



# CS Department Web Accessibility

November, 2021



UNIVERSITY OF  
MARYLAND

# What Is Web Accessibility?

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“The **inclusive** practice of ensuring there are no barriers that prevent interaction with, or access to, websites.”

[https://en.wikipedia.org/wiki/Web\\_accessibility](https://en.wikipedia.org/wiki/Web_accessibility)

# Who Benefits From Accessibility?

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- People with Physical Disabilities
  - Vision, Hearing, Motor, Cognitive
    - Traditional adaptive technologies like screen readers, subtitles, pointing devices
  - ALSO a broad portion of the population
    - 1 in 4 Americans have a disability of some type
  - Not everyone who benefits from accessibility is technically “disabled”. Senior citizens, for example

<https://www.cdc.gov/ncbddd/disabilityandhealth/infographic-disability-impacts-all.html>

# Who Benefits From Accessibility?

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- People with Physical Disabilities
- People with Situational Disabilities
  - Data entry. Repetitive tasks. Working in loud, dangerous environments

# Who Benefits From Accessibility?

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- People with Physical Disabilities
- People with Situational Disabilities
- People with Equity-based Disabilities
  - Socio-economic status, geography, and race affect a person's access to high-speed data and current technology
  - “Mobile friendly” also means data & device friendly

# Why Is Accessibility Important?

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- It's the Law
  - Sections 504 Rehabilitation Act of 1973
  - Section 508 of the 1990 ADA
- It's University Policy
  - Since 2018, if a website serving a teaching or business purpose is rebuilt or updated it must meet WCAG 2.0 AA compliance requirements
  - Also applies to captions and transcripts for public video (YouTube)
  - Web Accessibility link in the footer of every webpage
  - Regular evaluation and reporting by DIT & OSC

# Why Is Accessibility Important

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It's Ethical

# Who Makes Accessibility Standards?

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- World Wide Web Consortium (W3C) maintains HTML and CSS standards
- W3C's Web Accessibility Initiative (WAI) maintains web accessibility standards
- Academics, researchers, industry partners, gov't reps & advocates draft, vote on, and revise the standards
- WAI issues Web Content Accessibility Guidelines (WCAG), and Accessible Rich Internet Applications (ARIA) considered the benchmarks for accessibility

<https://www.w3.org/WAI>



# How Is Accessibility Achieved?

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- Alt tags for images
- Much more than that, though
- Color contrast - for low-vision and colorblind users
- Keyboard Navigation - can I tab through the site?
- Standards change over time
- `<b>` vs `<strong>`, `<i>` vs `<em>`
- Semantic HTML - document structure is important  
H1 -> H2 -> H3

# DIY– IT Accessibility

The University of Maryland is committed to creating and maintaining a welcoming and inclusive educational and working environment. Consistently completing these six steps when creating online content improves accessibility and gives all members of our community equal access to information and services.

## SIX Essential Steps



For a text version of this document and more information, visit the IT Accessibility website at [itaccessibility.umd.edu](http://itaccessibility.umd.edu) or contact us at [itaccessibility@umd.edu](mailto:itaccessibility@umd.edu).



# How Can I Help With This?

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# How Can I Help With This?

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- For content editors, Drupal CMS and the site theme handle most of it
- Editors still have broad control over HTML, so it's helpful to check your work
- Two tools: SiteImprove Chrome plugin and WebAIM WAVE Evaluation Tool

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# Demo

# Conclusion

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- Accessibility compliance is an ongoing and evolving process.
- The department move to Drupal 9 next year will further help content editors
- IT Group staff are always available for questions and consultation

# Resources

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- Helpdesk FAQ page:  
<https://helpdesk.cs.umd.edu/faq/web/accessibility.html>
- SiteImprove Extension:  
<https://chrome.google.com/webstore/detail/siteimprove-accessibility/efcfolpjihicnikpmhnmphjhpiclljc>
- WAVE Extension:  
<https://chrome.google.com/webstore/detail/wave-evaluation-tool/jbbplnpkjmmeebjpijfedlgcdilocofh/related>
- WebAIM Color Contrast Checker:  
<https://webaim.org/resources/contrastchecker/>

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# Questions?