

# Accessibility (a11y) in Web Sites

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“Design like you give a damn.”

– Léonie Watson, “Practical Accessibility for Web Pros”

“The power of the web is in its universality.  
Access by everyone regardless of disability is  
an essential aspect.”

– Tim Berners-Lee

# Accessibility

- Many of us don't spend enough time catering to end user needs
- Even less time catering to users with special needs

# What is it?

- People with disabilities can and should be able to use and contribute to the web
- Includes users with auditory, visual, cognitive, physical, speech, neurological disabilities
- While old age isn't a disability, older users benefit too!

# Why should I care?

- Approximately 15% (1 billion people) have a form of disability. 2-4% severe ([census.gov](https://www.census.gov))
- By not making your site accessible, you are driving disabled users to your competition
- **Accessibility == Moar Profitability**
- In certain countries/circumstances, it's the law!

“To enable persons with disabilities to live independently and participate fully in all aspects of life, States Parties shall take appropriate measures to ensure to persons with disabilities access, on an equal basis with others, to the physical environment, to transportation, to information and communications, including information and communications technologies and systems.”

– UN CONVENTION on the RIGHTS of PERSONS with DISABILITIES, Article 9

# Because it might be you someday!

- Broken arm
- Loss of/diminished eyesight
- Loss of hearing
- Trying to work with a baby in one arm

# Process

- Not just a checklist, it's a way of working
- Accessibility is about quality
- Ideally, it is of the same importance in your development process as testing and documentation are
- Design for inclusion



# Biggest Win - Semantically Valid HTML

- **A**
- **B**
- **C**
- **D**

# Biggest Win - Semantically Valid HTML

- **A**nchors for links
- **B**
- **C**
- **D**

# Biggest Win - Semantically Valid HTML

- **A**nchors for links
- **B**uttons for buttons
- **C**
- **D**

# Biggest Win - Semantically Valid HTML

- **A**nchors for links
- **B**uttons for buttons
- **C**lickable DIVs?
- **D**

# Biggest Win - Semantically Valid HTML

- **A**nchors for links
- **B**uttons for buttons
- **C**lickable DIVs?
- **D**on't do it :)

# Biggest Win - Semantically Valid HTML

- Anything more complex? WAI-ARIA to the rescue!
- Check your markup - <https://validator.w3.org/>

# Other Considerations

- Screen readers (VoiceOver)
- Keyboard navigation
- Mobile? Mind button size!
- Contrast - <http://colorsafe.co/>
- ARIA attributes - <http://webaim.org/techniques/aria/>
- Frameworks often not good at accessibility

# Tools

- aXe
- WAVE (not Google Wave!) - will tell you why something is wrong and where to go for more info
- [tenon.io](https://tenon.io/) - Best of the bunch, but not cheap.



# Resources

- <https://www.udacity.com/course/web-accessibility--ud891>
- Web Accessibility Checklist: <http://a11yproject.com/checklist.html>
- WAI - <https://www.w3.org/WAI/>
- Section 508 - <https://www.section508.gov/>

# Challenge!

- On your next project, make a point of focusing on the accessibility of your site
- Or, revisit an existing project and focus on making it more accessible

“Design that doesn’t enhance content is art.”

– Job van Achterberg

# Thank you!



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