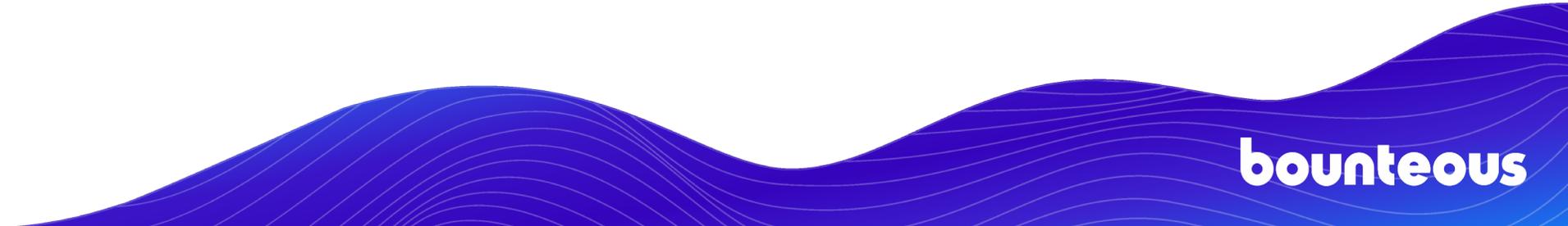# ACCESSIBILITY FOR PROJECT MANAGERS

Drupal MidCamp

March 22, 2019

bounteous

Heather Gantz
Project Director

Bounteous
www.bounteous.com

Heather is a Project Director with over 20 years of experience and has a demonstrated history of managing large, complex projects. She has worked on a variety of projects including high-volume web, mobile, and internal applications. She is skilled in Search Engine Optimization (SEO), Web Accessibility, Requirements Analysis, E-commerce, and Agile Methodologies.

Her after work addiction is making dinner and eating outside on the patio with the family with the birds chirping, the butterflies flitting and the hummingbirds humming. Reality: dogs barking, lawn mowers buzzing, mosquitos biting, kids squirming – but I wouldn't have it any other way.

Heather lives in Fox River Grove, IL with her husband and two children, two dogs and a menagerie of other aquatic animal life. She has a BS in Marketing from Miami University, Oxford, Ohio.

LEARNING OBJECTIVES & OUTCOMES

1. **Making the case for accessibility**

2. **What do Project Managers need to know**

3. **What do Project Managers need to do**

MAKING THE CASE FOR ACCESSIBILITY

"

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

—————

Tim Berners-Lee
W3C Director and Inventor of the World Wide Web

WHAT IS ACCESSIBILITY?

Accessibility refers to a person's ability to use or benefit from products and/or services, regardless of their capability to do so.

THE CASE FOR ACCESSIBILITY

- There are 7.4 billion people in the world

- About 15% of the world population live with some form of permanent disability. (WHO, 2011)

- In the context of a personal attribute, a disability is any restriction or lack of ability to perform a task or function as one might expect a human to do.

- However, not all disabilities are a health or physical problem.

THE CASE FOR ACCESSIBILITY

Some disability is temporary

- As people move through different environments, their abilities can change dramatically.

  - in a loud crowd, they can't hear well

  - in a car, they're visually impaired by a blind spot

  - new parents spend much of their day doing tasks one-handed

  - an overwhelming day can cause sensory overload

Some exclusion is situational

- Even a short-term injury or context affects the way people interact with the world around them, if only for a short time.

  - looking into a bright light

  - wearing a cast

  - ordering dinner in a foreign country

"

Exclusion happens when we solve problems
using our own biases.

_____

Microsoft

SOLVE FOR ONE, EXTEND TO MANY

- Our ambition is to optimize experiences for our clients' user base. However, often we use ourselves as a baseline, as is human nature. We really need to consider the physical, cognitive, and emotional experiences appropriate for all users.

- Every decision we make throughout our delivery process can raise or lower barriers to participation for our clients' users.

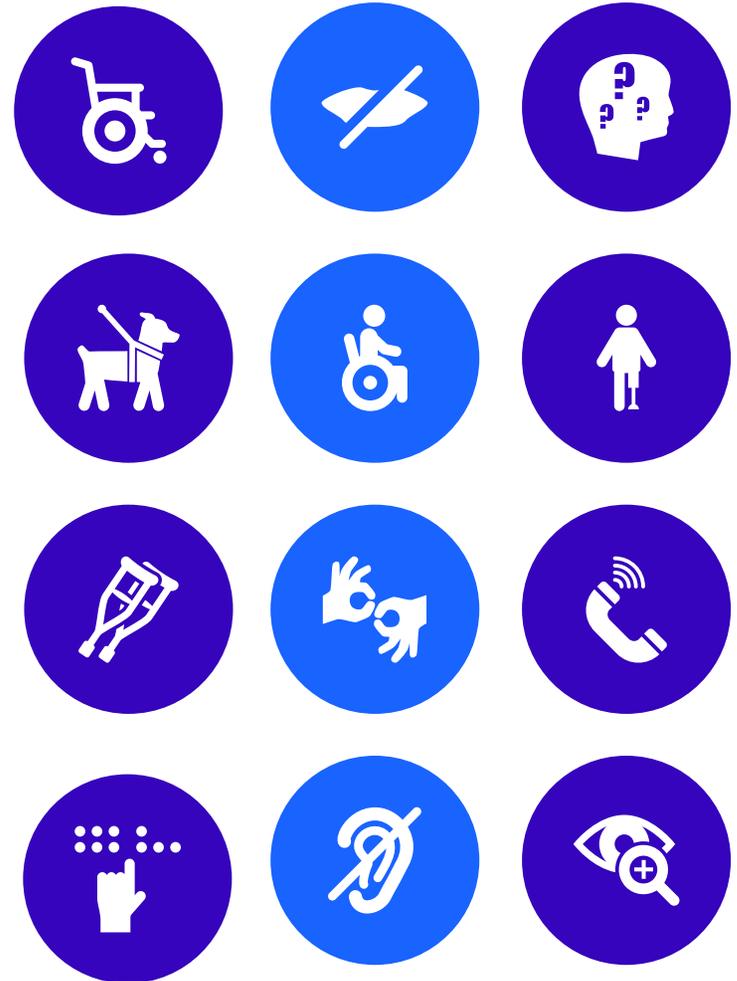- Empathy is an important part of our job as advocates for our clients and their products.

	Permanent	Temporary	Situational
Touch	One arm	Arm injury	New parent
See	Blind	Cataract	Distracted driver
Hear	Deaf	Ear infection	Bartender
Speak	Non-verbal	Laryngitis	Heavy accent

EMPATHY

Empathy is the capacity to understand or feel what another person is experiencing from within their frame of reference, i.e., the capacity to place oneself in another's position.

ACCESSIBILITY SUPPORTS SOCIAL INCLUSION

- Accessibility overlaps with other best practices such as device independence, usability, and SEO.

- The UN Convention on the Rights of Persons with Disabilities recognizes access to information and communications technologies, including the Web as a basic human right.

- Web accessibility is required by law in many situations.

- And, if this isn't enough to convince you...

THE CASE FOR ACCESSIBILITY

- In 2018, plaintiffs filed at least 2258 federal lawsuits about allegedly inaccessible websites, including a number of punitive class actions.

- This included a case heard in federal district court in California against Domino's Pizza in March, 2017. It was ultimately ruled in favor of Domino's based on due process. It is awaiting trial on appeal for later this year.

- In June, 2017 a different federal district court ruled against Winn Dixie stating that now Websites may constitute "public accommodations" under the Americans with Disabilities Act (ADA).

AND LASTLY...

Adopting A11Y is never about designing and developing with accessibility in mind. It's not even about adopting an empathetic culture. While those things are *really* important, it is really about achieving better outcomes for your users or your client's users and ultimately their success.

WHAT YOU NEED TO KNOW

LAWS AND GUIDELINES

Section 508 of the Rehabilitation Act of 1973

Requires Federal agencies to make their electronic and information technology accessible to people with disabilities.

Section 504 of the Disabilities Act of 1973

The first disability civil rights law to be enacted in the United States. It prohibits discrimination against people with disabilities in programs that receive federal financial assistance.
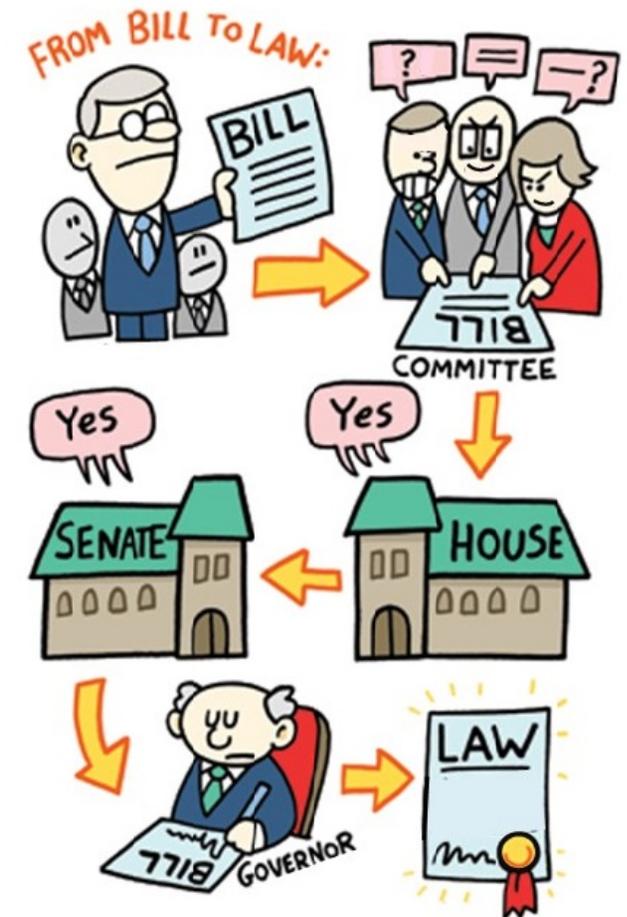
The Americans with Disabilities Act (ADA) became law in 1990

Title III regulates public accommodations

Standard – EN 301 549

Requirements suitable for public procurement of ICT products and services in Europe.

Laws and Policies by Country

LAWS AND GUIDELINES

WCAG 2.1

WCAG 2.1 – Web Content Accessibility Guidelines

- Referenceable technical guide finalized in June, 2018

- WCAG 2.1 extends Web Content Accessibility Guidelines 2.0 [WCAG20]

- 12 guidelines that are organized under 4 principles

- Each guideline has testable success criteria which are listed out at 3 levels: Level A, AA, and AAA

WCAG 2.2 is already in progress and is expected to be a major revision.

WCAG 2.0

These international guidelines for websites & web content, including mobile content, were developed by the World Wide Web Consortium (W3C). WCAG 2.0 has been adopted by many jurisdictions around the world. Most organizations strive to meet Level AA Conformance. WCAG 2.0 should be the baseline standard for all organizations who want to ensure accessibility for their users.

PUTTING PEOPLE AT THE CENTER OF THE PROCESS

The POUR Framework

Perceivable – Information and user interface components must be presentable to users in ways they can perceive.

Operable – User interface components and navigation must be operable.

Understandable – Information and the operation of user interface must be understandable.

Robust – Content must be robust enough that is can be interpreted reliably by a wide variety of user agents, including assistive technologies.

PERCEIVABLE

ASK YOURSELF: Is there anything on our website that a blind, deaf, low vision, or color blind user would not be able to perceive?

Provide text alternatives for non-text content. →	• Ensure that all your non-text content, ie – images, videos, etc, • on your site are accompanied with alt-text and that it is a required field. • Use of ARIA labels
Provide captions and alternatives for audio and video content →	• Ensure you're using captions or alt-text for videos are audio files. • Provide transcripts of video or audio files that can be read by screen readers.
Make content adaptable; and available to assistive technologies →	• Provide a text alternative to CAPTCHA • Use of ARIA to identify headings and regions of a page
Use sufficient contrast to make things easy to see →	• The visual presentation of text and images of text has a contrast ratio of at least 4.5:1
Don't rely on color alone to convey info →	• An example is the treatment used for Hyperlinks. Using only color to demonstrate that a portion of the copy is clickable is not enough.

OPERABLE

ASK YOURSELF: Can all functions of our website be performed with a keyboard? Can users control interactive elements of our website? Does our website make completing tasks easy?

Make all functionality keyboard accessible	• Ensure keyboard control of all functionality • Using HTML form controls and links
Allow the use of tabbing and arrow keys, especially with forms	• Use of keyboard event triggers
Do not use content that causes seizures	• Web pages do not contain anything that flashes more than three times in any one second period, or the flash is below the general flash and red flash thresholds.
Wayfinding: help user navigate, find content, and determine where they are.	• Using language attributes on the html element • Providing text descriptions to identify required fields that were not completed • Use of consistent navigation
Give users enough time to read and use content	• Allow for a way for users to turn the time limit off or extend it.

UNDERSTANDABLE

ASK YOURSELF: Is all of the text on our website clearly written? Are all of the interactions easy to understand?

Make text readable and understandable ⟶	• The default human language of each Web page can be programmatically determined. • Strive for brevity
Copy should be written at the 8th grade reading level ⟶	• When text requires reading ability more advanced than the lower secondary education level, then a version that is at the lower level is available.
Break up long forms, grouping input fields of similar context ⟶	• Implement forms in an order that makes sense • Group input fields together logically
Make content appear and operate in predictable ways ⟶	• When on focus, the context does not change • Consistent use of functionality across the site • Use of consistent navigation
Help users avoid and correct mistakes ⟶	• Errors are clearly identifiable and use more than color to be identified. • Provide a clear path for resolution

ROBUST

ASK YOURSELF: Does our website only support the newest browsers or operating systems? Is our website developed with best practices?

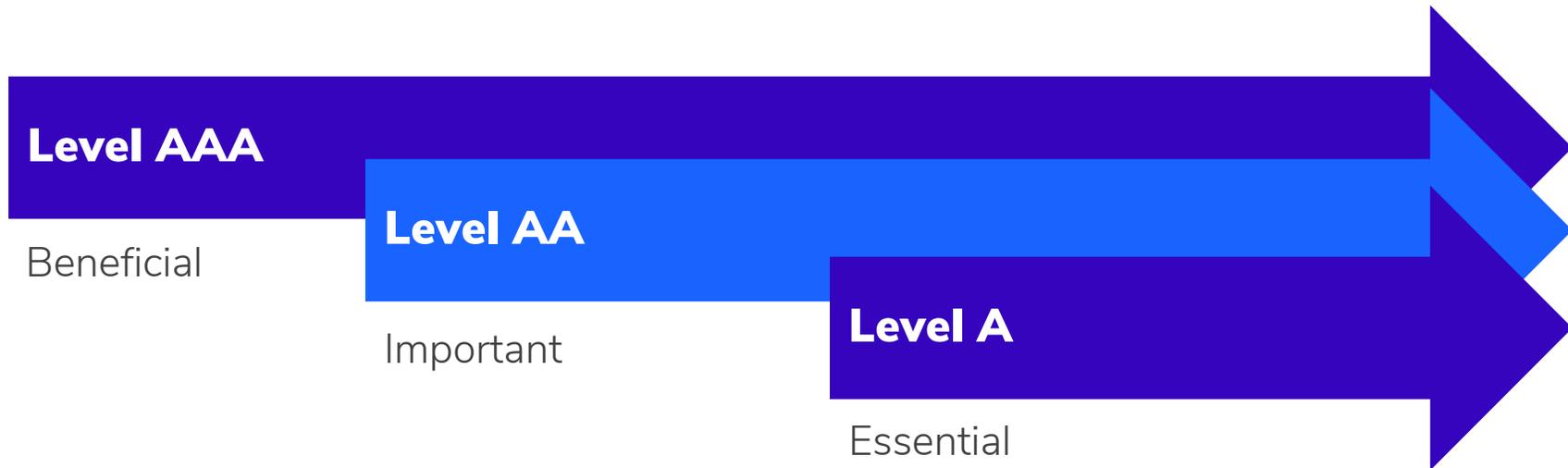|	
Maximize compatibility with current and future tools and technologies	• Use of well formatted HTML – use a formatter to review • Using aria-label to provide an invisible label where a visible label cannot be used
Maximize your compatibility with assistive technologies	• Use of WAI-ARIA and markup to support use of assistive technologies

WCAG 2.1 LEVELS OF CONFORMANCE

Level AAA

Beneficial

Level AA

Important

Level A

Essential

LINKS, LINKS & MORE LINKS

LOTS AND LOTS OF INFORMATION

Resources

W3C

The A11Y Project

WebAIM

Berkley Web Access

Inclusive Design by Microsoft

Introduction to ARIA

DRUPAL 8 ACCESSIBILITY FEATURES

Core Features

More Semantic

Aural Alerts

Controlled Tab Order

Hidden/Invisible/On-focus

Fieldsets

jQuery UI

Alt Text

Bartik

Accessible Inline Form Errors

Hiding content properly

Extensions

Automatic Alternative Text

Block ARIA Landmark Roles

CKEditor Abbreviation

CKEditor Accessibility Checker

High Contrast

htmLawed

Siteimprove

Style Switcher

Text Resize

TOOLS AND TEST APPS

Checklists

[The A11Y's Checklist](#)

[WebAIM's Checklist](#)

Apps, Checkers, and More

["HTML CodeSniffer" Bookmarklet](#)

[Colour Contrast Analyser](#)

[WAVE Evaluation Tool](#)

[Accessible-Colors](#)

[Brandwood](#)

WHAT YOU NEED TO DO

MINDSET

Mindset is an individual's collection of thoughts and beliefs that shape their thought habits. It is a way of thinking.

HOW DO YOU CHANGE YOUR TEAM'S MINDSET

Reframe your approach

- Integrate Accessibility compliance as a continuous deliverable in your project roadmaps rather than a feature enhancement.

- Ensure compliance is written into User Story acceptance criteria

Make is simple

- Organize materials and resources for our clients and/or content authors to make it easier on them to know and understand how to comply when authoring content.

Change priorities

- The choices people make are reflections of the things they see as most important—their priorities.

- Law of 7

PURSUIT WORK

Accessibility should be treated the same as SEO or Responsiveness:
It should be a given in Design and Build Projects.

- Proposals should be speaking to your expertise not only in SEO, Mobile-first and User-centric design, but Accessibility as well.

- Estimates for Design, Front End Development, and Quality Assurance should take Accessibility into account.

- Project timelines should be established to take coding and testing for Accessibility into account.

  - Much of the Accessibility testing is manual

"

If you see something, say something.®

_____

US Department of Homeland Security

IF YOU SEE SOMETHING, SAY SOMETHING.®

"Do we actually need this slogan and the ads that go with it?" – Poke the Box, by Seth Godin

- In the book, Seth Godin unpacks this a little and I don't want to spoil it too much, but we as a society are conditioned not to speak up.

- However, companies and/or clients hire us to be the experts and advise them on best practices. This is an easy way to add value to your partnerships.

- Work with your team to understand what makes sense for each project and each situation.

- Ensure you're discussing the right level of compliancy with your stakeholders/clients and advising stakeholders to involve their legal departments and formulating a point of view for their business.

- "Leave your code in a better place than how you found it". – Chris Greatens

CRAWL...WALK...RUN...

Rome wasn't built in a day, and neither is your website's accessibility.

- Start with <u>evaluation tools</u> to level-set where your site is at.

- Determine with your client their goals.

- Identify some easy and <u>quick wins</u>.

- Make a longer term roadmap.

Q & A

PLEASE PROVIDE YOUR FEEDBACK!

The top rated sessions will be captioned, courtesy of Clarity Partners.

https://mid.camp/249

Thank you!

Heather Gantz
Project Director

Phone: 773.296.2600 x210
Email: heather.gantz@bounteous.com