IBM Software

Innovate 2011

The Premier Event for Software and Systems Innovation

Software. Everyware.

19- July, Sydney, Australia
21- July, Melbourne, Australia

Changes to the AHRC DDA Web Advisory Notes

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About me

- Started in accessibility in 1998

- Worked on the first accessible Australian web site

- Worked as the Melbourne 2006 Commonwealth Games accessibility specialist

- Spent six years working on the W3C Web Content Accessibility Guidelines, 2.0

Accessibility in the Web Development LifeCycle

Accessibility in the WDLC

"…creating accessible web content should be an integral part of the web design cycle, and accessibility features should be incorporated into all aspects of the design process."

Accessibility in the WDLC

- Choose the right developer

- Review key documents

- Design evaluation

- Training (content authors and developers)

- Template evaluation

- Audit

UN Convention of Human Rights for People with a Disability

UN Convention of Rights

"While the Australian Government has primary responsibility for meeting Australia's obligations under the Convention, all sections of society, including industry, educational institutions, and community organisations, must play an active role in upholding the rights established by the Convention…"

UN Convention of Rights

"Accordingly, *any failure to provide full access to the web and other internet-based technologies for people with a disability may be seen as a violation of human rights.*"

Multiple formats

Multiple formats

"There are wide variations in the accessibility of different file formats, and some formats are generally considered to be more suited to a particular type of content than others. Feedback that the Commission has received from users and web accessibility experts suggests that traditional HTML is the most universally accessible format."

Multiple formats

"Other formats have advantages and disadvantages that should be considered when deciding which format to use. For example, the RTF format is considered to be more generic, but it is less suited than Microsoft Office Word to representing complex tables so that they can be navigated successfully by screen-reading software."

Multiple formats

"*In general, material will be accessible to the greatest number of users when it is published in multiple accessible formats.*"

Inaccessible documents

Inaccessible documents

"It should also be borne in mind that some content cannot be made accessible online to some people with a disability, especially if it is inherently graphical in nature."

Inaccessible documents

"Organisations that make such content available online need to consider strategies for making it accessible, for example, by *providing text descriptions of pictorial content*, or using *qualified contractors to produce tactual maps and diagrams on request.*"

PDFs

PDFs

"The Commission's advice, current October 2010, is therefore that *PDF cannot be regarded as a sufficiently accessible format* to provide a user experience for a person with a disability that is equivalent to that available to a person without a disability, and which is also equivalent to that obtained from using the document marked up in traditional HTML."

PDFs

"The Commission will *review the accessibility of PDF documents again in 2013*, by which time it is expected that the provision, support, and utilisation of accessibility features will have improved."

Document security

Document security

"Some file formats provide mechanisms for enhancing the security of documents by preventing unauthorised editing, copying, or printing. Some of these mechanisms are not compatible with accessibility for people with a disability, and document authors should ensure that security features do not prevent access to the document by assistive technology."

Document security

"If there are concerns about ensuring the authenticity of material published on the web in multiple formats, then a *statement should be included that specifies which format is to be regarded as definitive or authorised*, and noting that additional formats are being provided to maximise access."

People with cognitive disabilities

Cognitive disabilities

"It should be emphasised, however, that accessibility of web content cannot always be achieved solely through compliance with WCAG 2.0."

Cognitive disabilities

"In addition to these Guidelines, web designers and authors will need to make themselves familiar with a range of tools, resources, and emerging best-practice solutions, as they meet their accessibility goals and responsibilities under the DDA and the Convention. *This is particularly the case in areas that are not comprehensively addressed in WCAG 2.0, such as the needs of people with cognitive disabilities.*"

The role of the accessibility specialist

Accessibility Specialist

"The Commission strongly encourages web designers to use expert advice and information that is up to date with web content publishing and access challenges and solutions. A number of Australian companies and organisations provide consultancy and design services with specialisation in accessibility."

Accessibility Specialist

"*There is currently no national accreditation system for expertise in this area, so potential clients of such services should use standard assessment practices such as speaking with referees and examining samples of their work.*"

Ten common failures

Ten common failures (1 – 3)

1. "Failure to include appropriate text descriptions (such as "alt-text" labels) for images;

2. Failure to provide accessible alternatives when using a visual CAPTCHA;

3. Failure to use technologies (such as Flash and JavaScript) in ways that are accessible;"

Ten common failures (4 – 6)

4. "Failure to use HTML features appropriately to indicate content structure such as the hierarchy of headings;

5. Failure to explicitly associate form input controls with their labels;

6. Failure to ensure sufficient difference between foreground (text) colour and background colour;"

Ten common failures (9 – 10)

9. "Failure to ensure that web pages can be used from the keyboard (that is, without the mouse);

10. Failure to alert the user to changes on a web page that are triggered automatically when selecting items from a dropdown menu."

Transitioning to WCAG2

Transitioning to WCAG2

Government

"All Australian government websites should comply with the timelines and conformance requirements of the NTS, whether or not they are specifically mandated to do so. In particular, *state and territory governments are strongly encouraged to comply with the AA conformance level that applies to Commonwealth Government websites.*"

Transitioning to WCAG2

Non-Government

"Non-government websites and web resources whose development commences after July 1 2010 should comply with WCAG 2.0 to a minimum of AA-Level conformance;"

Transitioning to WCAG2

Non-Government

"Existing non-government websites or web resources that undergo substantial change in the period July 2010 – December 2013 should comply with WCAG 2.0 to a minimum level of AA conformance;"

Transitioning to WCAG2

Non-Government

"All existing non-government websites and web content should comply with WCAG 2.0 to a minimum level of AA conformance by December 31 2013."

Accessibility supported technologies

Accessibility supported

"WCAG 2.0 does not provide a list of accessibility supported technologies, since such a list is likely to require regular updating and is likely to have local variation."

Accessibility supported

"The Commission will be working with the Australian Government Information Management Office (AGIMO) and other stakeholders to develop more detailed advice about technologies (and features of technologies) that are considered to be accessibility supported in the Australian context."

Accessibility supported

"Until such advice is available, web developers should give serious consideration to *using those technologies that are known to be compatible with* **WCAG 1.0**. In cases *where this is not practical, they should seek expert accessibility advice before using other technologies*."

Limits on the obligation to comply with the DDA: Web Advisory Notes

Limits on obligation to comply with the DDA

"The advice provided in these notes is intended to give effect to the requirement of the DDA for access to be provided without unreasonable barriers that exclude or disadvantage people with disability. *In some (but not all) circumstances, obligations under the DDA to provide equal access are limited by the concept of unjustifiable hardship*."

Limits on obligation to comply with the DDA

"Where issues of unjustifiable hardship have to be decided, section 11 of the DDA requires the courts to consider all relevant circumstances of the case, including…"

Limits on obligation to comply with the DDA

- "The nature of the benefit or detriment likely to accrue, or be suffered by, any persons concerned;

- The effect of the disability of a person concerned;

- The financial circumstances, and the estimated amount of expenditure required to be made, by the person claiming unjustifiable hardship"

Limits on obligation to comply with the DDA

- "The availability of financial and other assistance to the person claiming unjustifiable hardship; and

- In the case of the provision of services, or the making available of facilities—any relevant action plans given to the Commission under section 64 of the DDA."

More information

http://www.hreoc.gov.au/disability_rights/standards/www_3/www_3.html

http://www.gianwild.com/2010/11/28/australian-human-rights-
commission-updates-their-web-advisory-notes/

What is Policy Tester?

- Achieve compliance with regulatory and internal standards

- Obtain assessments and establish governance during application development and content creation to mitigate risk and reduce cost

Web Accessibility:
- WCAG
- Section 508
- AccessiWeb

Web Privacy:
- Data collection practices
- PII collection
- 3rd party linking
- GLBA, COPPA, HIPPA

Web Content Quality:
- Broken links, spelling errors
- Metadata
- Content inventory

Benefits

- Mitigate risk related to regulatory non-compliance

- Reduce the cost for achieving compliance by providing automated assessments

- Establish governance during application development and content creation

- Provide visibility for Management and Legal

- Enable collaboration among all stakeholders

Product features & capabilities

- Web portal style interface

- Enterprise-class architecture designed to scale assessments

- Central repository, which enables creating an inventory of your Web properties

- User roles and access permissions

- Centralized test policy for Accessibility

- High-level dashboards displaying status and compliance risk

Product features & capabilities (cont.)

- Manual and automatic Web site explore

- Browser plug-in for Accessibility testing

- Detailed compliance reports

- Advisories and education

- Issue management

- Defect Tracking Systems integration
  - RTC, RQM, CQ, HPQC, etc.
- Content Management Systems integration
  - Interwoven TeamSite, Documentum, etc.

- REST-style API

Support for WCAG 2.0 and WAI-ARIA

v8.0: Reporting – issue high-lighting in source code

v8.0: Dynamic assessment plug-in

V8.0: Enhanced Accessibility Dashboard

Screen re-design

Issues by severity

Top accessibility issues

Pages scanned over time

Accessibility Module Overview

What is Accessibility?

- **Accessibility of a product is enabling its use by a person with disabilities (and in a usable manner). Accessibility applies to web sites, kiosks, mobile devices, and other communications, e.g., documents.**
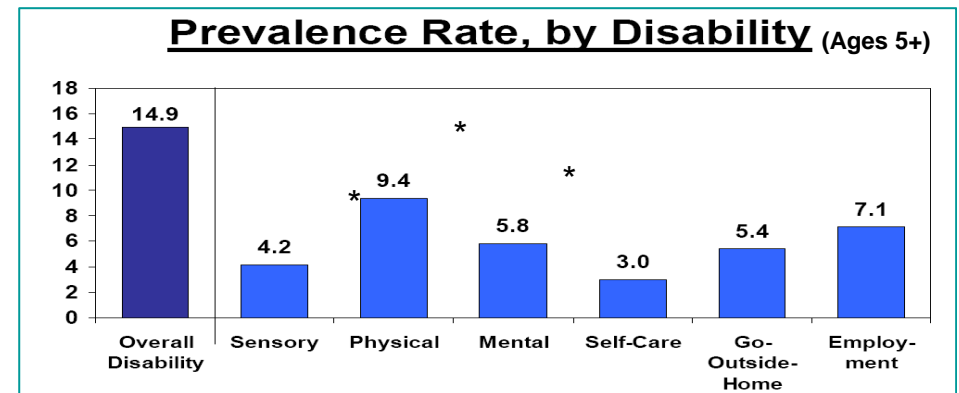-

Web pages often have access issues for people with disabilities like:

- Visual   (use screen reader or other technologies)
- Hearing   (use captioning, transcripts)
- Physical   (use special devices, larger targets)
- Mental   (need reduced memory loads, more time)
-
- Usable accessibility is a journey!

- Sources:

- http://www-03.ibm.com/able/index.html

- http://www.section508.gov/index.cfm?FuseAction=Content&ID=3

- http://www.w3.org/standards/webdesign/accessibility

Prevalence Rate, by Disability (Ages 5+)

Overall Disability	14.9
Sensory	4.2
Physical	9.4 *
Mental	5.8
Self-Care	3.0
Go-Outside-Home	5.4
Employ-ment	7.1

* What we can support by design

Accessibility beneficiaries are a powerful market segment

People with disabilities:

- More than $1 Trillion in aggregate annual income

- More than $220 Billion in disposable income annually

- Twice the spending power of teens and 17x's the spending power of "tweens"

Mature consumers:

- 1 in 4 over age 50 and 1 in 2 over 65 have a disability

- People aged 50+ spent nearly $400B In 2003

People with low literacy:

- 900+ million illiterate people represent 25 percent of the world's you and adults

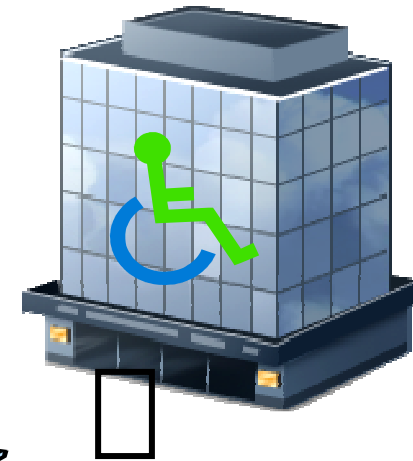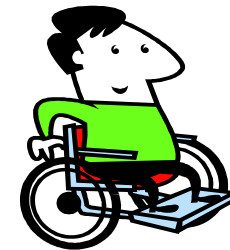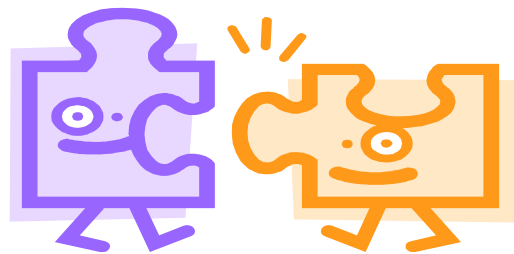**Non-native language speakers:**

- Nearly 47M people speak a language other than English at home

I/T Accessibility has two sides to the solution – Just like Physical accessibility

Accessible virtual environment

Assistive Technology
+
Accessible IT Systems

Wheelchair
+
Accessible Building

Accessible physical environment

Accessibility

- IBM Human Ability & Accessibility Center www.ibm.com/able
  - Recognized thought leaders in the area of Accessibility
  - Help provide direction for the Policy Tester – Accessibility product
  - Develop the product's rule set
  - Conduct research and develop new technology in the area of Accessibility
  - Consulting services – assessments, strategy, education
- Policy Tester identifies Web accessibility non-compliance issues related to
  - U.S. Section 508
  - WCAG 1.0 (Priority 1, Priority 2, Priority 3)
  - WCAG 2.0 (A and AA)
  - AccessiWeb (France)
  - Can be customized for other standards
- IBM provides a complete solution: subject matter expertise + tooling

Thank you