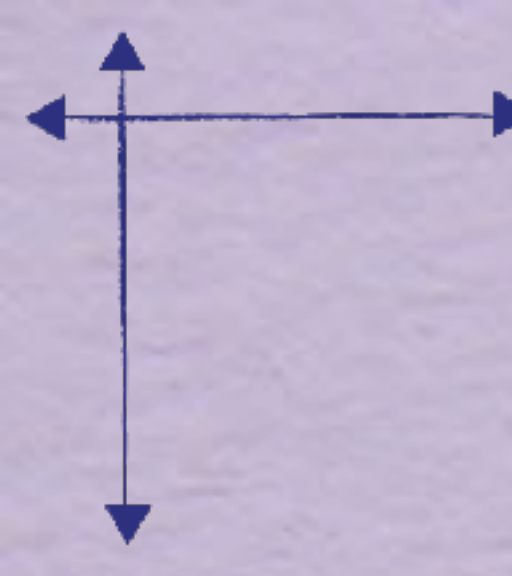




Inputs and outputs

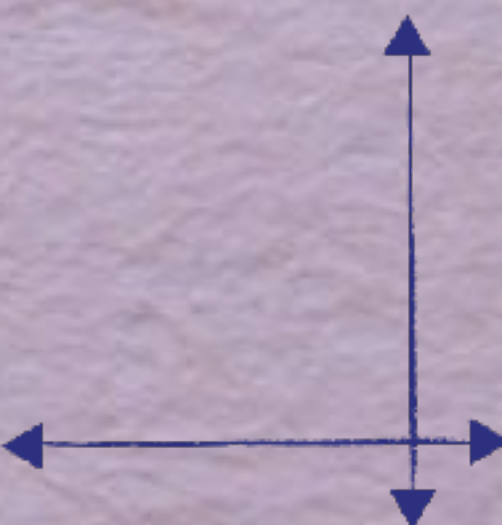
- Outgroup homogeneity, stereotypes, and even bigotry are still a challenge
- “Disability” as a topic carries a lot of social baggage, ableism, fear

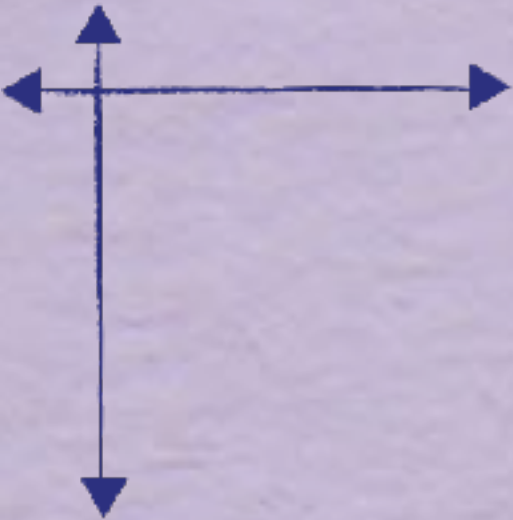




Inputs and outputs

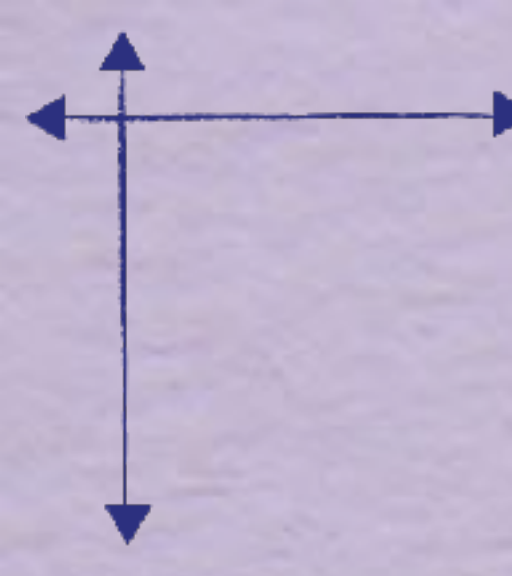
- Shift the conversation away from what “those people” can’t do, and toward what “good designers and developers” are responsible to do for everyone.
- If you need to change the conversation to make progress, change the conversation





Inputs and outputs

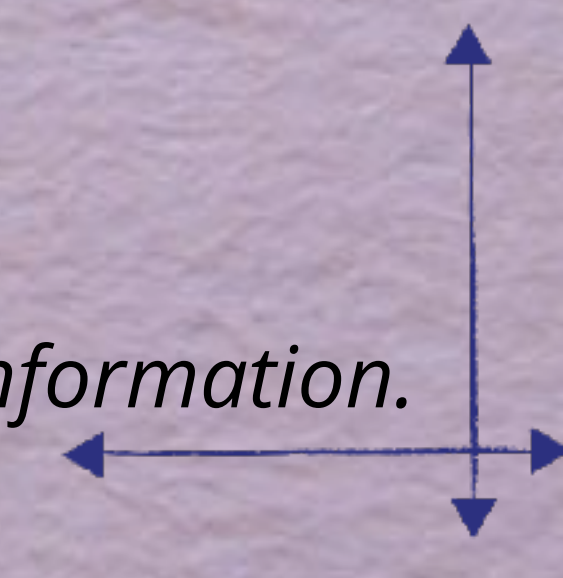
	Monitor	Colorblind palette on monitor	400% Zoom on monitor	Audio output / Screen reader	Braille cell display
Keyboard(s)	✓		✓		
Mouse	✓	✓			
Microphone / Voice Recognition					✓
Touchscreen				✓	
Etc...					



Top 3 priorities

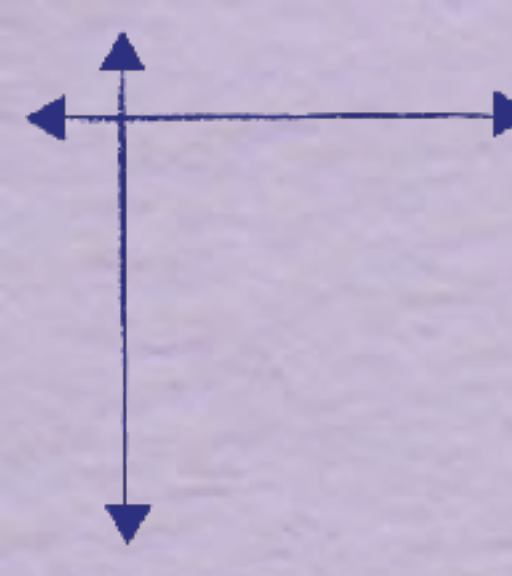
- Keyboard
- Images
- Forms

Thanks to Derek Featherstone and Simply Accessible for this critical information.



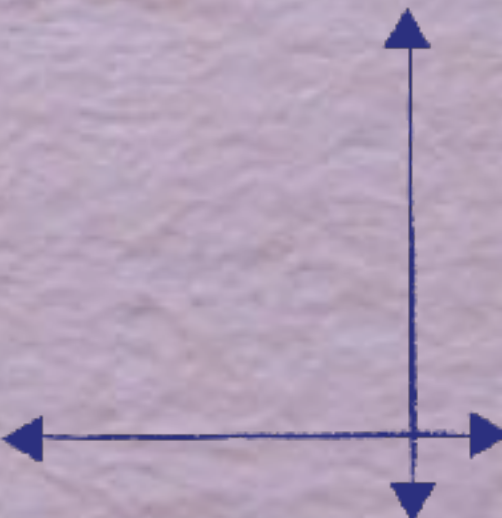
Top 3 priorities: keyboards



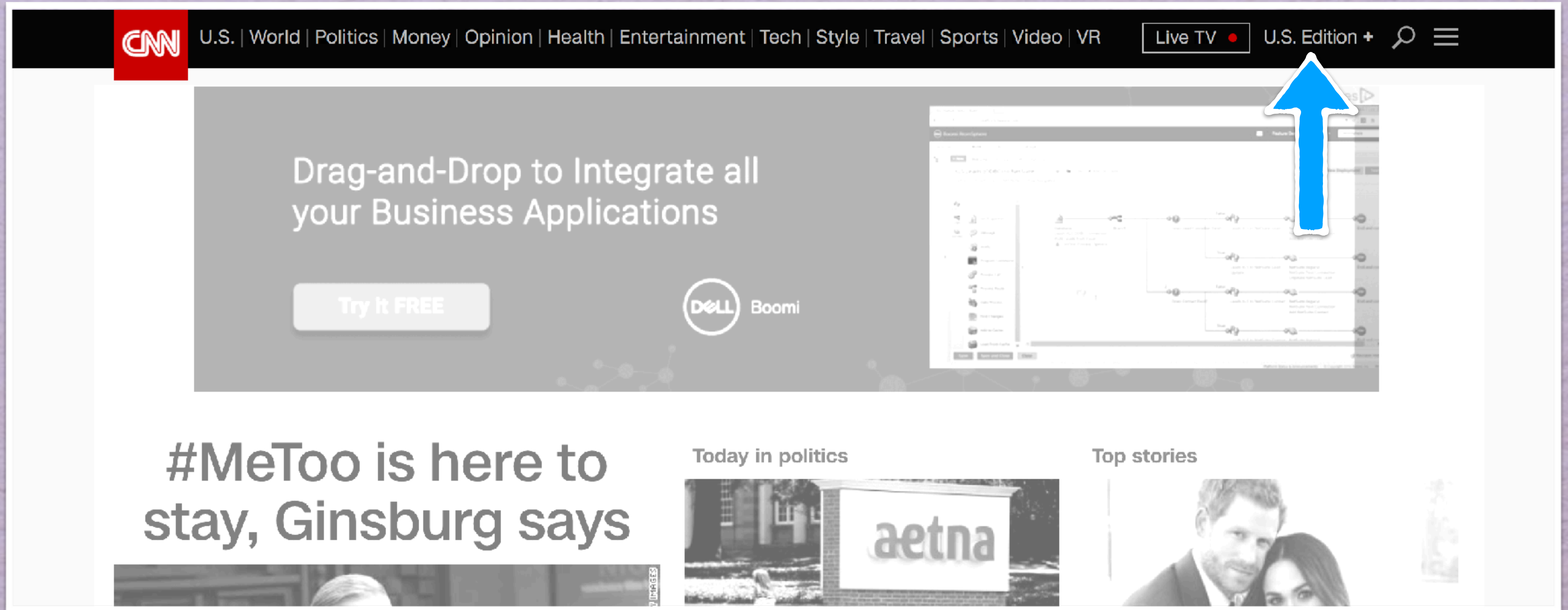


Keyboard problems

- Can't get to the controls using a keyboard
- The tab order is confusing
- Our custom components are untested

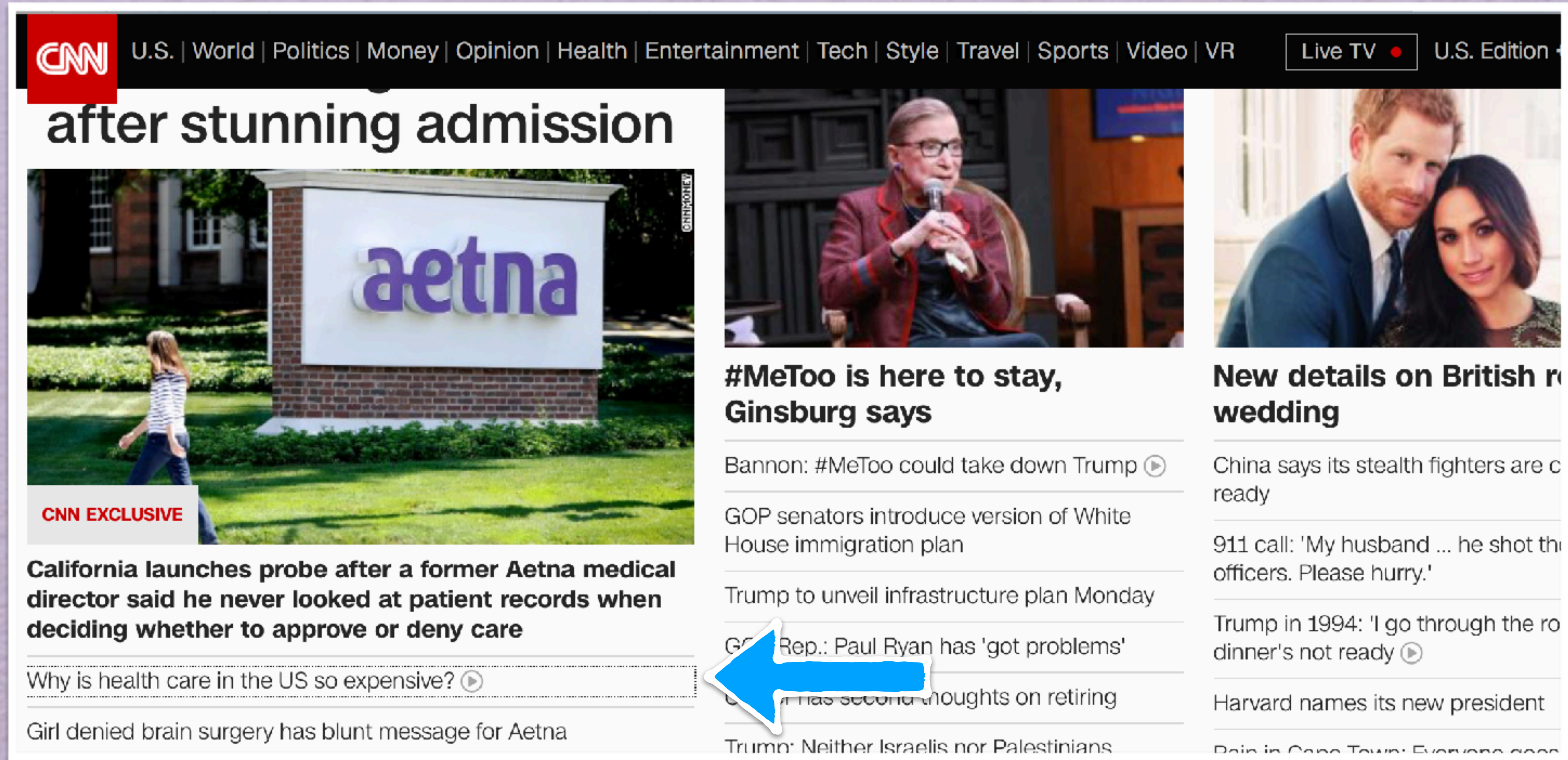


Keyboard problems



Can't navigate to an actionable item

Keyboard problems



The screenshot shows the CNN website with a navigation bar at the top containing links to U.S., World, Politics, Money, Opinion, Health, Entertainment, Tech, Style, Travel, Sports, Video, and VR. There are also buttons for 'Live TV' and 'U.S. Edition'. The main content area features several news stories. On the left, a large story about Aetna is highlighted with a 'CNN EXCLUSIVE' tag. To the right, there are three smaller stories: one about #MeToo featuring Ginsburg, one about the British royal wedding featuring Prince Harry and Meghan Markle, and one about China's stealth fighters. A blue arrow points to the article titled 'GOP Rep.: Paul Ryan has 'got problems'', which is part of a list of stories on the right side of the page.

U.S. | World | Politics | Money | Opinion | Health | Entertainment | Tech | Style | Travel | Sports | Video | VR

Live TV • U.S. Edition

after stunning admission

CNN EXCLUSIVE

California launches probe after a former Aetna medical director said he never looked at patient records when deciding whether to approve or deny care

Why is health care in the US so expensive? ▶

Girl denied brain surgery has blunt message for Aetna

#MeToo is here to stay, Ginsburg says

Bannon: #MeToo could take down Trump ▶

GOP senators introduce version of White House immigration plan

Trump to unveil infrastructure plan Monday

GOP Rep.: Paul Ryan has 'got problems'

Clinton has second thoughts on retiring

Trump: Neither Israelis nor Palestinians

New details on British royal wedding

China says its stealth fighters are closer to ready

911 call: 'My husband ... he shot the officers. Please hurry.'

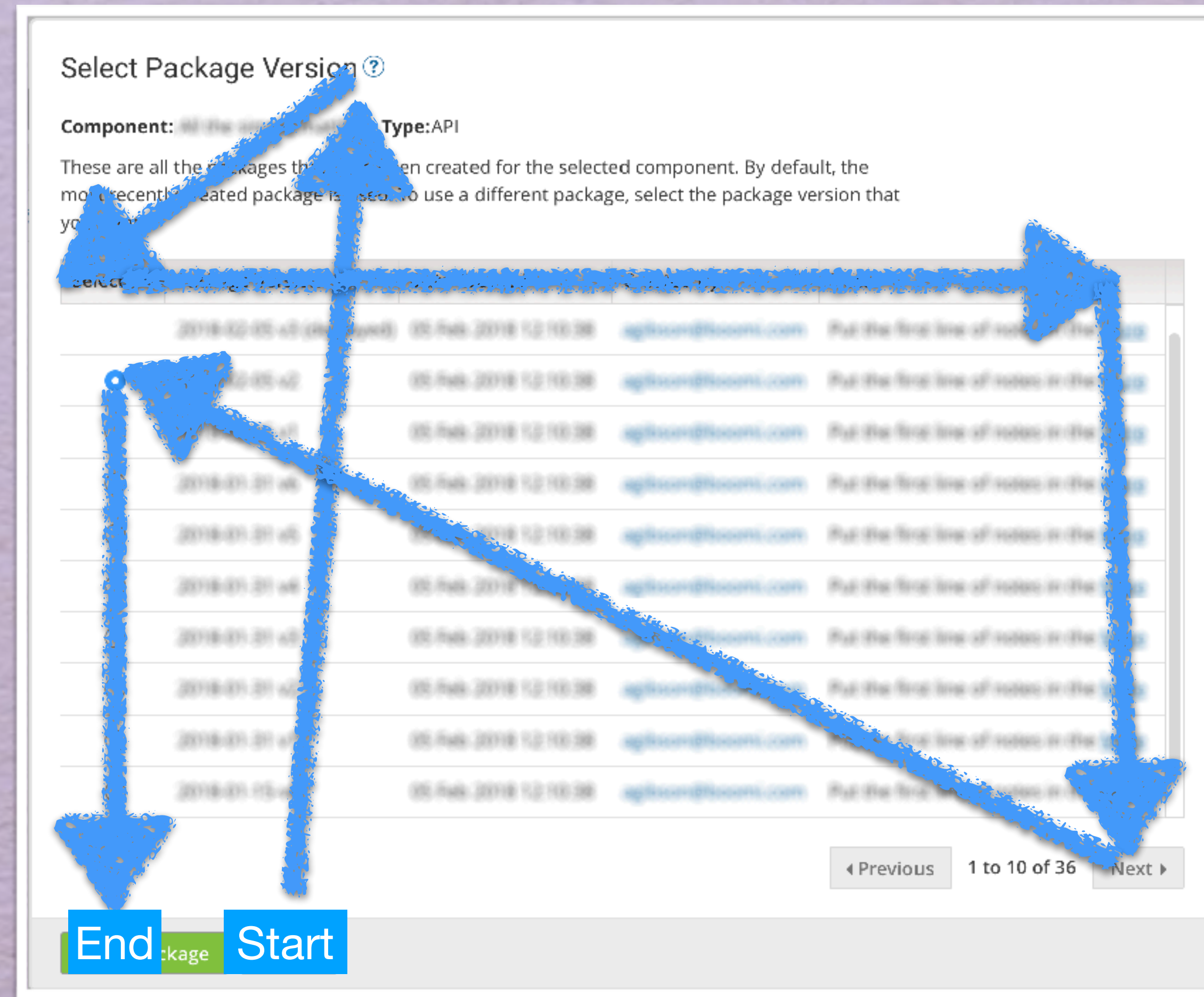
Trump in 1994: 'I go through the rough dinner's not ready' ▶

Harvard names its new president

Bein in Cape Town: Everyone goes

Can't find the focus indicator

Keyboard problems



The screenshot shows a 'Select Package Version' dialog box. At the top, it says 'Component: All the components in the project' and 'Type: API'. Below this is a text block explaining that the most recently created package is selected by default, and users can choose a different one. A table follows, listing package versions with columns for version number, date, email, and description. At the bottom are 'Previous' and 'Next' buttons, and a status bar showing '1 to 10 of 36'. Blue arrows are drawn over the interface to show a tab order: starting at the 'Start' button, moving to the 'End' button, then to the 'Select' dropdown, then to the first row of the table, then to the 'Next' button, and finally to the 'Previous' button. A small blue circle is also placed on the first row of the table.

Select Package Version ?

Component: All the components in the project Type: API

These are all the packages that have been created for the selected component. By default, the most recently created package is selected. To use a different package, select the package version that you want.

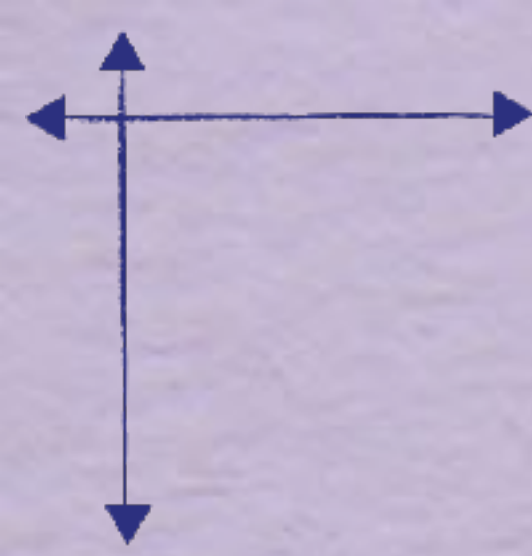
Select

2018-02-05 12:10:38	2018-02-05 12:10:38	ap@...@...com	Put the first line of nodes in the ...
2018-02-05 12:10:38	2018-02-05 12:10:38	ap@...@...com	Put the first line of nodes in the ...
2018-02-05 12:10:38	2018-02-05 12:10:38	ap@...@...com	Put the first line of nodes in the ...
2018-02-05 12:10:38	2018-02-05 12:10:38	ap@...@...com	Put the first line of nodes in the ...
2018-02-05 12:10:38	2018-02-05 12:10:38	ap@...@...com	Put the first line of nodes in the ...
2018-02-05 12:10:38	2018-02-05 12:10:38	ap@...@...com	Put the first line of nodes in the ...
2018-02-05 12:10:38	2018-02-05 12:10:38	ap@...@...com	Put the first line of nodes in the ...
2018-02-05 12:10:38	2018-02-05 12:10:38	ap@...@...com	Put the first line of nodes in the ...
2018-02-05 12:10:38	2018-02-05 12:10:38	ap@...@...com	Put the first line of nodes in the ...
2018-02-05 12:10:38	2018-02-05 12:10:38	ap@...@...com	Put the first line of nodes in the ...

◀ Previous 1 to 10 of 36 Next ▶

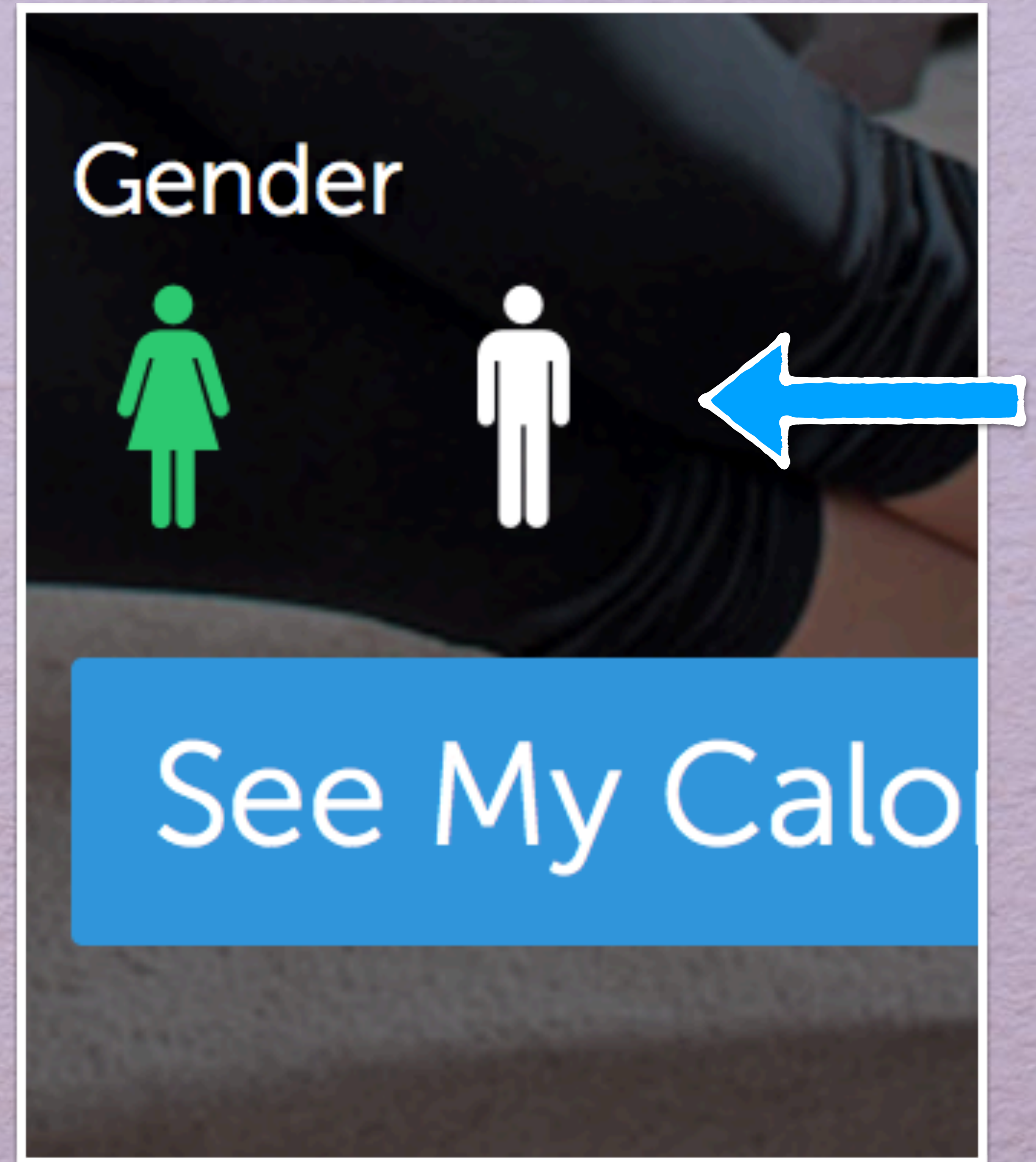
End package Start

Tab order

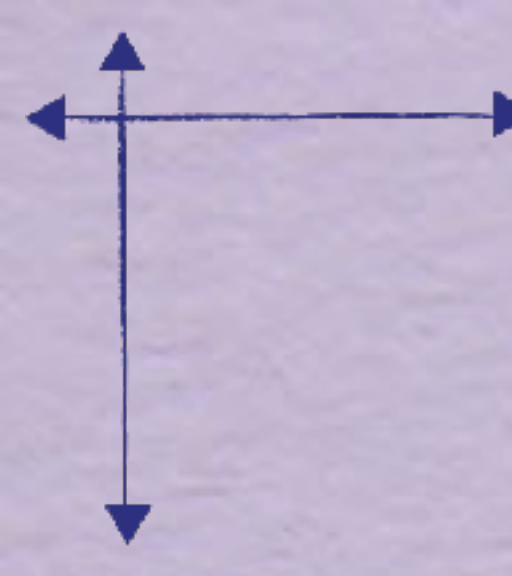


Custom components

You'd better test the ever-loving
heck out of them

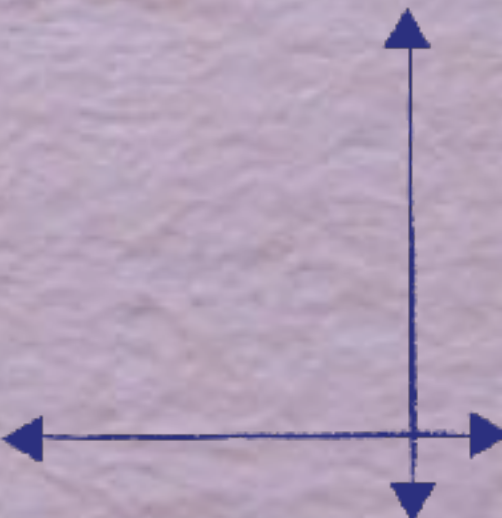


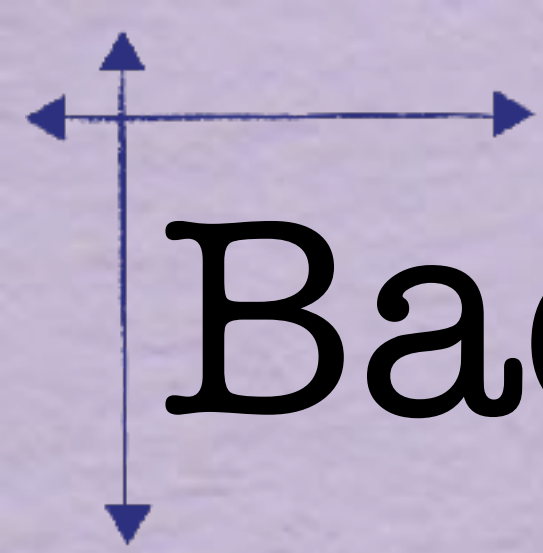
Part of a form on MyPlate by LiveStrong.



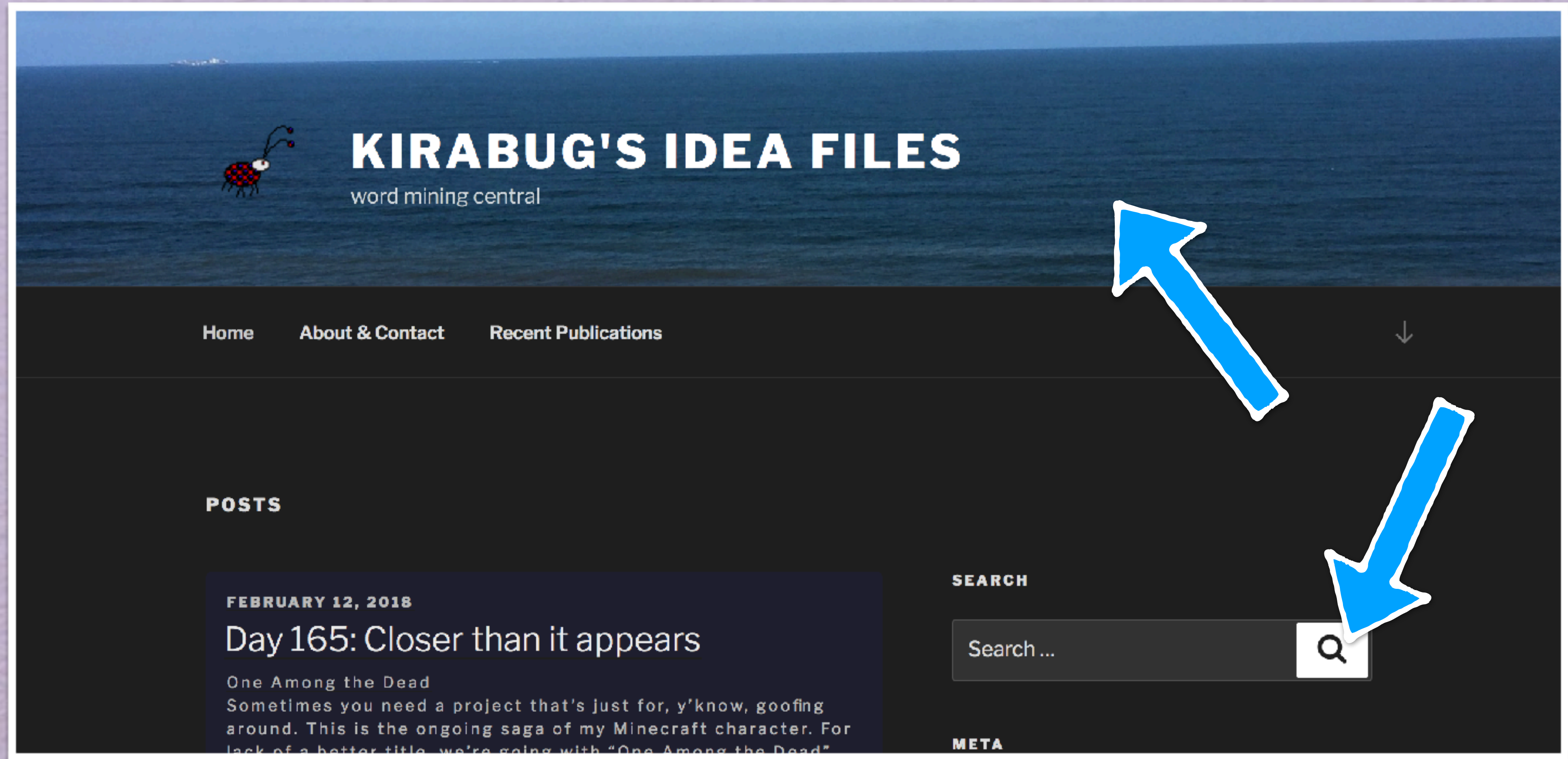
Top 3 priorities: Images

- Frequent problems:
 - Meaningful images in the background and meaningless images in the foreground
 - Font icons
 - Alt tags need to be present and meaningful



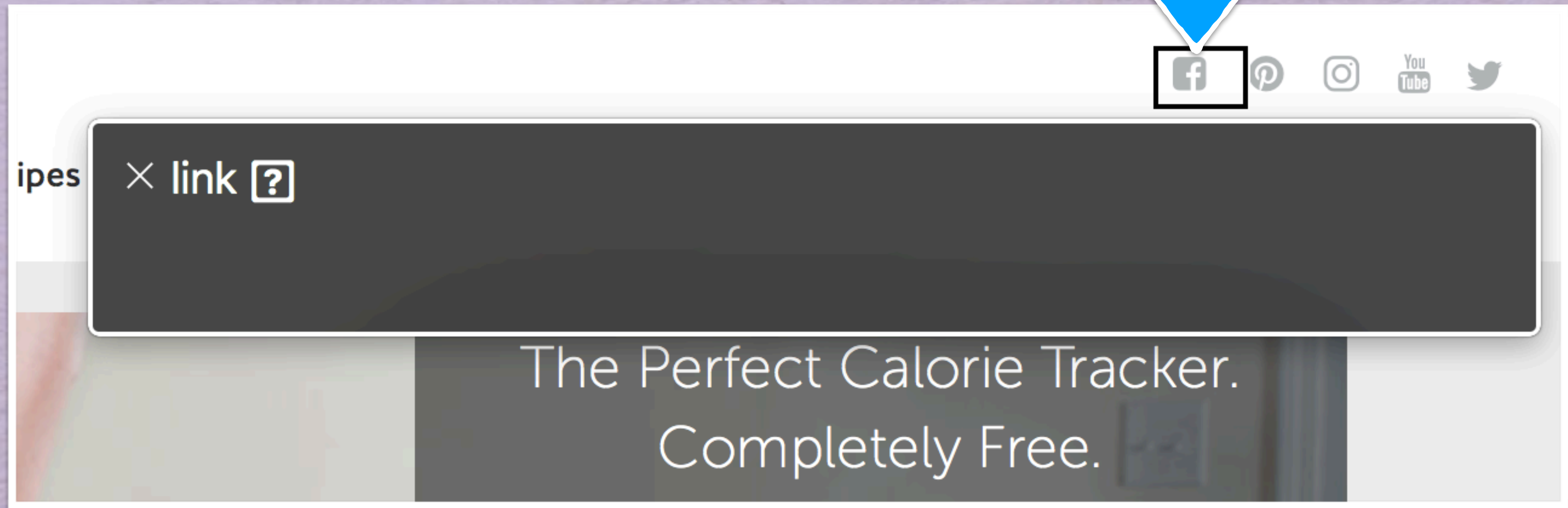


Background vs Foreground Images



Background: If you don't mention it's there, nobody loses anything.
Foreground: If you don't mention it, somebody can't understand something.

This is a font icon



Be really careful with these.



Foreground icons require alt tags.

Your image only has meaning if
you describe it. Otherwise it's a
file name.



[Click here](#) to w

× link, demo.html

Here's how you do it right

- × visited, link, image, Marvel's "Black Bolt" writer Saladin Ahmed has a new comic, "Abbott," about a black female tabloid journalist. (And I love it.) The comic is set in 1972 Detroit, but is vividly



TRANSPORTATION

Judge: PPA is not liable for taxi cab losses inflicted by Uber and Lyft



HELEN UBIÑAS

Move over, Lois Lane, Abbott's on the beat

LATEST NEWS

Porn star Stormy Daniels says affair with Trump 'never happened'

46 minutes ago

Police ID Virginia man fatally shot by officer in South Philly

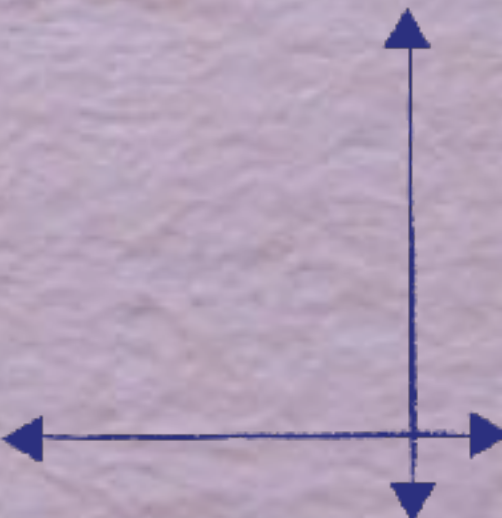
Amtrak worker fired after 2016 Chester derailment

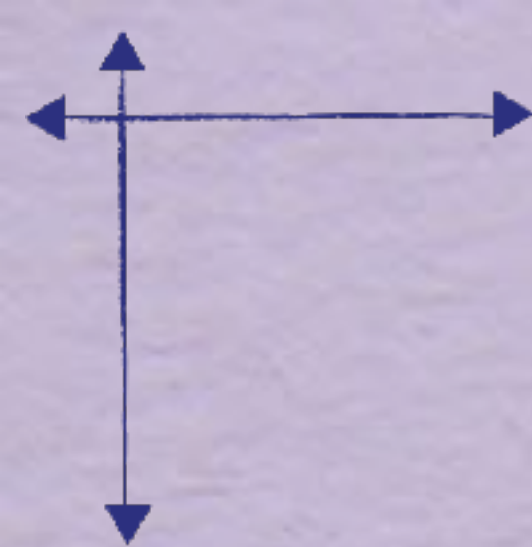
A meaningful image with a descriptive alt tag.



Top 3 priorities: Forms

- Frequent problems:
 - Bad color contrast, size, and visual design
 - Bad labels and instructions
 - Bad error handling
 - Keyboard inaccessibility





Form problems

- Bad color contrast, size, and visual design

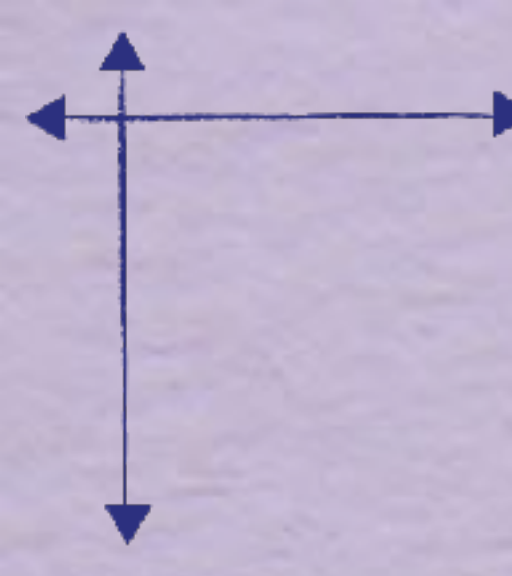
Log In

USERNAME

PASSWORD

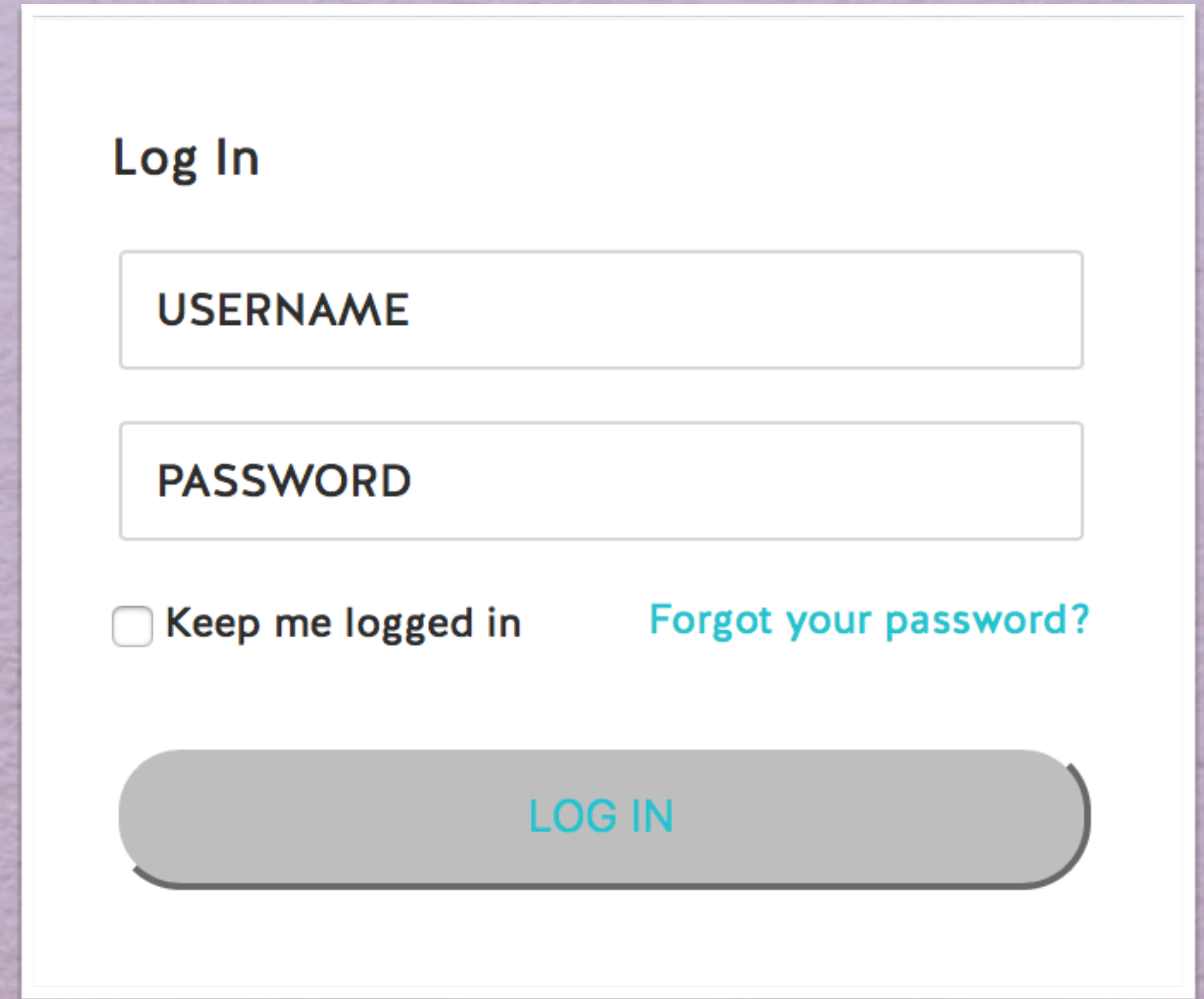
☐ Keep me logged in [Forgot your password?](#)

LOG IN



Form problems

- Bad color contrast, size, and visual design
- Bad labels and instructions



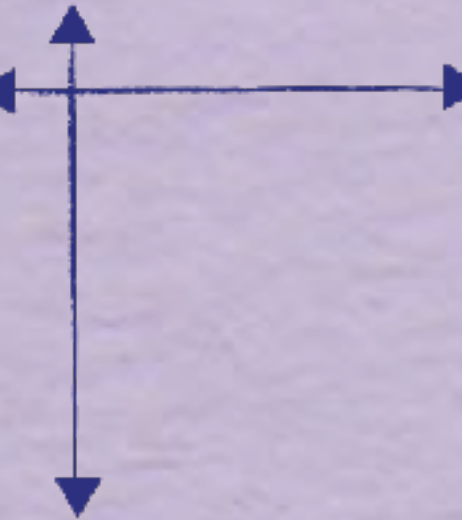
Log In

USERNAME

PASSWORD

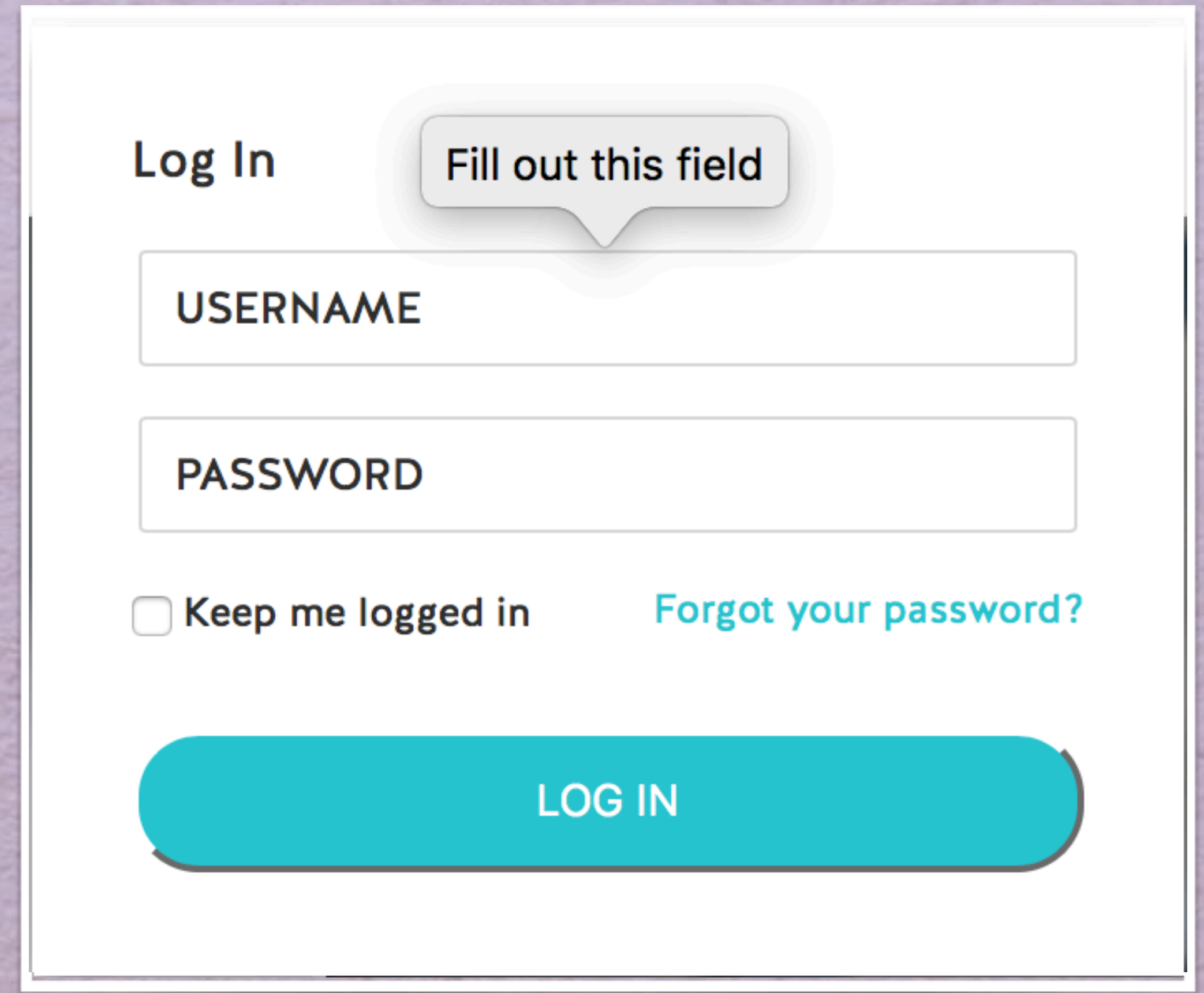
☐ Keep me logged in [Forgot your password?](#)

LOG IN



Form problems

- Bad color contrast, size, and visual design
- Bad labels and instructions
- Bad error handling



Log In

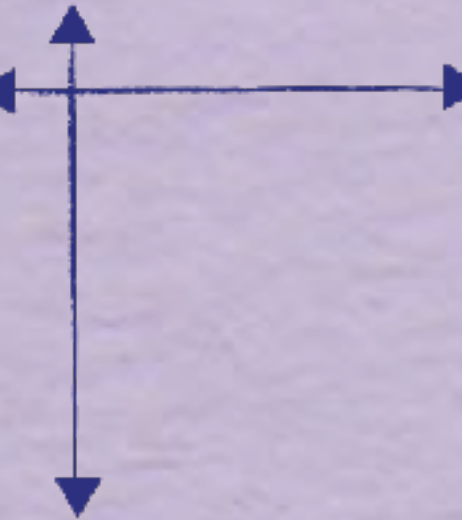
Fill out this field

USERNAME

PASSWORD

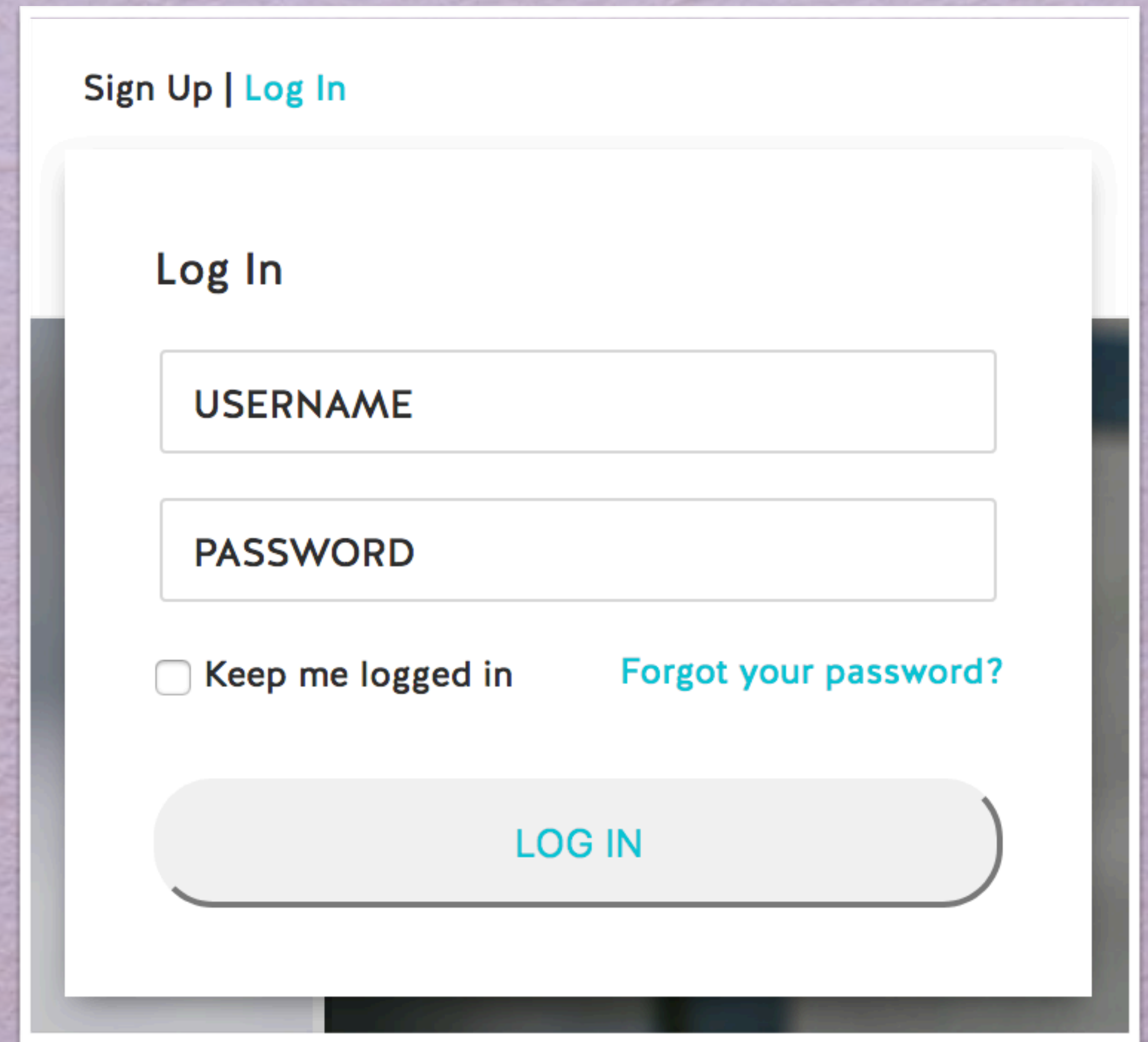
☐ Keep me logged in [Forgot your password?](#)

LOG IN



Form problems

- Bad color contrast, size, and visual design
- Bad labels and instructions
- Bad controls and help access
- Keyboard inaccessibility



Sign Up | [Log In](#)

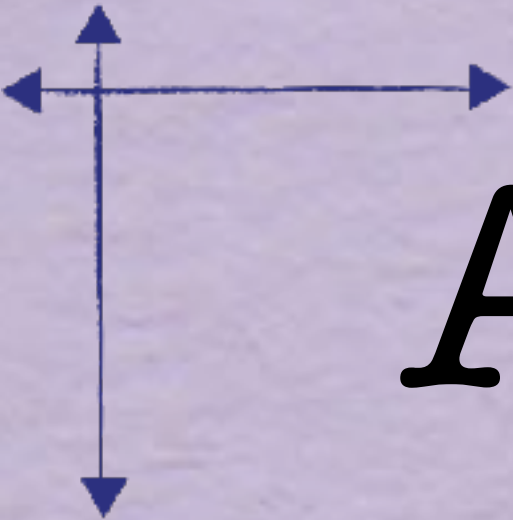
Log In

USERNAME

PASSWORD

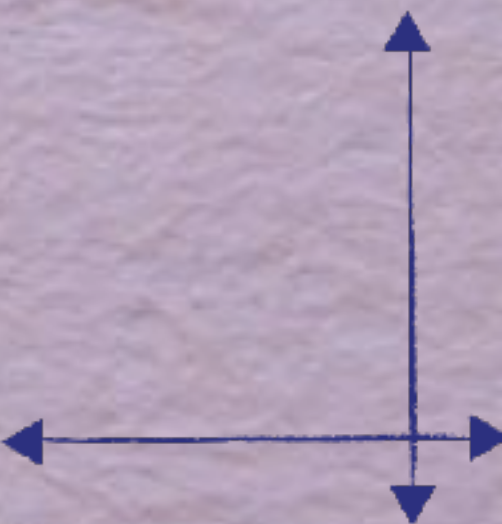
☐ Keep me logged in [Forgot your password?](#)

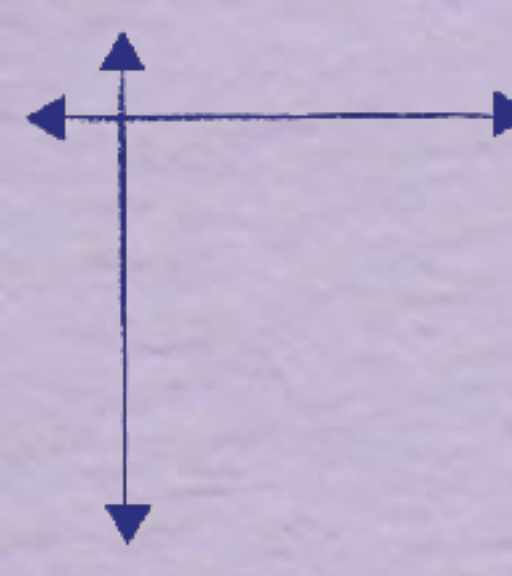
[LOG IN](#)



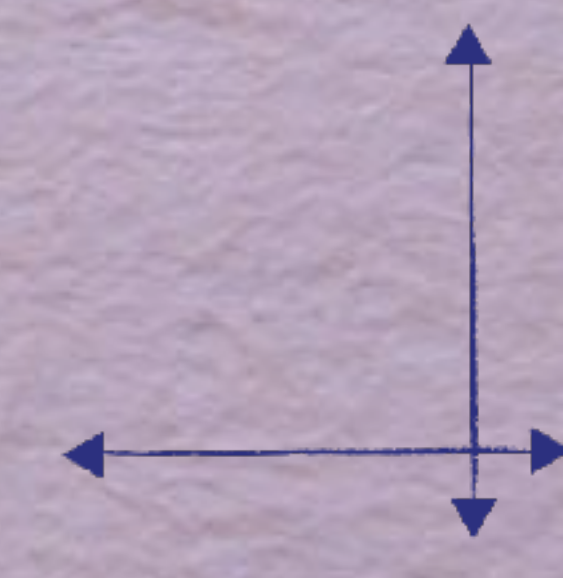
Accessibility is infrastructure

- Accessibility is infrastructure, just like security, performance, and usability
- Customers expect infrastructure to be present. When it's not, they move on
- Accessibility is a differentiator





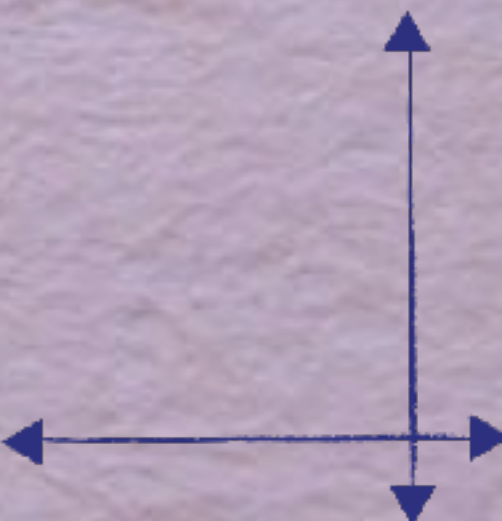
Testing

- Test for accessibility using:
 - Automated tools (maybe 30%)
 - Knowledgeable people in your organization (50%)
 - Usability testing with disabled users provide critical insights (20%)
- 



What is accessibility?

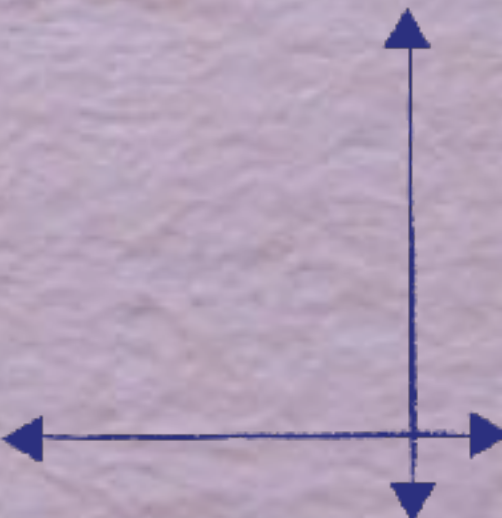
- Disability is a matter of differing physical characteristics
- Four main categories: visual, auditory, physical, and cognitive
- Web Accessibility is ensuring that our websites work for anyone — regardless of what disabilities they might have

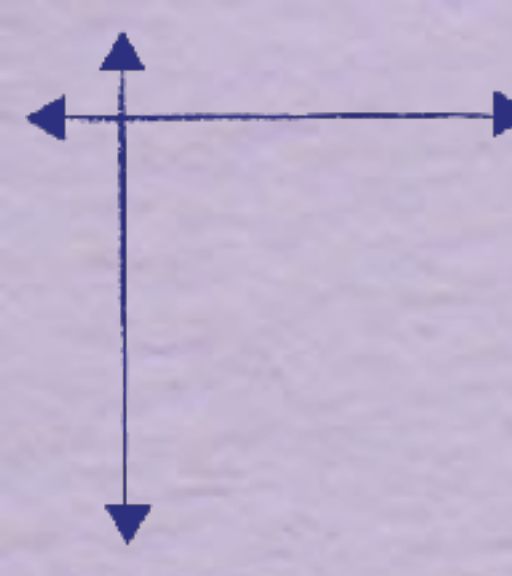




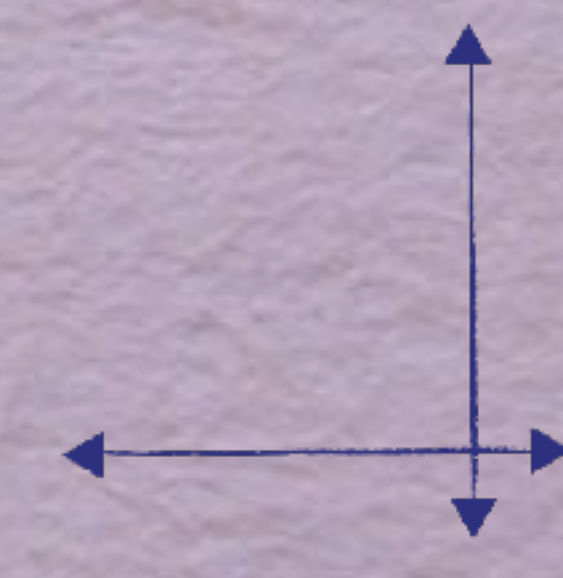
Keys to Accessible Design

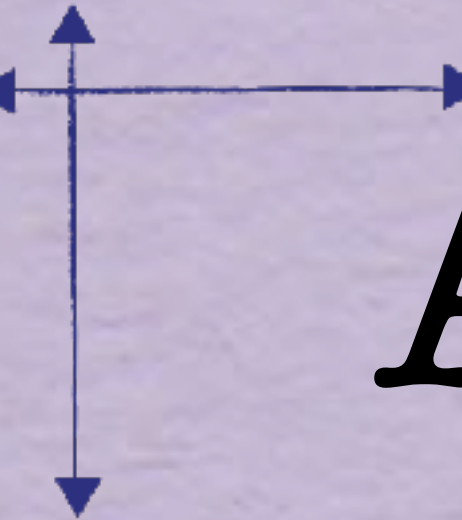
- Provide more than one way to get information or do a task
- Assume people could be using anything to access your website
- Design and test for the extremes and everyone will benefit





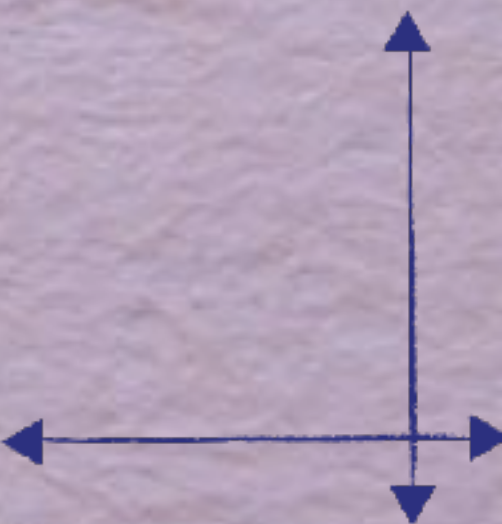
Top 3 priorities

- Keyboard - solid HTML, tab order, custom controls
 - Images - background images, foreground images, alt tags
 - Forms - visual design, labels, errors, and keyboards
- 



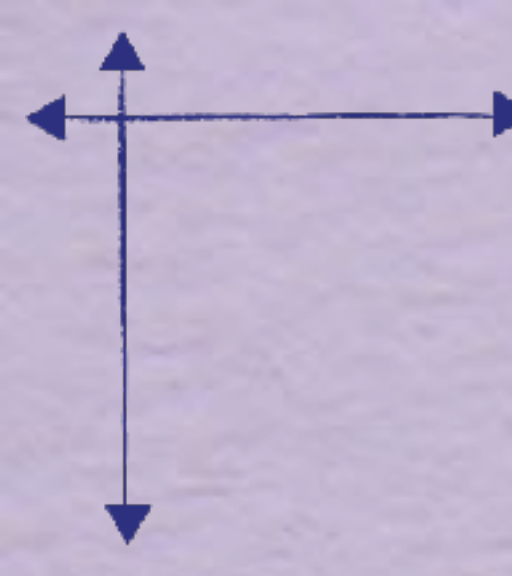
Accessibility is infrastructure

- Accessibility is infrastructure, just like security, performance, and usability
- Customers expect infrastructure to be present. When it's not, they move on
- If we have to reframe accessibility as an input/output problem and an accessible website as the outcome of strong design and development skills, we'll do it



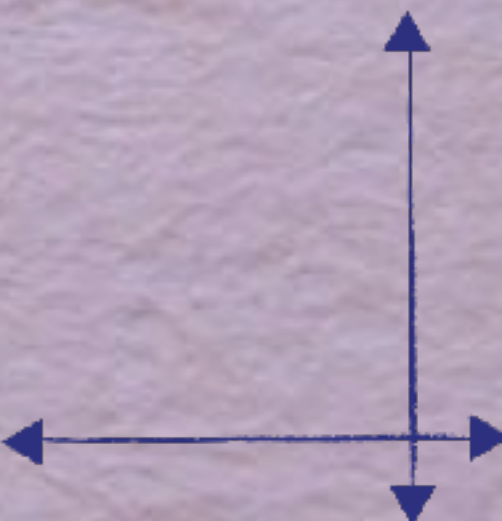
An alphabet of accessibility





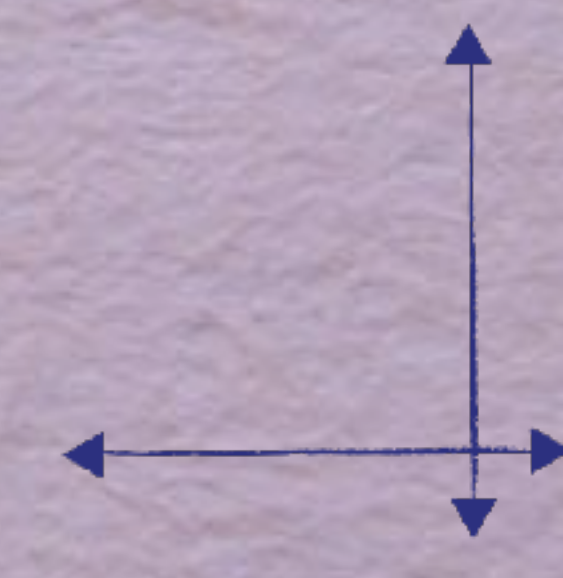
Special thanks to

- Robin Christopherson, AbilityNet. <https://www.abilitynet.org.uk>
- Austin Seraphin, <http://austinseraphin.com>
- Derek Featherstone, Simply Accessible. <http://simplyaccessible.com>
- Dylan Wilbanks, <http://hetre.design>



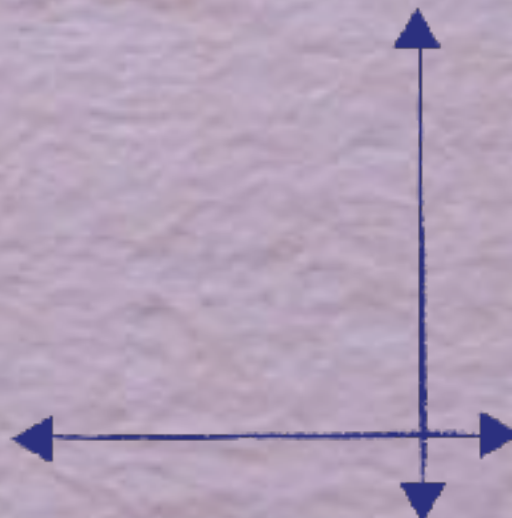


Works Cited / Works Consulted

- “10 Signs You May Be Sleep Deprived”, How Stuff Works. Tom Scheve. <https://health.howstuffworks.com/mental-health/sleep/disorders/10-signs-you-may-be-sleep-deprived.htm>
 - “A Primer to Vestibular Disorders”, The A11Y Project. 15 May 2013. <https://a11yproject.com/posts/understanding-vestibular-disorders/>
 - “Ableism”, Wikipedia. <https://en.wikipedia.org/wiki/Ableism>
 - “Accessibility”, W3C. <https://www.w3.org/standards/webdesign/accessibility>
 - “Amblyopia”, Wikipedia. <https://en.m.wikipedia.org/wiki/Amblyopia>
 - “An Alphabet of Accessibility Issues”, The Pastry Box, anne m. gibson. 31 July 2014. <https://the-pastry-box-project.net/anne-gibson/2014-july-31>
 - “Astigmatism”, Wikipedia. <https://en.m.wikipedia.org/wiki/Astigmatism>
 - Boomi.com
 - “Broken Finger”, NHS Choices. Last reviewed 3 July 2016. <https://www.nhs.uk/conditions/broken-finger/>
 - “Cancer Stat Facts: Cancer of Any Site”, National Cancer Institute. <https://seer.cancer.gov/statfacts/html/all.htm>
- 

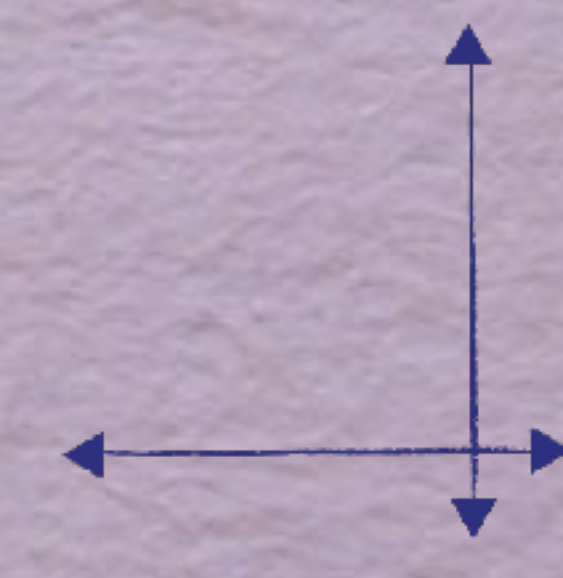


Works Cited / Works Consulted

- “Cancer Treatment & Survivorship Facts & Figures 2016-2017”, American Cancer Society. <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/cancer-treatment-and-survivorship-facts-and-figures/cancer-treatment-and-survivorship-facts-and-figures-2016-2017.pdf>
 - “Chemo Brain”, American Cancer Society. <https://www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/changes-in-mood-or-thinking/chemo-brain.html>
 - CNN.com
 - “Color Blindness”, Wikipedia. https://en.m.wikipedia.org/wiki/Color_blindness
 - “Cystic Fibrosis”. Wikipedia. https://en.m.wikipedia.org/wiki/Cystic_fibrosis
 - “De Quervain syndrome”, Wikipedia. (Synonym: Gamer’s Thumb.) https://en.m.wikipedia.org/wiki/De_Quervain_syndrome
 - “Directional Dyslexia”, The Reading Well. <http://www.dyslexia-reading-well.com/directional-dyslexia.html>
 - “Disabled Enough”, Uncanny Magazine kickstarter. Elsa Sjunneson-Henry, 22 August 2017. <https://www.kickstarter.com/projects/lynnemthomas/disabled-people-destroy-science-fiction-uncanny-ma/posts/1969160>
 - “Disability in the media”, Wikipedia. https://en.wikipedia.org/wiki/Disability_in_the_media
 - “Dyslexia”, Wikipedia. <https://en.m.wikipedia.org/wiki/Dyslexia>
- 

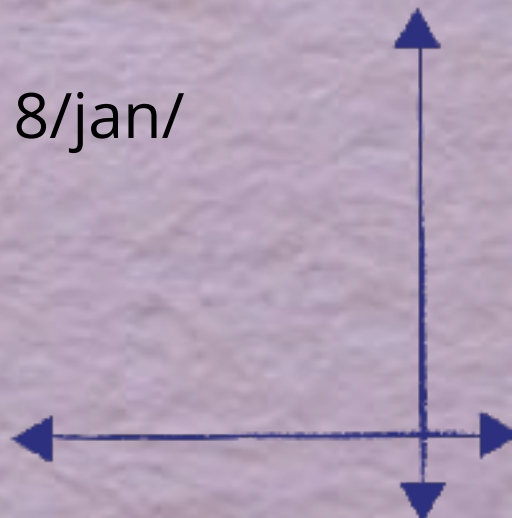


Works Cited / Works Consulted

- “Effects of MS”, healthline. <https://www.healthline.com/health/multiple-sclerosis/effects-on-the-body>
 - “Eye Problems in Premature Babies,” WebMD. <https://www.webmd.com/eye-health/premature-babies-eye-problems#1>
 - “How does Age-Related Macular Degeneration (AMD) Affect Vision?” VisionAware. Lylas G. Mogk, MD. <http://www.visionaware.org/info/your-eye-condition/age-related-macular-degeneration-amd/how-does-amd-affect-vision/125>
 - “I Belong Where the People Are: Disability and The Shape of Water”, Tor. Elsa Sjunneson-Henry, 16 January 2018. <https://www.tor.com/2018/01/16/i-belong-where-the-people-are-disability-and-the-shape-of-water/>
 - “If you can’t tell your left from your right, you’re not stupid. Chron. Belle Elving. 27 July 2008.
 - “Introduction to Web Accessibility”, Web Accessibility Initiative. Last updated 7 February 2018. <https://www.w3.org/WAI/intro/accessibility.php>
 - “Introduction to Web Accessibility”, WebAIM. <https://webaim.org/intro/>
 - “Invisible Disabilities and the Basic Income”, Basic Income Earth Network. Karen Christine Patrick, 6 September, 2015. <http://basicincome.org/news/2015/09/invisible-disabilities-and-the-b-i-g/>
 - “Is being Deaf a disability?”, American Sign Language University. <http://www.lifeprint.com/asl101/topics/disability-deafness.htm>
 - Kirabug.com
- 



Works Cited / Works Consulted

- “Lightships Did Cause Hearing Loss!”, US Coast Guard Lightship Sailors Association International, Inc. Rick Bennett. <http://www.uscglightsailors.org/library/hearing/>
 - “Linda”, Muppet Wiki. <http://muppet.wikia.com/wiki/Linda>
 - Livewell.com
 - “Macular Degeneration”, Wikipedia. https://en.m.wikipedia.org/wiki/Macular_degeneration
 - “Media Room”, The Vision Council. <https://www.thevisioncouncil.org/media-room>
 - “Multiple Sclerosis”, Cleveland Clinic. Carrie M. Hersh, DO and Robert J. Fox, MD. June 2014. http://www.clevelandclinicmeded.com/medicalpubs/diseasemanagement/neurology/multiple_sclerosis/
 - “My First Week with the iPhone”, Austin Seraphin’s blog. 12 June 2010. <http://blog.austinseraphin.com/2010/06/12/my-first-week-with-the-iphone/>
 - “Mythbusters (2010 season): Arrow Machine Gun”, Wikipedia. [https://en.wikipedia.org/wiki/MythBusters_\(2010_season\)#Topsy_vs._Tired](https://en.wikipedia.org/wiki/MythBusters_(2010_season)#Topsy_vs._Tired)
 - “Nearly 1 in 5 People Have a Disability in the US, Census Bureau Reports”, United States Census Bureau. 25 July 2012. <https://www.census.gov/newsroom/releases/archives/miscellaneous/cb12-134.html>
 - “People accept that I’m gay, but not that I’m disabled,” The Guardian. As told to Joan McFadden. <https://www.theguardian.com/lifeandstyle/2018/jan/13/people-accept-that-im-gay-but-not-that-im-disabled>
- 



Works Cited / Works Consulted

- “People with Disabilities are the Largest Minority Group in the US”, Invisible Disabilities Association. 27 August, 2011.
 - Philly.com
 - “Photosensitive Epilepsy”, WebMD. <https://www.webmd.com/epilepsy/guide/photosensitive-epilepsy-symptoms-causes-treatment#1>
 - “Post-concussion syndrome”, Wikipedia. https://en.m.wikipedia.org/wiki/Post-concussion_syndrome
 - “Radioactive Iodine”, Thyroid Cancer Survivor’s Association, Inc. <http://www.thyca.org/pap-fol/rai/>
 - “Raynaud’s disease”, Mayo Clinic. <https://www.mayoclinic.org/diseases-conditions/raynauds-disease/symptoms-causes/syc-20363571>
 - “Reframing Accessibility for the Web”, A List Apart. anne m. gibson, 3 February 2015. <https://alistapart.com/article/reframing-accessibility-for-the-web>
 - “Respect Your Audience with Readable Content”, meet content. Gregory Cohen, 16 September 2013. <http://meetcontent.com/blog/respect-your-audience-with-readable-content/>
 - “Too Young to Have a Stroke? Think Again,” New York Times. Jane E Brody. <https://well.blogs.nytimes.com/2012/09/03/too-young-to-have-a-stroke-think-again/>
 - “Transitioning from College to Work”, Learning Disabilities Association of America. <https://ldaamerica.org/transitioning-from-college-to-work/>
 - “Web Accessibility”, Wikipedia. https://en.m.wikipedia.org/wiki/Web_accessibility
 - “Where to find free stock photos with people of color”, Medium. Camille Eddy, 26 August 2017. <https://medium.com/@NikkyMill/where-to-find-free-stock-photos-of-people-of-color-f262b851a1b5>
 - “Why mobile design means accessible design”, Creative Bloq. Robin Christopherson, 18 December 2014. <https://www.creativebloq.com/web-design/why-mobile-design-means-accessible-design-111413509>
- 