Accessibility essentials and management

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What is accessibility in terms of software?

The following can cause accessibility issues:

- User (dis)abilities
- Technical and circumstantial influences

Web standards are the key to universal accessibility:
www.w3.org

"The power of the Web is in its universality. Access by everyone regardless of disability is an essential aspect."
(Sir Tim Berners-Lee)

User needs

From a users point of view, content providers will have to focus on the following seven aspects to comprehend accessibility:

1. Text orientation
2. Contrast and colours
3. Resizeability
4. Linearisation
5. Device-independence and dynamic content
6. Understandibility
7. Structured contents

Legal issues

W3C has published recommendations on:

- Web Content Accessibility
- Authoring Tool Accessibility
- User Agent Accessibility

The Web Content Accessibility Guidelines are the basis for legislation, including most European countries.

There are also guidelines for Multimedia:

- IMS Guidelines for Developing Accessible Learning Applications
- WGBH/NCAM Design Guidelines for Electronic Publications, Multimedia and the Web

Techniques and standards

Web accessibility is often a technical issue - at first. To be successful, though, project managers and designers will need to relate to technical ideas such as:

- standards compliance

- web page prototyping

- progressive enhancement

Production phases

In real projects a site will usually be designed and then be coded. An efficient and accessible Web site should be coded and then designed. There are two major reasons to adapt to this process:

- ensuring standards compliance with progressive enhancement
- the content structure must be finalized to apply (any) presentation layer.

Concepts and experiments

- accessibility and semantics

- cascading style sheets - art in web design

- navigation - a site's backbone

- text-only? For whom or for what?

Technical implementation

- layout techniques - writing letters with MS Excel

- forms

- flexibility, not optimisation

- device-independence

  1. Input devices

  2. Formats (PDF, Flash …)

  3. Dynamic content

Visuals and graphical design

Accessibility refers basically to content, not to design. There are a few checkpoints to be reflected, and art directors should ideally be able to develop their designs with Cascading Style Sheets. The accessibility issues for the graphic designer:

- contrast and colour are always subjective
- multiple formatting

Contents

The next step is the day-to-day work, which is often in different hands. In a way, keeping accessibility up to par in a growing system is the hardest bit, not because of its complexity, but because there might be more people involved.

- orientation
- images (contrast, alternative text)
- technical accessibility (tables, abbreviations …)

Resources

Clark, Joe: "Building accessible web sites", Indianapolis: New Riders 2002.

Hellbusch, Jan Eric/Mayer, Thomas: Barrierefreies Webdesign - Webdesign für Menschen mit körperlichen Einschränkungen, Osnabrück: KnowWare, 4th ed, 2006.

Holter, Eric :Client vs. Developer Wars - Communicating the Web Development Experience: Newfangled Web Factory E-Book (PDF): 2002. Online http://www.newfangled.com/client_vs_developer_wars.

Web Accessibility In Mind (WebAIM), online http://www.webaim.org/.

World Wide Web Consortium, online http://www.w3.org.

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