



Usability and Accessibility



Macro Media's Usability Tips

- ✱ Remember user goals
- ✱ Remember site goals
- ✱ Avoid unnecessary introductions
- ✱ Provide logical navigation and interactivity

- ✱ Design for consistency
- ✱ Don't overuse animation
- ✱ Use sound sparingly
- ✱ Target low bandwidth users
- ✱ Test for usability



Sample Test for Web Site Usability

- Ask users to answer two factual questions based on the web site information
- Ask users to answer two task oriented questions from the web site information
- Ask users to share the subjective impressions about the ability of the web site content to meet their needs in an interview setting
- Have users complete a post test survey regarding their overall experience



Advantages of Usability Metrics

- You can track progress between releases
- You can assess your competitive position
- They help you make stop or go decisions prior to product launch
- They can serve as the basis of bonus plans for design managers



Usability Performance Measures

- Time to learn
- Speed of performance
- User error rates
- Retention over time
- Subjective satisfaction



How many users do you need to measure?

- ✦ If you are doing qualitative testing, it is enough to obtain data from 3 to 5 users
- ✦ If you are collecting quantitative data, you should test 20 or more users



Measuring Success

- % improvement can be useful (eg. time to complete task in old and new design)
- Several % improvement scores are may be combined by computing their geometric mean
- Geometric mean in the N^{th} root of the product of N numbers



What are accessibility concerns?

- ✱ Low visual acuity
- ✱ Color blindness
- ✱ Deafness
- ✱ Language impairments
- ✱ Cultural differences



Why make pages more accessible?

- ✦ Reach as many readers as possible
- ✦ Automation tools and search engines work better
- ✦ Concern over customer alienation



Accessibility Strategies

- Adhere to accessibility guidelines
- Test for accessibility
- Provide alternate pages to accommodate users with varying needs



Accessibility Guidelines - part 1

- ✱ Tables are fine, IF they read left-right/top-bottom
- ✱ Text columns are ok if the spacing works in various environments
- ✱ 'Fancy Stuff' - i.e. fonts, style sheets - as long as page is functional with these options turned off
- ✱ Provide 'ALT' text for graphics
- ✱ Make image maps client side
- ✱ Provide useful text links (e.g. not 'click here')



Accessibility Guidelines - part 2

- ✱ Provide good keyboard navigation
- ✱ Alternatives for controls and applets
- ✱ Frames/Noframes, (be sure to provide a reasonable 'noframe' option)
- ✱ Be aware of unusual formats
- ✱ Avoid scrolling marquees
- ✱ Provide titles/names for most objects



Testing for Accessibility

- ✖ Turn off graphics
- ✖ Turn off sound
- ✖ Turn off style sheets
- ✖ Choose "high contrast" option
- ✖ Use largest font size
- ✖ Re-size browser window
- ✖ Navigate using keyboard
- ✖ Select all text and copy into clipboard, paste elsewhere
- ✖ Use a specialized browser or analysis tools