MassBay Online: Universal Design

Quick Tips for Creating Online Materials to Meet Standards for Americans with Disabilities Act (ADA)
Wednesday, October 12, 2016  MassBay EdTech
Slide Deck:

http://www.slideshare.net/WendyWalsh5/presentation-mass-bayuniversaldesignonlinetips20161006

http://www.massbay.edu/ada-guidelines
Questions or Follow-up:

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Universal Design Definition:

Instead of building the same old way and then adding accommodations for different abilities – just build once and make it work for everyone right at the start!

http://en.wikipedia.org/wiki/Universal_design
Online Accessibility Resources

www.w3.org/TR/wai-aria

www.w3.org/WAI/PF/aria-practices

www.html5accessibility.com/tests/landmarks.html

www.accessible-culture.org
Universal Design Definition:

Compliance is always a process, and no-one is perfect. Compliance to Government 508 Standards means your material meets POUR:

Perceivable
Operable
Understandable
Robust
The iPhone! Make your content mobile-friendly if you can! If you have no control over the code, at least make type and buttons large enough to read if they scale down to 1/3 size! If you do have control, put a VIEWPORT DECLARATION at the top of your page! Before <title>!

<meta name="viewport" content="width=device-width, minimum-scale=1, initial-scale=1" />
Build to Consider – Vision Impaired

TEXT

SIZE: Text does not have to be tiny.
COLOR: Color-blind – Don’t use color of text for meaning.
CONTRAST: The popular look of pale gray text on white, and MassBay’s green on gray or thin, can be hard to read.

Online COLOR CONTRAST text checker

http://webaim.org/resources/contrastchecker/
Build to Consider – Vision Impaired

IMAGES

CONTENT: Try to put content such as headlines and titles in text on the page rather than photo text.

ALT and TITLE tag your images:

```html
<img src="coolimage.jpg" alt="Cool image of dog at play." title="Cool image of dog at play." />
```
Build to Consider – Vision Impaired

LINKS
CONTENT: Please spell out where the link is going. The screen reader will read the links before the rest of the page, so there will be 20 “Read more…”

DESTINATION:
DO NOT use target=_blank to open in separate window! Vision impaired cannot see it, screen reader either will not follow or will start entire website again from the beginning!
Build to Consider – Vision Impaired

INTERACTIVE MEDIA
VIDEO and CAROUSEL: Katherine Wahl, Northeastern University, says that students with ADHD have a hard time comprehending text near moving images. Make sure Video and Carousel do not Autoplay.

POP-UP Windows:
Users with screen readers and users who cannot use the mouse get stuck, unable to click action button OR click X to close the window!
Build to Consider – Hearing Impaired

VIDEO
Professional Closed Captioning is required. Default YouTube Captioning isn’t accurate enough for ADA compliance.

This requirement only applies to video with essential information for a class, admissions, or financial aid.

If it’s a promotional video these rule don’t apply. Contact I.T. at MassBay to discuss professional captioning.
SEMANTIC STRUCTURE
Allow SKIP NAVIGATION: Your visitors may want to hear or tab through the navigation when landing on the website. But it will play on each page. Put a link right at the top so they don’t have to hear it every time they click.

SKIP Navigation works by adding #main to body of your page:
<div id="main">
Build to Consider – Vision Impaired

SEMANTIC STRUCTURE
Headlines are read first, from H1 down to H6. Then links.
Use these to give priority and navigation through content.

HTML 5 tags help screen readers: <header>, <nav>, <footer> <main> <section> <aside> <form> <button>
If you are working in XHTML, consider using these attached to <div>. Example: <div id="header">
SEMANTIC STRUCTURE
WAI-ARIA Role Tags
Please apply these to your web page code. These help the screen reader.
Web Accessibility Initiative’s Accessible Rich Internet Applications.
<main role="main" id="mainArea">
<footer role="contentinfo" id="footerArea">
http://mcdlr.com/wai-aria-cheatsheet/
Build to Consider – Vision Impaired

TEST YOUR SITE IN A SCREEN READER!

Really good screen readers are expensive – JAWS specifically has a mathematics/engineering bent!
http://www.freedomscientific.com/Products/Blindness/JAWS

Free screen readers to test your content!
Windows NVDA http://www.nvaccess.org/
Chrome ChromeVox http://www.chromevox.com/
TAB KEY and RETURN KEY Navigation
Make sure your major navigation, links and buttons all Have a visible “hover” state set!

CSS
a {color:blue}
a:hover {color:red}

Visitors use tab key and return key and this automatically works in browser without your adding any code! EXAMPLE:
http://www.harvard.edu