



Common Misconceptions on Web Accessibility

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What's web accessibility?

- To provide equal access to information on the world wide web to everyone irrespective of people with all abilities or with any limitations
- From Wikipedia:
“**Web accessibility** refers to the inclusive practice of making websites usable by people of all abilities and disabilities. When sites are correctly designed, developed and edited, all users can have equal access to information and functionality.” Source:
http://en.wikipedia.org/wiki/Web_accessibility

Why Accessibility?

- As per World Health Organization (WHO), there are around 650 million people with disabilities around the world
- US and India has around 60 million people with disabilities in each country
- “Best viewed” statement on a website will loose a potential market



Who are people with disabilities?

- Situation Disability
- Functional Disability



What is usual mindset?

- Accessibility is a special effort
- Is just for visually impaired users
- Need to have a text version to address needs of people with disabilities
- Time consuming
- Involves lot more costs



Arguments to above comments – Accessibility is a special effort!

- **Writing headings in Microsoft Word and on the Web**
- **Inserting images into Microsoft Word and on the web**
- **Writing HTML forms**



Guideline 1: Perception

- Non-text content
 - Images
 - CAPTCHA
 - Audio / Video



[Yahoo! Chat Home](#) | [Help](#)

Chat Room Verification

We know you hate spam and automated bots in chat rooms as much as we do. To help prevent them, please verify your account by typing the characters shown in the illustration into the text box below. Then click the Submit button. Upon verification, you'll be allowed to join the room and start chatting.

We appreciate your help in making the Yahoo! chat rooms a safer place to hang out.



To join the chatroom please complete the following verification.



Please enter the character shown above...

Submit

Code verification technology developed in collaboration with the [Captcha Project](#) at [Carnegie Mellon University](#).

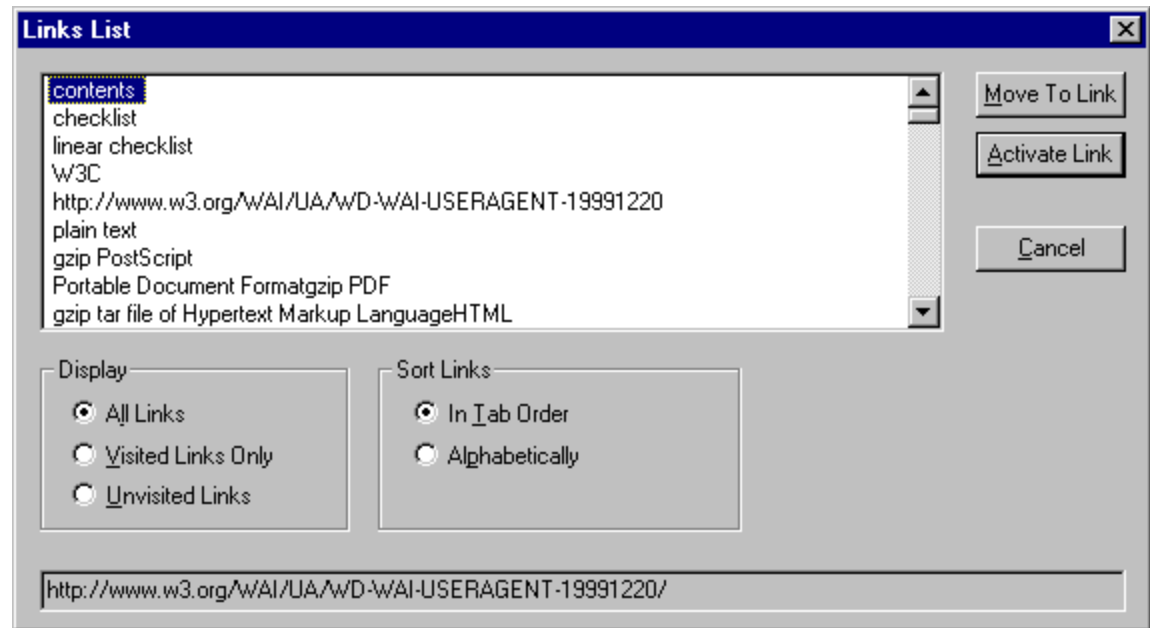
Guideline 1: Perceivable – contd.,

- Adaptability
- Sufficient Color Contrast



Guideline 2: Operable

- Keyboard access – all information and functionality should be available to access via keyboard including:
 - Links
 - Headings
 - Form fields
 - Lists
 - Tables



Guideline 2: Operable – contd.,

- Enough time
- Seizures – seizures should generally be avoided as far as possible
- Navigable – Web page should be easily navigable by any input device including assistive technologies



Accessible Rich Internet Applications (ARIA)

- ARIA is WAI Recommendation
<http://www.w3.org/WAI/intro/aria.php>
- WAI-ARIA, the Accessible Rich Internet Applications Suite, defines a way to make Web content and Web applications more accessible to people with disabilities. It especially helps with dynamic content and advanced user interface controls developed with Ajax, HTML, JavaScript, and related technologies.



Guideline 3: Understandable

- Use of Natural Language – unless a specific terminology is required
- Predictable – User should be able to predict the result upon his action
- Input assistance – provide adequate help for user to interact with forms etc.

The image shows a screenshot of the 1040EZ tax form interface. The form is titled "1040EZ" and "Income Tax Return for Single and Joint Filers With No Dependents". It includes a "Personal Information" section with fields for "Your First Name", "M.I.", "Last Name", "Suffix", "Date of Birth", and "Social Security #". There are also fields for "Spouse's First Name", "M.I.", "Last Name", "Suffix", "Date of Birth", and "Social Security #". Below these are fields for "Street Address", "Apartment No.", "City", "State", and "ZIP Code". At the bottom, there is a checkbox for "Check the boxes at the right if you or your spouse would like to contribute \$3 to the presidential election campaign fund." with options for "You" and "Spouse". A help tooltip is visible on the right side of the form, stating: "Name change? Report it to your local Social Security Administration office before you file to prevent delays. Tell me more".

Guideline 4: Robust

- Compatibility with latest technologies and support for assistive technologies
- Add Accessible Rich Internet Applications (ARIA) support for RIA such as AJAX based applications
 - Alert
 - Landmark etc...



Accessibility Guidelines

- Web Content Accessibility Guidelines –
<http://w3.org/tr/wcag20/>
- Section 508 of Rehabilitation Act –
<http://www.section508.gov>
- Web Guidelines for Indian Government Websites –
<http://web.guidelines.gov.in>



Accessibility Testing

Automated Tools
(Eg: Wave/ FAE)

+

Manual Testing
(Eg: Screen Reader)

=

Accessibility Testing

Accessibility Testing - Automated

- WAVE – <http://wave.webaim.org/toolbar>
- Web Developer Kit - <https://addons.mozilla.org/en-US/firefox/addon/60>
- Color Contrast Analyzer - <http://visionaustralia.org/info.aspx?page=628>



Accessibility Testing – Manual

- Screen Readers
 - NVDA – <http://www.nvda-project.org>



YUI and Accessibility

- We have a lot of accessible controls in YUI 3 such as TabView, Menu, Calendar and so on...
- We have used ARIA to make the widgets accessible
- See the blog with videos at <http://yuiblog.com/blog/category/accessibility>



Questions?





Thank you!

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