Accessibility Testing

- Automating your way to compliance

The opportunities and pitfalls that automating your accessibility testing can bring

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Blindness. Low Vision. Opportunity.

- What is accessibility?
- Who benefits?
- What is compliance?
- How do we test?

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What is “disability”?

Any limitation, restriction or impairment which **restricts everyday activities** and has lasted, or is likely to last, for at least six months.

Source: Australian Bureau of Statistics, Survey of Disability, Ageing and Carers 2015

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What is Accessibility?

“Use”ability – Ease of use

“Acess”ability – The right to use

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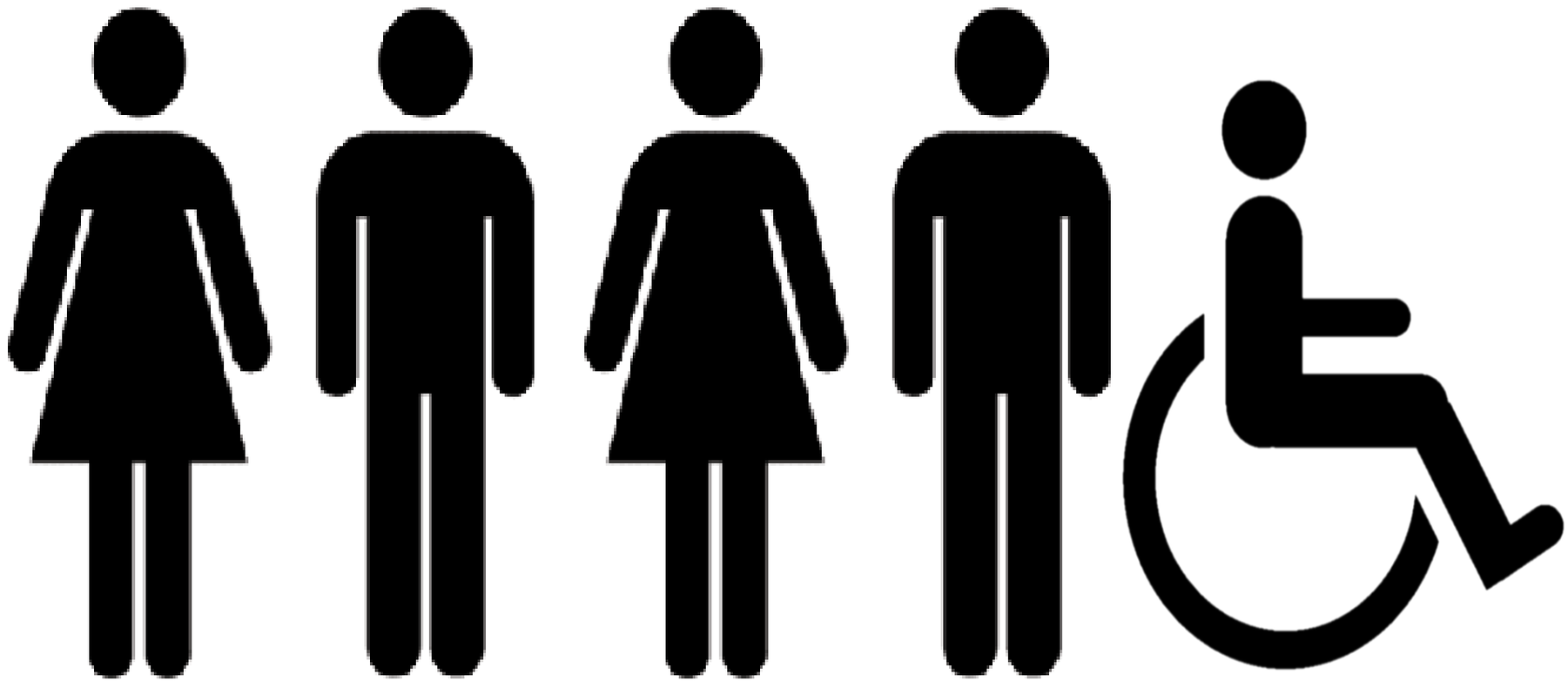
Who benefits?



Source: Australian Bureau of Statistics, Survey of Disability, Ageing and Carers 2015

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Compliance

Perceivable

- Information and user interface components must be presentable to users in ways they can perceive.
- Users must be aware of the information being presented.

Operable

- User interface components and navigation must be operable.
- Users must be able to operate the interface (the interface cannot require interactions that a user cannot perform).

Understandable

- Information and the operation of user interface must be understandable.
- Users must be able to understand the information as well as the operation of the user interface (the content or operation cannot be beyond their understanding)

Robust

- Content must be robust enough that it can be interpreted reliably by a wide variety of user agents, including assistive technologies.
- Users must be able to access the content as technologies advance (as technologies and user agents evolve, the content should remain accessible)

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Testing

"Automated testing is the worst!"

"Automate ALL the things"

"Automated testing is a valuable component of my complete audit methodology"

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Testing – Auto vs Manual

WCAG Level	Auto	Manual Ver.	Manual Only
Level A	25%	29%	46%
Level AA	17%	41%	41%
Level AAA	23%	24%	53%

Source: https://karlgroves.com/2012/09/15/accessibility-testing-what-can-be-tested-and-how

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Testing – What can be automated?

- Missing form labels
- Invalid ARIA attributes
- Color contrast
- Language specification
- Reading level
- Table Markup

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Testing – What can’t be automated?

- Keyboard only support
- Visible focus
- Screen reader compatibility
- Page Titles
- Captions
- Audio descriptions

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Testing – What needs manual checking?

- Alt-text
- Colour contrast
- Text resize
- Headings
- Form label content

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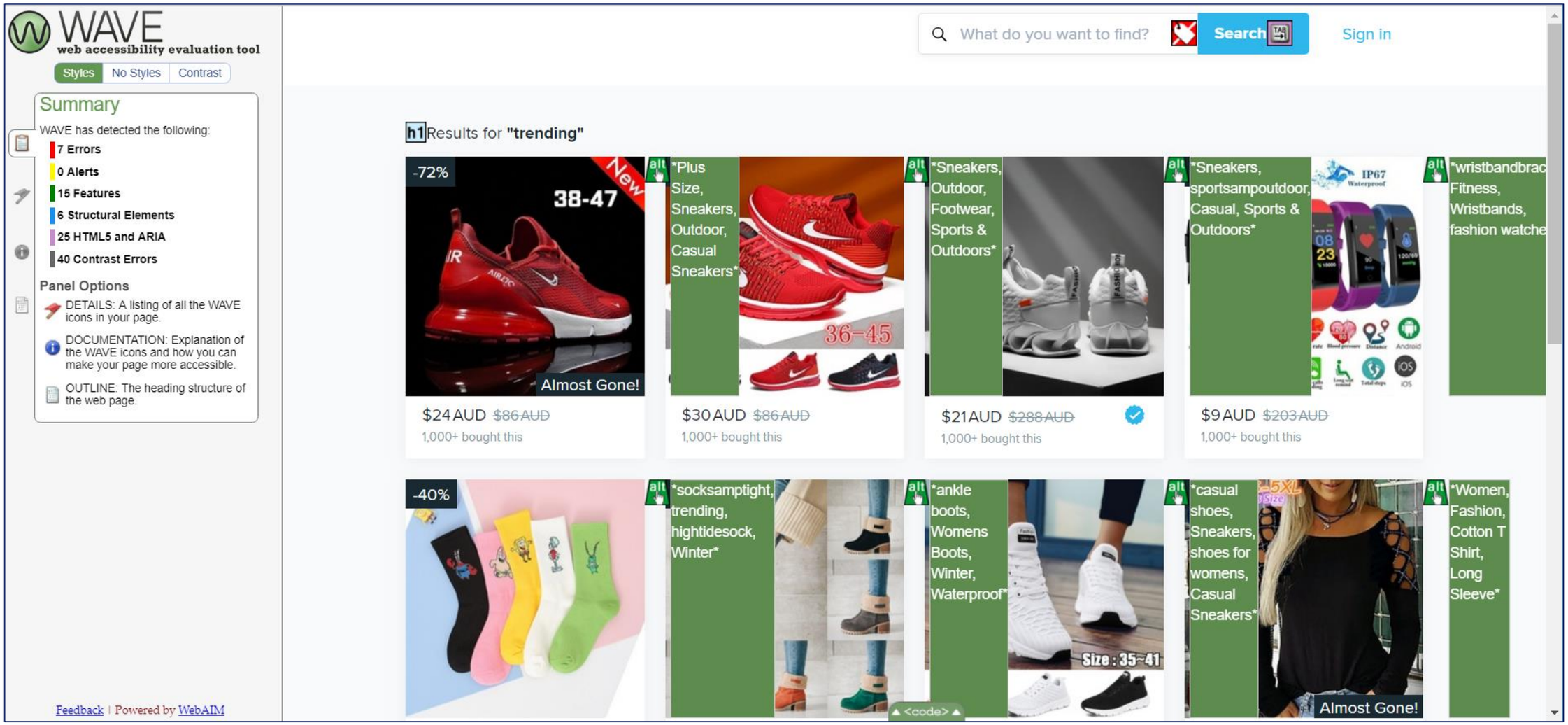
Tools – Wave



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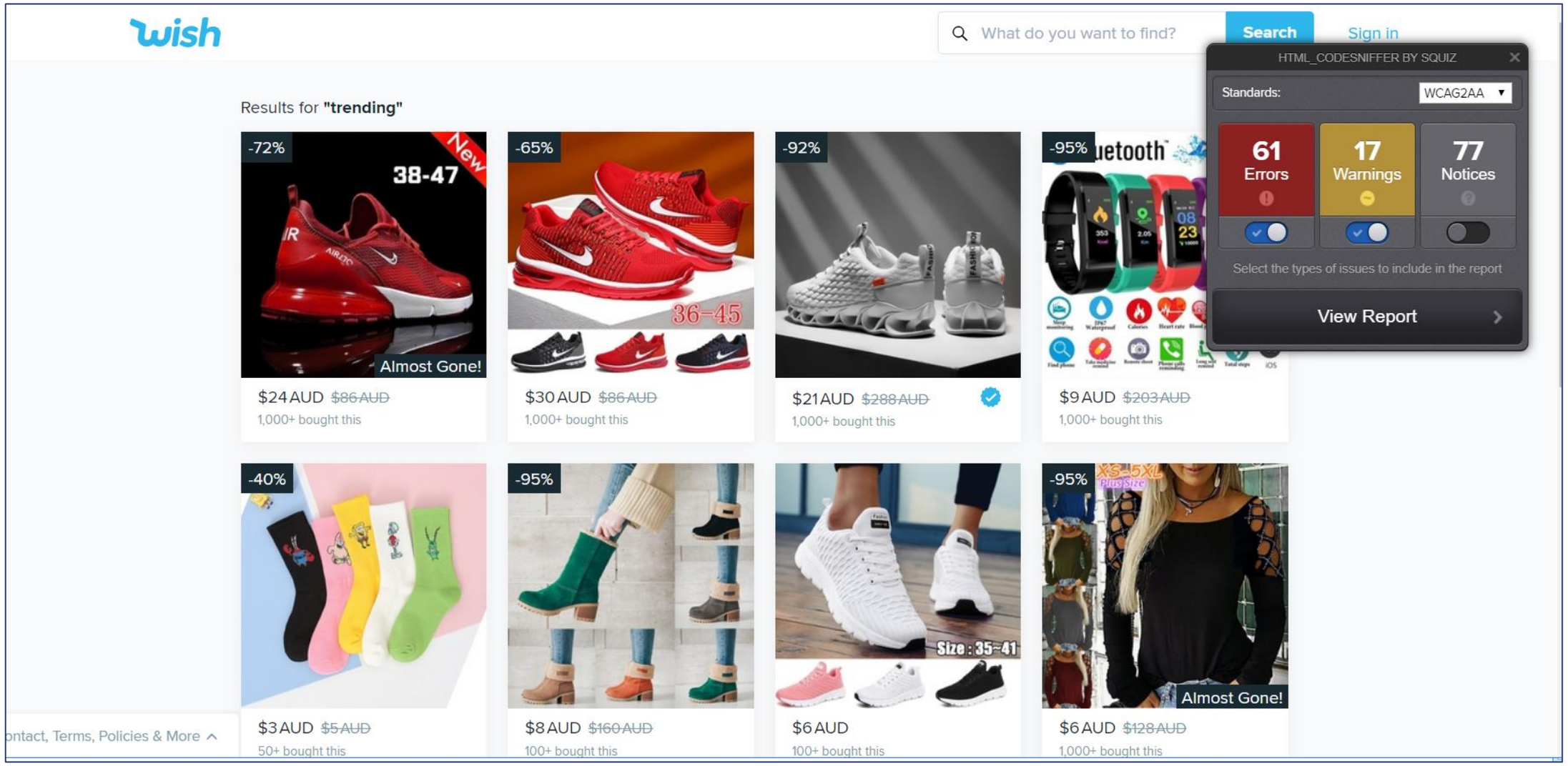
Tools – HTML Codesniffer



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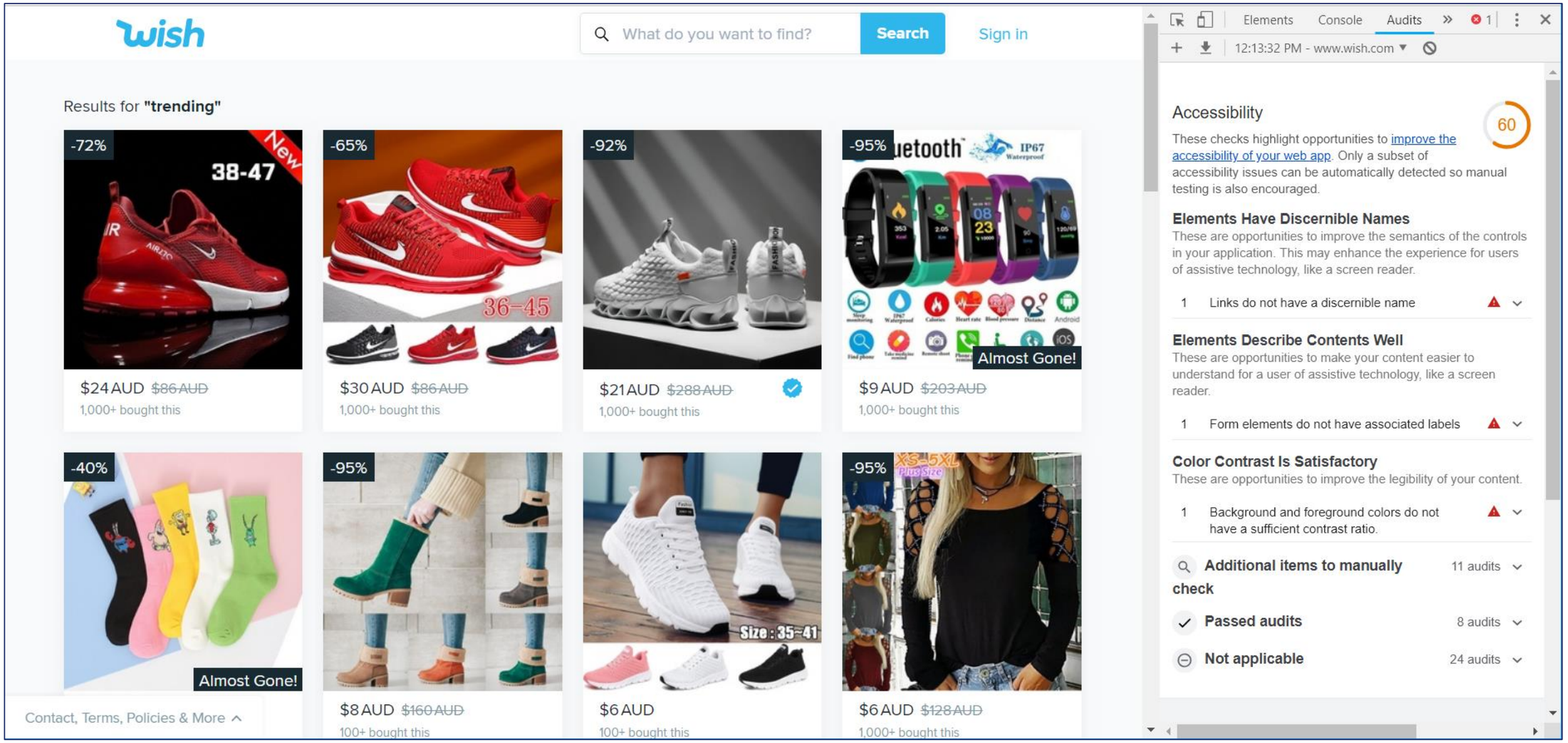
Tools – Lighthouse



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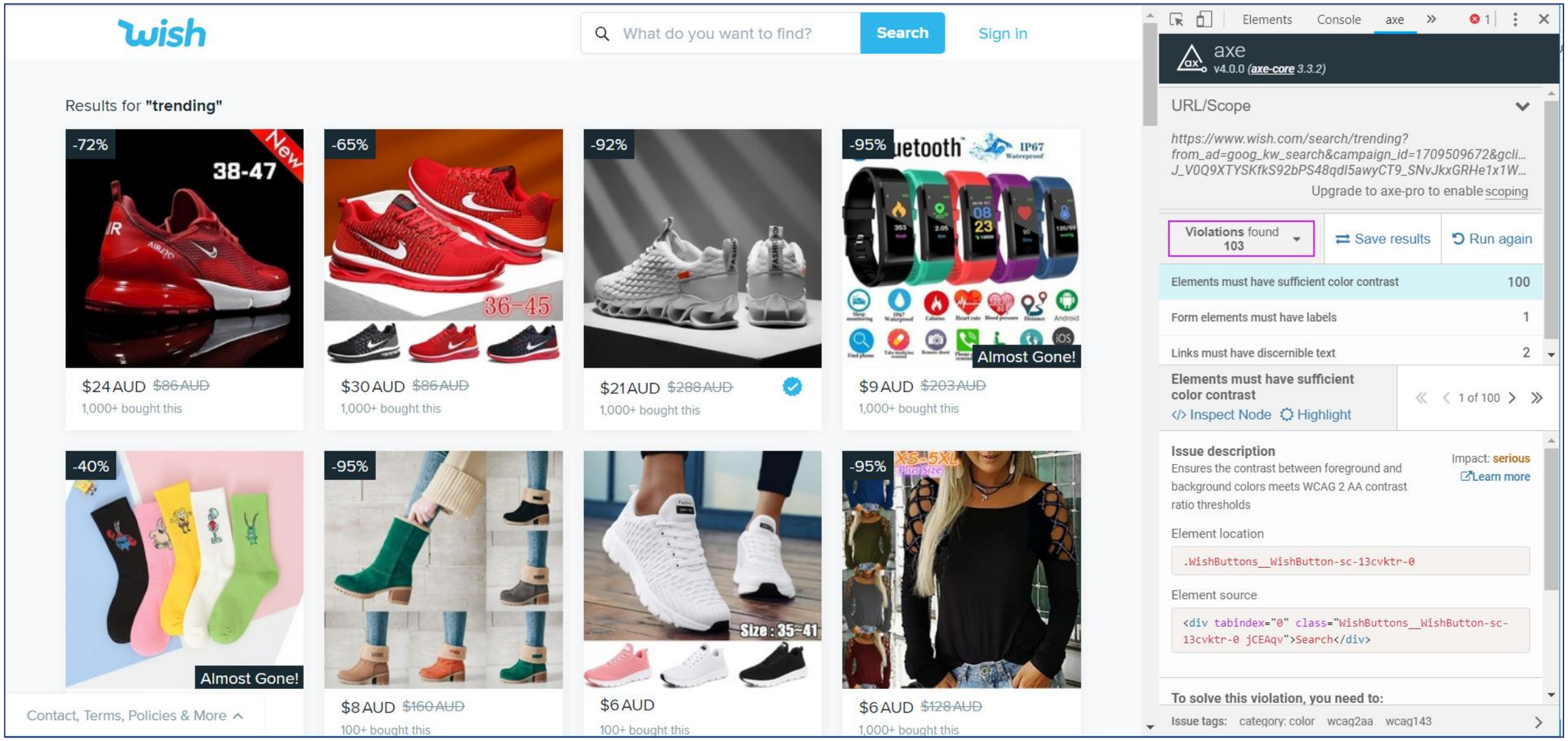
Tools – aXe



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Tools – Choosing the right tool

- Is the tool easy to use?
- Are the results reliable?
- Does the tool test the DOM?

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Key Take-aways

- Automating can increase efficiency
- Test early, Test often
- Nothing can replace a real person

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