

Tech Ease for All

Introduction to Web Accessibility

Web accessibility is the practice of building websites that can be used by people of all abilities and disabilities. The goal of web accessibility is to create a level playing field for people with disabilities on the Web. As Tim Berners-Lee, Director of the W3C and inventor of the Web, states:

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

There are many disabilities that need to be considered when building a new website. These include:

- Visual impairments: some visitors to your website may have low vision or be completely blind. Instead of using a display, they could be using screen reading software to hear the content on your website read to them.
- Hearing impairments: people who have a hearing loss or are deaf may not be able to hear what is said on a video or an audio recording. They will need videos or audio files on your website to include captions that will allow them to read what is being said.

- Motor impairments: people who have motor impairments may not be able to use a mouse to interact with your website. They may be limited to the use of the keyboard for navigation, or they may use specially designed assistive technology that allows them to control the mouse cursor by moving their head or changing their eye gaze.
- Cognitive disabilities: people with cognitive disabilities such as ADHD may benefit from an uncluttered design that minimizes distractions.

Because of the wide range of disabilities that need to be accommodated, web accessibility is said to occur on a continuum and no website is either completely accessible or completely inaccessible. While every website falls somewhere in between on the accessibility continuum, the goal should be to make websites as accessible as possible to accommodate the greatest number of people possible. By practicing **consistency** (in navigation, location of important elements, etc.) you can make it possible for people with disabilities to learn how to use your website, even if it has some accessibility problems.

Web accessibility is related to **Universal Design**. Universal Design is the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. Examples of

universal design we often take for granted include ramps and curb cuts. These two design features not only benefit people on wheelchairs, but also anyone who pushes a stroller or a cart.

In the same way, web accessibility does not just benefit people with disabilities. Other groups who benefit from accessible websites include:

- Older users: as we age our vision and motor skills diminish, and we may benefit from the same accessibility features as people with disabilities.
- People with low literacy/English Language Learners: accessibility features intended for people with cognitive disabilities (such as avoiding the use of jargon) can benefit those who are not familiar with the English language, as well as those with low literacy.
- People on slow computers or Internet connections: accessible websites often require less bandwidth to download. They also often have streamlined code that can help web browsers on slow computers present them to the user more quickly.
- Novice computer users: the use of consistent navigation and other accessibility practices can make it easier to learn how to use a website.

Web accessibility is complemented by web usability and by the use of web standards. **Web usability** is the practice of designing web pages to be more effective, efficient and satisfying for all people who use them. An example of web usability is the use of consistent navigation.

Web standards refers to following best practices for web design. An example of a current best practice for web standards is the use of Cascading Style Sheets, or CSS, to separate the content of a website from its presentation.

The application of web usability principles and web standards do not by themselves result in an accessible website, but they can enhance the effectiveness of the accessibility features of a website.

For additional tutorials, please visit our website at <http://etc.usf.edu/techease/4all/>