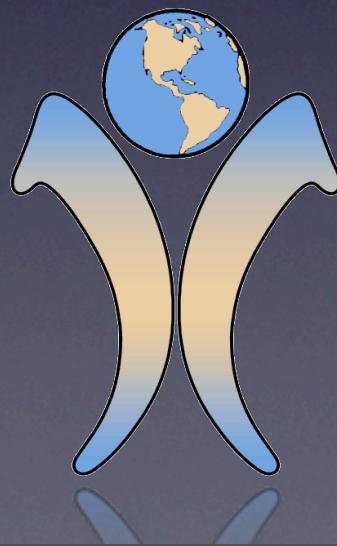


Accessible Design is Smart Design

Cyndi Rowland Ph.D.
Utah State University

www.ncdae.org



www.webaim.org

WebAIM
Web Accessibility in Mind

LANL, October 2007

Street creds

- Executive Director WebAIM
 - Consistently in top 5 results of Google searches for Web accessibility (of 20mil)
 - WebAIM has worked on WCAG (WAI/W3C)
 - WebAIM contributes to the Web Standards Project (WaSP)
 - Partners with industry (e.g. Adobe, IBM)



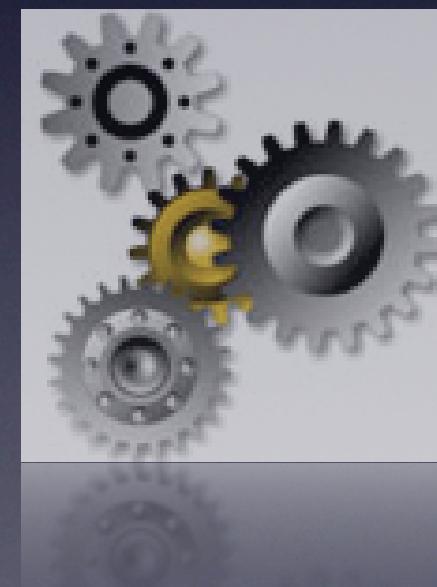
Street credits

- Technology Director NCDAE
- Part of TEITAC (U.S. Access Board work to refresh technical standards of Section 508 and Telecom Act)
- 645 affiliates nationwide
- NCDAE invited to participate in global initiatives (e.g., G3ICT Global forum)



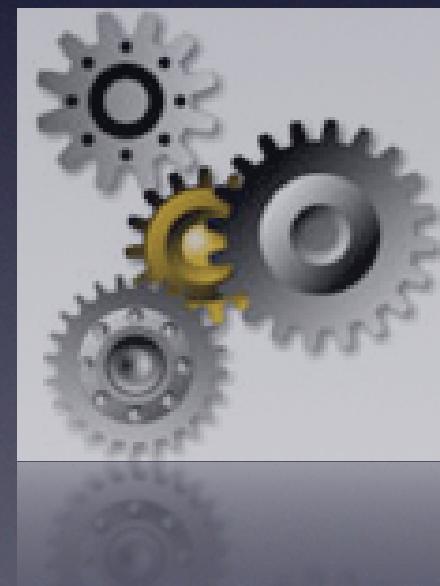
Questions as we begin

Is your Web content
available to all,
including those with
disabilities?



I f n o t , w h y ?

- These are not individuals who participate in our online content
- Somebody else deals with these problems
- We never thought about it before
- We don't want to
- We don't know what to do



Our Brief Time Today . . .

- Context
- Rational for accessible design
- User Experience



The Context

Individuals with
Disabilities in an
Online World

WebAIM
Web Accessibility in Mind

Who Does this Affect?

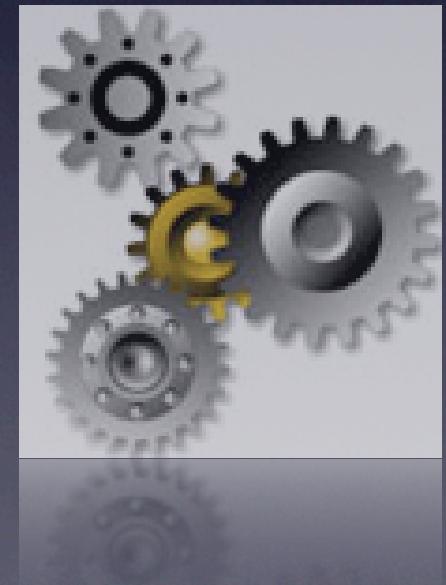
- Those with difficulties in
 - Vision
 - Hearing
 - Motor function
 - Cognition
 - Seizure activity
- Age related processes

See <http://www.webaim.org/intro/>
<http://www.webaim.org/intro/#video>



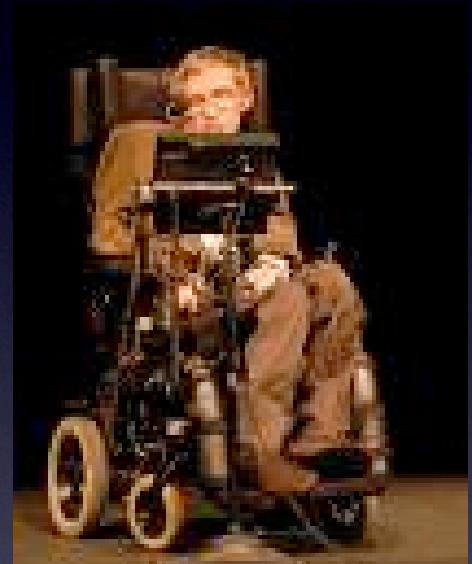
National Context

- Your Web users (including staff) have disabilities
- Almost one in 5 Americans report the presence of a disability
- 9% of incoming freshman report a disability
- 8.5% of the general population have a disability that affect computer and Internet use (approximately 4.8 million users)



Source: U.S. Census 2000: Disability Status

There but for the
grace of God
go I . . .



Could I, my family, or friends, access my web
content tomorrow if any of us acquired a
disability?

The Rational

Why should you design
with accessibility in
mind?

WebAIM
Web Accessibility in Mind

Why Develop Accessibly?

- It's the right thing to do
 - Ethics would have us treat each other the same
- It is the law in many places
 - U.S. Sections 504 & 508
 - Possible application of ADA
 - State laws (26 states)
 - International laws

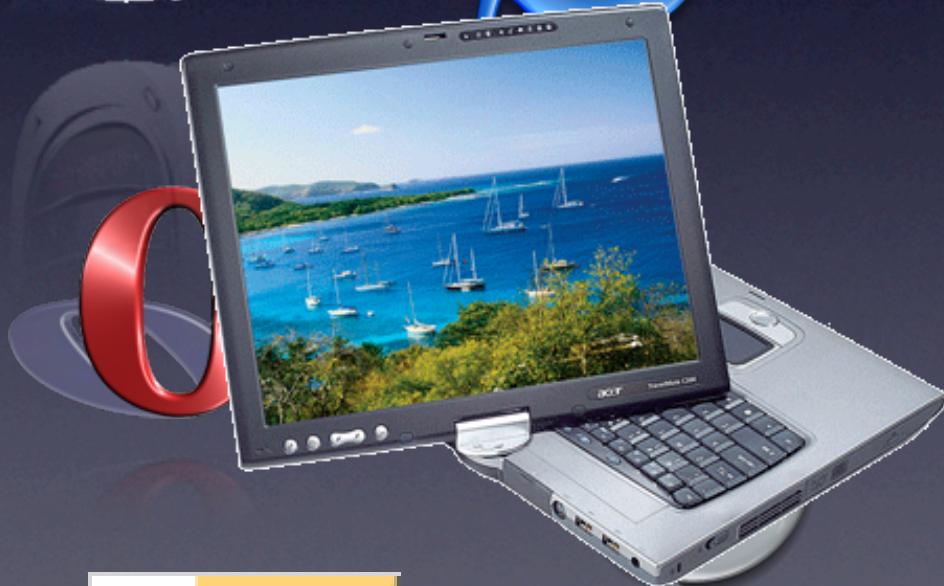
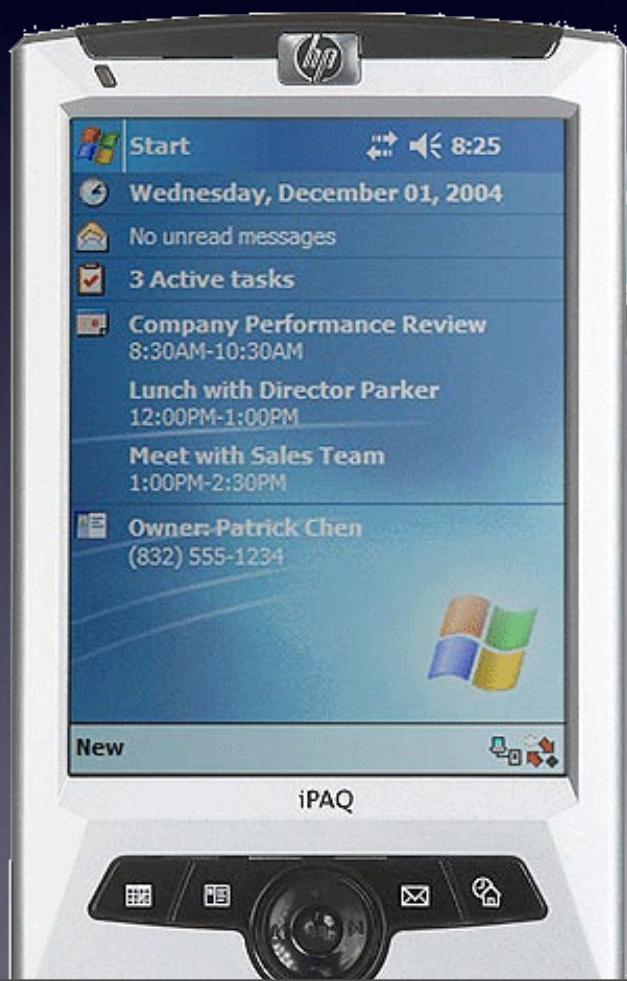


Why Develop Accessibly?

- It is smart technologically
 - Accessible sites are standards conformant
 - Pages load quicker
 - Search engine optimization
 - Compatible with emerging technologies



Compliant

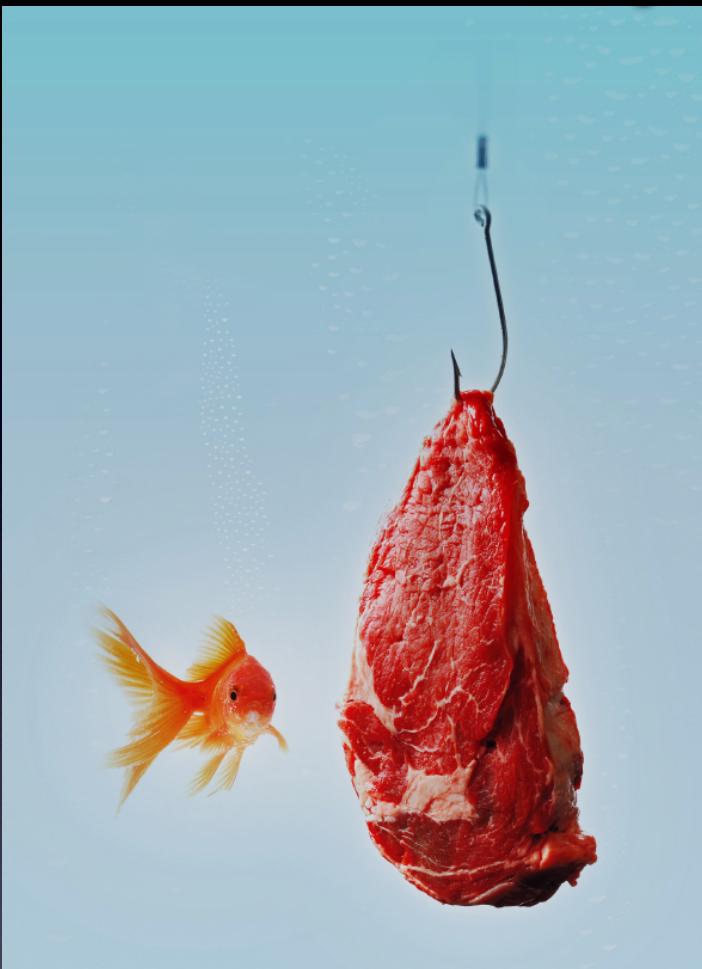


Web 2.0?



Or Next Generation Applications?

Accessibility 2.0



Resources include:

- <http://ncdae.org/webcasts/accessibility2.cfm>
- <http://www.webaim.org/techniques/ajax/>



Why Develop Accessibly?

- It is smart economically
 - Accessible sites will reach a broader audience
 - Entities with accessibility policies, laws
 - Aging baby boomers
 - Returning Vets
- Efficiency in native access
(no need for accommodation)



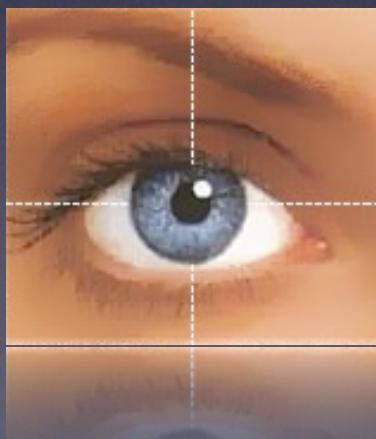
The User Experience

Individuals with
Disabilities in an
Online World

WebAIM
Web Accessibility in Mind

What is the User Experience?

- Those who are **BLIND**, color blind, or have low vision:
 - Article - www.webaim.org/articles/visual
 - Kyle's experience
<http://www.webaim.org/articles/visual/blind.php>
 - Screen reader simulation -
www.webaim.org/simulations/screenreader.php



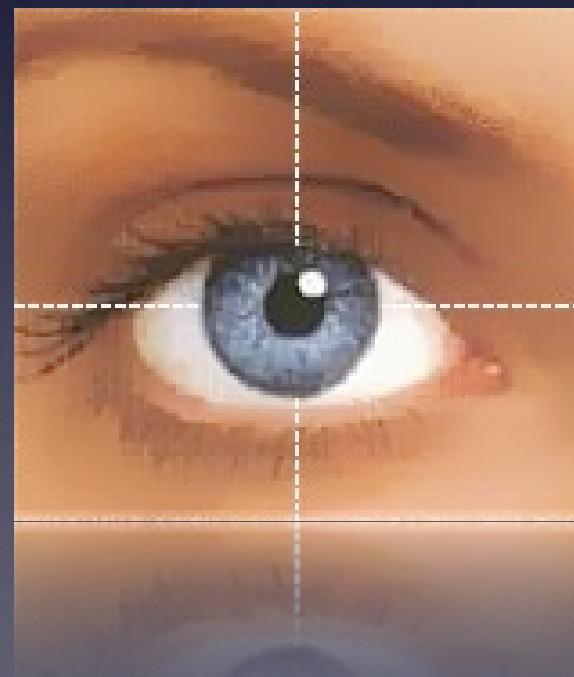
What is the User Experience?

- Those who are blind, **COLOR BLIND**, or have low vision:

The green mushrooms listed here are OK to eat.

The red mushrooms will kill you.

- Amanita
- Chanterelle
- Porcini
- Shitake
- Tylopilus



What is the User Experience?

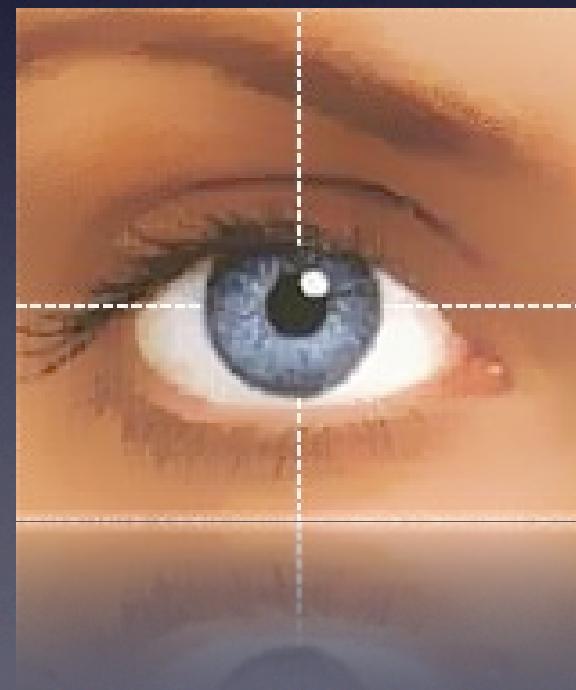
- Those who are blind, COLOR BLIND, or have low vision:

The green mushrooms listed here are OK to eat.

The red mushrooms will kill you.

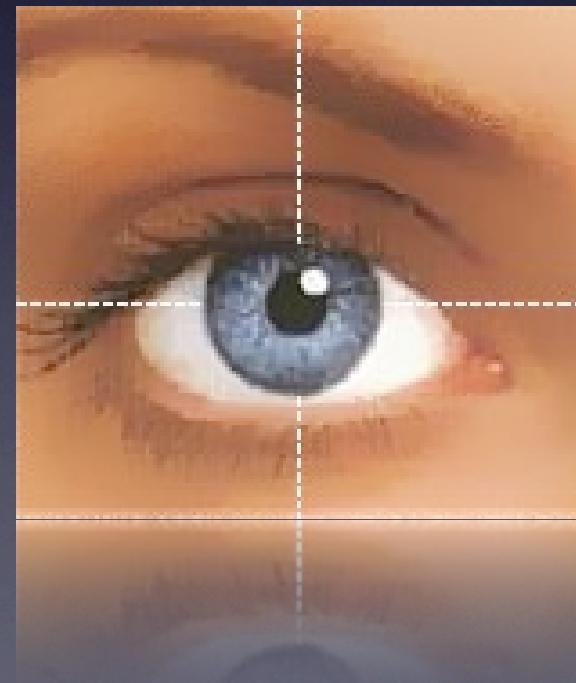
- Amanita
- Chanterelle
- Porcini
- Shitake
- Tylopilus

Resource
Vischeck.com



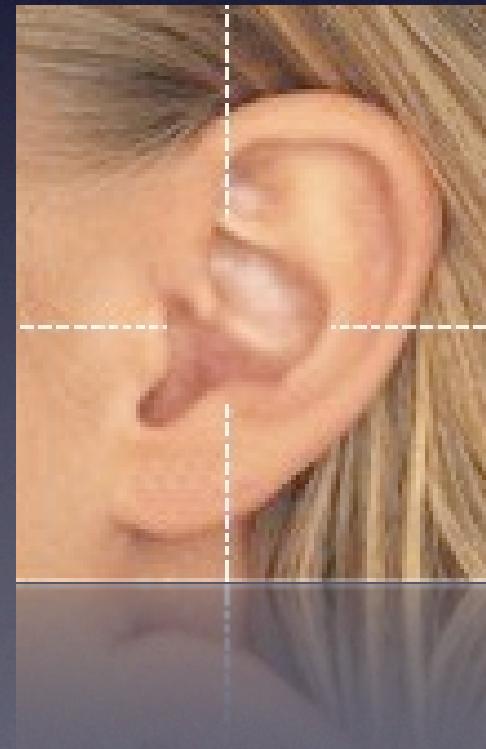
What is the User Experience?

- Those who are blind, color blind, or have **LOW VISION**:
- Low vision simulation -
www.webaim.org/simulations/lowvision.php



What is the User Experience?

- Those who are deaf or hard of hearing:
 - Article - www.webAIM.org/articles/auditory
 - Curtis' experience
<http://www.webaim.org/articles/auditory/culture.php>



What is the User Experience?

- Those who have difficulty with **MOTOR SKILLS**:
 - Article - <http://www.webaim.org/articles/motor/>
 - Gordon's experience

*Don't rely on the
use of
keyboard or mouse*





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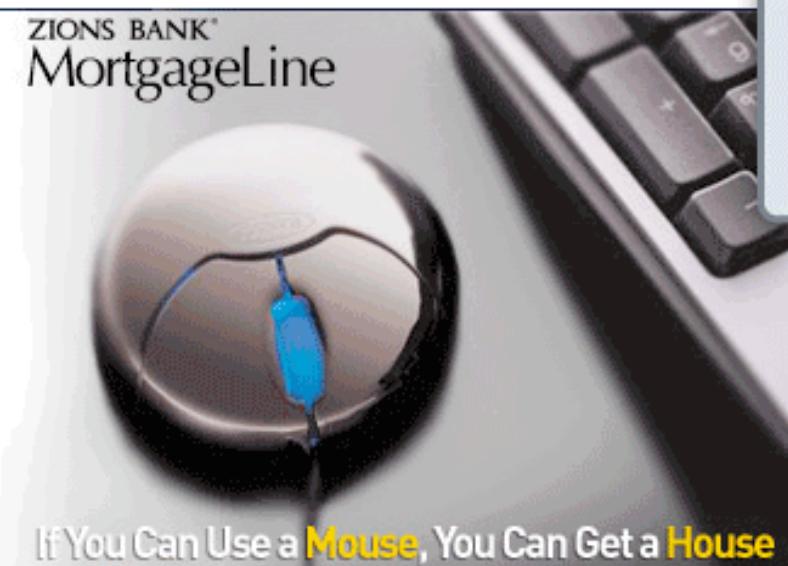
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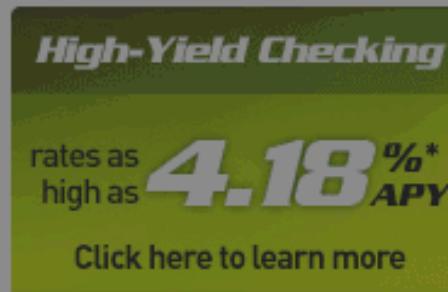
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DEPOSITS

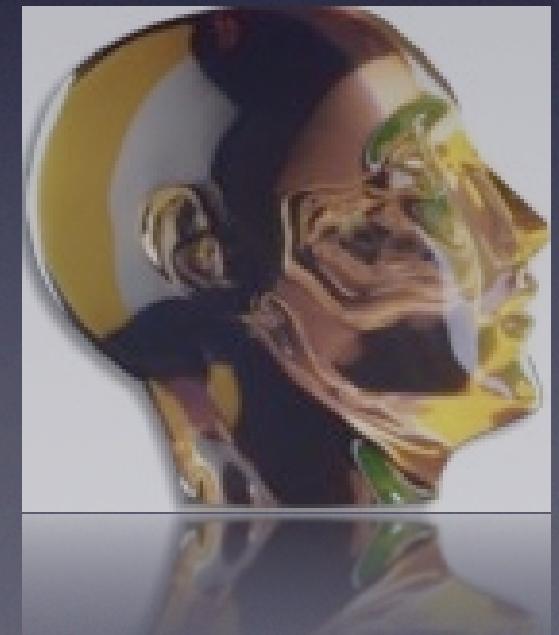
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What is the User Experience?

- Those who have difficulty with COGNITIVE SKILLS:
 - Article - www.webaim.org/articles/cognitive
 - Distractibility simulation
<http://www.webaim.org/simulations/distractability.php>



What is the User Experience?

- Those who have difficulty with **SEIZURES**
- Those with **AGE RELATED PROCESSES**





When will this be me?

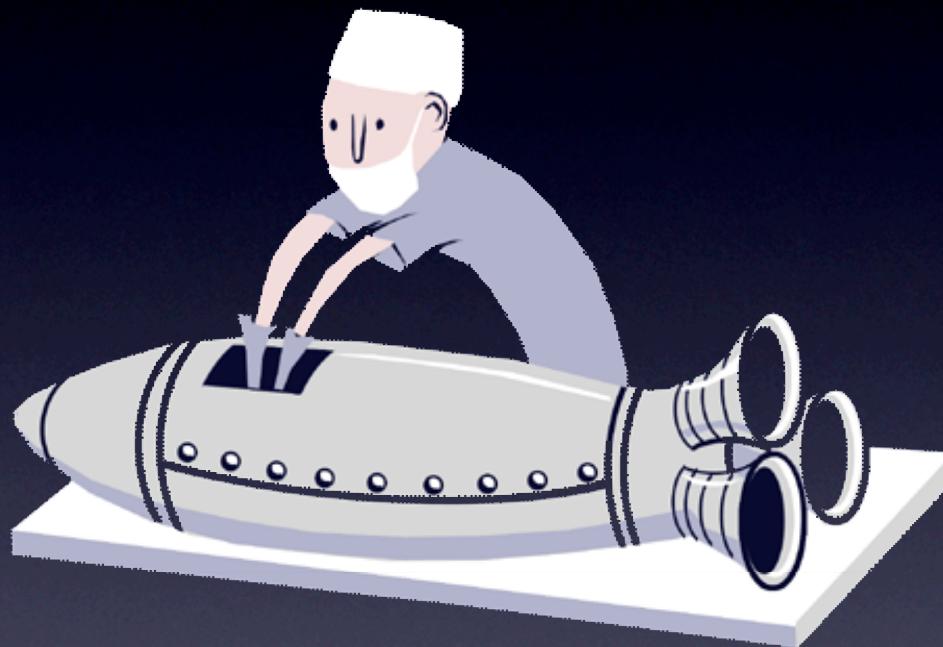
What Do You Do?

- Simple answer
 - Become redundant & multi-modal.
Don't rely on
 - Use of mouse
 - Sight
 - Hearing
- Complete answer
 - Apply existing standards for accessibility. Examples
 - WCAG
 - Section 508 guidelines



Perceivable
Operable
Understandable
Robust

Web Accessibility



... it's not rocket surgery!

http://dev.wave.webaim.org/

WAVE [3.5] analysis of ' CNN.com – Breaking News, U.S., World, Weather, Entertainment & Video News'

http://dev.wave.webaim.org/Output.jsp

WAVE 3.5 development version

HOME ICON View TEXT View OUTLINE View REPORT View

URI: Submit Preferences | Explanation of Icons(open new window)

Accessibility Errors: 9

Accessibility Alerts: 109

Accessibility Features: 242

Structural & Semantic Elements: 2

Instructions: Examine the feedback and icons in the context of the page below to:

1. Eliminate any accessibility errors,
2. Evaluate whether the alerts need to be fixed, and
3. Ensure that the accessibility features, and structural/semantic elements are rendering as you intend them to.

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Thank you!

Cyndi Rowland
Cyndi@cpd2.usu.edu



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