



Usability, Accessibility, and Universal Usability



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- ▶ **Accessibility:** web sites should not provide obstacles that prevent any potential users from accessing content
 - ▶ graphical content without textual alternatives
 - ▶ inputs that may require mouse movement
- ▶ **Usability:** interfaces should
 - ▶ make tasks and requirements easily comprehensible
 - ▶ support needs and goals of users
 - ▶ provide context, cues, and help that will increase chances of successful task completion
- ▶ **Universal usability**
 - ▶ sites should be usable for all users, despite differences in technology, skills, and cultures

But I am just a developer..

- ▶ Why should software engineer be concerned about user interface?
- ▶ Ideally, expert in UI design will be designing...
 - ▶ but, that's not always the case
 - ▶ UI design often short-changed in development shops
 - ▶ developers design interfaces, for better or worse
- ▶ Agile model
 - ▶ need to talk to clients/ customers to understand their needs.
 - ▶ can't assume that UI designers will hand off a finished design.

Accessibility

- ▶ Several million people in US alone are blind or have vision loss
 - ▶ As population ages, these numbers will increase
 - ▶ Other disabilities may cause sites to be inaccessible.
- ▶ Do you want to build sites that make it impossible for people to buy your products?
- ▶ Section 508 of US Rehabilitation Act – Government regulations that require federal sites to be accessible (section508.gov)

Quick guidelines – usability/ accessibility

- ▶ **When in doubt, simplify**
 - ▶ Design is done when there's nothing left to take away
 - ▶ few fonts, colors, etc. Don't overdo it.
 - ▶ Clear labels, links
 - ▶ Avoid multiple sets of links that might conflict
 - ▶ across the top and down the side
- ▶ **Put content early in link**
- ▶ **Let the user know where they are in site and where they came from**
 - ▶ breadcrumbs, etc.

Quick guidelines – usability/ accessibility (cont.)

- ▶ Be careful with colors – use sparingly,
 - ▶ Don't rely on them for content – color-blind users, etc.
- ▶ Use CSS for layout, not tables
 - ▶ alt tags wherever appropriate
 - ▶ though not all pictures are worth hearing about
- ▶ Use fonts carefully and appropriately
 - ▶ High-contrast text
- ▶ Use glitz only when necessary

Links and Breadcrumbs

- ▶ Root > Second Level > Third Level> ...
 - ▶ Indications of where you've been and context of current spot.
- ▶ Without context, get “lost in cyberspace” problem
 - ▶ Towson, Academics, Grad
- ▶ Differing sets of links for different users can help
- ▶ Content words first
 - ▶ “Graduate student life” ,”Graduate Student Community...”,etc.

Usability resources

- ▶ www.useit.com
- ▶ www.ok-cancel.com
- ▶ <http://www.designofsites.com/>
 - ▶ 2nd edition
- ▶ www.websitesthatsuck.com