Accessibility
DO'S & DON'TS
Posters

Blindness

ACCESSIBILITY DO'S & DON'TS

Meet
MALIK

Malik (he/him) lost his sight as a child, and relies on both a screen reader and haptic feedback to browse content on the web or in native mobile applications. A point-and-click device like the mouse is of no use to him, and neither is a computer screen.

PERSONALITY
Careful, organized, pragmatic

DEMOGRAPHICS
28 years old, open relationship, teacher

NEEDS (ON THE WEB)
Meaningful heading structures, semantic values in source code, programmatic form associations.

FRUSTRATIONS (ON THE WEB)
Websites and apps that are incompatible with his screen reader and content that depends on sight.

deque

Accessibility doesn't have to be complicated. Here are some of the things you can do (or should avoid) to help someone like Malik successfully consume digital information.

Always...

01 Describe linked images and images that convey information with brief, meaningful text alternatives.

02 Make sure purely decorative and redundant images are kept out of the screen reader experience.

03 Ensure navigation throughout pages or screens can be fully achieved using just the keyboard.

04 Support content in the pages with properly coded section headings and meaningful link text.

05 Provide experiences that are optimized for screen readers as well as other assistive technologies.

Never...

01 Embed meaningful information through images without offering equivalent text alternatives.

02 Provide images with alt text that is not adding any relevant meaning or information to the page.

03 Design or implement features on pages that are only meant to work with the use of a mouse.

04 Use section headings that are purely visual, or vague link text that leaves the audience guessing.

05 Create a broken experience for people navigating with screen reader or assistive technologies.

> **I need full support for assistive technologies, so the information can be reliably conveyed back to me.**

deque

Mobility
ACCESSIBILITY DO'S & DON'TS

Meet
CINDY

Cindy (she/her) suffered a car accident that left her partially paralyzed from the neck down a few years ago. She can no longer use a mouse, has partial use of the keyboard and relies mostly on voice dictation software to control her computer.

PERSONALITY
Charismatic, driven, insightful

DEMOGRAPHICS
54 years old, married,
2 sons, military officer

NEEDS (ON THE WEB)
Features that are fully operable through the use of keyboard or voice commands only.

FRUSTRATIONS (ON THE WEB)
Features and interactions that are only designed to work with the use of a mouse.

deque

Accessibility doesn't have to be complicated. Here are some of the things you can do (or should avoid) to help someone like Cindy successfully consume digital information.

Always...

01 Ensure that every feature or functionality available can be fully operated using just the keyboard.

02 Allow the audience to use their keyboard to skip over large blocks of content like navigation menus.

03 Offer simpler alternatives when complex finger gestures are required to control the interface.

04 Merge adjacent calls to action that point to the same destination into single, larger target areas.

05 Provide experiences that are fully optimized for voice dictation and other assistive technologies.

Never...

01 Design or implement features on pages that are only meant to work with the use of a mouse.

02 Force the audience to tab through an entire navigation menu before they can reach the main content.

03 Impose complex finger gestures that make it impossible for some people to use the interface.

04 Multiply the number of tab stops by creating adjacent links that all point to the same destination.

05 Create a broken or frustrating user experience for those navigating with voice dictation software.

> " I need full keyboard and voice support, as features or interactions that only work with the mouse are totally useless to me.

deque

Deafness

Meet
BRIAN

Brian (he/him) was born deaf, and is a native ASL (American Sign Language) speaker. Most multimedia content creates significant barriers for him, but so does written content, as his fluency in English was always limited by his inability to hear the language.

PERSONALITY
Easy going, caring, family-oriented

DEMOGRAPHICS
48 years old, married, 3 daughters, lawyer

NEEDS (ON THE WEB)
Captions and transcripts for audio and video, sign language interpretation, CART, plain language.

FRUSTRATIONS (ON THE WEB)
Walls of text with little whitespace, multimedia content that is not captioned or transcribed.

deque

Accessibility doesn't have to be complicated. Here are some of the things you can do (or should avoid) to help someone like Brian successfully consume digital information.

Always...

01 Ensure reliable, synchronized captions are always provided for all pre-recorded video files or content.

02 Support all pre-recorded audio and video content with complete and accurate text transcriptions.

03 Make sure all the important details conveyed through audio cues are also available in text, or otherwise.

04 Leverage plain language principles to make the content easier to read, process, and understand.

05 Break down information in short, digestible blocks of text that make it easier to read or scan the page.

Never...

01 Upload pre-recorded video content without first making sure they are supported with reliable captions.

02 Offer pre-recorded audio or video content without also supporting it with reliable text transcripts.

03 Rely on audio cues as the only way through which meaningful or important information is conveyed.

04 Use complex, convoluted, jargony, or overly technical language to communicate important ideas.

05 Organize the content of the page into large, intimidating, and unappealing blocks of text.

" I need support with multimedia files online, but I also enjoy pages and screens that are both easy to scan and read.

deque

Dyslexia
ACCESSIBILITY DO'S & DON'TS

Meet
LENNY

Lenny (he/him) was diagnosed early on as dyslexic, and struggles with most forms of written content. On top of content complexity and text density, uneven spacing between words and insufficient spacing between paragraphs can also introduce challenges.

PERSONALITY
Altruistic, energetic, goofy

NEEDS (ON THE WEB)
Line readers, text-to-speech, multi-sensory learning opportunities and dyslexic-friendly fonts.

DEMOGRAPHICS
21 years old, single, no kids, psychology major

FRUSTRATIONS (ON THE WEB)
Big walls of words with little whitespace, fully justified text, and small, hard to read fonts.

deque

Accessibility doesn't have to be complicated. Here are some of the things you can do (or should avoid) to help someone like Lenny successfully consume digital information.

Always...

01 Leverage plain language principles and techniques to make the content easier to understand.

02 Break down information in short, digestible paragraphs of text separated by section headings.

03 Left-align paragraphs of text to prevent the creation of uneven spaces between different words.

04 Support content with icons, visuals and other graphs to minimize overall text density.

05 Stick to lower, or sentence case text presentation to make it easier for people to process information.

Never...

01 Use complex, convoluted, jargony, or overly technical language to communicate important ideas.

02 Organize the content into big walls of text that are harder to scan and more difficult to process.

03 Fully justify text in paragraphs and blocks of text, as it creates uneven spacing between words.

04 Stick to long-form, text-heavy formats as the only way to convey information to the audience.

05 Present long strings of text in uppercase letters, as it makes reading and processing difficult.

> **I need support with differentiated learning opportunities, and do better when pages are supported by visuals and have legible fonts.**

deque

Colorblindness

Meet
MATT

Matt (he/him) is colorblind, and struggles when it comes to perceiving information conveyed through color alone or poor contrasts. On top of color perception and hues challenges, additional difficulties also occur when the information is not supported through other visual cues.

PERSONALITY
Cheerful, focused, rational

DEMOGRAPHICS
26 years old, single,
no kids, musician

NEEDS (ON THE WEB)
Sufficient color contrasts, information based on more than just colors and other visual cues.

FRUSTRATIONS (ON THE WEB)
Complex graphs and charts driven by colors, contrasts that are too weak or too subtle.

deque

Accessibility doesn't have to be complicated. Here are some of the things you can do (or should avoid) to help someone like Matt successfully consume digital information.

Always...

01 Rely on sufficient color contrasts, so foreground text clearly stands out against its background.

02 Ensure that iconography and other visuals clearly stand out against their respective background.

03 Make sure color is never used as the only way to convey important information on a page.

04 Run grayscale filters on your content to identify potential issues when colors cannot be perceived.

05 Support colors in graphs with patterns and other cues to help the audience differentiate the data.

Never...

01 Use poor, lightly contrasted colors to create stylistic effects against their respective backgrounds.

02 Rely on subtle color patterns or differences to visually represent iconography on the page.

03 Convey important information to the audience through the use of colors and hues alone.

04 Trust your gut when determining if the contrasts you created are distinguishable enough.

05 Expect people to differentiate between data points in graphs based only on the use of colors.

" **I need support with strong color combinations, so I can perceive contrasts and not miss any critical information.**

deque

Autism
ACCESSIBILITY DO'S & DON'TS

Meet
NICKY

Nicky (they/them) fits somewhere on the autism spectrum and would define themselves as a person who is oblivious to certain cues and thinks in images and colors, rather than words. As a result, Nicky tends the perceive information differently than most.

PERSONALITY
Discreet, prudent, thorough

NEEDS (ON THE WEB)
Consistent layouts, larger font sizes, plain language, minimal clutter and distractions.

DEMOGRAPHICS
24 years old, in a relationship, no kids, web designer

FRUSTRATIONS (ON THE WEB)
Inconsistent navigation patterns, lack of white space, and fixed layouts.

Accessibility doesn't have to be complicated. Here are some of the things you can do (or should avoid) to help someone like Nicky successfully consume digital information.

Always...

01 Leverage plain language principles to simplify the content and make it easier to understand.

02 Avoid metaphors and potentially ambiguous expressions that can be confusing for some people.

03 Rely on simple, consistent page layouts that provide people with a reassuring sense of consistency.

04 Offer clear and straightforward calls to action for the different functionalities of the page.

05 Provide clear instructions so people understand what to expect as they interact with the content.

Never...

01 Use complex, convoluted, jargony, or overly technical language to communicate important ideas.

02 Make liberal use of idioms, figures of speech, metaphors, and other non-literal expressions.

03 Use complex page layouts with frequent design changes that constantly keep people guessing.

04 Leverage cryptic, ambiguous labels for different calls to action or controls found in the page.

05 Force the audience to guess the meaning or purpose of various features found in the page.

> I need flexibility in the way I am allowed to use the interface, as I like to do things in very specific ways.

deque

Low vision

ACCESSIBILITY DO'S & DON'TS

Meet
RAKESH

Rakesh (he/him) experienced significant vision loss as he got older, which has affected his ability to read. He now largely depends on bigger screens, screen magnification software and text resizing to comfortably consume information.

PERSONALITY
Persistent, playful, clear-headed

NEEDS (ON THE WEB)
Truly responsive web interfaces and applications, CSS based layouts, adaptive fonts, contrasts.

DEMOGRAPHICS
61 years old, single, no kids, technical writer

FRUSTRATIONS (ON THE WEB)
PDF documents that won't reflow properly, small-sized text and mobile sites without pinch to zoom.

deque

Accessibility doesn't have to be complicated. Here are some of the things you can do (or should avoid) to help someone like Rakesh successfully consume digital information.

Always...

01 Ensure information is presented using strong color contrasts and easily readable font sizes.

02 Support information on the pages with a combination of text, colors, and other visual cues.

03 Make sure messages, instructions, and notifications are presented in close proximity to their context.

04 Design the website or application so that it reflows properly when various breakpoints are triggered.

05 Favor HTML and CSS to publish information, so the content remains as adaptive as possible.

Never...

01 Design your content using subtle color contrasts or fonts that are too small to read comfortably.

02 Rely on the use of color as the only way to convey meaningful or important information on the page.

03 Separate key instructions, notifications, or messages from their related context on the screen.

04 Let any content overlap, disappear or get truncated when various breakpoints are triggered.

05 Bury information in downloadable formats like PDF documents that are harder for many to consume.

> **I need support with flexible layouts and legible fonts, so I can resize the text to a size that works well for me.**

deque

Anxiety
ACCESSIBILITY DO'S & DON'TS

Meet
YING

Ying (she/her) has a really hard time dealing with stressful situations and easily finds herself feeling defeated when things don't go the way she expected them to. This regularly affects the quality of her experiences online.

PERSONALITY
Modest, curious, methodical

DEMOGRAPHICS
43 years old, divorced, 2 sons, singer/songwriter

NEEDS (ON THE WEB)
Not feeling rushed into tasks or interactions, and being provided with clear instructions to succeed.

FRUSTRATIONS (ON THE WEB)
Dark, anti-patterns that create false senses of urgency and feed into her anxiety are difficult.

deque

Accessibility doesn't have to be complicated. Here are some of the things you can do (or should avoid) to help someone like Ying successfully consume digital information.

Always...

01 Make sure enough time is offered to complete tasks, or options are provided to extent time limits.

02 Provide clear and direct form instructions, so no one is left wondering what will happen next.

03 Minimize risks of confusion or stress by leveraging plain, simple language when possible.

04 Provide mechanisms to validate the accuracy of the information before forms are submitted.

05 Take advantage of predictable interaction patterns that will minimize unnecessary stress.

Never...

01 Force the audience to complete tasks in a timeframe that is unrealistic or impractical for them.

02 Leave the audience wondering about next steps, once forms have been filled out and submitted.

03 Use complex, triggering language that might leave the audience feeling confused and stressed out.

04 Let the audience worry about whether the information that they submitted was accurate.

05 Leverage interaction patterns or techniques that make people feel inadequate, or stressed out.

" **I need support with clearly defined expectations on sites and apps, as I can get easily anxious or give up.**

deque

Meet
JASON

Jason (he/him) contracted a viral infection that permanently damaged his nerve system and overall sense of balance. Since then, he grew very sensitive to animations and scrolling effects, and can get dizzy or develop a migraine when there is too much movement.

PERSONALITY
Discreet, intelligent, practical

NEEDS (ON THE WEB)
Clear notifications, warnings, or efficient ways to opt-out of unwanted, or unnecessary animations.

DEMOGRAPHICS
28 years old, single, no kids, business analyst

FRUSTRATIONS (ON THE WEB)
Parallax effects and other invasive scroll-triggered animations that can induce dizziness or nausea.

deque

Accessibility doesn't have to be complicated. Here are some of the things you can do (or should avoid) to help someone like Jason successfully consume digital information.

Always...

01 Avoid the use of flashing, blinking, or other strobing effects that can be triggering for some people.

02 Minimize scrolling effects to better protect those more susceptible to motion sickness triggers.

03 Provide warnings about upcoming screen movements or animations, and offer clear ways to opt-out.

04 Minimize risks of vertigo by designing content with obvious horizontal and vertical lines.

05 Be mindful of images that can cause flickering effects when the page is scrolled quickly.

Never...

01 Rely on flashing, blinking, or other strobing effects as a way to draw people's attention on the screen.

02 Use too many animations and movement that can trigger people who are prone to motion sickness.

03 Force movement or animations on people without prior warnings, or clear ways for them to opt out.

04 Design user interface components and screens that make use of potentially triggering slanted lines.

05 Integrate images in your designs that can cause flickering effects when scrolling occurs on a page.

> " I need ways to shield myself from animations and scrolling or parallax effects that can make me feel sick.

deque

Meet
JOYCE

Joyce (she/her) was diagnosed with severe ADHD as a child and finds herself easily distracted on the Web, especially when she runs into disruptive websites that make heavy use of pop up or modal windows, as well as other distracting features that affect her concentration.

PERSONALITY
Articulate, active, imaginative

NEEDS (ON THE WEB)
Clearly streamlined sets of options on the screen, to help avoid going down unexpected rabbit trails.

DEMOGRAPHICS
23 years old, single, 1 daughter, influencer

FRUSTRATIONS (ON THE WEB)
Distracting, or busy interfaces that make focusing on content more complicated than it needs to be.

deque

Accessibility doesn't have to be complicated. Here are some of the things you can do (or should avoid) to help someone like Joyce successfully consume digital information.

Always...

01 Avoid embedding videos that are set to autoplay as the page loads, even if they are muted by default.

02 Minimize distractions that interrupt the flow, such as pop ups, modals and other animated features.

03 Provide meaningful headings and clear link text that make scanning content that much easier.

04 Create flows that don't require people to memorize information in order to complete a task.

05 Design predictable layouts and patterns that are consistent from one screen to the next.

Never...

01 Set video content to autoplay by default on page load, as it will be very distracting to some people.

02 Litter the page with unnecessary and distracting content that will disrupt people's concentration.

03 Affect content scannability by making poor or ambiguous use of section headings or link text.

04 Force people to rely on short-term memory, or remember information from one screen to the next.

05 Design interfaces that are inconsistent or unpredictable as people go from screen to screen.

> **I need support with clear content structures, so that I can successfully stay focused on the job to be done.**

deque

Ageing
ACCESSIBILITY DO'S & DON'TS

Meet
KIM

Kim (she/her) has developed early signs of dementia, osteoarthritis, and Alzheimer's, on top of her declining senses of hearing and sight, and finds herself to be more easily confused these days when experiencing online content.

PERSONALITY
Passionate, wise, cheerful

DEMOGRAPHICS
67 years old, recently widowed, 2 sons, retired

NEEDS (ON THE WEB)
Simple interfaces, clear expectations, larger, more legible fonts, strong contrasts, and white space.

FRUSTRATIONS (ON THE WEB)
Long-winded, confusing, or overly complex interfaces that lead to convoluted interactions.

deque

Accessibility doesn't have to be complicated. Here are some of the things you can do (or should avoid) to help someone like Kim successfully consume digital information.

Always...

01 Ensure navigation throughout the pages or screens can be fully achieved using only the keyboard.

02 Design the website or application so that it reflows properly when various breakpoints are triggered.

03 Support information with the use of strong contrasts, easily readable fonts, and other visual cues.

04 Provide clear, unambiguous form instructions, so no one is left wondering what will happen next.

05 Leverage plain language principles and techniques to make the content easier to understand.

Never...

01 Design or implement features that require people to make painful wrist movements with their mouse.

02 Let any content overlap, disappear, or get truncated when various breakpoints are triggered.

03 Use color alone as a way to convey information, or rely on subtle contrasts, and hard-to-read fonts.

04 Leave the audience guessing about next steps, once the form they filled out has been submitted.

05 Use complex, triggering language that might leave the audience feeling confused and stressed out.

" I need simple, easy to use pages because when it gets too complicated, I just don't know what to do.

deque

Photo-epileptic sensitivity

ACCESSIBILITY DO'S & DON'TS

Meet
LYNN

Lynn (she/her) is subject to epileptic seizures and often finds herself at risk of a seizure when she unexpectedly runs into flashing or blinking content online. This makes her very nervous when browsing the web, especially on social media.

PERSONALITY
Responsive, alert, perfectionist

DEMOGRAPHICS
31 years old, married,
2 daughters, pediatrician

NEEDS (ON THE WEB)
Obvious warnings before being presented with flashing, blinking or strobing materials.

FRUSTRATIONS (ON THE WEB)
Ends up needing anywhere between 6 to 10 hours of bed rest when content triggers a seizure.

deque

Accessibility doesn't have to be complicated. Here are some of the things you can do (or should avoid) to help someone like Lynn successfully consume digital information.

Always...

01 Avoid the use of flashing, blinking, or other strobing effects that can be triggering for some people.

02 Provide warnings about upcoming flashing or flickering effects, and offer clear ways to opt-out.

03 Be mindful of images that can cause flickering effects when the page is scrolled quickly.

04 Stick to soft, non-triggering colors and contrasts to minimize the risk of seizures or stroboscopic effects.

05 Pay attention to animations and movements in video that can cause flashing or flickering effects.

Never...

01 Rely on flashing, blinking, or other strobing effects as a way to draw people's attention on the screen.

02 Force flashing or flickering on people without prior warnings, or clear ways for them to opt out.

03 Integrate images in your designs that can cause flickering effects when scrolling occurs on a page.

04 Use bold and high-contrasting colors that can be dangerous for people prone to seizures.
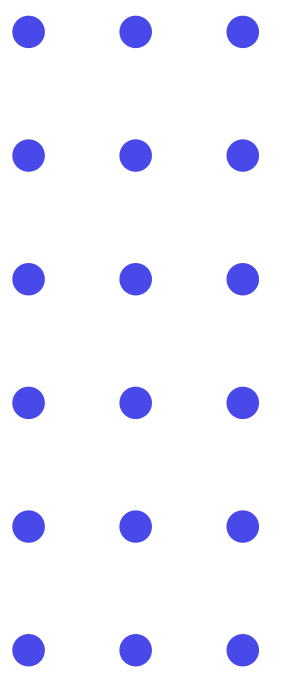
05 Avoid any flashing or flickering elements or scenes in video content that can be triggering.

> **I need to feel safe online, trusting that I won't run into content that may cause me harm when I least expect it.**

deque

DEQUE'S DIGITAL ACCESSIBILITY BOOTCAMP

WEBINAR SERIES

JUNE 5-8

1:00 PM - 4:00 PM EDT

Take your GAAD learning to the next level with our 16-hour Accessibility Bootcamp! One-time only - Special pricing at $500!

REGISTER NOW

https://events.zoom.us/ev/ArR3fazEs8RkSU0UifZcEvJwjTx2E
csgcDpRADSgmwvsq2fa-Byr~AggLXsr32QYFjq8BlYLZ5I06Dg