

User Accessibility + Section 508 Solutions

Universal accessibility is never an afterthought with PowerTrain. When we develop courses, we consider the challenges faced by people with disabilities, and routinely develop Section 508-compliant courseware for both our Government and commercial clients. As a matter of fact, many agencies and organizations hire us to validate their course compliance with Section 508 standards and then to “fix” problematic courses.

Our 508-compliance check system ensures consistency, while accommodating your particular needs.

Over the years, we have refined our Section 508-compliant designs to maximize student interactions while allowing equal access to learning for all. PowerTrain excels at developing courseware that is fully compliant with the requirements of Section 508 to satisfy the needs of persons with disabilities, and that still remains highly engaging to non-disabled users.

[We recently developed a standardized, web-based set of 508 compliance checklists.](#)

With our new system, we ensure consistency in meeting and exceeding the rigorous Section 508 standards set by the Federal Government. When we develop your fully accessible courseware, we’ll go over our standard Section 508 checklists with you in the initial design meeting to make sure that we meet any special requirements that your organization might have.

After determining the optimal approach to accessibility, our writers, designers, quality assurance testers, and programmers will use our in-house proprietary Accessibility Compliance Checklists throughout the development process. Upon delivery of the final course, we provide you with a PDF of the completed checklists as a way of certifying 508 compliance.

We also make sure to include rigorous testing by persons with disabilities as part of our 508 services.

This testing gives invaluable information about what it’s like to take the course as a person with a disability. We not only try to follow the letter of the law when it comes to compliance, but also to provide a fluid, non-cumbersome, accessible experience for people using assistive technologies to take our courses.

Learning is for everyone, and our stringent process ensures that our products remain engaging and effective while functioning seamlessly for all.

On the next page, you’ll find an example of our standard 508 checklist.

While we have separate lists for different team members at different phases of project development, this list is the one our QA specialist uses to check accessibility and compliance before we deliver a project. It provides a good overview of what we look for.

QA: 508 CHECKLIST

Verify Audio & Audio-Related Accessibility

_____ If the course is narrated, there's a text equivalent for any audio narration. (i.e., Audio and screen text should match and there shouldn't be any audio that is not reflected as text somewhere on the screen or in a popup, rollover, etc.).

_____ If the course is narrated, there's a universal audio on/off feature either at the beginning of the course or in the interface, and it works properly.

Verify Images & Interface Elements

_____ All graphics need to be sharp and readable at 200%, so you'll need to test the course images at 200%.

_____ Ensure that all information conveyed with color is also available without color.

_____ Keep the following information in mind regarding certain color combinations that shouldn't be used in graphics:

Common Color-Blindness Trouble-Spots:

- > Insufficient contrast between a foreground object (such as text) and its background.
- > For deuteranopes or protanopes, reds and greens, when used together, become brownish (with greens having a lighter tone).
- > For tritanopes, yellows become pinkish and blues appear lighter when used together.

Verify Labeling/Alt Text

_____ Links are labeled with a title for a screen reader; they don't simply say "[click here](#)." This is mostly important for links that are not self-explanatory out of context. A correct example might be, "Select the link to access a [PDF](#) of this information."

_____ All data tables have column and/or row headers appropriately identified (using the <th> element).

_____ Alt text included for all images. Specifically:

- > Apt alt text descriptions for instructional images.
- > Alt="" for non-instructional images.
- > Note: Make sure this is consistent throughout, and that we don't have some non-instructional images with descriptive alt tags and others with null. All non-instructional images should be null.

Screen Reader Testing

_____ Test on JAWS (full version 17) and make sure screen reader can access all elements. If questions arise, check in with our consultant on trouble spots.

Verify PDFs

_____ Test any PDFs using a screen reader to make sure they read each word and graphic description from top to bottom and don't skip any text, read any text in the wrong order, or read something "odd" that isn't part of the content on the page.

Video

_____ Closed captioning exists, is correct in all videos, and works in multiple video players.

_____ Since CC is handled differently on different browsers, this should be tested on all the major browsers the course is meant to run on.

Verify Tabbing

_____ Fully tab-able navigation so the course is accessible to an individual without a mouse, with motor skill limitations, or who is blind. You should be able to tab to:

- > All navigation features
- > All content on every screen
- > All content in every popup
- > All scrolling content, onscreen or in popups (if there's scrolling, be sure that you can see all content by using only keyboard navigation)
- > All video controls
- > All audio controls
- > All boxes and text within the accordion dropdown structures (if used in the course)

_____ On screens using rollovers or other features that can't be tabbed to/through, an accessible PDF containing the same content is included.

- > (Note: Sometimes Programming accomplishes this through use of an "invisible" link. This link should **become visible** when tabbed to.)

_____ The tabbing order is logical and intuitive.

_____ A link is provided to skip over navigational menus or other lengthy lists of links.

- > NOTE: A “skip navigation” link is **not** required if the HTML content is ordered so that the navigation buttons are listed last on the page (even if they visually appear at the top).
- > Also note that the standard skip link with href=“#content” does not work in Chrome.

Text

_____ All screens and course functions are readable when the browser text is set at any of the standard IE text sizes: smallest, smaller, medium, larger, and largest.

When you're ready, give us a call.

For more information on PowerTrain's user accessibility and Section 508 solutions, contact:

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