

Social Security Administration
CDR Training Pilot

**Web-Based “Guided Practice” Modules
Design Guidelines and Technical Requirements**

v. 12

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Work Sample

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Accessible Design

Accessibility and Section 508 Compliance

By U.S. Federal law (Section 508), all Web-based training developed by/for the Social Security Administration must be fully accessible to all users, including those with physical disabilities. Specifically, the training. . .

- must meet all applicable criteria in Social Security Administration's Section 508 Evaluation Template [see Appendix for details]:
 - Section 1194.21 Software applications and operating systems
 - Section 1194.22 Web-based intranet and Internet information and applications
 - Section 1194.31 Functional performance criteria
 - Section 1194.41 Information, documentation, and support
- should follow W3C guidelines for developers
 - See guidelines main page: <http://www.w3.org/TR/ATAG10-TECHS/>
 - Specific guidelines for supporting the creation of accessible content: <http://www.w3.org/TR/ATAG10-TECHS/imp3>

Assistive Technologies

SSA users might use one or more of the following assistive technologies to interact with Web training:

- Screen reading software (JAWS)
- Screen magnification software (MAGic)
- Voice recognition software (Dragon)

General Accessibility Guidelines

Designers and developers should be aware of the following general guidelines for creating accessible Web-based applications:

- Make sure that all screen elements that can be activated with a mouse (hyperlink, button, text field, etc.) can also be accessed by either a keyboard shortcut or a voice command. Keyboard shortcuts typically are created with the "AccessKey" attribute; voice commands typically leverage the "title" attribute within the HTML tag for a given element.
- When using dynamic text (e.g., feedback text displayed within the same page), be sure to provide an alternate, accessible method of displaying that text. (Screen readers do not reliably read dynamic HTML.)
- Provide clear prompt indicators (e.g., buttons, instruction text) that will benefit both disabled and non-disabled users.
- When appropriate, customize *reading order* of instruction text, images, buttons, and other elements to optimize the experience of a user of screen reading software.
- When appropriate, customize *tabbing order* of buttons, forms and hyperlinks to optimize the experience of a user using the keyboard as the sole means of interacting with the screen.
- Be aware of the default settings of the assistive technologies (e.g., JAWS, MAGic). If you override the default settings, be sure to include instructions at the beginning of the training.
- Avoid using decorative graphics or other non-essential graphics. For example, a "ghosted" image of a software screen might confuse low-vision users.
- Be sure interactive elements and their labels are placed close together so that MAGic users know which label corresponds to which element.
- If creating custom media players, make sure controls are in a logical sequence (based on importance or frequency of use). For example, put the Play button (used frequently) before the shuttle control (used infrequently).
- Include the length of an audio or video piece in the title of the media object so users know how long to expect to listen/view the piece.

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- If appropriate, use heading tags for text headings (e.g. <h1>, <h2>, etc). Screen readers use these tags for in-page navigation.
- Avoid using tables for layout; use CSS instead. If you must use tables for layout, do not use table heading tags; they will confuse the screen reader.
- Use table heading tags for tables when tables are used properly, i.e., to display data

Work Sample

Design Standards: Instructional Designer/Writer

Content Development

Guided Practices (GPs) will be written/developed in Microsoft Word using storyboard templates based on screen types described later in this document. At some point in the future the GPs will be developed in HTML via a custom Web-based tool. Until that time, getting the Word-based content moved over to HTML will likely be done manually by a process yet to be determined.

GP Components

In addition to the basic HTML pages, the Guided Practices will include various supporting materials such as:

- HTML popups
- PDFs
- Photographs and graphics
- Screen captures of actual SSA software and systems (scrubbed as needed)
- Video (and scripts)
- Audio (and scripts)

GP Organization

Guided Practices will be organized in this general sequence:

- A. Table of Contents
- B. Getting Started
- C. Learning Objectives
- D. Introduction to Content
- E-Y. [Variable, based on learning needs]
- E-Y. Transitional screen/Progress check [if needed]
- E-Y. [Variable, based on learning needs]
- Z. Conclusion

Alternative Text

Provide alternative text for all buttons, images that convey important content, forms, and other interactive elements. For efficiency's sake, the Design Standards: HTML Developer/Programmer section already specifies the alternative text for common buttons and other elements. Instructional designers will use the storyboard to specify the alternative text for non-common elements.

Alternative text for complex images should be descriptive but not too long. Examples:

- **Image description:** the Workload Management Process diagram with Stage 2 highlighted.
alt text: "This diagram illustrates the workload management process. Stage 2, the Development stage, is highlighted."
- **Image description:** screen capture of the main eWork screen
alt text: "This image shows the main eWork screen. For this training activity, only three areas of the screen are active: the BOAN entry field, the Claim number entry field, and the hyperlink for Initial/Update Work Review."

For more specific information refer to the Style Guide.

Design Standards: Web Developer/Programmer

Alternative Text

Provide alternative text for all buttons, images, forms, and other interactive elements.

Use the following alternative text for common elements:

- Buttons
 - **Next:** "Next page"
 - **Back:** "Previous page"
 - **Map:** "See the Table of Contents"
 - **Help:** "Get help"
 - **Exit:** "Exit"
 - **Find the Answer:** "Find the answer"
 - **Show Me How:** "Show me how"
 - **Show Captioned Video:** "Show captioned video"
 - **Show Transcript:** "Show transcript"
- Logos (Welcome page only)
 - SSA logo: "logo for Social Security Administration"
 - NTVW logo: " logo for National Training Vision Workshop"
- Multiple choice buttons and boxes. Use the number (1, 2, 3 4, etc).

The instructional designer will specify the alternative text for non-common elements via the storyboard.

CSS-Controlled Layout

Use CSS styles rather than HTML tables for layout. The expected page "viewport" area is 1024x714 pixels. These dimensions presumably can serve as the CSS "container" dimensions. To accommodate possible future changes to the specified page size, ideally we will use relative positioning. A set of draft HTML templates and preliminary style sheet will be provided to facilitate design and development of the HTML pages/templates. We expect that both the templates and style sheet will change as development progresses.

Customized Browser Window

We assume an end user screen resolution of 1024x768 pixels. The training program should be displayed in a browser window with only a title bar (no navigation or address bars). The window should cover the Windows task bar area at the bottom of the screen, but not the SSA "InfoCast" intranet strip at the top. With these requirements in mind, we calculate an available screen area of 1024x746 pixels, and an internal page viewport area of 1024x714 pixels. If technical limitations prevent our covering the task bar, then the available screen area is 1024x716 pixels, with a viewport area of 1024x686 pixels.

Dynamic Text Alternative

If dynamic text is used, then the same content should be made available as an accessible popup window for blind users. Dynamic text is used for several types of content including multiple choice answer feedback, **Show Me How** content, **Find the Answer** content, video captions, and audio transcripts. The specific technical approach for displaying the pop-up has not yet been determined. Options include:

- **"Accessibility Flag" method.** An "accessibility flag" code could be used to detect the presence of accessibility software. A different feedback message would be displayed depending on whether the user is, or is not, using accessibility software. The non-accessible machine will display the dynamic version of the text; the accessible machine will display the system popup window.
- **User action method.** The type of text displayed may be determined by how the user activates the element. A mouse click would display the dynamic text (via "OnClick" JavaScript), while a keyboard action should generate the popup window (via "OnEnter" JavaScript).

Keyboard Shortcuts and Voice Commands

Use keyboard shortcuts and voice commands for all navigation elements and other purposes.

This table shows our proposed AccessKey and Voice Command Assignments:

Action	AccessKey	Voice command word
Go to the next page	Alt-N	"Next"
Go to the previous page	Alt-B	"Back"
Select answer 1	Alt-1	"Answer one"
Select answer 2	Alt-2	"Answer two"
Select answer 3	Alt-3	"Answer three"
Select answer 4	Alt-4	"Answer four"
Select answer 5	Alt-5	"Answer five"
Select True	Alt-T	"True"
Select False	Alt-F	"False"
Select Find the Answer button	Alt-A	"Find"
Select Show Me How button	Alt-S	"Show"
Read alternative text description for simulation screen image	Alt-D	"Description"
Open the Help page	Alt-H	"Help"
Open the Map page	Alt-M	"Map"
Exit the program	Alt-X	"Exit"

Media Files and Media Players

Audio

The training includes audio files. For full accessibility we will provide a text transcript of each audio file. All users, regardless of ability (hearing or deaf) can view the transcript by clicking/selecting the "Show Transcript" button located within or near the audio player. The transcript content should be displayed following our standard for dynamic text (provide both an inline version and an accessible popup). The dynamic text version should be scroll enabled. After clicking the button, its label changes to read "Hide Transcript." Clicking the Hide Transcript button hides the inline text transcript.

Video

The training includes video files. For full accessibility we will provide a caption and two versions of the video file: a non-captioned version and an open-caption version. All users, regardless of ability (sighted or blind) should be able to access the video caption.

Possible implementation method: Embed the non-accessible video within the page. When the user clicks the Show Captioned Video button, the open-caption version of the video opens in a stand-alone player. The spoken audio contains enough detail so that a separate text version of the caption would not be necessary.

See <http://www.webaim.org/techniques/captions/> for more information.

To be resolved:

- What type of media player?
 - Windows Media Player
 - RealPlayer
 - QuickTime
 - Flash
- Have we accounted for all accessibility and technical issues?
 - For good usability we probably do not want the video/audio start playing automatically. (User simply must select **Play**.)

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- Stand-alone player required for accessibility?
- Can we trigger a page refresh after the video finishes playing, or must the user select the **Next** button?
- Can the video or audio title and duration text be embedded in the player or must it be displayed separately (if separately, we need to add a style to the style sheet)

Multiple Choice Design and Functionality

Custom graphics

The training includes multiple choice questions, both "radio button" style and "check box/multi-select" style. Do not use standard form objects; instead create custom graphics to represent radio buttons and boxes. The buttons or boxes should be significantly larger than a standard radio button or check box so that they are easier to click. Buttons should be differently shaped and colored than boxes. An advantage of graphic buttons is they allow us to display the shortcut key text as part of the graphic (e.g., "1" embedded within the button or box). Another advantage is that linked graphics can be accessed more easily with the JAWS accessibility tool (via regular tabbing).

Custom functionality

We're specifying an unconventional functionality for both the radio button and check box/multi-select styles of multiple choice questions. The concepts of single and multiple correct answers remain conventional, but when the user clicks or selects an answer button or box, feedback appears immediately; no "Check Answer" button used.

- For accessibility, the user may choose an answer by either clicking a numbered button or box, or pressing the appropriate keyboard shortcut.
- Text feedback appears as separate text panel or, if a keyboard short cut is used, an accessible pop-up window.
- [When a "correct" feedback pop-up is used, dismissing the pop-up will automatically advance the program to the next page. \[added April 5, 2007\]](#)

Flexible number of answers

To maintain instructional flexibility, the number of possible answers might vary from question to question and will be specified in the storyboard as a variable {#}. Another variable, {COR #}, will indicate the number of correct answers in a multi-select multiple choice question. This variable will be used to display the proper feedback given for each selection.

Visual feedback

In addition to the text feedback provided by text panels or pop-ups, also display graphical feedback. A red "X" (incorrect) or green check mark (correct) should appear to the left of the selected button or box. Once selected, a button or box can't be reselected.

Navigation Conventions

- **Back** button navigates to the previous page in the sequence.
- **Next** button navigates to the next page in the sequence (e.g., 20-03, 20-04, 20-05). Exception: Display the {NO ANSWER} feedback/popup if a screen asks for user input (multiple choice question, audio/video player, simulation task) and the user has not yet made any input.
- **Exit** button exits the program and saves state for later return.
- **Map.** Page of hyperlinks to sections within the GP. Design TBD.
- **Help.** Provides instructions for how to use the course, navigation conventions, accessibility conventions (including keyboard shortcuts and voice commands).

Reading Order

The reading order is the sequence in which all screen elements are read by screen reading software (e.g., JAWS). In many cases, the desired reading order of screen elements will differ from their visual location on the page; reading order will be specified in the storyboard. Screen readers read HTML content from top to

bottom, so we can use HTML to control reading order by sequencing the HTML code in the desired order. We can then use CSS to display those elements on the page in the desired order/layout. Reading order will be specified in the storyboard.

Simulations

Software simulations will replicate the functionality of several types of screen elements, such as:

- text fields
- buttons
- drop-down menus
- combo boxes
- hyperlinks
- popup calendars

These elements probably can be grouped into two basic types of technical approaches: (1) text entry forms and (2) clickable "hot zones." To create the "hot zones" over a screenshot, we recommend using a combination of image maps and layers (rather than sliced/abled images).

To be resolved:

Our current simulation "hot spot" design specification includes an "incorrect answer other" variable {INC ANS OTHER} to provide feedback for user answers (e.g., clicks) that are not part of the prescribed answers. For example, we might describe hot spots for three possible answers and corresponding feedback text for those three hot spots. But what if the user clicks an area other than those three hot spots? Can we "trap" for incorrect clicks or keystrokes that fall outside the area of our three hot spots? If so, how?

Update from Mark Swanson, April 2, 2007: I tested the technique of simply adding a hyperlink to the main screen shot image, associated with a show/hide layer JavaScript. Unfortunately, I can't get it to work in IE 6.0 using my sample HTML templates. The technique works fine in Firefox, so perhaps this is a JavaScript behavior issue that has a known workaround (?). I have not yet tried the invisible pixel.gif solution.

Tabbing Order

Tabbing order is the sequence in which the user encounters buttons, links, or form objects by pressing the Tab key. Tabbing order can be customized so that the user tabs to in a sequence other than the default sequence. Order is determined by using the "tabindex" attribute for the relevant HTML elements.

Use the following sequence for setting tabbing order:

1. Elements in the main content area, following these rules:
 - If one column, read all elements from top to bottom
 - If two columns, read all elements on the left side, top to bottom, then read all the elements on the right side, top to bottom
2. Primary navigation buttons (Back, Next)
3. Secondary navigation buttons (Site, Help, Exit)

User Interface Screen Types and HTML Templates

We have identified 13 different "screen types" to illustrate the variety of screen content the user will encounter. (These screen types are described in greater detail later in this document.) Unique layout or content requirements, or both, distinguish the screen types. Screen type layout differences should be accomplished via styles in the CSS style sheet. To help the developer and designer, we have created a set of draft HTML templates and CSS style sheet that correspond to these screen types. The style sheet includes groupings of styles (indicated by comments) that are required by each of the HTML templates. This table shows the current proposed screen types and their corresponding HTML templates:

Screen Type	HTML template
Welcome	welcome.html

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One Column	one-column.html
Two Columns A: Generic	two_columns_A.html
Two Columns B: Interactive List	two_columns_B.html
Multiple Choice A: Radio Button style	multiple-choice_A.html
Multiple Choice B: Check Box/Multi-Select style	multiple-choice_B.html
Simulation A: Hot Spots	simulation_A.html
Simulation B: Text Entry	simulation_B.html
Simulation C: Show Me How	simulation_C.html
Video A: Play	video_A.html
Video B: Answer Question	video_B.html
Audio A: Play	audio_A.html
Audio B: Answer Question	audio_B.html

The number of screen types and HTML templates required might change after the designer and developer have had time to analyze the program requirements.

To be resolved:

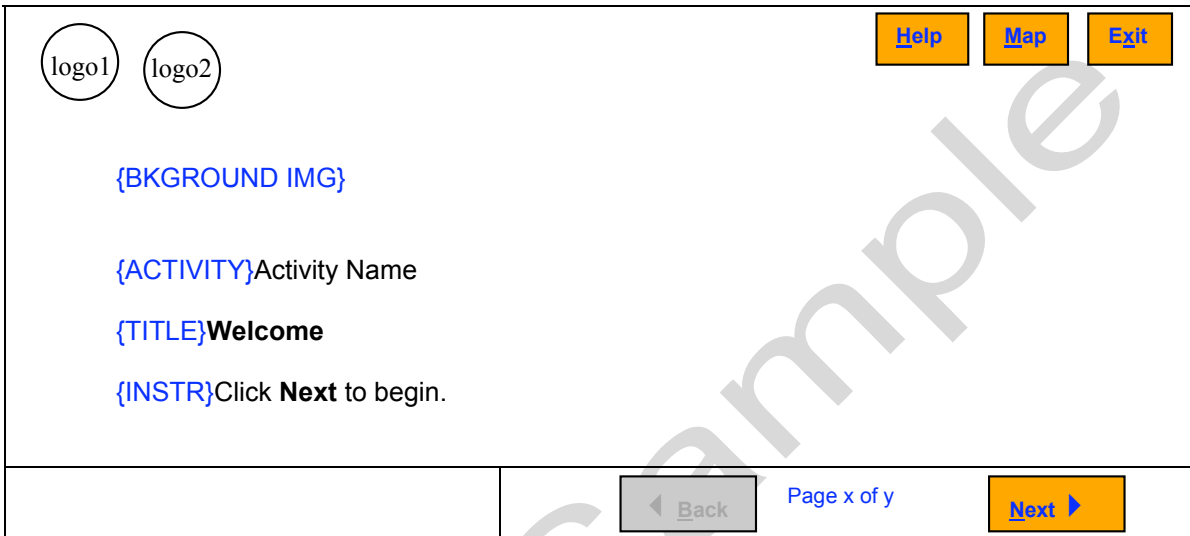
- Are the current screen types, HTML templates, and CSS style sheet sufficient for the designer and developer to do their work? Graphic design/layout? HTML programming/interaction design? Database design? Web-based tool interface? Other?
- Are all the CSS styles identified? If not, can the graphic designer create new styles as needed?
- Are all the variables identified in the screen types specifications? If not, what's missing?
- What is the best workflow between graphic designer and developer? E.g., Must all CSS styles be identified before the database can be built? Can work be done in parallel?
- Assuming the actual HTML files will be generated dynamically from a database, must the graphic designer provide new HTML template code to the developer?

User Interface Screen Types and Specifications

Welcome

Sample page from storyboard:

{PAGE}Page 20-01



Specifications:

Screen type	Welcome
User interaction	The images and text appear automatically on this screen. Navigation text/buttons appear to allow students to move to the next screen. The Back button is not active.
{LOGO1}	Description: Social Security Administration logo File name: ssa-logo.jpg Alt text: Logo for Social Security Administration
{LOGO2}	Description: Training Vision Workshop logo File name: ntvw-logo.jpg Alt text: Logo for National Training Vision Workshop
{BKGROUND IMG}	This is a large image placed in background of page. There will be only two possible images: Work and Medical. Description: [Defined by instructional designer] File name: [Defined by instructional designer] Alt text: [NOTE: alt text is impossible for background images. If this image conveys important content, we must use an inline image.]

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Reading order (for accessibility software)	{LOGO1} {LOGO2} {TITLE} {ACTIVITY} {BACKGROUND IMG} {INSTR} Back button [inactive] Next button Help button Map button Exit button
--	--

Work Sample

One Column

Sample page from storyboard:

{PAGE}Page 20-02

<p>{TITLE} Introduction</p> <p>{ACTIVITY} Work CDRs—Activity 3: Handling Incomplete Earnings Information</p> <p>{TEXTa} [max 15 lines] After completing the appropriate queries in the first stage of handling work CDRs, a CR is ready to develop a case by collecting and classifying information about the claimant.</p> <p>Stage 2: Case Development</p> <p>You will practice developing a case in Stage 2 by working through a simulation on the computer. By the end of this activity you will be able to:</p> <ul style="list-style-type: none"> • Collect relevant information from a claimant • Retrieve information about an existing case using eWork • Verify self-employment earnings and employer-paid wages • Calculate average self-employment wages • Determine countable earnings <p>{IMG} [optional]</p> <p>{TEXTb} Optional</p> <p>{INSTR} Click Next to continue.</p>	<p>Help Map Exit</p>
	<p> ← Back Page x of y Next → </p>

Specifications:

Screen type	Open (Stacked)
User interaction	The images and text appear automatically on this screen. Navigation text/buttons appear to allow students to move to the next screen.
{IMG} (optional)	This can be a horizontally-oriented image, placed either above or below the text. Description: [Defined by instructional designer] File name: [Defined by instructional designer] Alt text: [Defined by instructional designer]
Reading order (for accessibility software)	{TITLE} {ACTIVITY} {TEXTa} {IMG} (alt text) {TEXTb} {INSTR} Back button Next button Help button Map button Exit button

Two Columns A: Generic

Sample page from storyboard:

{PAGE}Page 20-02

{TITLE}Introduction Help Map Exit 	
{ACTIVITY}Work CDRs—Activity 3: Handling Incomplete Earnings Information	
[Optional]	
{TXT1a}	{TXT2a}
{IMG1}	{IMG2}
{TXT1b}	{TXT2b}
{INSTR}Click Next to continue.	
	◀ Back Page x of y Next ▶

Specifications:

Screen type	Two Columns A: Generic
User interaction (narrative)	The images and text appear automatically on this screen. Navigation text/buttons appear to allow users to move to the next screen.
{ICON}	This will be a small graphic. The icon text should wrap around the icon. Description: [Defined by instructional designer] File name: [Defined by instructional designer] Alt text: [Defined by instructional designer]
Reading order (for accessibility software)	{TITLE} {ACTIVITY} {TXT1a} {IMG1} {TXT1b} {INSTR} {TXT2a} {IMG2} {TXT2b} Back button Next button Help button Map button Exit button

Two Columns B: Interactive

Sample page from storyboard:

{PAGE}Page 20-02

<p>{TITLE} Common Companion Animals</p>		<p>Help</p>	<p>Map</p>	<p>Exit</p>
<p>{ACTIVITY} Work CDRs—Activity 3: Handling Incomplete Earnings Information</p>				
<p>{INSTR1} Click an item in the list below to learn more.</p>		<p>Optional {LINKTXTa} [where x is variable]</p>		
<ul style="list-style-type: none"> • {ITEM1} Cats • {ITEM2} Dogs • {ITEM3} Horses • {ITEM4} Turtles • {ITEM5} Fish • {ITEM6} Rabbits 		<p>Optional {LINKIMGx} [where x is variable]</p>		
		<p>Optional {LINKTXTb} [where x is variable]</p>		
<p>{INSTR2} When you're done, click Next to continue.</p>				
		<p>← Back</p>	<p>Page x of y</p>	<p>Next →</p>

Specifications:

Screen type	Two Columns C: Interactive
User interaction (narrative)	When the user clicks a hyperlinked item in the list on the left, more information appears on the right (either text or image). The same accessibility rules apply: mouse actions display dynamic in-page text or image, keyboard actions display a popup window.
{TXTa}	First text block associated with {ITEMx} where x is defined by instructional designer.
{IMGx}	Image associated with {ITEMx} where x is defined by instructional designer. Description: [Defined by instructional designer] File name: [Defined by instructional designer] Alt text: [Defined by instructional designer]
{TXTb}	Second text block associated with {ITEMx} where x is defined by instructional designer.

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Reading order (for accessibility software)	{TITLE} {ACTIVITY} {INSTR1} List: {ITEM1} through {ITEMx} {INSTR2} Back button Next button Help button Map button Exit button
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Work Sample

Multiple Choice A: Radio Button style

Sample page from storyboard:

{PAGE}Page 20-03

{TITLE}Queries

Help
Map
Exit

{ACTIVITY}Work CDRs—Activity 3: Handling Incomplete Earnings Information

{Q TXT} [10 lines max] Before sending out the SSA-821 and SSA-820 forms to Mr. Johnson, the CR would have made some inquiries about his work history. Which of the following would you query? Click the best answer. Optional:

✗ 1. {ANS 1}MBR

✓ 2. {ANS 2}DEQY

✗ 3. {ANS 3}DCF

✗ 4. {ANS 4}SEQY

{TXT2a}

{IMG2}

{TXT2b}

Not sure? Find the Answer

[Area for in-page feedback, See below for text. Maximum 8 lines]

← Back

Page x of y

Next →

Specifications:

Screen type	Multiple Choice A: Radio Button style
User interaction	Screen automatically shows question text. [See Project Standards for detailed description of multiple choice design/interaction.] If user clicks Find the Answer at any time, a separate text panel/accessible popup window is displayed with the {FIND ANS} text.
{#}	Number of answer buttons (may vary with each question; <i>might</i> be needed to display appropriate feedback) [Defined by instructional designer]
{COR ANS}	The correct answer number [Defined by instructional designer]
{FDBK 1}	Specific feedback text for {ANS 1} [Defined by instructional designer]
{FDBK 2}	Specific feedback text for {ANS 2} [Defined by instructional designer]
{FDBK 3}	Specific feedback text for {ANS 3} [Defined by instructional designer]
{FDBK 4}	Specific feedback text for {ANS 4} [Defined by instructional designer]
{COR APPEND}	Generic feedback text that should be appended to any correct feedback, e.g., {FDBK 3} + {COR APPEND}, but only for the dynamic text feedback (not the popup). Click Next to continue.

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{INC APPEND}	<p>Generic feedback text that should be appended to any incorrect feedback text, e.g., {FDBK 4} + {INC FEEDBK 1}</p> <p>Try again.</p>
{NO ANSWER}	<p>When user clicks Next button before selecting an answer, this text will appear in a dynamic text panel (or accessible popup window):</p> <p>Don't forget to answer the question before moving on.</p>
{FIND ANS}	<p>When user clicks the Find the Answer button, this text will appear in a dynamic text panel (or accessible popup window). [Defined by instructional designer]</p>
Reading order (for accessibility software)	<p>{Q TXT}</p> <p>{ANS 1}</p> <p>{ANS 2}</p> <p>{ANS 3}</p> <p>{ANS 4}</p> <p>Find the Answer button</p> <p>{TXT2a}</p> <p>{IMG2}</p> <p>{TXT2b}</p> <p>Back button</p> <p>Next button</p> <p>Help button</p> <p>Map button</p> <p>Exit button</p>

Multiple Choice B: Check Box/Multi-Select style

Sample page from storyboard:

{PAGE}Page 20-03

{TITLE}Queries

Help
Map
Exit

{ACTIVITY}Work CDRs—Activity 3: Handling Incomplete Earnings Information

{Q TXT} [10 lines max] This is an example of a multi-select question in which more than one answer is correct. Which of the following colorful phrases are most closely related? Choose the three best answers.

- 1. {ANS 1}Blue skies
- 2. {ANS 2}Rose-colored glasses
- 3. {ANS 3}Pink flamingos
- 4. {ANS 4}Silver linings

Not sure? Find the Answer

[Area for in-page feedback, See below for text. Maximum 8 lines]

Optional:

{TXT2a}

{IMG2}

{TXT2b}

← Back
Page x of y
Next →

Specifications:

Screen type	Multiple Choice B: Check Box/Multi-Select style
User interaction	Screen automatically shows question text and possible answers. [See Project Standards for detailed description of multiple choice design/interaction.] If user clicks Find the Answer at any time, a separate text panel/accessible popup window is displayed with the {FIND ANS} text.
{#}	Number of answer check boxes (may vary with each question; <i>will</i> be needed to display appropriate feedback) [Defined by instructional designer]
{COR #}	Number of correct answers (may vary with each question). Will be used to program the text string properly for the appended text a correct feedback. [Defined by instructional designer]
{COR ANS}	Set of all correct answers, e.g., {ANS 1} and {ANS 2} and {ANS 4}. [Defined by instructional designer]
{FDBK 1}	Specific feedback text for {ANS 1} [Defined by instructional designer]
{FDBK 2}	Specific feedback text for {ANS 2} [Defined by instructional designer]
{FDBK 3}	Specific feedback text for {ANS 3} [Defined by instructional designer]
{FDBK 4}	Specific feedback text for {ANS 4} [Defined by instructional designer]

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{COR APPEND}	<p>Variable feedback text that should be appended to any correct feedback, e.g., {FDBK 3} + {COR APPEND}.</p> <p>If not all correct answers have been selected, append: There are [X] correct answers remaining. Where X = {COR #} – Number of Correct Answers Already Selected.</p> <p>If all correct answers have been selected, and dynamic feedback is used, append: You have selected all the correct answers. Click Next to continue.</p> <p>If all correct answers have been selected, and a popup feedback is used, append: You have selected all the correct answers.</p>
{INC APPEND}	<p>This is generic feedback text that should be appended to any incorrect feedback text, e.g., {FDBK 4} + {INC APPEND}</p> <p>Try again.</p>
{ALL CORRECT}	<p>Specific feedback text when all correct answers have been selected [Defined by instructional designer]</p>
{NO ANSWER}	<p>When user clicks Next button before selecting an answer, this specific text will appear in a dynamic text panel (or accessible popup window):</p> <p>Don't forget to answer the question before moving on.</p>
{FIND ANS}	<p>When user clicks the Find the Answer button, this text will appear in a dynamic text panel (or accessible popup window). [Defined by instructional designer]</p>
Reading order (for accessibility software)	<p>{Q TXT} {ANS 1} {ANS 2} {ANS 3} {ANS 4} Find the Answer button {TXT2a} {IMG2} {TXT2b} Back button Next button Help button Map button Exit button</p>

Simulation A: Hot Spots

Sample page from storyboard:

{PAGE}Page 20-12

{TITLE} **Using eWork**

Help
Map
Exit

{ACTIVITY}Work CDRs—Activity 3: Handling Incomplete Earnings Information

Your Task: {SIM SCREEN}

{TASK}Use eWork to verify earnings reported by claimant Mr. Johnson.

{STEP}Step 1:
 {STEP INSTR}Click (or select) the field used to enter the SNN for the beneficiary.

Show Me How

{RSC INSTR}To see the claimant's file information, click the file tabs below.

[Optional tabs; delete if not needed:]

{RESOURCE 1}
{RESOURCE 2}

◀ Back
Page x of y
Next ▶

Specifications:

Screen type	Simulation A: Hot Spots
User interaction	User selects the appropriate "hot zone". JAWS users will use keyboard shortcut equivalent to activating a hyperlink (e.g., spacebar or Enter). A correct answer automatically advances user to the next page. Correct and incorrect hot zones are indicated below as "COR ANS" or "INC ANS x".
{SIM SCREEN}	This is the initial screen capture image file. A marked-up version of this image will be embedded in the storyboard, with hot spots marked; the described {SIM SCREEN} image file itself will be unmarked. Description: [Defined by instructional designer] File name: [Defined by instructional designer] Alt text: [Defined by instructional designer]
{COR ANS}	The "hot zone" for the correct answer [highlighted in the screen shot above] Hot spot alt text: [Defined by instructional designer]
{INC ANS 1}	The first incorrect "hot zone" [highlighted in the screen shot above] Hot spot alt text: [Defined by instructional designer]
{INC ANS 2}	The second incorrect "hot zone" [highlighted in the screen shot above] Hot spot alt text: [Defined by instructional designer]

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{SHOW TXT}	When user clicks the Show Me How button, this text will appear in a dynamic text panel (or accessible popup window). [Defined by instructional designer]
{INC FBDK 1}	Specific feedback text for {INC ANS 1} [Defined by instructional designer]
{INC FBDK 2}	Specific feedback text for {INC ANS 2} [Defined by instructional designer]
{INC FEEDBK OTHER}	Generic feedback text for any other incorrect click: That is not correct. Click Show Me How for guidance.
{NO ANSWER}	When user clicks Next button before selecting an answer, this specific text will appear in a dynamic text panel (or accessible popup window): Don't forget to complete the step before moving on.
{RESOURCE 1}	Description of the label and hyperlinked file associated with the (optional) first resource tab. Description: [Defined by instructional designer] File name: [Defined by instructional designer] Alt text: [Defined by instructional designer]
{RESOURCE 2}	Description of the label and hyperlinked file associated with the (optional) second resource tab. Description: [Defined by instructional designer] File name: [Defined by instructional designer] Alt text: [Defined by instructional designer]
Reading order (for accessibility software)	{SIM SCREEN} alt text {TASK} {STEP} {STEP INSTR} Show Me How button {RSC INSTR} {RESOURCE 1} {RESOURCE 2} {COR ANS} {INC ANS 1} {INC ANS 2} Back button Next button Help button Map button Exit button

Simulation B: Text Entry

Sample page from storyboard:

{PAGE}Page 20-13

{TITLE} **Using eWork**

Help
Map
Exit

{ACTIVITY}Work CDRs—Activity 3: Handling Incomplete Earnings Information

Your Task: {SIM SCRN}

{TASK}Use eWork to verify earnings reported by claimant Mr. Johnson.

{STEP}Step 1:
{STEP INSTR}Specify the beneficiary.

Enter Mr. Johnson's SSN then press the Tab key.

Show Me How

{RSC INSTR}To find the claimant's SSN number, click the tab for the SSA-820 file below.

[Optional tabs; delete if not needed:]

{RESOURCE 1}

{RESOURCE 2}

◀ Back

Page x of y

Next ▶

Specifications:

Screen type	Simulation B: Text Entry
User interaction	The user types text or numbers into a text field. After user presses Tab key on keyboard, feedback is provided. A correct answer automatically advances user to the next page.
{SIM SCRN}	This is the screen capture image file. A marked-up version of this image will be embedded in the storyboard, with the text field circled for guidance; the described {SIM SCREEN} image file itself will be unmarked. Description: [Defined by instructional designer] File name: [Defined by instructional designer] Alt text: [Defined by instructional designer] Field alt text: [name of text entry field]
{COR ANS}	Defines the text required for the correct answer [Defined by instructional designer]
{INC ANS 1}	Describes the conditions for providing incorrect feedback. Ideally, this will be a known common error so that specific feedback can be provided.
{SHOW TXT}	When user clicks the Show Me How button, this text will appear in a dynamic text panel (or accessible popup window). [Defined by instructional designer]
{INC FBKD 1}	Specific feedback text for {INC ANS 1} [Defined by instructional designer]

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{INC FEEDBK OTHER}	<p>Generic feedback text for any other incorrect click:</p> <p>That is not correct. Click Show Me How for guidance.</p>
{NO ANSWER}	<p>When user clicks Next button before selecting an answer, this specific text will appear in a dynamic text panel (or accessible popup window):</p> <p>Don't forget to complete the step before moving on.</p>
{RESOURCE 1}	<p>Description of the label and hyperlinked file associated with the (optional) first resource tab.</p> <p>Description: [Defined by instructional designer] File name: xxxxxx.pdf [Defined by instructional designer] Alt text: [Defined by instructional designer]</p>
{RESOURCE 2}	<p>Description of the label and hyperlinked file associated with the (optional) second resource tab.</p> <p>Description: [Defined by instructional designer] File name: xxxxxx.pdf [Defined by instructional designer] Alt text: [Defined by instructional designer]</p>
Reading order (for accessibility software)	<p>{SIM SCREEN} alt text {TASK} {STEP} {STEP INSTR} Show Me How button {RSC INSTR} {RESOURCE 1} {RESOURCE 2} {COR ANS} alt text Back button Next button Help button Map button Exit button</p>

Simulation C: Informational Only

Sample page from storyboard:

{PAGE}Page 20-13

{TITLE} **Using eWork**

Help
Map
Exit

{ACTIVITY}Work CDRs—Activity 3: Handling Incomplete Earnings Information

Your Task: {SIM SCRN}

{TASK}Use eWork to verify earnings reported by claimant Mr. Johnson. {SHOW HL}

{STEP}Step 3:
 {STEP INSTR}You have finished verifying Mr. Johnson's earnings.

Click **Next** to continue.

[Optional tabs; delete if not needed:]

{RESOURCE 1}
{RESOURCE 2}

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Next ▶

Specifications:

Screen type	Simulation C: Informational Only
User interaction	Informational only (to show the result of an action and/or to highlight a portion of a screen. User reads information then clicks Next.
{SIM SCREEN}	File name: [Defined by instructional designer] Alt text: [Defined by instructional designer] (Example: "This image is a simulation of the main eWork screen. The SSN field is highlighted.")
{RESOURCE 1}	Description of the label and hyperlinked file associated with the (optional) first resource tab. Description: [Defined by instructional designer] File name: xxxxxx.pdf [Defined by instructional designer] Alt text: [Defined by instructional designer]
{RESOURCE 2}	Description of the label and hyperlinked file associated with the (optional) second resource tab. Description: [Defined by instructional designer] File name: xxxxxx.pdf [Defined by instructional designer] Alt text: [Defined by instructional designer]

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Reading order (for accessibility software)	{SIM SCREEN} alt text {TASK} {STEP} {RSC INSTR} {RESOURCE 1} {RESOURCE 2} Back button Next button Help button Map button Exit button
--	---

Work Sample

Video C: Play

Sample page from storyboard:

{PAGE}Page 20-04

{TITLE} **The Interview**

Help
Map
Exit

{ACTIVITY}Work CDRs—Activity 3: Handling Incomplete Earnings Information

{MEDIA TITLE}In-person interview
({DURATION})

Video player area
{MEDIA}

[blank]
or
{INSTR}

Show Captioned Video

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Page x of y
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Specifications:

Screen type	Video C: Play
User interaction	The video player appears alone on the left side. After the user plays the video, multiple choices question could be displayed on right using a different template (Video A or B). If user clicks the Show Captioned Video button, the open-caption version opens in a stand-alone player.
{MEDIA}	Description of the video file. Description: [Defined by instructional designer] File name (standard version): [Defined by instructional designer; model answer video should include "ans" in the file name, e.g., 20-04-video-ans.wmp] File name (open-caption version): [Defined by instructional designer; model answer video should include "ans" in the file name, e.g., 20-04-video-oc-ans.wmp] Alt text: [Defined by instructional designer] Duration: [Defined by instructional designer]
{CAPTION}	Video caption text. [Might be implemented by video production, not Web developer.]
{INSTR}	(Optional text) When this page is used to display the "model answer" video, use this area to display instruction.

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Reading order (for accessibility software)	<p>If initial video:</p> <p>{TITLE} {ACTIVITY} {MEDIA TITLE} {DURATION} {MEDIA} Back button Next button Help button Map button Exit button</p> <p>If follow-up "model answer" video (indicated by "ans" in the file name):</p> <p>{INSTR} {MEDIA TITLE} {DURATION} {MEDIA} Back button Next button Help button Map button Exit button {TITLE} {ACTIVITY}</p>
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Video A or B: Answer Question

Sample page from storyboard:

{PAGE}Page 20-05

{TITLE} **The Interview**

Help
Map
Exit

{ACTIVITY}Work CDRs—Activity 3: Handling Incomplete Earnings Information

{MEDIA TITLE}In-person interview
({DURATION})

Video player area
{MEDIA}

Show Captioned Video

{Q TXT} Which of the following three choices would you say next to the claimant? Click the best answer.

1. {ANS 1} Well, we cannot complete these forms without this information. Would you contact this employer and come back with proof of your wages?
2. {ANS 2} That's Okay. We don't need it. We'll just use the yearly total that you gave me.
3. {ANS 3} Okay. Do you have any records of your self-employment earning? How about a tax return?

Not sure? Find the Answer

[Feedback area for in-page feedback. See below for text.]

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Specifications:

Screen type	Video A or B: Answer question
User interaction	Video player functionality/interactivity is the same as Video A screen type. The multiple-choice interaction is the same as the Multiple Choice screen types (A =radio button type, B =multi-select type).
{MEDIA}	Description of the video file. Description: [Defined by instructional designer] File name (standard version): [Defined by instructional designer] File name (open-caption version): [Defined by instructional designer] Alt text: [Defined by instructional designer] {DURATION}: [Defined by instructional designer]
{#}	Number of answer check boxes (may vary with each question; <i>will</i> be needed to display appropriate feedback) [Defined by instructional designer]
{COR ANS}	Correct answer, e.g. {ANS 1}, or if multi-select, set of all correct answers, e.g., {ANS 1} and {ANS 2} and {ANS 4}
{FDBK 1}	Specific feedback text for {ANS 1} [Defined by instructional designer]
{FDBK 2}	Specific feedback text for {ANS 2} [Defined by instructional designer]
{FDBK 3}	Specific feedback text for {ANS 3} [Defined by instructional designer]

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{FDBK 4}	Specific feedback text for {ANS 4} [Defined by instructional designer]
{INC FEEDBK 1}	This is generic feedback text that should be appended to any incorrect feedback text, e.g., {FDBK 4} + {INC FEEDBK 1} [Defined by instructional designer]
{ALL CORRECT} (if multiselect)	Specific feedback text when all correct answers have been selected [Defined by instructional designer]
{NO ANSWER}	When user clicks Next button before selecting an answer, this specific text will appear in a dynamic text panel (or accessible popup window): Don't forget to answer the question before moving on.
{FIND ANS}	When user clicks the Find the Answer button, this text will appear in a dynamic text panel (or accessible popup window). [Defined by instructional designer]
Reading order (for accessibility software)	{Q TXT} {ANS 1} {ANS 2} {ANS 3} Find the Answer button {MEDIA TITLE} {DURATION} {MEDIA} Back button Next button Help button Map button Exit button {TITLE} {ACTIVITY}

Audio C: Play

Sample page from storyboard:

{PAGE}Page 20-25

{TITLE}Return Call

Help
Map
Exit

{ACTIVITY}Work CDRs—Activity 3: Handling Incomplete Earnings Information

{MEDIA TITLE}Phone interview
({DURATION})

Audio player area
{MEDIA}
{PHONE IMG}

[blank]
or
{INSTR}

Show Transcript

[Transcript area. See below for text.]

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Specifications:

Screen type	Audio A: Play
User interaction	The audio player appears alone on the left side. After the user plays the audio, user clicks Next. (If a multiple choice question is involved, screen type Audio A or B then would be displayed.) When user clicks/selects the Show Transcript button, the transcript text appears in transcript area below (or in an accessible popup if selected via keyboard) and the button label changes to Hide Transcript .
{MEDIA}	Description of the audio file. Description: [Defined by instructional designer] File name: [Defined by instructional designer; model answer audio should include "ans" in the file name, e.g., 20-25-audio-ans.wmp] Alt text: [Defined by instructional designer] {DURATION}: [Defined by instructional designer]
{PHONE IMG}	Description of the image file associated with the audio player. Description: [Defined by instructional designer] File name: [Defined by instructional designer] Alt text: [Defined by instructional designer]
{TRANSCRIPT}	Text of the audio transcript.

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Reading order (for accessibility software)	<p>If initial video:</p> <ul style="list-style-type: none">{TITLE}{ACTIVITY}{MEDIA TITLE}{DURATION}{MEDIA}Back buttonNext buttonHelp buttonMap buttonExit button <p>If follow-up "model answer" video (indicated by "ans" in the file name):</p> <ul style="list-style-type: none">{INSTR}{MEDIA TITLE}{DURATION}{MEDIA}Back buttonNext buttonHelp buttonMap buttonExit button{TITLE}{ACTIVITY}
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Audio A or B: Answer Question

Sample page from storyboard:

{PAGE}Page 20-26

{TITLE}Return Call

Help
Map
Exit

{ACTIVITY}Work CDRs—Activity 3: Handling Incomplete Earnings Information

{MEDIA TITLE}Phone interview
{DURATION}

Audio player area
{MEDIA}
{PHONE IMG}

Show Transcript

[Transcript area. See below for text.]

{Q TXT} Which of the following three choices would you say next to the claimant? Click the best answer.

1. {ANS 1}Well, we cannot complete these forms without this information. Would you contact this employer and come back with proof of your wages?
2. {ANS 2}That's Okay. We don't need it. We'll just use the yearly total that you gave me.
3. {ANS 3}Okay. Do you have any records of your self-employment earning? How about a tax return?

Not sure? Find the Answer

[Feedback area for in-page feedback. See below for text.]

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Specifications:

Screen type	Audio A or B (with multiple-choice question)
User interaction	Audio player functionality/interactivity is the same as for Audio A screen type. The multiple-choice interaction is the same as the Multiple Choice screen types (A =radio button type, B =multi-select type).
{MEDIA}	Description of the audio file. Description: [Defined by instructional designer] File name: [Defined by instructional designer] Alt text: [Defined by instructional designer] {DURATION}: [Defined by instructional designer]
{PHONE IMG}	Description of the image file associated with the audio player. Description: [Defined by instructional designer] File name: [Defined by instructional designer] Alt text: [Defined by instructional designer]
{TRANSCRIPT}	Text of the audio transcript.
{#}	Number of answer check boxes (may vary with each question; <i>will</i> be needed to display appropriate feedback) [Defined by instructional designer]
{COR ANS}	Correct answer, e.g. {ANS 1}, or if multi-select, set of all correct answers, e.g., {ANS 1} and {ANS 2} and {ANS 4}

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{FDBK 1}	Specific feedback text for {ANS 1} [Defined by instructional designer]
{FDBK 2}	Specific feedback text for {ANS 2} [Defined by instructional designer]
{FDBK 3}	Specific feedback text for {ANS 3} [Defined by instructional designer]
{FDBK 4}	Specific feedback text for {ANS 4} [Defined by instructional designer]
{INC FEEDBK 1}	This is generic feedback text that should be appended to any incorrect feedback text, e.g., {FDBK 4} + {INC FEEDBK 1} [Defined by instructional designer]
{ALL CORRECT} (if multi-select)	Specific feedback text when all correct answers have been selected [Defined by instructional designer]
{NO ANSWER}	When user clicks Next button before selecting an answer, this specific text will appear in a dynamic text panel (or accessible popup window): Don't forget to answer the question before moving on.
{FIND ANS}	When user clicks the Find the Answer button, this text will appear in a dynamic text panel (or accessible popup window). [Defined by instructional designer]
Reading order (for accessibility software)	{Q TXT} {ANS 1} {ANS 2} {ANS 3} Find the Answer button {MEDIA TITLE} {DURATION} {MEDIA} {PHONE IMG} {TRANSCRIPT} button alt text, not actual transcript Back button Next button Help button Map button Exit button {TITLE} {ACTIVITY}

Technical Specifications

Presentation environment

Machine Type 1: HP Compaq dc7600:

- RAM 1GB DDR2 SDRAM
- Screen Display Samsung 19" LCD Flat Panel 1280x1024
- OS Microsoft Windows XP
- video card Nvidia (model # Quadro NVS 285)
- sound card Integrated High Def audio / Realtek 2 channel ALC260 codec (stereo)
- processor Intel P4 650 (3.4/800/2M)
- sound speakers or headphones
- installed software Standard Microsoft office and proprietary systems, Internet Explorer v 6+

Machine Type 2: Dell GX260:

- RAM 512MB DDR Non-ECC SDRAM
- screen resolution 1024x768
- OS Microsoft Windows XP
- video card Integrated Intel 82845G
- sound card Integrated AC97
- processor Pentium 4 Processor 2.26 MHz
- sound speakers/headphones
- installed software Standard Microsoft office and proprietary systems, Internet Explorer v 6+

Development Environment

- See low end machines for presentation environment above

Incorporation of Commercial Tools; Selection Criteria:

- Ease of integrating 508 compliance requirements
- Licensing requirements
- Presentation environment/student workstation set-up requirements

Compatibility with Assistive Technologies

The *Guided Practices* will interface with assistive technologies for 508 compliance during presentation:

- JAWS (screen reading software) v 7.10
- MAGic (Screen magnification software) v 10
- Dragon Naturally Speaking (Speech recognition software) v 8

Appendix

Section 508 Criteria

Section 1194.21 Software Applications and Operating Systems

- (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.
- (b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.
- (c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.
- (d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.
- (e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.
- (f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.
- (g) Applications shall not override user selected contrast and color selections and other individual display attributes.
- (h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.
- (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.
- (j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.
- (k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.
- (l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.

Section 1194.22 Web-based Internet information and applications

- (a) A text equivalent for every non-text element shall be provided (e.g., via "alt", "longdesc", or in element content).
- (b) Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation.
- (c) Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup.
- (d) Documents shall be organized so they are readable without requiring an associated style sheet.
- (e) Redundant text links shall be provided for each active region of a server-side image map.
- (f) Client-side image maps shall be provided instead of server-side image maps except where the regions cannot be defined with an available geometric shape.
- (g) Row and column headers shall be identified for data tables.

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- (h) Markup shall be used to associate data cells and header cells for data tables that have two or more logical levels of row or column headers.
- (i) Frames shall be titled with text that facilitates frame identification and navigation
- (j) Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.
- (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.
- (l) When pages utilize scripting languages to display content, or to create interface elements, the information provided by the script shall be identified with functional text that can be read by Assistive Technology.
- (m) When a web page requires that an applet, plug-in or other application be present on the client system to interpret page content, the page must provide a link to a plug-in or applet that complies with 1194.21(a) through (l).
- (n) When electronic forms are designed to be completed on-line, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.
- (o) A method shall be provided that permits users to skip repetitive navigation links.
- (p) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.

Note to 1194.22: The Board interprets paragraphs (a) through (k) of this section as consistent with the following priority 1 Checkpoints of the Web Content Accessibility Guidelines 1.0 (WCAG 1.0) (May 5 1999) published by the Web Accessibility Initiative of the World Wide Web Consortium: Paragraph (a) - 1.1, (b) - 1.4, (c) - 2.1, (d) - 6.1, (e) - 1.2, (f) - 9.1, (g) - 5.1, (h) - 5.2, (i) - 12.1, (j) - 7.1, (k) - 11.4.

Section 1194.31 Functional Performance Criteria

- (a) At least one mode of operation and information retrieval that does not require user vision shall be provided, or support for Assistive Technology used by people who are blind or visually impaired shall be provided.
- (b) At least one mode of operation and information retrieval that does not require visual acuity greater than 20/70 shall be provided in audio and enlarged print output working together or independently, or support for Assistive Technology used by people who are visually impaired shall be provided.
- (c) At least one mode of operation and information retrieval that does not require user hearing shall be provided, or support for Assistive Technology used by people who are deaf or hard of hearing shall be provided
- (d) Where audio information is important for the use of a product, at least one mode of operation and information retrieval shall be provided in an enhanced auditory fashion, or support for assistive hearing devices shall be provided.
- (e) At least one mode of operation and information retrieval that does not require user speech shall be provided, or support for Assistive Technology used by people with disabilities shall be provided.
- (f) At least one mode of operation and information retrieval that does not require fine motor control or simultaneous actions and that is operable with limited reach and strength shall be provided.

Section 1194.41 Information, documentation, and support

- (a) Product support documentation provided to end-users shall be made available in alternate formats upon request, at no additional charge.
- (b) End-users shall have access to a description of the accessibility and compatibility features of products in alternate formats or alternate methods upon request, at no additional charge.
- (c) Support services for products shall accommodate the communication needs of end-users with disabilities.

Additional Resources

- Book: *Web Accessibility: Web Standards and Regulatory Compliance*. Jim Thatcher, et al. 2006.
- Site: *Web Aim* [<http://www.webaim.org/>]
- Site: W3C Web Content Accessibility Guidelines 2.0 [<http://www.w3.org/TR/WCAG20/>]
- Site: "Software Applications and Operating Systems (1194.21)" [<http://www.access-board.gov/sec508/guide/1194.21.htm>]
- Site: "Web-based Intranet and Internet Information and Applications (1194.22)" [<http://www.access-board.gov/sec508/guide/1194.22.htm>]

SSA's Internal Section 508 Evaluation Procedures

- "Section 508 Standards & SSA Guidance" [SSA intranet Web page, URL: http://ssahost.ba.ssa.gov/arc/GeneralInformation/quick_start_a.htm]