

MMI 1

Accessibility

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Types of Impairments

- ▶ hearing impairments
- ▶ visual disabilities
- ▶ physical disabilities
- ▶ speech disabilities
- ▶ cognitive and neurological disabilities
- ▶ multiple disabilities
- ▶ aging-related conditions

Pick one topic!

- > Research guidelines for design
- > Research tools for checking your website design
- > Find good and bad examples

Accessibility scenarios

- Online shopper with color blindness - user customized style sheets
- Reporter with repetitive stress injury - keyboard equivalents for mouse commands, access keys
- Online student who is deaf - captioned audio from multimedia
- Accountant who is blind - appropriate table markup and alternative text
- Student with dyslexia - use of supplemental graphics, freezing animated graphics, multiple search options
- Retiree with aging-related conditions managing personal finances – screen magnification, stopping scrolling text, avoiding pop-up windows
- Supermarket assistant with cognitive disability - clear and simple language, consistent design, consistent navigation options, multiple search options
- Teenager who is deaf and blind seeking entertainment – accessible multimedia, device-independent access, appropriate table markup

from: <http://www.w3.org/WAI/intro/people-use-web>

Examples

⇒ Movie Session!

Example I: Visual Disabilities

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Example I: Visual Disabilities

Screenreader:




<http://webanywhere.cs.washington.edu/wa.php>

Close your eyes and listen! What website is this?


Example I: Visual Disabilities


Color Blindness


Check iPhone availability at your local Apple Store


California   iPhones available  iPhones unavailable


California Stores Wednesday, July 4


San Diego, [UTC](#) 


San Francisco, [Stonestown](#) 

San Francisco, [San Francisco](#) 

San Jose, [Oakridge](#) 

San Luis Obispo, [Higuera Street](#) 

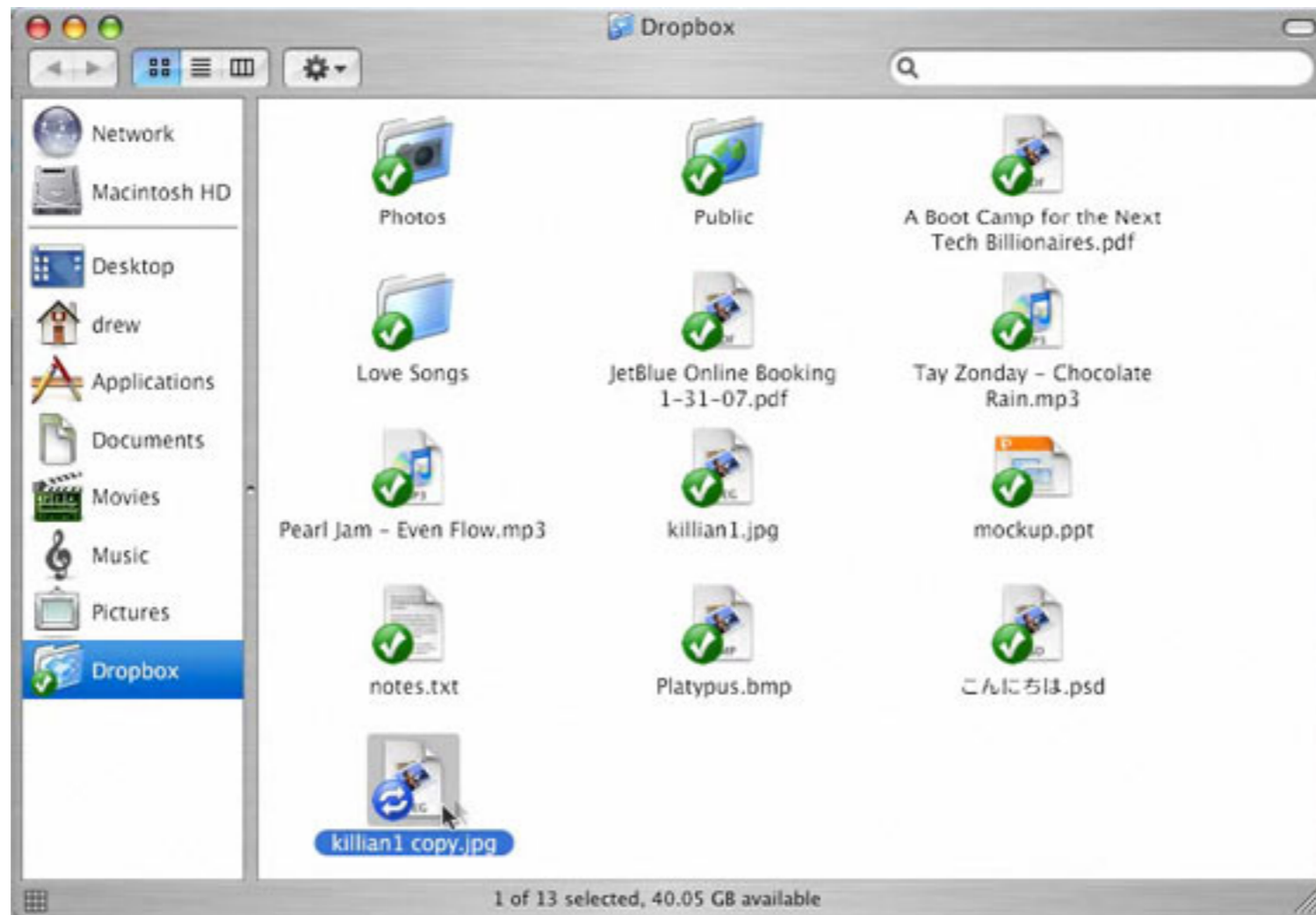
Santa Clara, [Valley Fair](#) 

Santa Monica, [Third Street Promenade](#) 

Examples for color blindness from
<http://www.colourlovers.com/web/blog/2010/03/17/be-kind-to-the-color-blind>

Example I: Visual Disabilities

Color Blindness



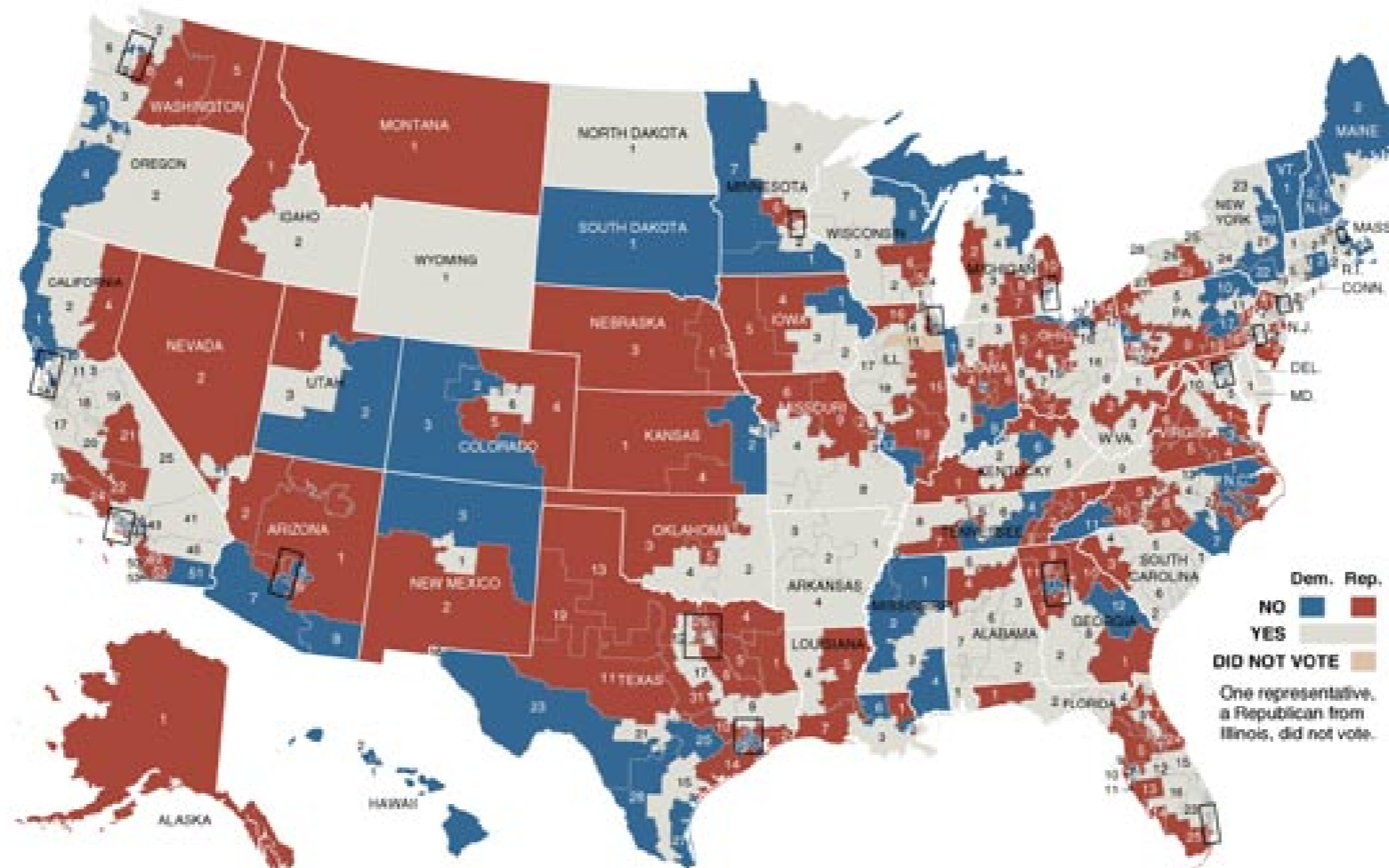
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Example I: Visual Disabilities

Color Blindness

The No Votes

Details on the Republican and Democratic representatives who voted against the \$700 billion financial bailout plan.



Examples for color blindness from
<http://www.colourlovers.com/web/blog/2010/03/17/be-kind-to-the-color-blind>

Example I: Visual Disabilities

Color Blindness



Examples for color blindness from <http://www.colourlovers.com/web/blog/2010/03/17/be-kind-to-the-color-blind>

Example II: Aging-Related Conditions

Test how it feels to be old (e.g. can't move fingers because of Arthritis)



Image from

http://www.at.ford.com/SiteCollectionImages/2011_FordOfEurope/April/Large/Third_Age_Suit_FFA-combi.jpg

Example II: Aging-Related Conditions

Design Guidelines

- Provide large targets, e.g., larger clickable graphics, for the mouse pointer.
- To reduce the number of clicks, do not require double clicking, use pull-down menus, nor have a deep hierarchy.
- When text must be read or scanned, use 12-14 point sans, serif (Helvetica, Arial) black text on a white background.
- The text should have appropriate, large headings in 14-16 sans serif font.
- ...

=> Can you think of more?

More Infos

W3C Web Accessibility Initiative

<http://www.w3.org/WAI/intro/people-use-web>

Videos: People using Assistive Technology

http://www.uiaccess.com/accessucd/resources_videos.html