

# ICT Symposium

Trusted Tester Testing Workshop

CHANGES

# Topic 4

## **KEYBOARD ACCESS AND FOCUS**

# Keyboard Testing

- Remains a manual test process requiring interactive elements to be keyboard accessible
- Requires exploration with a mouse to identify interactive elements (incl. drop-down menus, tool tips, form fields, hidden content, interactive elements)
- Use of [TAB] and [SHIFT + TAB], arrow keys, [Esc] key and [ENTER] to navigate using the keyboard

## **Tips:**

- Include any changes to functionality that occur automatically or due to interaction with the page.
- Information is considered essential or required when it is necessary to execute an action or understand information and relationships.

## 4.A Code sample



4.A\_demo.txt



4.A\_demo.html

# Keyboard Trap Tips

## Tips

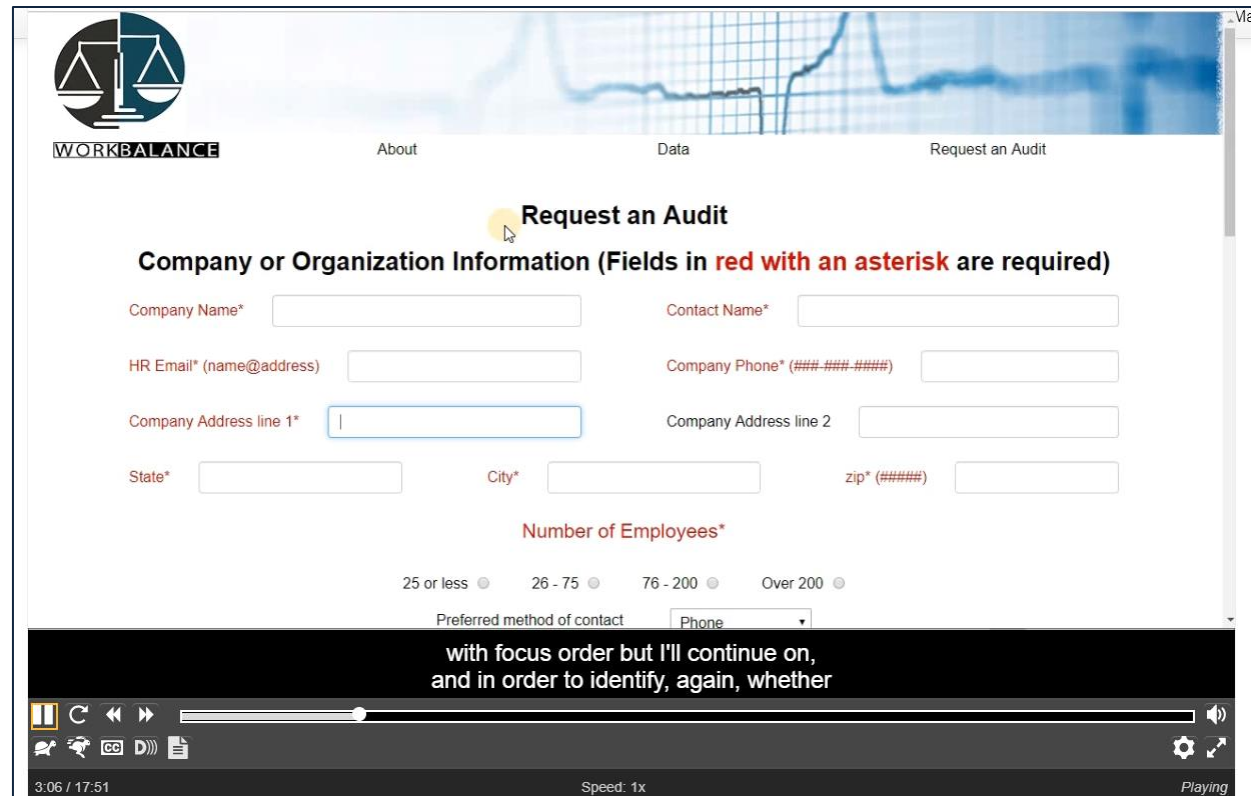
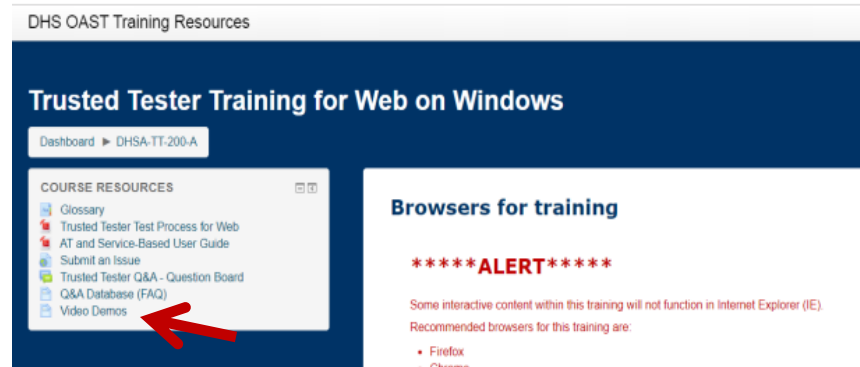
- For a trap to exist, it must be present whether you are navigating forward (TAB) or backward (SHIFT + TAB) through the page.
- In case of a keyboard trap, continue to test interactive elements after the trap by using the mouse to bypass the trap or refreshing the page and using the keyboard to navigate backwards through the page.
- Indicate the first and last element that create the trap.

Demo of keyboard trap

<https://interactiveaccessibility.com/education/training/ex7.1.html>

# Course Video

- Keyboard traps and other keyboard issues are difficult concepts for many students.
- The course provides a video demonstrating the testing of the incremental exam page which can be found in the course resources page



# 4.D 2.4.7-focus-visible

Test Name	Test ID	Test Condition
2.4.7-focus-visible	4.D	A visible indication of focus is provided when focus is on the interface component.

## Evaluate Results:

If the following is **TRUE**, the content **PASSES**:

1. When each interface element receives focus, there is a visible indication of focus.

## Tips

- Look carefully as there is not a contrast requirement for focus in AA standard – that is AAA.
- DO NOT use ANDI for this test since it can add markup that will skew your test results.
- Emphasis is on the interactive element.
- Does not apply to elements that do not receive keyboard focus. (Those elements are not failed for both 4.A and 4.D.)
- Focus indicator is not required to be the same – can be outline, change in hue (though not use of color), making font bold.

# Notes for Focus with Frames

## **Note**

To confirm keyboard focus is on a frame when there is not visible focus:

1. Use the TAB and SHIFT + TAB combination to deduce that the keyboard focus is on the frame.
2. When on the frame, a tab forward should move focus to the first keyboard focusable element within the frame.
3. From there, SHIFT + TAB once to move back to the frame and another SHIFT + TAB should move focus to a keyboard focusable element before the frame.

Only the frame is permitted to not have a visible focus. Be certain it is the frame that does not have a visible focus and not another element.



# 4.E 3.2.1-on-focus

Test Name	Test ID	Test Condition
3.2.1-on-focus	4.E	When an interface component receives focus, it does not initiate an unexpected change of context.

## Evaluate Results:

If the following is **TRUE**, the content **PASSES**:

1. An unexpected change of context is not initiated when an interface component receives focus.

## Definitions

**Change of Content:** The page content changes in a way that is expected related to expanding an outline, revealing/hiding content, or accessing a dynamic menu.

**Change of Context:** There is a major change in content that, if made without user awareness, can disorient users who are not able to view the entire page simultaneously.

Examples of a change in context include:

- Opening a new browser window.
- Moving focus to a different component.
- Submitting a form automatically when a component receives focus.
- Going to a new web page or window, or appearing to do so.
- Significantly rearranging the content of the page.

# Tips for Focus Order

## Tips

1. Focus on an element should not bring an unexpected change – user needs to select the interface component to initiate the change = a new window is launched, or focus is moved to another interface component.
2. It is key to understand the difference between a change of content and a change in context. Applying this concept also impacts testing for forms in Topic 5 of the test process.

# 4.F 2.4.3-focus-order-meaning

Test Name	Test ID	Test Condition
2.4.3-focus-order-meaning	4.F	The focus order preserves the meaning and operability of the web page.

## Evaluate Results:

If the following is **TRUE**, the content **PASSES**:

1. The focus order preserves the meaning of the page, AND
2. The focus order preserves the operability of the page.

## Definition

A modal dialog box (such as a Save As dialog box) requires a user to interact with it before they can go back to the main page. Visual focus is expected to remain within a modal dialog box until it is closed.

## Notes:

- ANDI tab order markup may be slightly different in certain browsers than a keyboard user's experience. Always use results from keyboard navigation.

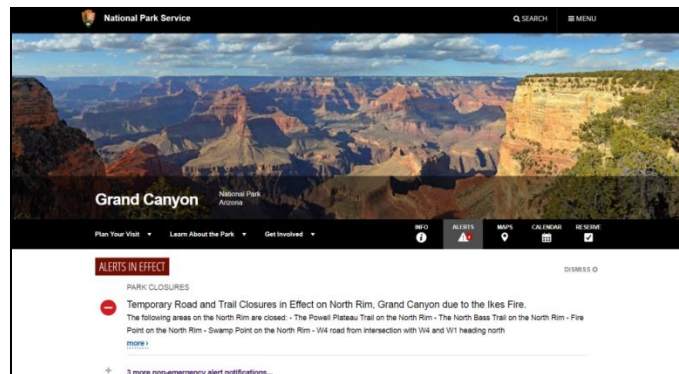
# Tips on for Focus

## Tips

1. Failures are most noticeable when focus order does not follow the logical order of operation (normally top to bottom, left to right).
2. The Focus order *can be different* if the specific order does not matter

Focus order issues can cause users to become lost:

<https://interactiveaccessibility.com/education/training/ex9.1.html#>



<https://www.nps.gov/grca/index.htm>

In the course, you will mark the last item that received the expected focus.

# 4.H 2.4.3-focus-order-return

Test Name	Test ID	Test Condition
2.4.3-focus-order-return	4.H	Focus is returned to the logical sequence.

## Evaluate Results:

If any the following is **TRUE**, the content **PASSES**:

1. Keyboard focus automatically returns to the logical sequence of focus order before the content was revealed, OR
2. One additional keystroke or keystroke combination returns focus to the logical sequence of focus order before the content was revealed

## Tips:

- It may be necessary to Press the SHIFT + TAB keys or an arrow key to move focus backwards.
- One additional keystroke is allowed to achieve the expected return of focus.

# Topic 10

## **CONTENT STRUCTURE**

# 10.A 2.4.6-heading-purpose

Test Name	Test ID	Test Condition
2.4.6-heading-purpose	10.A	Each heading describes the topic or purpose of its content.

## Evaluate Results:

If the following is **TRUE**, the content **PASSES**:

1. The heading describes the topic or purpose of its content.

## Tip:

- No tool is required – identify visually apparent headings and review the content beneath them.
- Not required to have headings.
- Heading tests divided to meet different WCAG success criteria

# 10.D 1.3.1-list-type

Test Name	Test ID	Test Condition
1.3.1-list-type	10.D	All visually apparent lists are programmatically identified according to their type.

## Evaluate Results:

If ALL of the following are **TRUE**, then the content **PASSES**:

1. All content that has the visual appearance of a list is defined programmatically as a list, according to the type of list.
  - a. An unordered list (with or without bullets) is marked as an unordered list (ul).
  - b. An ordered list is marked as an ordered list (ol).
  - c. Terms and their descriptions that are presented in the form of a list are marked as a description list (dl)

AND

2. All programmatic list relationships, including nesting and hierarchies, are consistent with the list relationships presented visually.

<https://www.w3.org/TR/WCAG20-TECHS/H48.html>