Accessibility Testing

# Description

Accessibility testing is part of usability evaluation, which has the goal to verify if the computer system tested is usable also for people with disabilities[[1]](#footnote-1). There are various types of disabilities such as visual, auditory, physical, speech, cognitive and neurological[[2]](#footnote-2). In order to allow individuals which such disabilities, an accessible system should provide information in different formats (sound and visual) and support, besides the usual point-and-click interface, keyboard- and voice-based control[[3]](#footnote-3).

Usually, developing systems tend to discriminate people with disabilities. In order to make all equal to law some accessibility standards have been established such as US federal government’s Section 508 legislation and the W3C’s Web Content Accessibility Guidelines (WCAG)[[4]](#footnote-4). In this tutorial, we will consider the latter.

WCAG is a stable and referenceable technical standard. In order to make content and functionality accessible, WCAG is composed of 12 guidelines organized under 4 basic principles: perceivable, operable, understandable and robust. Here the reference for more information [www.w3.org/TR/UNDERSTANDING-WCAG20/](http://www.w3.org/TR/UNDERSTANDING-WCAG20/) and www.access-for-all.ch/.

# Benefits

* no discrimination, everyone is the same, which shows good ethics (customer will value that)[[5]](#footnote-5)
* wider range and numerous end-users
* improve usability of the system because all users can access[[6]](#footnote-6)

# Best practices

* as people without disabilities, consider (even more) that there is a wide range of disabilities and numerous combinations of them besides their personal characteristics (age, gender, personality, skill etc…)
* less effort to develop a system from the beginning[[7]](#footnote-7)

## Best Practices for Accessible Content[[8]](#footnote-8)

* Do not rely on **color** as a navigational tool or as the sole way to differentiate items
* Images should include **Alt text** in the markup/code; complex images should have more extensive descriptions near the image (perhaps as a caption or descriptive summaries built right into a neighboring paragraph)
* **Functionality** should be accessible through mouse and keyboard and be tagged to worked with voice-control systems
* Provide **transcripts** for podcasts
* If you have a video on your site, you must provide visual access to the audio information through **in-sync captioning**
* Sites should have a **skip navigation** feature

# Examples

1. http://www.w3.org/wiki/Accessibility\_testing [↑](#footnote-ref-1)
2. http://www.w3.org/WAI/intro/accessibility.php [↑](#footnote-ref-2)
3. http://www.w3.org/wiki/Accessibility\_testing [↑](#footnote-ref-3)
4. http://www.w3.org/wiki/Accessibility\_testing [↑](#footnote-ref-4)
5. <http://dev.opera.com/articles/view/26-accessibility-testing/#whyisitimportant> [↑](#footnote-ref-5)
6. http://www.usability.gov/what-and-why/accessibility.html [↑](#footnote-ref-6)
7. <http://dev.opera.com/articles/view/26-accessibility-testing/#whyisitimportant> [↑](#footnote-ref-7)
8. http://www.usability.gov/what-and-why/accessibility.html [↑](#footnote-ref-8)