

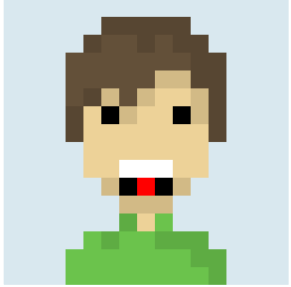


Get It Right the First Time

Stop 80%+ of A11Y Bugs During Development



Introductions



Jason Wilson (he/him)
[@scurker](#)



Glenda Sims (she/her)
[@goodwitch](#)

What we're covering

- Automated Testing with axe DevTools Pro
- What's Covered by Automated Tests
- Intelligent Guided Testing with axe DevTools Pro
- What's Covered by Automated Tests + Intelligent Guided Testing
- How to get to 100% WCAG 2.1 AA testing coverage after completing automated testing and Intelligent Guided Testing



Automated Testing

axe DevTools Extension

Why use axe DevTools automated testing?

- No up front accessibility knowledge needed!
- Save development time by finding many accessibility issues early
- *Zero* false positives
- Get results in seconds

Automated Testing with axe DevTools

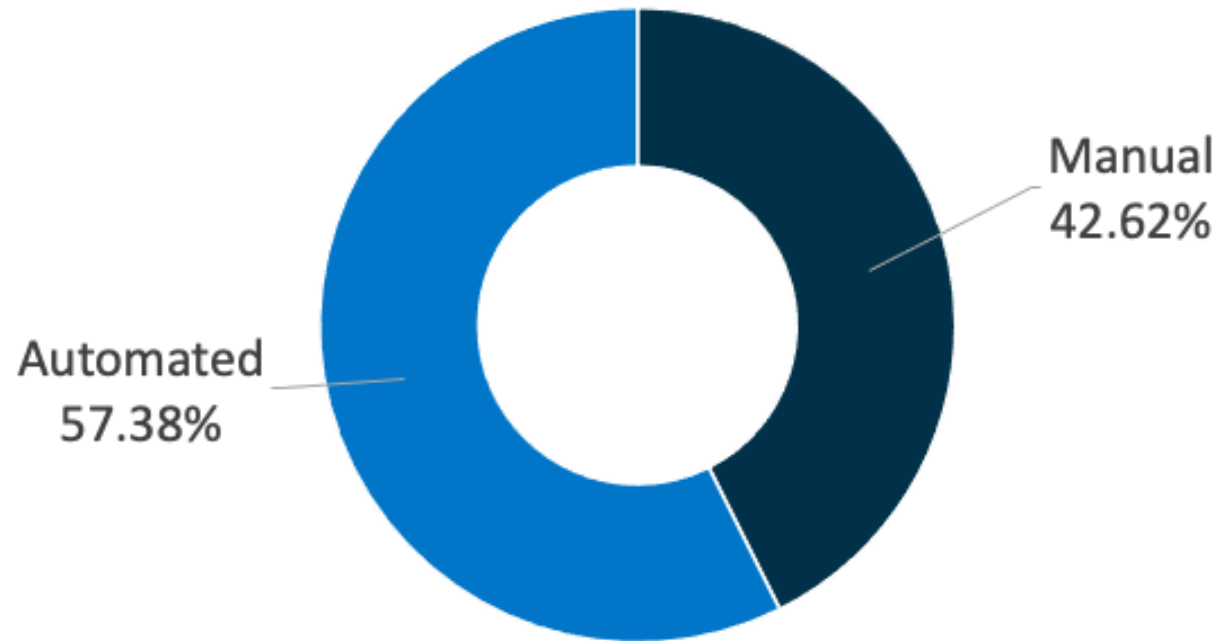
- Remediating using Issue Information
- Isolating specific elements by scanning part of a page
- Selecting WCAG Levels
 - A vs AA vs AAA & 2.0/2.1

Live Coding Session 1

Example Code Repository: <https://github.com/dequelabs/get-it-right-the-first-time>

What's Covered by axe-core Automated Tests

**Total WCAG Issues Found in Client Audits:
Automated vs Manual**



deque.com/automated-accessibility-testing-coverage



Intelligent Guided Testing

axe DevTools Extension

The power of Intelligent Guided Testing

- More in-depth testing
- Test like an accessibility expert by answering guided questions
- Learn how to do it correctly the first time

Intelligent Guided Testing with axe DevTools

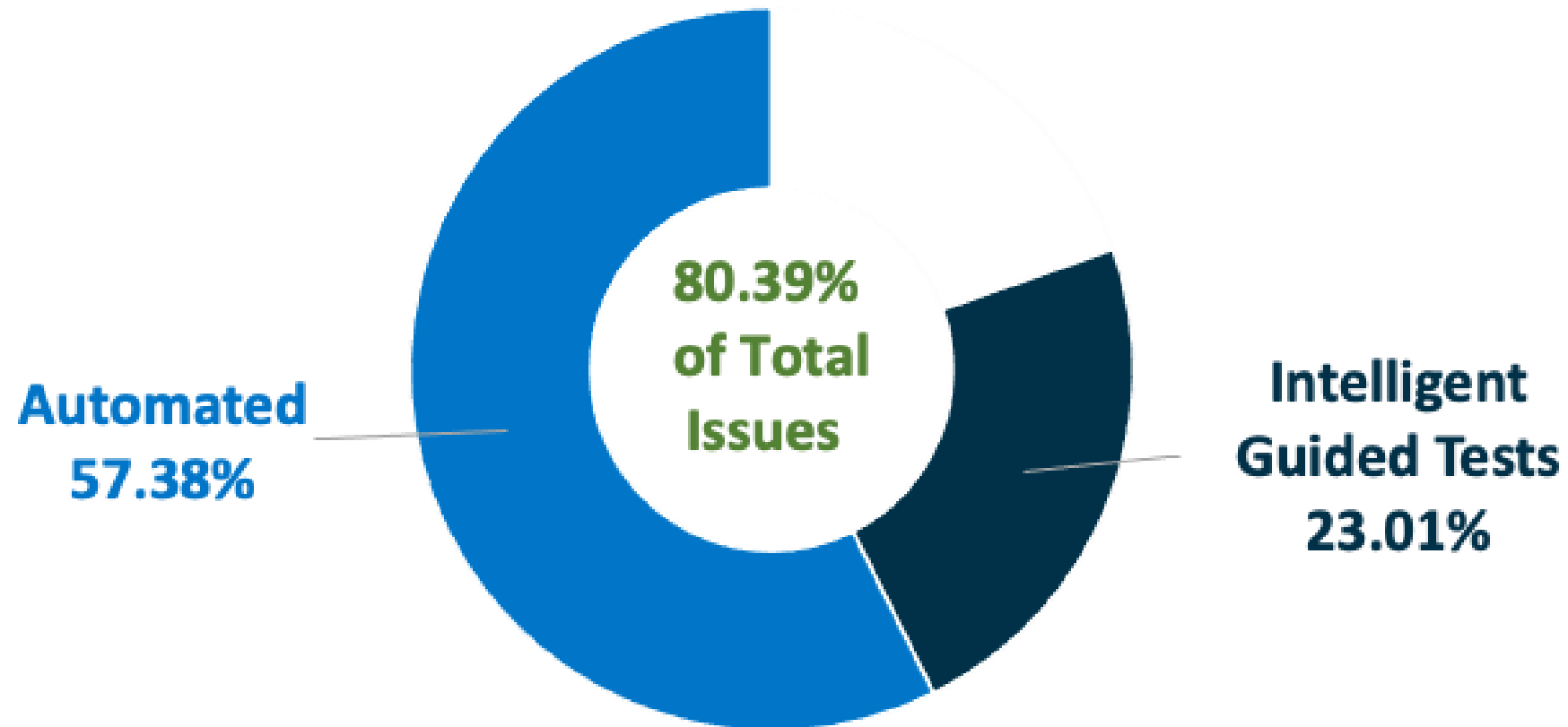
- Interactive Elements
- Structure
- Keyboard
- Images (time permitting)
- Modal Dialog (time permitting)

Live Coding Session 2

Example code repository:

<https://github.com/dequelabs/get-it-right-the-first-time>

Total % of Issues axe DevTools Can Find = **80.39%**
Automated + Intelligent Guided Tests



Research Findings on Intelligent Guided Tests

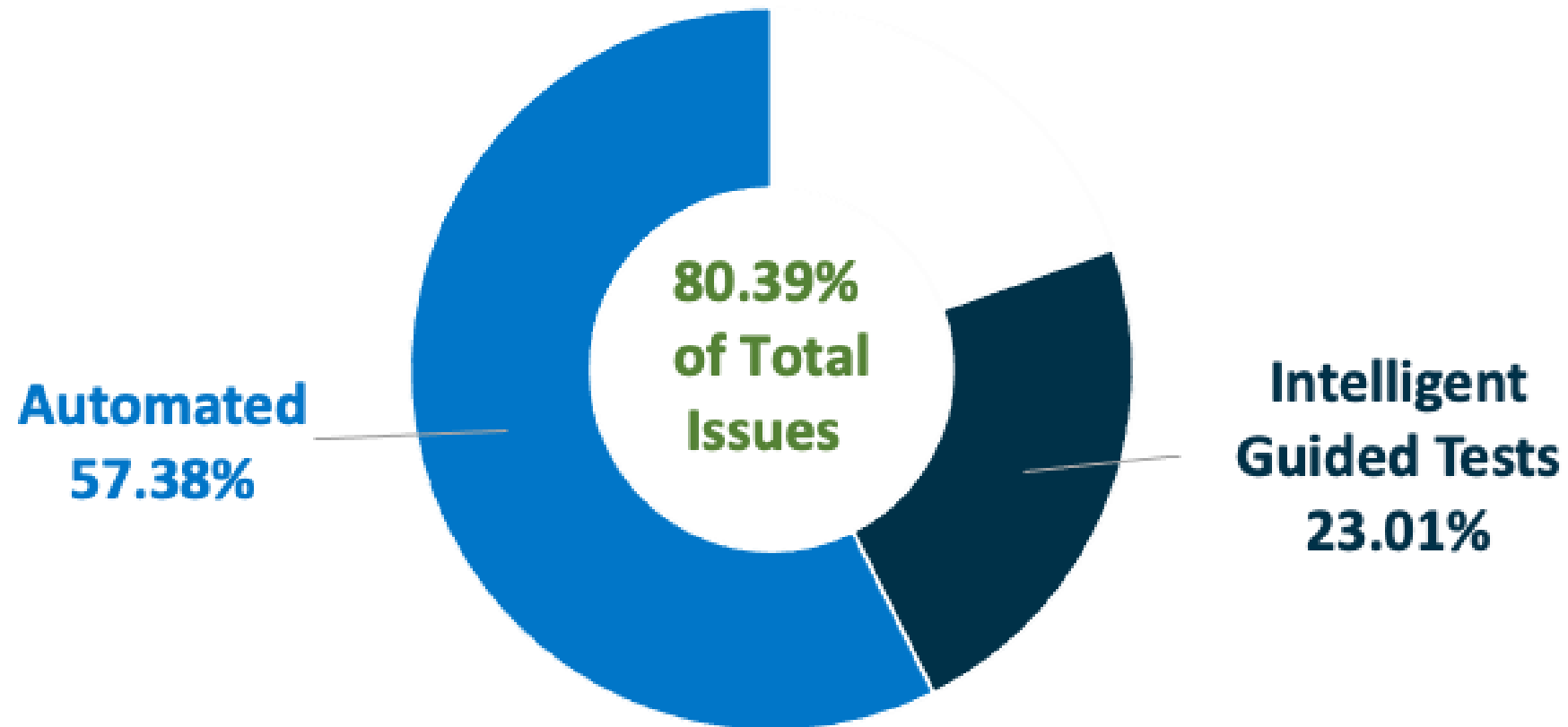
axe DevTools Intelligent Guided Test	% of Total IGT Issues	Applicable WCAG Success Criteria
Interactive Elements	27.75%	2.4.4, 4.1.2
Structure	18.19%	1.3.1, 2.4.2, 3.1.1, 3.1.2
Keyboard	15.66%	2.1.1, 2.4.7
Images	14.59%	1.1.1, 1.4.5
Forms	14.07%	1.3.1, 2.4.6, 3.3.1, 3.3.2, 3.3.3, 3.3.4
Modal Dialog	6.06%	1.3.2, 2.4.3
Lists	3.67%	1.3.1



What's left to test?

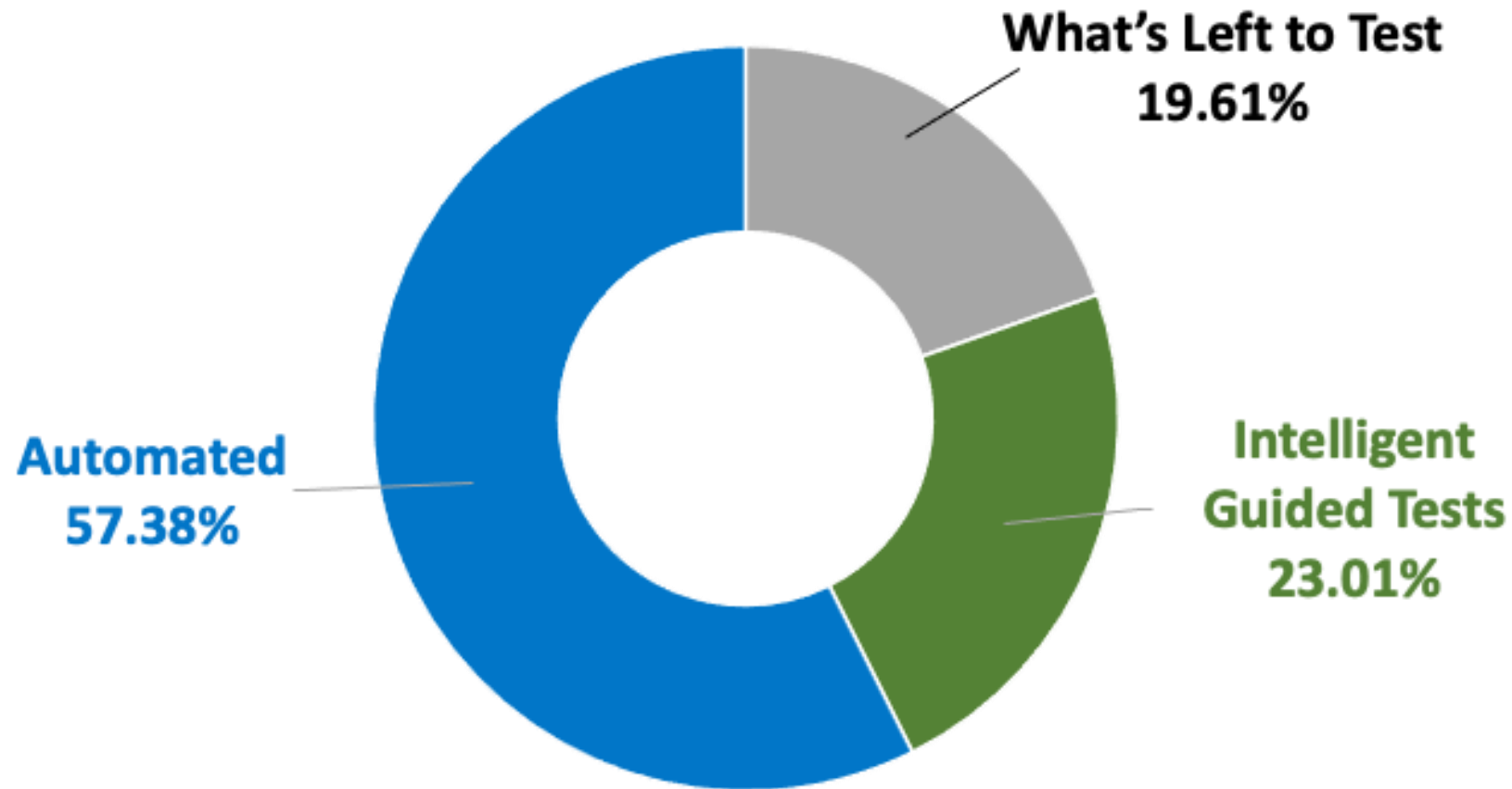
Getting to 100% test coverage

Total % of Issues axe DevTools Can Find = **80.39%**
Automated + Intelligent Guided Tests



Getting to 100% WCAG 2.1 A/AA Test Coverage

What's Left to Test? Advanced Testing Coverage

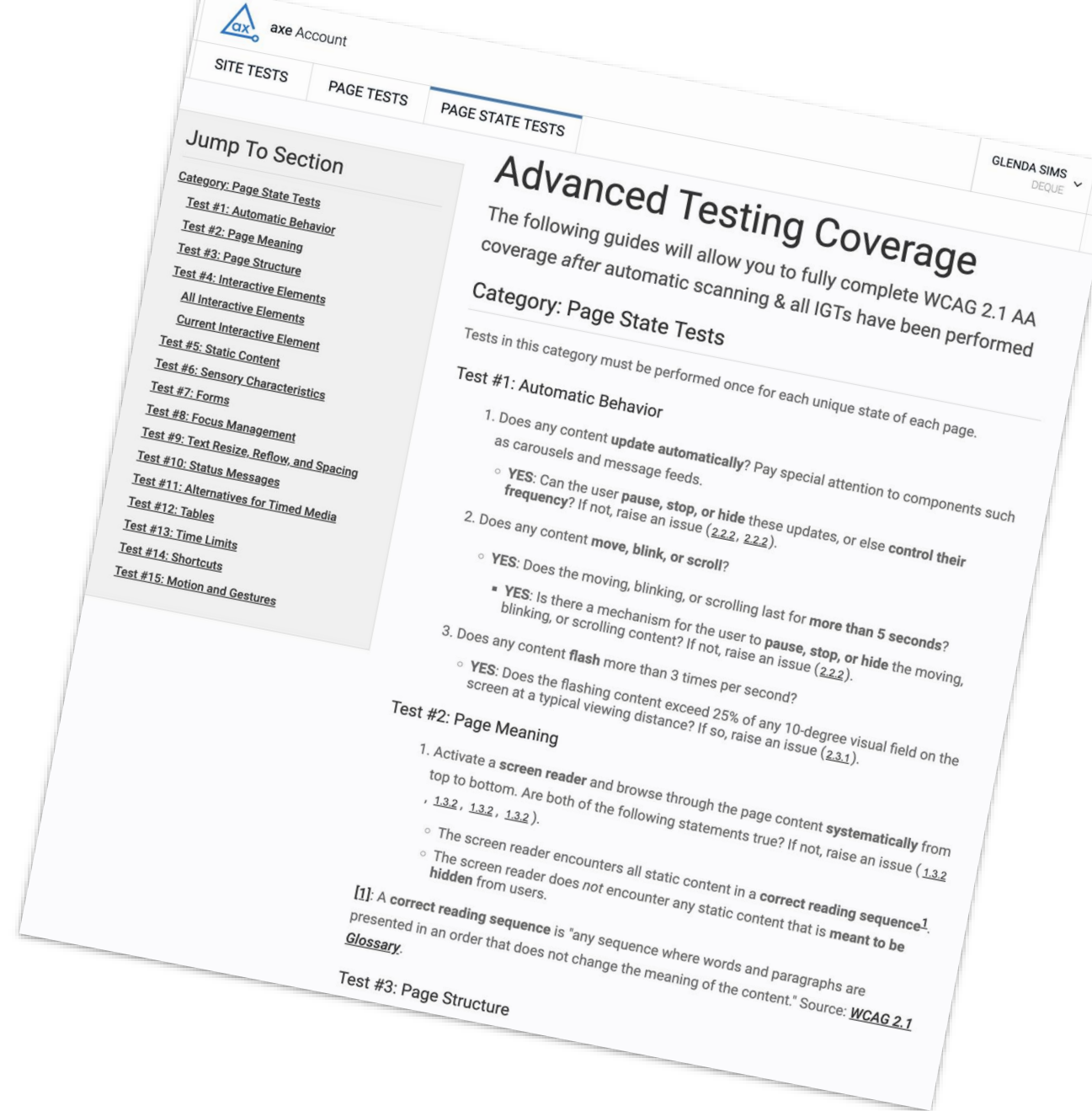


The Last Mile

- Documented all tests for full WCAG 2.1 coverage
- Requires more in-depth accessibility knowledge

This list of “What’s Left to Test/Advanced Test Coverage” is also our a11y bounty hunter list!

Deque continues to develop Intelligent Guided Tests to empower Developers to write accessible code from the start!



An abstract graphic in the top half of the image features three white circles of equal size. They are connected by thin white lines: a horizontal line connects the first two circles, and a diagonal line connects the second and third circles. Additionally, there are several long, sweeping, curved white lines that arc across the upper portion of the frame, creating a sense of movement and depth.

Questions & Answers

Deque Comprehensive Audits for New Clients

WCAG 2.1 A/AA SC with Most Issues (again)

#	Success Criteria #	Success Criteria Name	Total issues	Manual issues	Auto issues	Manual %	Auto %	% of ALL Issues by SC	Cumulative % of Issue
1	1.4.3	Contrast (Minimum)	88,714	14,981	73,733	16.89%	83.11%	30.08%	30.08%
2	4.1.2	Name, Role, Value	48,287	22,011	26,276	45.58%	54.42%	16.37%	46.45%
3	1.3.1	Info and Relationships	36,382	19,950	16,432	54.83%	45.17%	12.33%	58.78%
4	4.1.1	Parsing	34,488	3,351	31137	9.72%	90.28%	11.69%	70.47%
5	1.1.1	Non-text Content	23,701	7,687	16,014	32.43%	67.57%	8.04%	78.51%
6	2.4.3	Focus Order	9,553	9,553	0	100.00%	0.00%	3.24%	81.75%
7	2.1.1	Keyboard	9,412	9,178	234	97.51%	2.49%	3.19%	84.94%
8	2.4.7	Focus Visible	7,312	7,312	0	100.00%	0.00%	2.48%	87.42%
9	1.4.11	Non-text Contrast	4,539	4,539	0	100.00%	0.00%	1.54%	88.96%
10	1.4.1	Use of Color	3,713	3,261	452	87.83%	12.17%	1.26%	90.22%
11	1.3.2	Meaningful Sequence	3,313	3,313	0	100.00%	0.00%	1.12%	91.34%
12	3.3.2	Labels or Instructions	2,537	2,019	518	79.58%	20.42%	0.86%	92.20%
13	2.4.1	Bypass Blocks	2,533	532	2,001	21.00%	79.00%	0.86%	93.06%
14	2.4.2	Page Titled	2,211	1,962	249	88.74%	11.26%	0.75%	93.81%
15	3.1.1	Language of Page	2,173	178	1,995	8.19%	91.81%	0.74%	94.54%
	###	Rest of WCAG 2.1 A/AA SC	16,090	15,889	201	98.75%	1.25%	5.46%	100.00%
Totals			294,958	125,716	169242	42.62%	57.38%		