



Web-based Survey Design Considerations in Developing 508-compliant Instruments

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This presentation will...

- Provide an overview of common web-survey design conventions
- Describe 508-compliance including the standards related to web survey design
- Discuss several survey elements to understand the complexity in bringing them into compliance
- Demonstrate a few survey items that pose problems for popular screen readers and how they can be programmed correctly to be 508-compliant

Web survey design

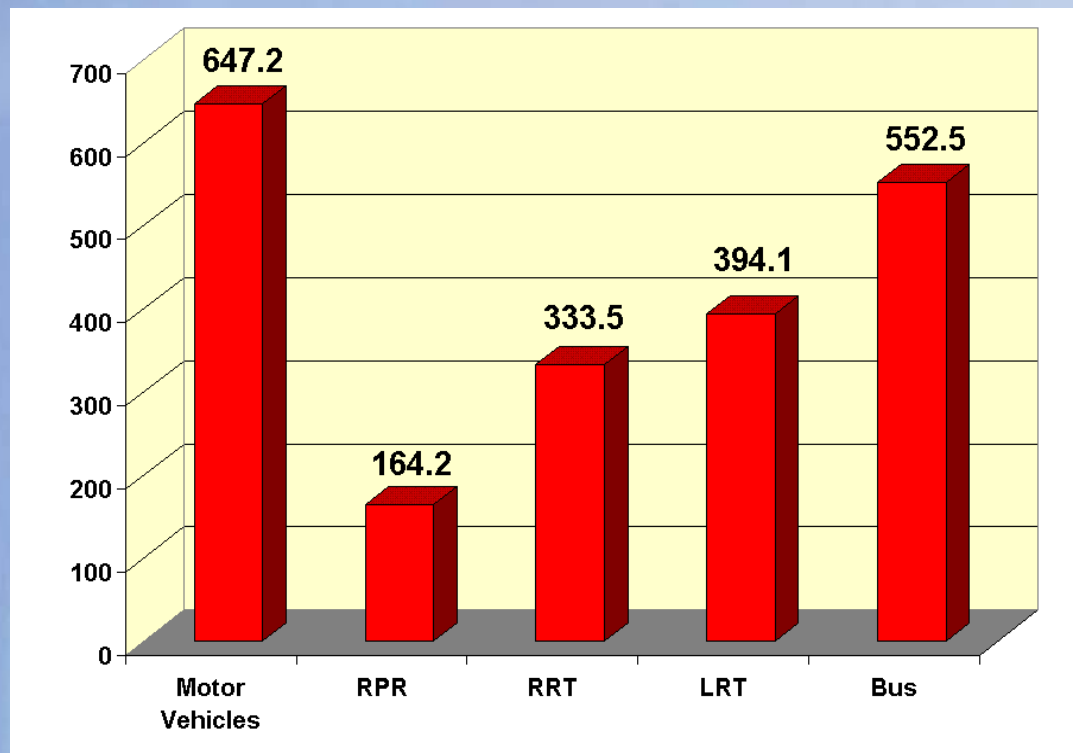
- There are many options for survey designers and programmers to...
 - encourage efficiency
 - increase response
 - Improve the overall screen aesthetics
 - Provide emphasis to specific phrases, words, or terms
 - Increase data response while decreasing real estate.

Web survey design features

Click on the scale to rate your general feeling of well-being during the past week.

As good as it could be

As bad as it could be



Survey Language:

English

Web survey design features (cont.)

8. For what purpose do you generally use visual materials? Please identify how important for your academic and research work are each of the following tasks.

	Not Important						Very Important
	1	2	3	4	5	6	7
Analysis							
To study an artist's technique	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To compare several images	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To document the contents of an image	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To interpret images in a historical context	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Expression							
To gain ideas and inspiration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To communicate and express ideas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Manipulation							
To obtain a copy of the image	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To edit and reuse the image	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Intake - Wellness (* required)

* In general, would you say your health is

Excellent

Very Good

Good

Fair

Poor

Web survey design features (cont.)

User Survey

Libraries are here to serve your entertainment, education and research needs. Please answer the following questions to help us better understand how we can serve our community better.

1 Approximately how often do you visit the local public library?

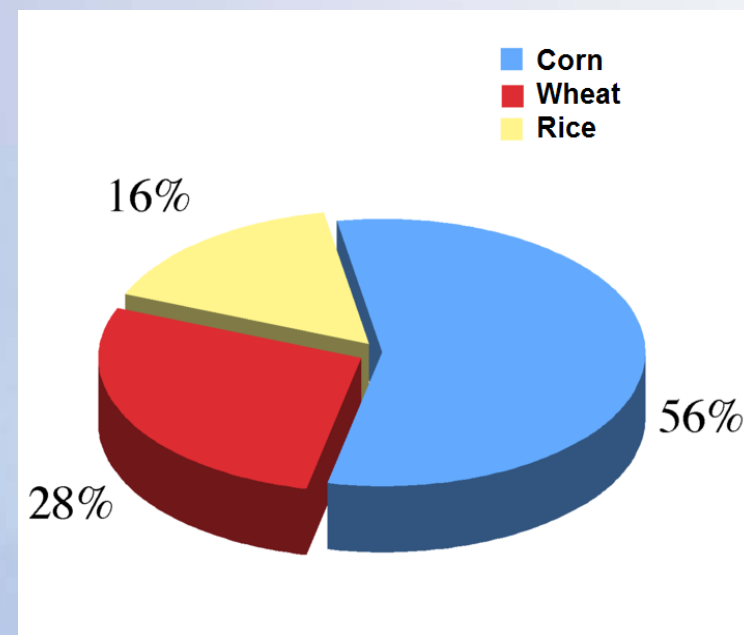
Once a week
 Once every two weeks
 Once a month
 Almost never
 Other

2 What type of materials do you mainly visit the local library to obtain? Select all that apply.

Fiction
 Non-fiction
 How-To Books
 Periodicals
 Movies
 Other

3 How often do you request assistance from the reference librarian?

4 Overall, how satisfied are you with the services provided by the local library branch?



What is 508-compliance?

- Section 508 amendment to the Rehabilitation Act of 1973 requires that Federal agencies' electronic and information technology is accessible to people with disabilities.
- Four parts:
 - A – General Standards
 - B – Technical Standards
 - C – Functional performance criteria
 - D – Documentation standards

Technical standards

- 1194.21 Software applications and operating systems

There are 13 standards that are listed under 1194.21

Keyboard Access

- 1194.22 Web-based intranet and internet information and applications

There are 16 standards that are listed under 1194.22

Accessibility using Assistive Technology

Keyboard access

- 1194.21 (a) - When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually
- Use of tab key to help navigate to fields
- Test applications without the use of a mouse.

Accessibility using screen reader

- 1194.21 (b) -- Accessibility feature – Screen Reader, High Contrast, Sticky keys
- Standard that relates to the development of a survey instrument that can be effectively rendered by a screen reader
- Screen readers read text as it appears on screen
- Limitations and known challenges

Sufficient information for user interface elements

- 1194.21 (d) - Images / graphical display / charts and graphs / video
- These are sometimes used as reference in a survey question
- May require elaborate descriptions
- May be labor-intensive to program
- Resulting in lengthy administration – extra burden placed on the respondent

User color and contrast settings

- 1194.21 (g) – Should not override user selected color and contrast settings
- Background color vs. text
- Text color combinations that can be challenging for individuals that are color blind (blue / green combination)

Animation alternative

- 1194.21 (h) – Non-animated presentable mode (like text narrative)
- Not often used in survey research
- Requires extensive programming to provide descriptive text

Color dependency

- 1194.21 (i) - Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.
- For example, “Fields marked in **RED** are mandatory”
“In the past **12 months**, how often did you visit...”
- However, text will need to be added to describe the meaning of the use of color.

Form label associations

- 1194.21 (I) - All electronic forms must have the necessary information, field elements, directions/cues, and functionality required to complete and submit the form.
- E.g. Name/Address fields
- Forms need to be properly labeled and associated with the response box else the question will not be 508-compliant

Repetitive navigation links

- 1194.22 (o) - A method shall be provided that permits users to skip repetitive navigation links.
- Repetitive links / menus will be continually read by screen readers
- An option should be in place to skip repetitive navigation links

Text-only page

- 1194.22 (k) – A text-only page, with equivalent information or functionality, shall be provided to make a web site comply with the provisions of this part, when compliance cannot be accomplished in any other way.
- The content of the text-only page shall be updated whenever the primary page changes.

In conclusion...

When planning the development of a web-based survey:

- Consider time & labor during early stages of development to accommodate 508 compliance
- Consider survey design features that may require extensive programming due to 508-compliant standards
- Complex designs can result in additional labor time to make screens 508 compliant
- Complex design features can add extra burden on respondents as the length of the instrument increases
- Like the saying goes... sometimes less is best.

More information...

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