

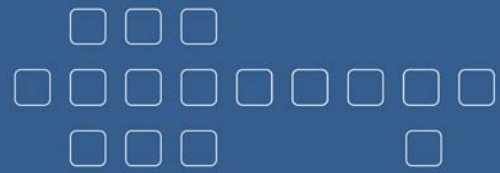
Hacking Away at Discrimination:

Section 508 and Accessibility Guidelines

“The power of the Web is in its universality.

Access by everyone regardless of disability is an essential aspect.”

— **Tim Berners-Lee**, *Creator of the World Wide Web*



1998 Amendment to Section 508 of the Rehabilitation Act

- Section 508 of the rehabilitation act (29 U.S.C. 794d), as amended by the workforce investment act of 1998 (P.L. 105-220), august 7, 1998.
 - Each federal agency shall ensure that the electronic and information technology allows individuals with disabilities who are federal employees to have access to and use of information and data that is comparable to the access to and use of the information and data by federal employees who are not individuals with disabilities.
 - Each federal agency shall ensure that the electronic and information technology allows individuals with disabilities who are members of the public seeking information or services from a federal department or agency to have access to and use of information and data that is comparable to the access to and use of the information and data by such members of the public who are not individuals with disabilities.

In Plain English...

- Updated section of the rehabilitation act of 1973.
- It's purpose is to end discrimination against people with disabilities.
- Provide equal **access** to information...and also to provide equal **quality** of information.
- Creates enforceable standards and complaint process.
- Right now, it only applies to federal agencies and their contractors...but I doubt that is the final word.

Americans With Disabilities Act of 1990 (ADA)

- The ADA has been described as the 'emancipation proclamation' for the disability community.
- The world's first comprehensive civil rights law for people with disabilities.
- TITLE III - prohibits private entities from discriminating on the basis of disability in places of public accommodation.
- Guarantees equal opportunities.

Why Should We Care?

- The legal environment seems to be changing .
- Web is becoming ubiquitous.
 - Many sources of information are 'web-only.'
 - A 'world' library.
- Following accessibility guidelines also has positive effects for non-disabled users.
- Persons with disabilities represent a huge commercial market.

Ethical Questions:

- Do web developers have a moral obligation to create accessible web sites?
- Is the internet a “place”?
- Do persons with disabilities have an obligation to sue those site owners who don’t provide equal access?
- In the future, do states have the right to enforce accessibility on private companies?

“Place of Public Accommodation”

- ... facility, operated by a private entity, whose operations affect commerce and fall within at least one of the following categories--
- ...an inn, hotel, motel, or other place of lodging... ;
- ... restaurant, bar, or other establishment serving food or drink;
- ... motion picture house, theater, concert hall, stadium, or other place of exhibition or entertainment;
- ... travel service, shoe repair service, funeral parlor, gas station, office of an accountant or lawyer, pharmacy, insurance office, professional office of a health care provider, hospital, or other service establishment;
- ...a nursery, elementary, secondary, undergraduate, or postgraduate private school, or other place of education;

Sec. 302. Prohibition Of Discrimination By Public Accommodations

- (A) GENERAL RULE- no individual shall be discriminated against on the basis of disability in the full and equal enjoyment of the goods, services, facilities, privileges, advantages, or accommodations of any place of public accommodation by any person who owns, leases (or leases to), or operates a place of public accommodation.

A Case Against Physical Structures

- “By including ‘travel service’ among the list of services considered ‘public accommodations,’ congress clearly contemplated that ‘service establishments’ include providers of services which do not require a person to physically enter an actual physical structure.”
- “Many travel services conduct business by telephone or correspondence without requiring their customers to enter an office in order to obtain their services.”
- “... It would be irrational to conclude that persons who enter an office to purchase services are protected by the ADA, but persons who purchase the same services over the telephone or by mail are not. Congress could not have intended such an absurd result.”

Carparts distribution center, inc. V. Automotive wholesaler's Ass'n of new England, inc., 37 f.3d 12, 19 (1st cir. 1994).

When Is a Website 'Accessible'?

- A website is accessible if, “it can be used in a variety of ways that do not depend on a single sense or ability” (USD OE).
- Measures are taken in development to insure equal opportunities and benefit to all users.

Kinds of Disabilities

- Physical/Motor impaired
 - Not necessarily fully impaired.
- Vision
 - Blind / Low Vision / Color Blindness
- Hearing
 - Deaf / Hard-of-Hearing
- Cognitive
 - Memory Problems / Learning Disability / Dyslexia

How to People With Disabilities 'Surf'?

■ Adaptive technology

- Screen readers
 - ◆ Braille / voice /
- Voice input devices
- Keyboard guard
- Video captioning
- Slow keys
- Screen magnification
- Alternative input devices (other than a mouse)
 - ◆ Trackballs/switches/

Development Myths and Poor Excuses

- It's too expensive.
- Need to create a separate 'accessible' version.
- Not worth it for just a 'few' extra visitors.
- Too difficult to implement.
- It's a 'visual-only' medium.
- Client didn't tell me to.

It's Too Expensive

- The cost is calculated in terms of minutes and hours, not weeks and months.
- It's a one-time expense.
- Cheaper than multiple versions and other 'work-arounds.'
- You'll save money in the long run. It's an investment.
- It is simply the cost of doing business.

A Separate 'Accessible' Version

- If you use standards, your site will be done right the first time...without the need for an 'accessible' version.
- 'Text only' versions become redundant. Their days are numbered.
- Universal access: code once, publish everywhere.

No Payback in Increased Visitors

- There are millions of disable users.
- ...and millions of people with temporary disabilities.
- Public access sites (airports, Disney, etc.).
- Search engine results/resource discovery.
- Faster download times.
- Non-traditional internet-enabled devices.

It's Too Difficult. (Whine)

- It is quite simple.
- Yes, you can still use tables.
- All you have to do is try.

It's a Visual-only' Medium

- Are books a 'visual-only' medium?
- How about television?
- Mp3s and other audio?
- Your cell phone?
- Your PDA

*“The **true** reason to design for accessibility is **GREED**”.*
— **Joe Clark**, *Building Accessible Websites*

By-products of an Accessible Site

- More value
 - Maximize value to the user (*ALL* users)
 - Faster download times
- More users.
 - Search engine optimized (SEO)
- More reach
 - Cell phones, airport kiosks, HTML newsletters, cars (satellite radio)

World Wide Web Consortium (W3C)

- Web accessibility initiative
 - <http://www.w3.org/WAI/GL/>
 - 3 levels of accessibility
 - PRIORITY 1-3 (remember, all you have to do is try!)
 - Provides simple authoring checklist
 - Headed up by Tim Berners-Lee
 - Non-governmental...provides 'recommendations'.
 - 14 of them, in fact.

Federal Access Board

- A Federal agency, overseeing Federal agency compliance with Section 508.
- Came up with 16 standards based closely on the WAI's recommendations.

Who's Making the Move?

- ESPN.Com
- Wired.Com
- Inc magazine (inc.Com)
- Cingular wireless (cingular.Com)
- PGA.Com

Who's Afraid of Accessibility?

- Fear of disabilities themselves.
- Fear of change.
- Fear of learning something new.
 - Unlearning to design with tables.

How to Start

- HTML is **not** a graphic design language
 - Separate content from presentation
 - Use CSS for style
- View your **own** site:
 - With images turned off
 - In a screen reader
 - In a text-only browser
 - Without a mouse

How to Become Compliant

- Use alternative text for images (ALL images)
``
- Closed captions in multimedia
 - Transcripts for audio
 - Synchronized audio/multimedia for visuals
- "Skip" buttons
- Name your frames
- Summarize your tables
- Use style sheets

How to Become Compliant

- Be careful with color.
- Use structured code (for non-css browsers).
- “Flicker” rate.
- Watch your scripts.
- Need a plug-in? Tell me.
- Forms are important!
 - Give me enough time to fill it out, and the ABILITY to fill it out.

Resources Online

- Cynthia says
<http://www.contentquality.com/>
- LIFT (free accessibility test)
<http://www.usablenet.com/>
- Bobby (free accessibility checker)
<http://bobby.watchfire.com>
- JAWS® for windows (screen reader)
freedomscientific.Com/fs_products/software_jaws.Asp
- Technical assistance project (activities of the states regarding current and planned section 508 activities)
128.104.192.129/taproject/policy/initiatives/508/508stateactions.htm

Resources Online

- The access board
<http://www.access-board.gov/>
- Web accessibility initiative (WAI)
<http://www.w3.org/WAI/>
- ADA
<http://www.usdoj.gov/crt/ada/adahom1.htm>
- Lynx viewer
<http://www.delorie.com/web/lynxview.html>
- IBM home page reader
http://www-3.ibm.com/able/solution_offerings/hpr.html
- Magpie (media access generator)
<http://ncam.wgbh.org/webaccess/magpie/index.html>

Takeaways

- A 1000 mile journey begins with the first step.
- Our choice today, but may be compulsory tomorrow.
- Demonstrate social responsibility.
- Reduce legal liabilities.

The Web must allow equal access to those in different economic and political situations; those who have physical or cognitive disabilities; those of different cultures; and those who use different languages with different characters that read in different directions across a page.

— Tim Berners-Lee, **Creator of the World Wide Web**