# Accessibility

# What

Web accessibility means that people with disabilities can use the Web. More specifically, Web accessibility means that people with disabilities can perceive, understand, navigate, and interact with the Web, and that they can contribute to the Web. Web accessibility also benefits others, including older people with changing abilities due to aging.

—https://www.w3.org/WAI/intro/accessibility.php

Web accessibility encompasses all disabilities that affect access to the Web, including visual, auditory, physical, speech, cognitive, and neurological disabilities.

—https://www.w3.org/WAI/intro/accessibility.php

# Context

- Age-related impairments
- Multiple disabilities
- Health conditions
- Changing abilities
- Temporary impairments
- Situational limitations

# Primary Considerations

- Auditory
- Cognitive and neurological
- Physical
- Speech
- Visual
- Communication
- Native Language

https://www.w3.org/WAI/intro/people-use-web/diversity#diversity

# Why Accessible?

- Because you should
- You will get more users
- Google can read your site better, so you will have a more relevant listing in search results (and probably higher)
- If you receive government funding you are probably legally obligated to follow accessibility guidelines
- If you follow universal design principles, your site could improve for lots of people

# Progressive Enhancement

what, why

# Layers

- HTML & Content (alt tags on images)
- CSS (presentation, visual)
- Javascript (interaction, animation + visual)

Designing in layers

# Why

- Provides accessibility for screenreader usage
- Much Better Browser compatibility
- Support Slow internet connections
- Google can read your site, so you get good SEO

including different version releases
there are literally thousands of different browsers, with different capabilities in use
you cannot test all of them

# Example

http://massart.andrewringler.com/intro-to-web-spring-2015/materials/examples/wk10/owlcarousel-progressive-enhancement/

progressive enhancement example (in safari)
disable javascript, & styles
show what it looks like and behaves as you add back

listen to page with screen reader
show what images without alt text sound like

# Testing

multiple browsers

# Why Test

- You will improve your website
- Your users use a LOT of different web browsers

lot of diversity
http://caniuse.com/usage_table.php

# Test Locally

Safari
Chrome
Firefox

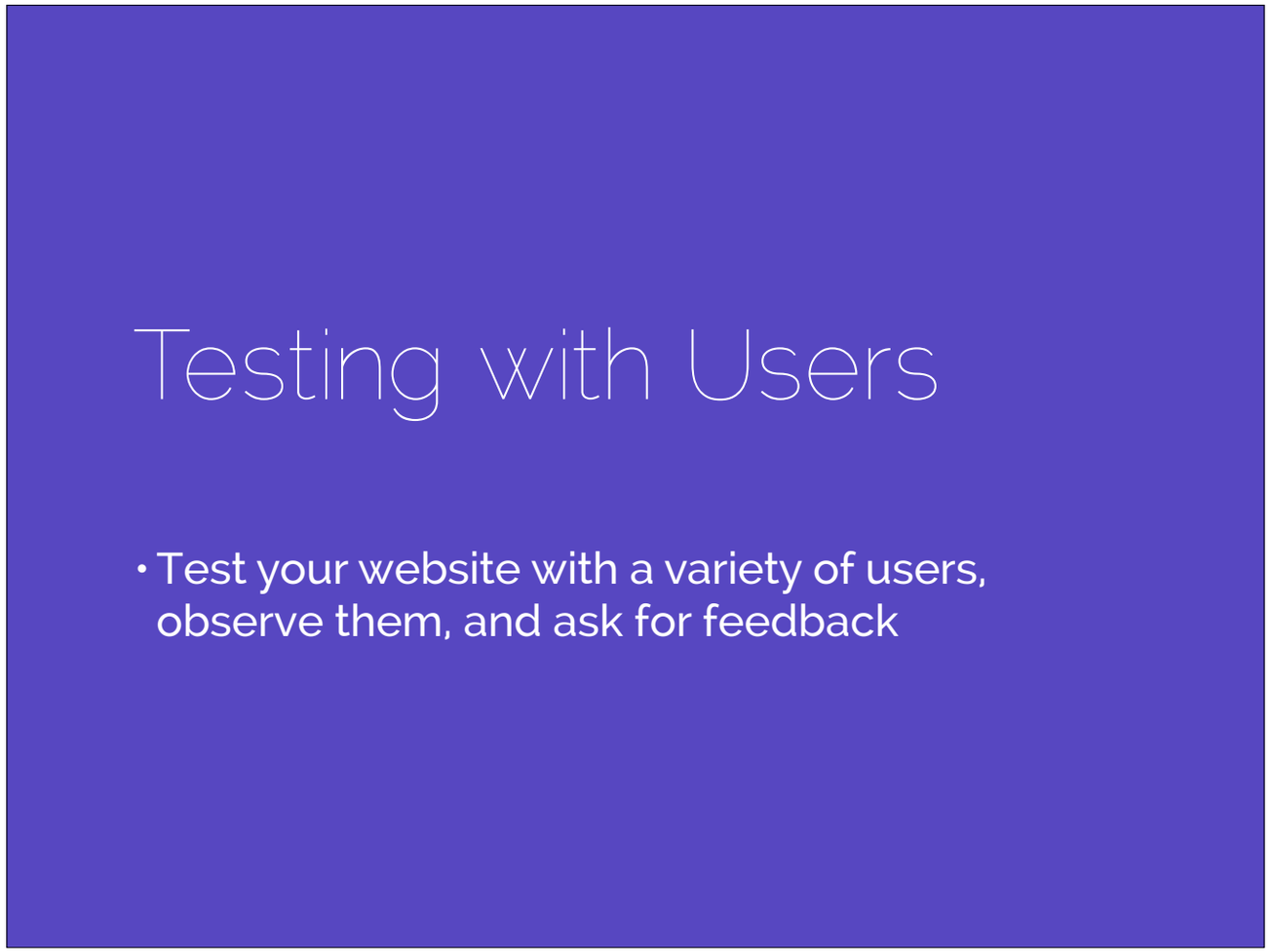
https://ftp.mozilla.org/pub/mozilla.org/firefox/releases/


Test on Phone
and tablet if you have

# Virtual Machines

- IE virtual machines: https://www.modern.ie
- http://browsershots.org/

either install your own, or use a web-based tool




and finally, always test your website with a variety of users. observe them interacting with your website, and ask for feedback.

# Accessible Design Resources

multiple browsers

# Web

- WebAIM http://webaim.org/
- How People with Disabilities Use the Web @W3C https://www.w3.org/WAI/intro/people-use-web/Overview.html and https://www.w3.org/WAI/intro/people-use-web/principles

# Books

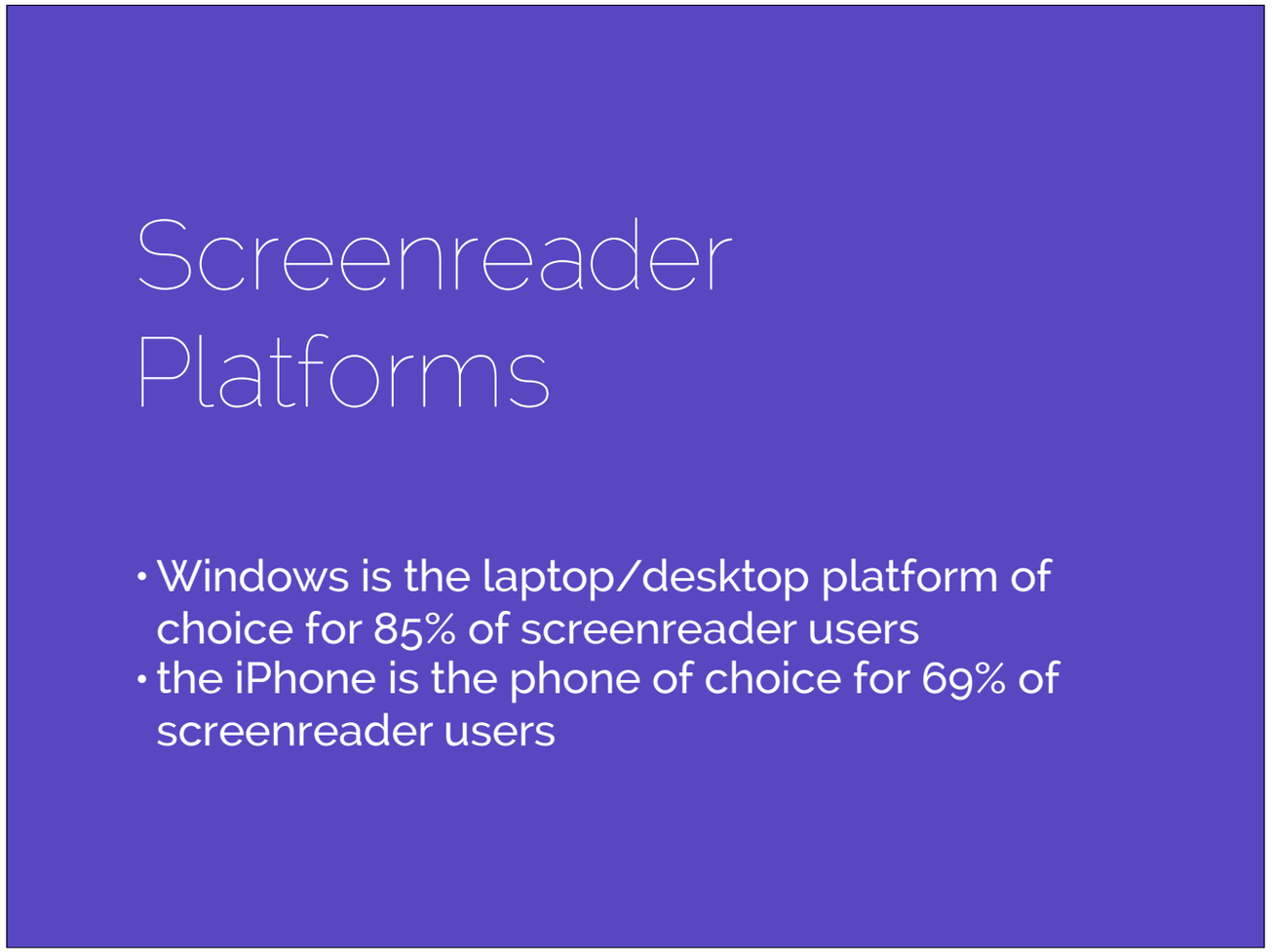
- Adaptive Web Design 1st edition free online: http://adaptivewebdesign.info/1st-edition/
- Designing with Progressive Enhancement. Peachpit/New Riders, 2010 by Scott Jell
- Responsible Responsive Design. A Book Apart, 2014 by Scott Jehl

Screenreaders

multiple browsers


Screenreader usage will just tackle one aspect of visual disability. But, hopefully this exercise will build general awareness for the importance of considering these aspects, and testing, testing ,testing.

https://www.w3.org/WAI/intro/people-use-web/diversity#diversity




85% of screenreader users use Windows on their desktop and 69% use an iPhone

IE, a typical user will use Windows for their Laptop, and iPhone for their phone.

why, in my opinion, Windows has better support for low-vision and screenreader usage. And the iPhone was the first, and only phone with screenreader support for a long time, and probably is still the best.