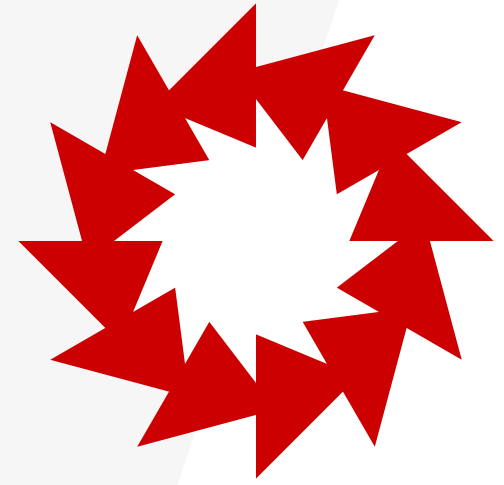


Accessibility

Tips & Tricks To Performing An Accessibility Audit

MICHAELA BLACKHAM

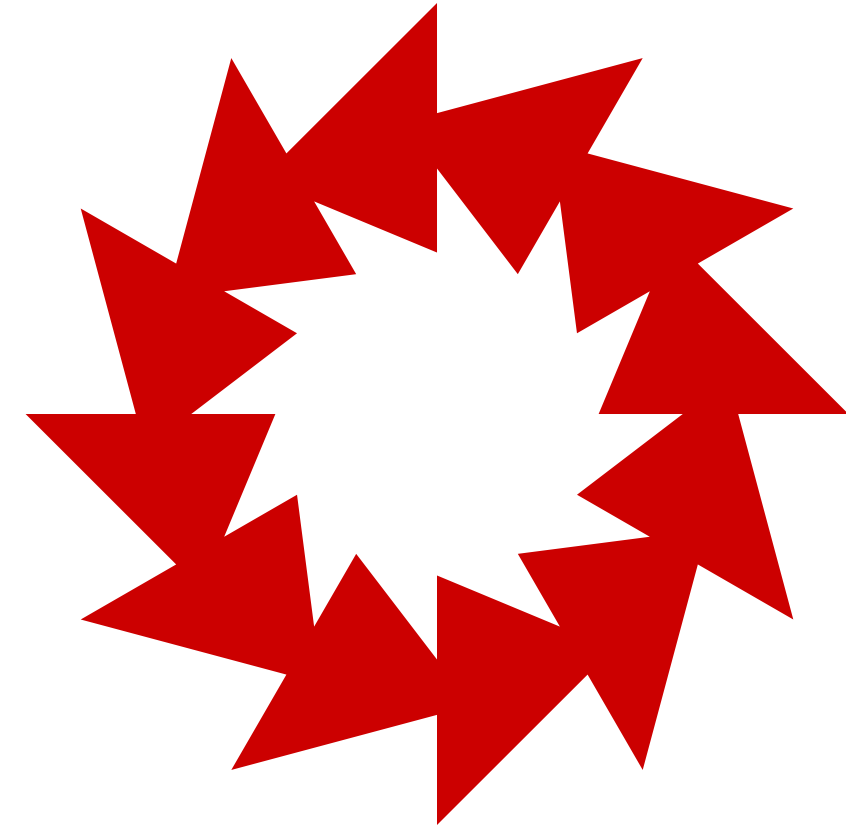


ATEN

Michaela Blackham

FRONT-END DEVELOPER





ATEN

@atendesign / aten.io



WORLD
RESOURCES
INSTITUTE

Stanford
University



UNIVERSITY of
DENVER



THE WORLD BANK
Working for a World Free of Poverty

Poynter.



JOHNS HOPKINS
BLOOMBERG
SCHOOL of PUBLIC HEALTH



USAID
FROM THE AMERICAN PEOPLE

Berkeley
UNIVERSITY OF CALIFORNIA



Stanford
University



Work That Matters



Poynter.



Berkeley
UNIVERSITY OF CALIFORNIA

Accessibility

Tips & Tricks To Performing An Accessibility Audit



**What is the
problem?**

53 million adults live
with some form of a
disability in the USA

— CDC: CENTERS FOR DISEASE CONTROL & PREVENTION

That's **1 in every 5**
adults in the USA

– CDC: CENTERS FOR DISEASE CONTROL & PREVENTION

What is accessibility?

Easy to obtain, use and understand.



P

O

U

R



P: Perceivable

O

U

R



P: Perceivable

O: Operable

U

R



P: Perceivable

O: Operable

U: Understandable

R



P: Perceivable

O: Operable

U: Understandable

R: Robust



P: Perceivable

O: Operable

U: Understandable

R: Robust



P: Perceivable

O: Operable

U: Understandable

R: Robust



P: Perceivable

O: Operable

U: Understandable

R: Robust



P: Perceivable

O: Operable

U: Understandable

R: Robust

Who

needs an accessible website?

Everyone benefits from
an accessible website.



**There are 4 main
categories**



Visual

Motor or Physical

Auditory

Cognitive



Visual

Motor or Physical

Auditory

Cognitive



VISUAL

What does this mean?

- Someone completely non sighted
- Someone with low, obstructed, or constricted vision
- My color blind father
- Each of our aging grandparents

Text

Artisanal kale

Search

How do I shoot web

Email

bootstrap@example.com

URL

https://getbootstrap.com

Telephone

1-(555)-555-5555

Password

.....

Date and time

08/19/2011, 01:45 PM

Text

Artisanal kale

Search

How do I shoot web

Email

bootstrap@example.com

URL

https://getbootstrap.com

Telephone

1-(555)-555-5555

Password

.....

Date and time

08/19/2011, 01:45 PM

Text

Artisanal kale

Search

How do I shoot web

Email

bootstrap@example.com

URL

https://getbootstrap.com

Telephone

1-(555)-555-5555

VISUAL

What should I look for?

- Navigation
- Visual content
- Orientation & boundaries
- Contrast & size
- Peripheral interaction

Visual

Motor or Physical

Auditory

Cognitive



MOTOR OR PHYSICAL

What does this mean?

- Someone like my cousin Emily, with a disability from birth
- The wounded vet that uses prosthetics
- Or even my niece with her broken arm or finger

MOTOR OR PHYSICAL

What should I look for?

- Gesture alternatives & sensitivity touches
- Reach/orientation on mobile
- Non physical navigation

Visual

Motor or Physical

Auditory

Cognitive



AUDITORY

What does this mean?

- Someone who is completely non hearing
- My grandfather who wears a hearing aid

AUDITORY

What should I look for?

- Embedded videos
- Alternative contact information

Visual

Motor or Physical

Auditory

Cognitive



COGNITIVE

What does this mean?

- My cousin Matthew who has down syndrome
- The little boy I babysit with autism
- Your friend who may have dyslexia
- Me with extreme motion sickness

COGNITIVE

What should I look for?

- Visual density
- Memory gestures
- Distracting content
- Fonts
- Excessive movements

Accessibility

Audits

What

is an accessibility audit?

An accessibility audit is an evaluation of how well your product supports the needs of web users with disabilities.



How

do I know what to follow?

508C

WCAG 2.1



508C

WCAG 2.1



508C

WCAG 2.1



Creating an accessible site is **more than just following a checklist.**



When

is an audit necessary?

Client Facing
Internal
Personal



Client Facing

Internal

Personal



Client Facing

Internal

Personal



Client Facing

Internal

Personal



Why

is an audit important?

People are **afraid**
of getting sued



ACCESSIBILITY AUDIT

Why is an audit important?

- Boost SEO
- Usability
- Awareness = Money
- Be a decent human being

Testing & Tools

Automated Manual



Automated

Manual



TESTING & TOOLS

Automated Tools

- Wave
- Lighthouse

TESTING & TOOLS - AUTOMATED TOOLS

Wave

- Well known
- Website or Chrome extension
- Quirk: color contrast

TESTING & TOOLS - AUTOMATED TOOLS

Lighthouse

- Integrated within Chrome Canary
- Does SEO, performance, accessibility, and best practices
- Creates a “report” you can send to clients
- Gives your site a score

Automated Manual



TESTING & TOOLS

Manual Testing

- Keyboard
- Screen Reader

TESTING & TOOLS - MANUAL TESTING

Keyboard Testing

- Pass/fail
- Actionable items
- Focus styling
- Logical order

TESTING & TOOLS - MANUAL TESTING

Screen Readers

- Jaws
- NVDA
- Voice Over (VO)

TESTING & TOOLS - MANUAL TESTING

Screen Reader Testing

- Entire experience
- Actionable items
- Navigation
- Content

Tips & Tricks

Project Managers



TIPS & TRICKS - PROJECT MANAGERS

Project Managers

- Get access to Google Analytics
- Include who needs to make edits

Content Editors



TIPS & TRICKS - CONTENT EDITORS

Content Editors

- **DO NOT WRITE WORDS IN ALL CAPS**
- Check hierarchy with the “no styles” option in Wave
- Outline extension (Chrome)
- Use a screen reader
- Read site to someone over the phone

Developers



TIPS & TRICKS - DEVELOPERS

Developers

- Color contrast checker (Chrome)
- Is the site responsive?
- Color contrast errors
- Text over images
- Zoom zoom zoom

TIPS & TRICKS

Keyboard

- Test the “skip to main content” link
- Default focus styling
- Interact with actionable items

TIPS & TRICKS

Screen reader

- Set screen reader preferences
- V.O. tutorials
- Turn your screen off
- Turn your mouse over
- Test a site you are not familiar with
- “Play all”

TIPS & TRICKS

Screen reader

- Dates
- 1-3 letter words are sometimes read letter by letter
- Vague Link text
- Get Comfortable

Demo

P.O.U.R

your heart into it!

Thanks!

Michaela Blackham / michaela@aten.io

Resources

- *VO Cheatsheet:* bit.ly/vo-cheatsheet
- *4 part series blog:* bit.ly/accessibility-blog-series
- *Wave:* wave.webaim.org
- *Demos:* pauljadam.com/demos.html
- *Content Checker:* hemingwayapp.com
- *Blind Institute of Tech:* blindinstituteoftechnology.org
- *Lighthouse Viewer:* bit.ly/lighthouse-report-viewer
- *508 Guidelines:* section508.gov
- *WCAG 2.1 guidelines:* bit.ly/wcag-2-1

Chrome Extensions

- *Wave*
- *Lighthouse*
- *Outliner*
- *Spectrum*