

Inactive Fields

Issue:

Must inactive fields (which can not transmit information to a server) be placed in the tab order of a form in order to be section 508 conformant?

Answer: No.

Analysis:

Sections 1194.22(N) and 1194.21(I) of the Access Board's standards says "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."

In this instance, the inactive fields are not "required" for the completion or submission of the form. Furthermore, the Access Board under 1194.22 cites the Web Content Accessibility Guidelines (WCAG) version 1.0 as providing guidance for web accessibility. Even though the note under 1194.22 is cross referenced to specific provisions of the WCAG version 1.0, it is clear that the Board continues to defer to the WCAG on issues relating to web-based applications so that version 2.0 of the WCAG is applicable.

Version 2.0 of the WCAG Provides:

Tab order in forms Web usability WCAG check point 9.4

Using, for example the tab index attribute by numbering the tab in ascending order you can progress through a web page in an order that is logical for the filling of the form. This is usually from top left to bottom right. Browser support for `tabindex` is not complete; however, the inclusion of `tabindex` attributes will not interfere with the functioning of browsers that do not support them.

WCAG 9.4 and 9.5: Create a logical tab order through links, form controls, and objects. Provide keyboard shortcuts to important links (including those in client-side image maps), form controls, and groups of form controls.

Beyond the checkpoint: In general, each form input or group must have an associated `<label>` element (not just plain text next to it); inputs may also be grouped with the `<fieldset>` element. The tab order of input elements must be set in a logical sequence for use without a mouse. WCAG version 2.0 check point 9.4.

From a practical stand point, it is not possible to put inactive controls in a tab sequence when coding in HTML. So requiring developers to place inactive controls in tab order is moot.

In W3C Recommendation 17.11.1 Tabbing navigation "...3. Elements that are disabled do not participate in the tabbing order." <http://www.w3.org/TR/html401/interact/forms.html#h-17.11.1>.

Also, in W3C Recommendation 17.12.1 Disabled Controls: "When set, the disabled attribute has the following effects on an element:

- Disabled controls do not receive focus.
- Disabled controls are skipped in tabbing navigation.
- Disabled controls cannot be successful." <http://www.w3.org/TR/html401/interact/forms.html#h-17.12.1>

Furthermore, under the preamble to the section 508 standards, in the section by section analysis, the Board directs that when applying section 508 standards to any electronic and information technology, we must look at both the specific provisions under Subpart B to find the technology standards as well as Subpart C to look at the functional performance criteria.

Under Subpart A – General

§1194.2 Purpose

"This section specifies what electronic and information technology is covered by the standards. Electronic and information technology covered by section 508 must comply with each of the relevant sections of this part. For example, a computer and its software programs would be required to comply with §1194.26, Desktop and portable computers, §1194.21, Software applications and operating systems, and the functional performance criteria in §1194.31." (<http://www.access-board.gov/sec508/preamble.htm#Subpart A>)

Section 1194.31 provides that:

Subpart C – Functional Performance Criteria

§ 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.

These provisions require that persons with disabilities have equivalent functionality to persons who do not have disabilities. In addition, placing fields which are inactive in the tab order will likely be more confusing to everyone disabled or not.

Clearly, the Board intended that persons using assistive technology must have keyboard access to all controls required for the filling out and submission of forms. Since inactive fields cannot be used to submit information on the form, they do not need to be in the tab order. However, users of assistive technology should still have access to the fields themselves because this information is important in understanding and using forms and applications. There are several ways that this can be accomplished. For example, the developer can create keystrokes to access the inactive fields, or simply leave the fields at the bottom of the form and allow users to access the information using a down arrow. Either way, a notice of the method to reach these inactive fields needs to be placed at the top of the form so that users are aware that such fields exist. Otherwise, the inactive fields should be removed from the form completely so that the fields are not available to anyone.