



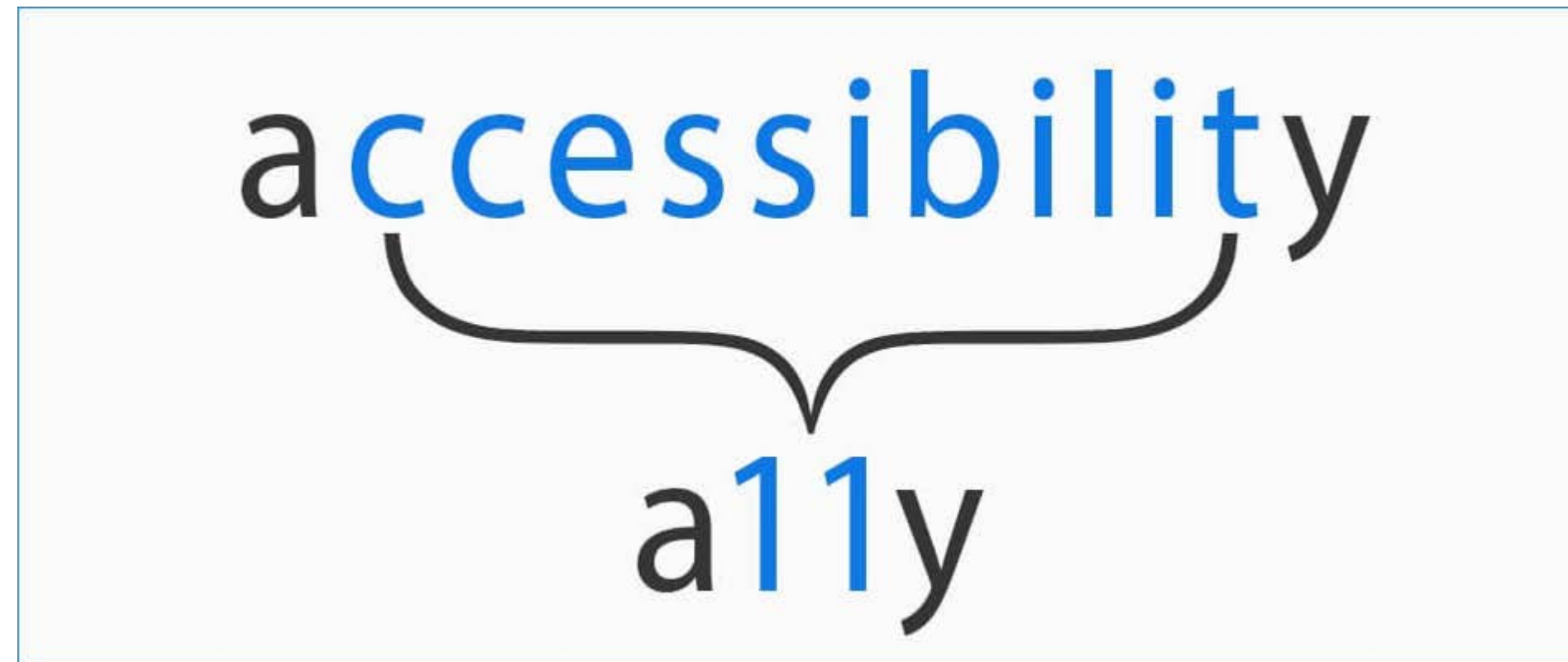
**opentext**<sup>™</sup>

# Web Accessibility

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# Accessibility at OpenText



Yammer **accessibility** group:  
<https://go.opentext.com/a11y>



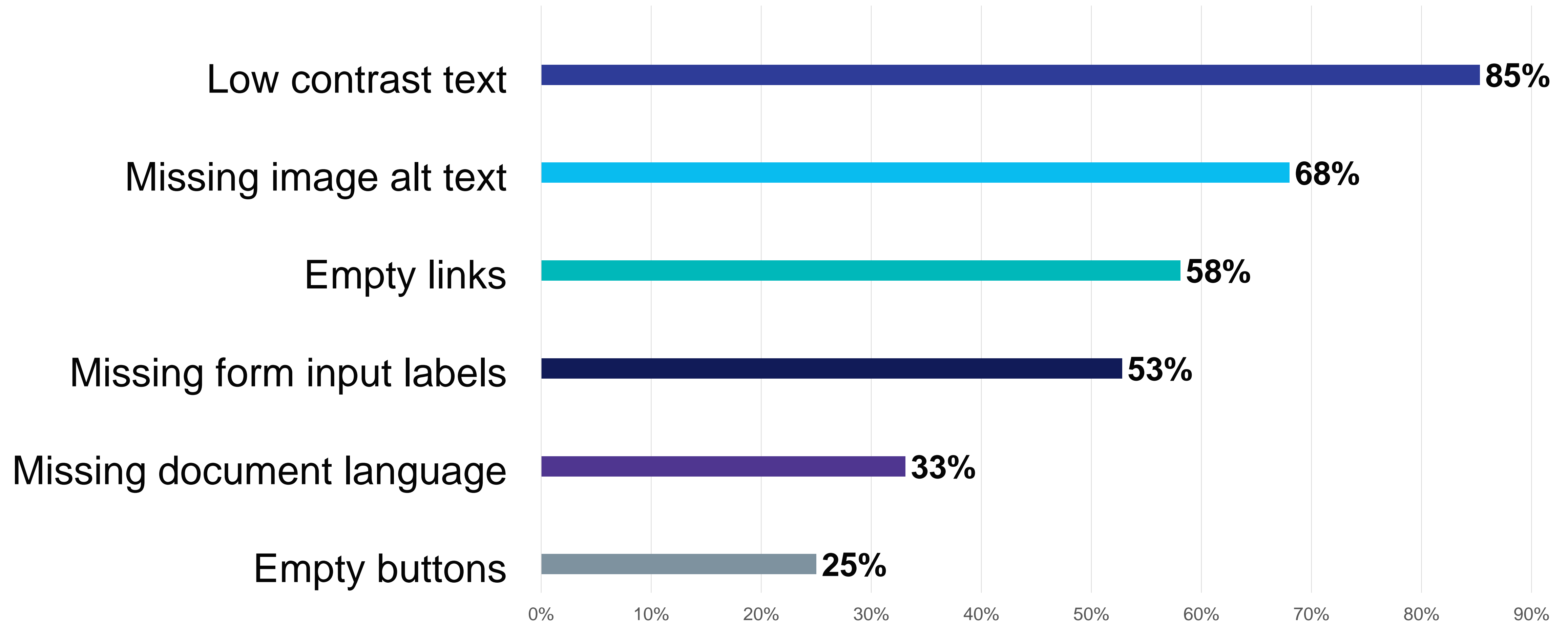
# Agenda

- State of accessibility
- What is web accessibility?
- Guidelines and requirements
- Checklists and testing
- Key takeaways

# State of accessibility

- **Web accessibility is not new**
  - Web Content Accessibility Guidelines (WCAG) 1.0 – **5 May 1999**
  - AODA – compliance deadline for OpenText of **1 January 2021**
- Diamond – 2019 State of Accessibility Report
  - 1 in 4 Americans (61M) / **1 billion people worldwide** have a disability
  - US Lawsuits
    - 2017: 814
    - **2018: 2,258**
  - Alexa top 100 sites – login accessibility: **29%**
- WebAIM Million homepages report
  - **OpenText.com rank: bottom 25%** in accessibility (806,097)
  - **73 accessibility errors** detected with *automated* testing

# Common failures (% of home pages tested)



[WebAIM Million Report 2019](#) — An accessibility analysis of the top 1,000,000 home pages

# Issues to watch

- Mobile application accessibility
- Streaming video – particularly audio description
- Augmented reality (AR) and virtual reality (VR)
- Voice-controlled assistants
- Social media content accessibility



# National AccessAbility Week in Canada: 26 May – 1 June 2019





# What is web accessibility?



# Web accessibility

Designing and developing websites, tools and technologies **inclusive** of **people with disabilities**

This encompasses all disabilities that affect access to the web, including:

- auditory
- visual
- cognitive
- neurological
- speech
- physical

**Disability is the only minority group  
you can join at any time.**



# Essential for some, useful for all

Web accessibility also benefits people *without* disabilities, for example:

- people using mobile phones, smart watches, smart TVs, and other devices with small screens, different input modes, etc.
- older people with changing abilities due to ageing
- people with **temporary disabilities** such as a broken arm or lost glasses
- people with **situational limitations** such as in bright sunlight or in an environment where they cannot listen to audio
- people using a slow Internet connection, or who have limited or expensive bandwidth

OpenText values

**Diversity**

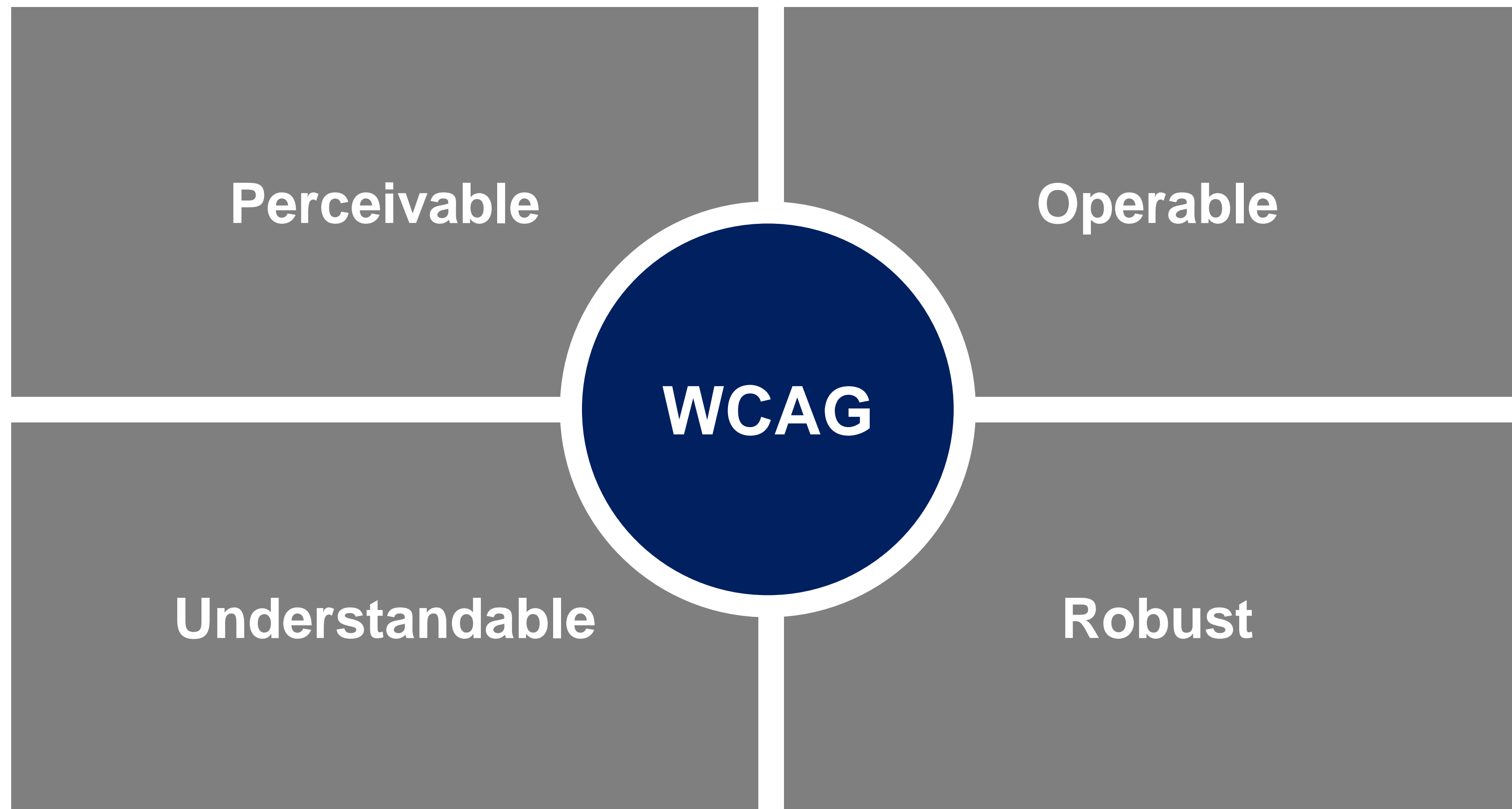
**Inclusion**

**Innovation**



# Guidelines and requirements

# Web Content Accessibility Guidelines





# Principals and guidelines

**Perceivable:** Provide **text alternatives** for any non-text content so that it can be changed into other forms people need, such as large print, braille, speech, symbols or simpler language.

**Operable:** Provide ways to help users **navigate**, find content, and determine where they are.

**Understandable:** Make webpages appear and operate in **predictable** ways.

**Robust:** Maximize compatibility with current and future user agents, including assistive technologies.

- **Semantic HTML**

# Who owns accessibility?



## For project managers

- What laws or guidelines exist?
- Know the roles and responsibilities
- Communicate early and often
- **Accessibility isn't a single line-item requirement.**

## For designers

- Color: contrast & information
- Layout: order, hierarchy & proximity
- States: hover, focus & errors
- **Design for failure. It's real life.**

## For developers

- Keyboard: unit test anything with the keyboard before committing code
- HTML: Semantics first!
- Focus: Where is the user on the page?
- **Code responsibly, responsively.**

## For testers

- Learn: about assistive technologies
- Plan: prepare for a11y testing
- Perform: automated + manual QA
- **Ensure accessibility issues are caught.**



# Accessibility for Ontarians with Disabilities Act (AODA)

2005



2014



2021



**WCAG 2.0 Level A**

**Level AA**

The AODA  
becomes law  
13 June 2005

Make all new and  
refreshed Internet  
websites and web  
content on those  
sites conform with  
**WCAG 2.0 level A**

Make all Internet  
website and web  
content conform  
with **WCAG 2.0  
level AA** (excluding  
live captioning and  
audio description)

# Accessibility is a civil right

- **United Nations**

- [Convention on the Rights of Persons with Disabilities](#)

- **United States**

- [Americans with Disabilities Act, 1990](#)

- Most US lawsuits against private companies happen under the public accommodation statute of the ADA

- [Revised Section 508](#) (for the purchase of ICT by US federal government)

- Updated in 2017 to require WCAG 2.0 Level AA

- **European Union**

- EN 301 549: [Directive on the Accessibility of Websites and Mobile Applications](#)

# Checklists and testing



# Checklists

- [Easy Checks](#) – a first review of web accessibility
- [WCAG 2.0 Level AA checklist](#) – review the 36 success criteria
- [WebAIM checklist](#) – provides recommendations of what to test
- [The A11y project checklist](#) – grouped by content type: headings, tables, etc.

# Automated testing

**Testing tools catch only **30-40%** of possible errors.**

- Lighthouse accessibility audit in Chrome developer tools (F12)
- aXe (the accessibility engine) [browser extensions](#)
- Accessibility Insights [Chrome extension](#)
- WAVE (web accessibility evaluation tool) [browser extensions](#)

# Manual testing

**Passing an automated test doesn't mean a page is accessible.**

- Tab through the website with a keyboard
- Focus visibility
- Links and buttons have text labels
- Use headings correctly
- Semantic HTML and native elements whenever possible
- Forms and error messages
- Screen readers
  - [NVDA](#) & Firefox, VoiceOver for iOS/macOS, TalkBack for Android



# Key takeaways

**Accessibility is habit and process,  
not a finish line.**

When your websites are accessible,  
it builds confidence that your products are.



# It's the right thing to do!

- More countries are coming up with accessibility laws and most require

## **Conformance to WCAG 2.0 Level AA success criteria**

- WCAG 2.1 success criteria were released last June and many laws have a moving target for compliance.
- It's always easier to design and develop to Level AA standards now instead of retrofitting.

“ *Disability is never a barrier.*

*Design is.*

–Haben Girma, first deafblind graduate of Harvard Law School

# Get started with web accessibility

## **Introduction to Web Accessibility**

<https://www.w3.org/WAI/fundamentals/accessibility-intro/>





# Resources

- How to make Websites Accessible: <https://www.ontario.ca/page/how-make-websites-accessible>
- Accessibility rules for businesses and non-profits: <https://www.ontario.ca/page/accessibility-rules-businesses-and-non-profits#section-3>
- Accessibility for Ontarians with Disabilities Act, 2005: <https://www.ontario.ca/laws/statute/05a11>
- How People with Disabilities Use the Web: <https://www.w3.org/WAI/people-use-web/>
- 2019 Digital Accessibility Legal Update: <https://www.lflegal.com/2019/04/after-csun19/>
- Useful [bookmarklets](#) for evaluating a wide array of elements
- Vox Media Accessibility guidelines: <http://accessibility.voxmedia.com/>
- Browser accessibility: <http://www.html5accessibility.com/>
- PDF accessibility: [https://helpx.adobe.com/acrobat/using/create-verify-pdf-accessibility.html#check\\_accessibility\\_of\\_PDFs](https://helpx.adobe.com/acrobat/using/create-verify-pdf-accessibility.html#check_accessibility_of_PDFs)
- The Accessibility Tree: <https://developers.google.com/web/fundamentals/accessibility/semantics-builtin/the-accessibility-tree>
- Screen reader keyboard shortcuts and gestures: <https://dequeuniversity.com/screenreaders/>