



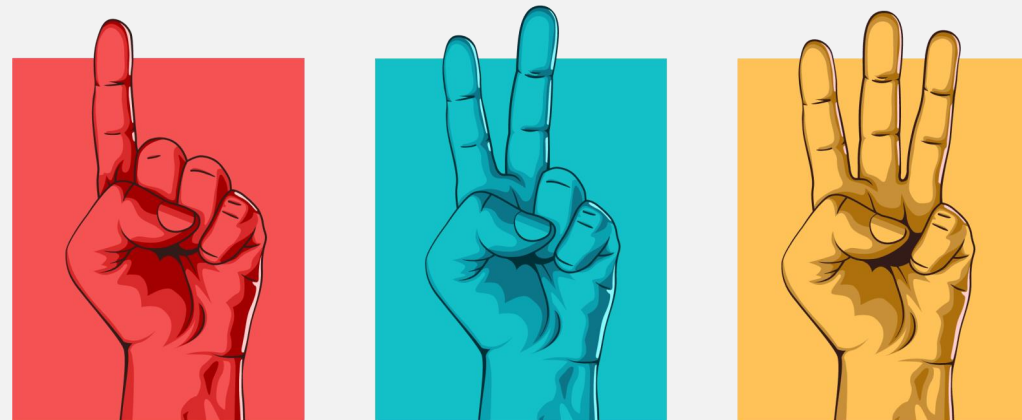
6 Things Screen Readers Catch that Your Document Accessibility Checker Can't

Dax Castro, ADS

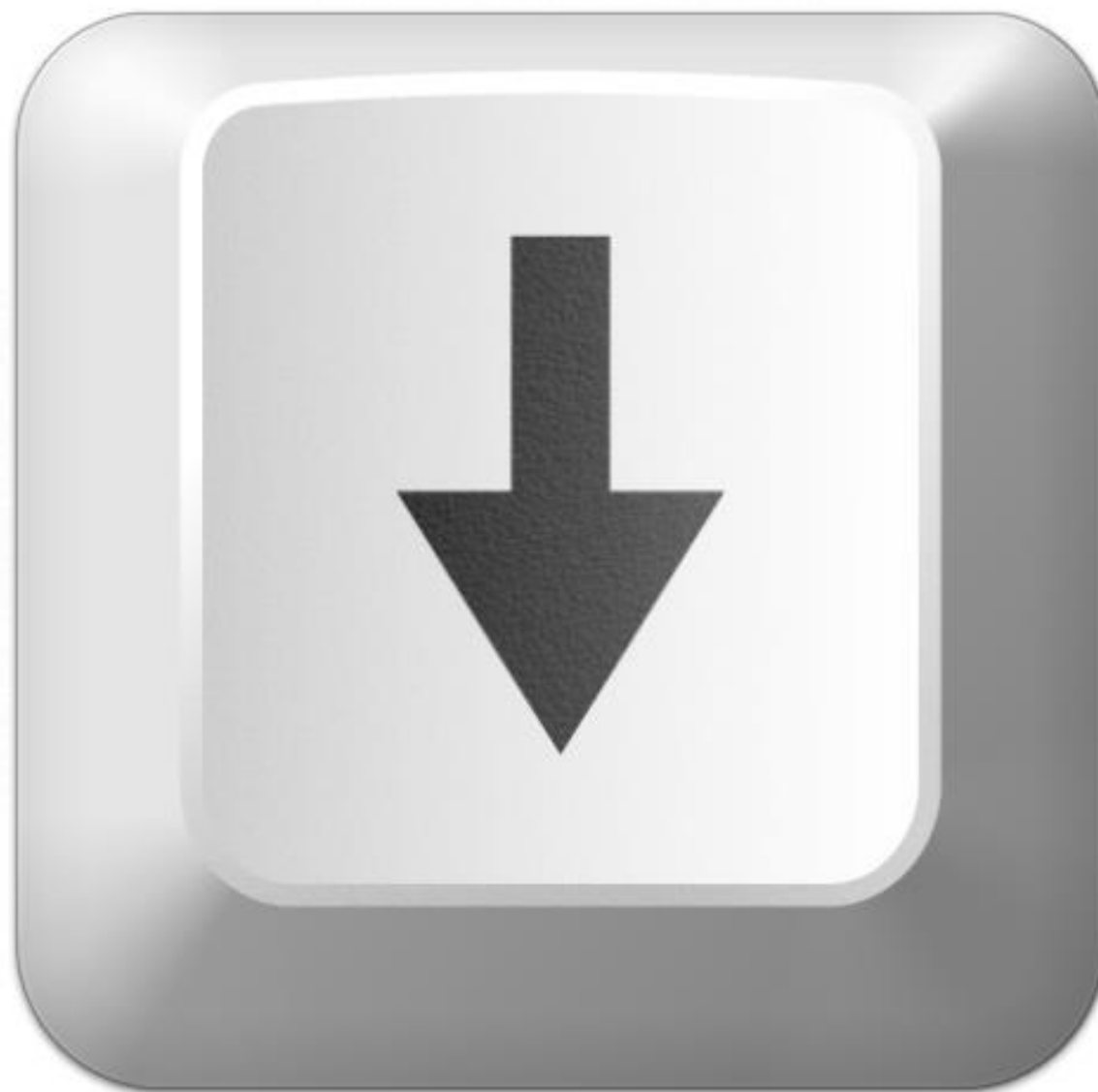
training@accessibilityUnraveled.com

By the end of this session, you will be able to:

- Use basic evaluation techniques to understand the real-world impact of accessibility flaws.
- Navigate documents to identify accessibility issues that are not flagged by automated checkers.
- Apply solid techniques to fix identified errors, ensuring documents are truly accessible and user-friendly



Basic
Control for
NVDA



Top 10 Testing Shortcuts you should know

#	Function	Shortcut
1.	Mouse Tracking Mode Toggle	Insert + M
2.	Silence	Insert + S / or shift key
3.	Read from this point on	Insert + Down Arrow
4.	Headings	H
5.	Next Focusable Item	Tab
6.	Graphic	G
7.	List	L
8.	Table	T
9.	Table Cell Navigation	Ctrl + alt + Left or Right Arrow
10.	Forms (Focus) Mode Toggle	Insert + space bar

User Guide:

<https://www.nvaccess.org/files/nvda/documentation>

1. Double Headings

<H1>

<H1>

Chapter 1:
Introduction

1. Double Headings: Hard Return Problem

<H1>

<H1>

Chapter 1:¶
Introduction

1. Double Headings: Soft Return Solution

<H1>

Chapter 1: 
Introduction

What shouldn't be a heading?

**ERG
Quarterly
Report**

January 2023 - 2024

**ERG Quarterly Report
Ringling in the New Year**

January 2023 - 2024


Subheadings are almost never Heading Levels

**ERG
Quarterly
Report**

 **January 2023 - 2024**

ERG Quarterly Report

 **Ring in the New Year**

 **January 2023 - 2024**

2. Fake Lists

- Apples
- Bananas
- Pineapples

- Apples
- Bananas
- Pineapples

2. Real lists vocalize how many items

Bullet Apples

Bullet Bananas

Bullet Pineapples

List. 3 items

Bullet Apples

Bullet Bananas

Bullet Pineapples

Context Matters

List. 29 items

- Argentina
- **Australia***
- Bolivia
- Brazil
- **Canada***
- Brazil
- Chile
- China
- Columbia
- Ecuador
- **EU/UK***
- France
- Germany
- Hong Kong
- India
- Ireland
- Israel
- Italy
- Japan
- Netherlands
- New Zealand
- **Norway***
- Peru
- Republic of Korea
- Spain
- United Kingdom
- Uruguay
- USA
- Venezuela

* Enforce compliance for commercial and government websites

1.3.1 Info and Relationships (A)

Information, structure, and relationships conveyed through presentation can be programmatically determined or are available in text.

If it is a list, tag it as a list.

3. Unicode Bullets

- Not all bullets are created equal.
- Verbose bullets increase cognitive load.
- You can fix but watch out for ordered lists.

Bullet	JAWS Interpretation	Base Font
• Text	Bullet	Arial
○ Text	Oh	Arial
➤ Text	Arrow Bullet	Arial
✓ Text	Checkmark Bullet	Arial
❖ Text	Starred Bullet	Arial
» Text	Right Double Angle Bracket	Arial
« Text	Left Double Angle Bracket	Arial
▪ Text	Filled Square Bullet	Arial
▶ Text	Black Right Pointing Pointer	Arial
◀ Text	Black Left Pointing Pointer	Arial
▲ Text	Black Up Pointing Triangle	Arial
▼ Text	Black Down Pointing Triangle	Arial
■ Text	*Not Voiced	Arial
◇ Text	Lozenge	Arial
◼ Text	Inverse Bullet	Arial
◉ Text	Inverse White Circle	Arial
■ Text	Black Square	Arial
◦ Text	White Bullet	Arial
□ Text	White Square	Arial

<https://www.accessibilityunraveled.com/accessibility-tips/how-does-my-bullet-sound-in-jaws/>

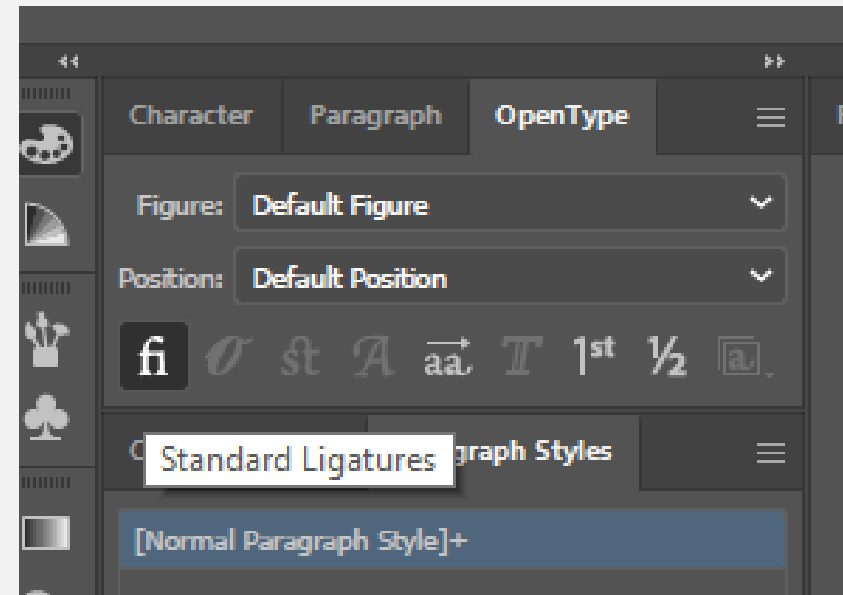


4. Ligatures

ff fi ffi fl ffi fbffb
fh ffh fk ffi fj ffj

Intent	Vocalization
Off <i>fi</i> ce	Ofice
Bene <i>fi</i> t	Benefit
Off <i>ff</i>	of
Matt <i>er</i>	Mater
Act <i>ion</i>	Acton
Fl <i>u</i> ent	Fuent

Benefit



5. Drop Caps

Broomstick Benny lived in a quaint village nestled between rolling hills. He wasn't your ordinary honeybee; Benny had a mind of his own and loved nothing more than to clean, clean, clean. Every night, when the moon hung high in the sky and the stars twinkled brightly, Benny would clean his room with his favorite stick.

Drop Caps will always
require work in the PDF to fix.




B + roomstick

6. Complex Table Structure



Region	Apples	Corn	Potatoes
Western			
Los Angeles	263 bushels	150 bushels	63 bushels
Sacramento	286 bushels	68 bushels	199 bushels
Midwest			
Fort Worth	32 bushels	58 bushels	77 bushels
Omaha	45 bushels	12 bushels	42 bushels
Eastern			
Florida	78 bushels	96 bushels	263 bushels
New York	120 bushels	99 bushels	66 bushels

Column Headers



Region	Apples	Corn	Potatoes
Western			
Los Angeles	263 bushels	150 bushels	63 bushels
Sacramento	286 bushels	68 bushels	199 bushels
Midwest			
Fort Worth	32 bushels	58 bushels	77 bushels
Omaha	45 bushels	12 bushels	42 bushels
Eastern			
Florida	78 bushels	96 bushels	263 bushels
New York	120 bushels	99 bushels	66 bushels

Is this Accessible?



Region	Apples	Corn	Potatoes
Western			
Los Angeles	263 bushels	150 bushels	63 bushels
Sacramento	286 bushels	68 bushels	199 bushels
Midwest			
Fort Worth	32 bushels	58 bushels	77 bushels
Omaha	45 bushels	12 bushels	42 bushels
Eastern			
Florida	78 bushels	96 bushels	263 bushels
New York	120 bushels	99 bushels	66 bushels

Everything stacks without Cell IDs

Region	Apples	Corn	Potatoes
Western			
Los Angeles	263 bushels	150 bushels	63 bushels
Sacramento	286 bushels	68 bushels	199 bushels
Midwest			
Fort Worth	32 bushels	58 bushels	77 bushels
Omaha	45 bushels	12 bushels	42 bushels
Eastern			
Florida	78 bushels	96 bushels	263 bushels
New York	120 bushels	99 bushels	66 bushels

Corn
Western
Midwest
Eastern
96

The Complex Table Solution

Region	City	Apples	Corn	Potatoes
Western	Los Angeles	263 bushels	150 bushels	63 bushels
	Sacramento	286 bushels	68 bushels	199 bushels
Midwest	Fort Worth	32 bushels	58 bushels	77 bushels
	Omaha	45 bushels	12 bushels	42 bushels
Eastern	Florida	78 bushels	96 bushels	263 bushels
	New York	120 bushels	99 bushels	66 bushels

10 Key points to remember

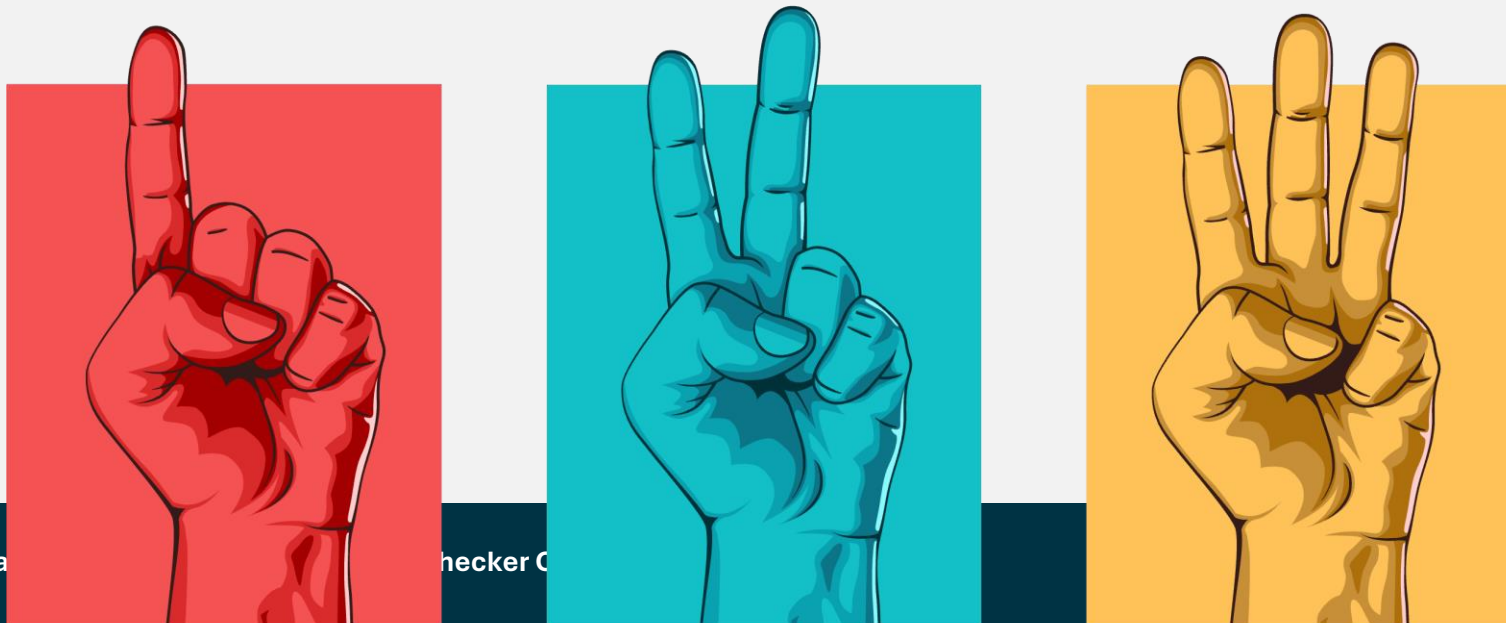
1. Headings organize content into blocks
2. Headings are not just based on size
3. True Lists declare how many items
4. Not all bullets sounds the same
5. Ligatures are okay if you test them (but I just avoid them)

10 Key points to remember (con't)

6. Never use drop caps unless you fix them in the PDF
7. Tables with merged entire rows will require extra work
8. Passing the checker is a good start...but that's it.
9. Accessibility requires manual review (and always will)
10. Testing with a screen reader will reveal hidden flaws.

What can you do?

- 1. Use “born accessibility” best practices**
- 2. Walk the tags tree**
- 3. Spot Check with a screen reader**



Chax Provides Expertise and Training in Accessibility

We help organizations know that their digital documents are accessible through:

- Customized trainings to fit your needs
- Online courses with expert knowledge transfer
- Deep dive discussion on Chax Chat Podcast

accessibilityUnraveled.com | training@accessibilityUnraveled.com



CERTIFIED INSTRUCTOR



Accessibility Training for:

- Adobe InDesign
- Adobe Acrobat
- MS Word
- MS Excel
- MS PowerPoint
- Video Captions
- Social Media

