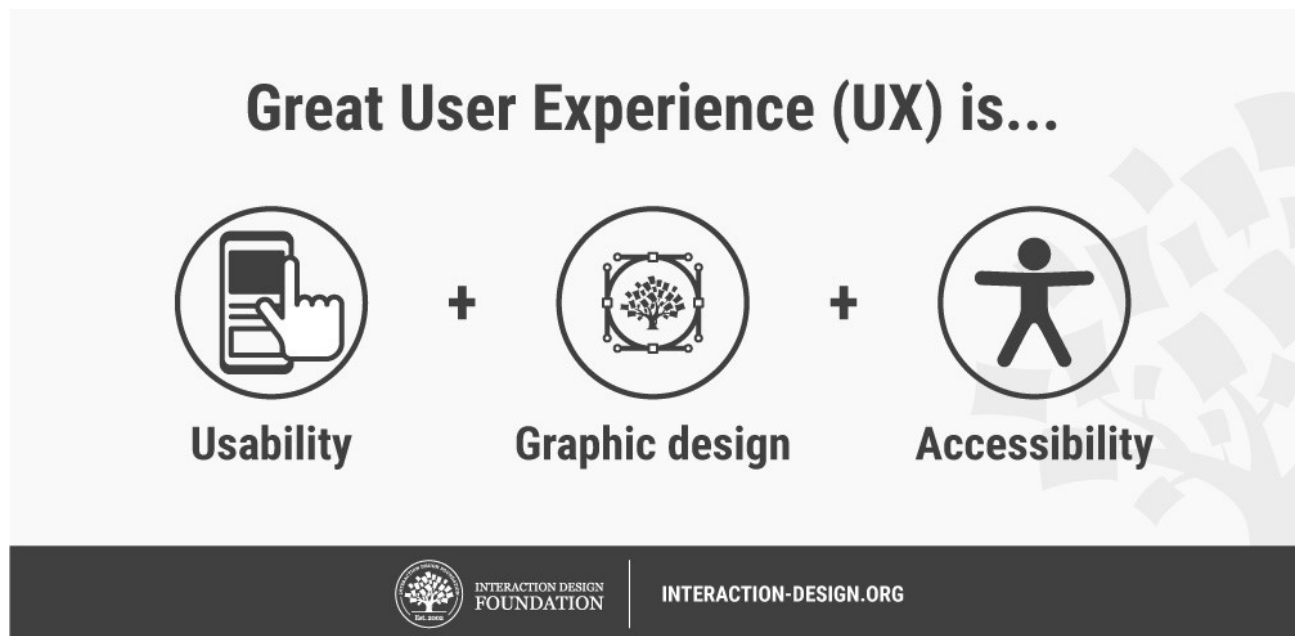# Accessibility

What is Accessibility?

Accessibility is the concept of whether a product or service can be used by everyone—however they encounter it. Accessibility laws exist to aid people with disabilities, but designers should try to accommodate all potential users in many contexts of use anyway. To do so has firm benefits—notably better designs for all.

Accessibility vs Usability

Since they have similarities, accessibility is sometimes confused with usability. Both overlap and are vital parts of user experience (UX) design, but there are also key distinctions between them. Usability is concerned with whether designs are effective, efficient and satisfying to use. Theoretically, this means that usability includes accessibility, since a product that is inaccessible is also unusable to someone with a disability; practically, however, usability tends not to specifically focus on the user experience of people with disabilities. **Accessibility, on the other hand, is concerned with whether all users are able to access an equivalent user experience, however they encounter a product or service** (e.g., using assistive devices). Unlike usability, accessibility focuses on people with disabilities.

Accessible Designs Help Everyone

Accessibility is not only the **right thing to do**, but often also **brings benefits to *all* users**. That's because accessibility features that help people with disabilities often help other people, too. For instance, video captions that help people with hearing difficulties also help a person who is watching the video on mute (e.g., in a social media feed). Legible, high-contrast text that helps people with vision difficulties also helps people with perfect eyesight who are using the app

outdoors in bright sunlight. **Many users—whatever their abilities—will face challenges due to demanding contexts**. When you design for all ability levels, you can create products and services anyone can use and enjoy—or at least find helpful or calming.

Although accessibility is a critical factor that impacts design, many brands overlook it. Based on a 2011 World Health Organization report concerning disability, however, you'll exclude about 15% of Earth's population if you don't make your design accessible. Furthermore, many jurisdictions—including the E.U.—have penalties for failure to create accessible designs. **However, designing for accessibility makes sense on more than a legal level; it brings benefits**, including these:

- **Improved SEO from semantic HTML**
- **Opportunities to reach more users on more devices, in more settings/environments**
- **Enhanced public image for your brand**

Types of Accessibility Issues

You should **consider the *number* and *types* of potential accessibility issues users will have**. These are common barriers:

- **Visual** (e.g., color blindness)
- **Motor/mobility** (e.g., wheelchair-user concerns)
- **Auditory** (hearing difficulties)
- **Seizures** (especially photosensitive epilepsy)
- **Learning/cognitive** (e.g., dyslexia)

Ability barriers can also arise for any user:

- **Incidental** (e.g., sleep-deprivation)
- **Environmental** (e.g., using a mobile device underground)

The possibilities are virtually limitless regarding who might be trying to access your product/service.

"When UX doesn't consider ALL users, shouldn't it be known as "SOME User Experience" or… SUX?"

— Billy Gregory, Senior Accessibility Engineer

Practical Guidelines for Accessibility

The World Wide Web Consortium (W3C) stipulates standards for accessible design in its latest Web Content Accessibility Guidelines (WCAG). You can follow these essential points to accommodate users with diverse abilities:

- Use a content management system (CMS) supporting accessibility standards (e.g., WordPress). Whenever you amend any pre-used template, ensure themes were designed for accessibility.
- Include personas with varying abilities.
- Use header tags in text (optimally, use CSS for consistency throughout). Move consecutively from one heading level to the next (without skipping).

- Use alt text on content-enhancing images.
- Have a link strategy (i.e., describe the link before inserting it – e.g., "Read more about the Interaction Design Foundation, at their website." Offer visual cues (e.g., PDF icons), underline links and highlight menu links on mouseover.
- Improve visibility with careful color selection and high contrast.
- Reference shapes to help guide users (e.g., "Click the square button").
- Consider how screen readers handle forms. Label fields and give descriptions to screen readers via tags. Make the tab order visually ordered. Assign an ARIA required or not required role to each field (know how to use ARIA). Avoid the asterisk convention.
- Use proper HTML elements in lists. Don't put them on the same line as text.
- Present dynamic content carefully, including slideshows. Consult ARIA standards for overlays, etc.
- Validate markup using the W3 standards site to ensure all browsers can read your code.
- Offer transcriptions for audio resources, captions/subtitles for video.
- Make content easily understandable – simpler language reaches more users, as do effective information hierarchy, progressive disclosure and prompting.
- Try using your design without a mouse. It can be hard to scroll.
- Use tools such as WAVE and Color Oracle to test your design's accessibility.

Naturally, you should test for accessibility on users themselves. Note that while it's impossible to cover all use cases, your efforts to reach all users can yield many rewards—sometimes in unexpected areas.

Learn More about Accessibility

See some revealing insights on accessibility, including examples: https://uxplanet.org/a-primer-to-web-accessibility-for-designers-2c548448c612

Here's a helpful resource featuring examples of accessible design: https://medium.com/tealmedia/designing-for-accessibility-the-ultimate-in-ux-e366165d0db7

Learn how to design with accessibility in mind with our course addressing accessibility: https://www.interaction-design.org/courses/accessibility-how-to-design-for-all