

Keyboard Accessibility

ADA Testing

Keyboard accessibility is one of the most important aspects of web accessibility. All interactions & information that can be accessed with a mouse must be accessible with just a keyboard. Many users with motor disabilities rely on a keyboard. Blind users also typically use a keyboard for navigation. Some people have tremors which don't allow for fine muscle control. Others have little or no use of their hands. Some people simply do not have hands, whether due to a birth defect, an accident, or amputation. In addition to traditional keyboards, some users may use modified keyboards or other hardware that mimics the functionality of a keyboard.

Keyboard Testing

Testing with a keyboard is an essential part of any accessibility evaluation. However, when testing with a keyboard, you are not just trying to interact with the page successfully, you also want to ensure all interactions are predictable. This requires an understanding of most common online interactions and standard keyboard interactions.

How to test Keyboard Navigation

Testing a website: Click in the browser address bar, take your hand off your mouse and use only your keyboard to navigate using the following keyboard shortcuts. As you do this, consider these questions: Can you access all features? Can you operate all controls? Is it reasonably easy to tell where you are on the page? Does the focus wrap within the entire page or modal dialog? Does the order of movement within the page or modal echo the visual layout?

- **Tab** – move to the next link, form element or button
- **Shift+ Tab** – move to the previous link, form element or button
- **Enter** – activate the current link or button
- **Space** – check or uncheck a checkbox form element. Will activate a button that currently has focus

- **Up/Down arrow keys** - moves between radio button or, in some cases, menu links.
- **Right/Left arrow keys** - in some cases, move between menu links or adjust sliders in audio and video plugins.

Testing Failures of Keyboard Access

1. A keyboard trap, Focus moves in a loop making the rest of the page inaccessible
2. If the user cannot interact with something
3. If the tab order is confusing
4. If you lose focus, on a hidden link or other object when simply tabbing through the page
5. If you ever need your mouse to get back to an element
6. If the keyboard user cannot do all of these things
7. Title attributes which can only be exposed by hovering the mouse over the element are a failure of keyboard access

Conclusion

People who are unable to use a mouse or see the screen need to access all website content and functionality through their keyboard alone. This is why keyboard accessible testing is important.