

# DrupalCon

SEATTLE 2019

APRIL 8-12





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# **Inclusive Digital Products: Why Web Accessibility Matters**

Kara Gaulrapp, Message Agency

# Hi, there!

## I'm Kara Gaulrapp.



- Front-end Developer at Message Agency
- Web Accessibility advocate
- Drupaling since 2012

# We build better brands and websites for the greater good.

Message Agency is a social enterprise that helps nonprofits use technology to enlighten, educate, engage, and enact change.

MESSAGE  AGENCY

Certified



Corporation™

# Outline

- What is web accessibility?
- Why should I care?
- Where do I start?
- How do I get people to care?
- Questions and answers



# What is **Web Accessibility?**

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“ The power of the Web is in  
its **universality**.

Access by everyone  
**regardless of disability** is  
an essential aspect. ”

Tim Berners-Lee

# WCAG Principles



Perceivable

e



Operable



Understandable



Robust





# Perceivable

- **Nothing can be invisible to all of a user's senses**



# Perceivable

- Nothing can be invisible to all of a user's senses
- **Text equivalents, captions, and transcripts, oh my!**



# Perceivable

- Nothing can be invisible to all of a user's senses
- Text equivalents, captions, and transcripts, oh my!
- **Color contrast for all the things**



## Perceivable

- Nothing can be invisible to all of a user's senses
- Text equivalents, captions, and transcripts, oh my!
- Color contrast for all the things
- **Flexible, responsive design**



# Operable

- **Must be keyboard-friendly and useable by all input mechanisms**



# Operable

- Must be keyboard-friendly and useable by all input mechanisms
- **Properly structured site architecture and content**



# Operable

- Must be keyboard-friendly and useable by all input mechanisms
- Properly structured site architecture and content
- **Controls over animation, auto-updating or moving content**



# Operable

- Must be keyboard-friendly and useable by all input mechanisms
- Properly structured site architecture and content
- Controls over animation, auto-updating or moving content
- **Give enough time for actions**





# Understandable

- Language of page and parts



# Understandable

- Language of page and parts
- **No surprises from interactions**



# Understandable

- Language of page and parts
- No surprises from interactions
- **Clear instructions and definitions of elements and errors**



# Understandable

- Language of page and parts
- No surprises from interactions
- Clear instructions and definitions of elements and errors
- **Consistent navigation and naming**



## Robust

- **Backwards compatible and futureproof**



## Robust

- Backwards compatible and futureproof
- **Components' names, roles, states, properties, and values must be available to all assistive technology (AT)**



## Robust

- Backwards compatible and futureproof
- Components' names, roles, states, properties, and values must be available to all assistive technology (AT)
- **AT alerted to status messaging, but not interrupting the user**



**Why should I care?**

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# Why should I care?



Social



Financial



Legal



## Social

- **Solve for one, extend to many**



## Social

- Solve for one, extend to many
- **Decrease the digital divide**



## Social

- Solve for one, extend to many
- Decrease the digital divide
- **Friendly to first-time internet users**

# First-time Internet Users



**1.1 billion**  
worldwide



**23 million**  
in America



## Social

- Solve for one, extend to many
- Decrease the digital divide
- Friendly to first-time internet users
- **Account for low-literacy and fluency levels**



# Financial

- **Increase website use and market share**



# Financial

- Increases website use and market share
- **Makes Google love you (SEO)**





# Financial

- Increase website use and market share
- Makes Google love you (SEO)
- **Be eligible for more contracts**



## Legal

- **Americans with Disabilities Act (ADA) compliant**



## Legal

- Americans with Disabilities Act (ADA) compliant
- **And you likely need to be compliant**



## Legal

- Americans with Disabilities Act (ADA) compliant
- And you likely need to be compliant
- **And check with your state**



**Where do I start?**

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# Where do I start?

Teamwork makes the dream work

- **Standardize your interpretation, goals and tools.**

# Where do I start?

## Teamwork makes the dream work

- **Standardize your interpretation, goals and tools.**
  - Are we working towards a minimum, optimized, or idealized solution?

# Where do I start?

## Teamwork makes the dream work

- **Standardize your interpretation, goals and tools.**
  - Are we working towards a minimum, optimized, or idealized solution?
  - Are we using the same tools and testing methods?



# Where do I start?

## Teamwork makes the dream work

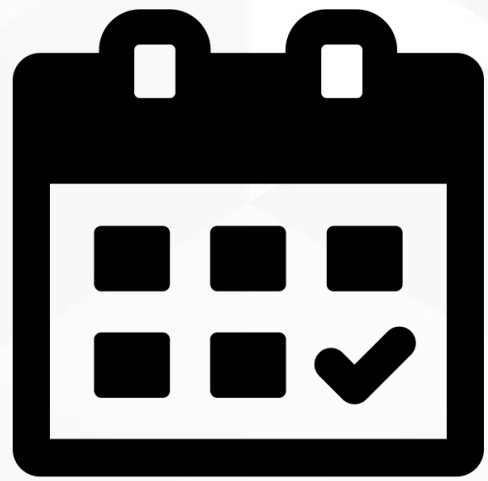
- **Standardize your interpretation, goals and tools.**
  - Are we working towards a minimum, optimized, or idealized solution?
  - Are we using the same tools and testing methods?
- **Identify your Achilles' heel.**

# Where do I start?

## Teamwork makes the dream work

- **Standardize your interpretation, goals and tools.**
  - Are we working towards a minimum, optimized, or idealized solution?
  - Are we using the same tools and testing methods?
- **Identify your Achilles' heel.**
- **Share knowledge (and responsibility).**

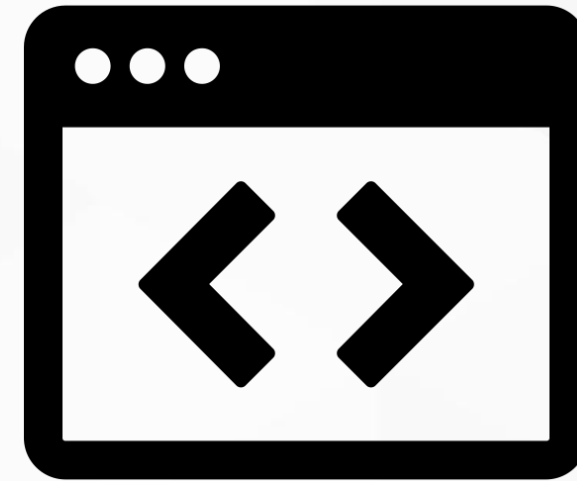
# Where do I start?



Planning



Discovery &  
Design



Development



Content  
Creation



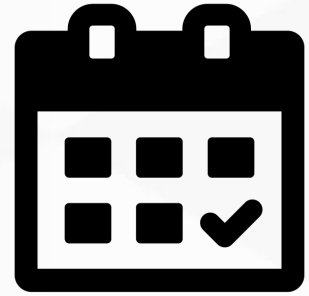
# Planning

- **Build in, not bolt on.**



# Planning

- Build in, not bolt on.
- **Accessibility as a requirement**



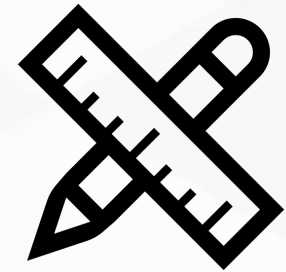
# Planning

- Build in, not bolt on.
- Accessibility as a requirement
- **Plan for training**



# Discovery & Design

- **Universal and Inclusive Design**



# Discovery & Design

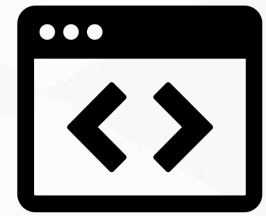
- Universal and Inclusive Design
- **Personas with limitations**





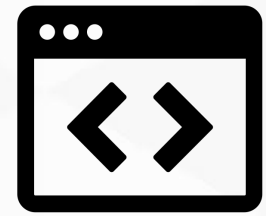
# Discovery & Design

- Universal and Inclusive Design
- Personas with limitations
- **Vet mockups**



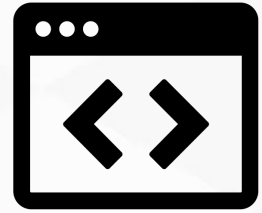
# Development

- **Web extensions and command-line tools**



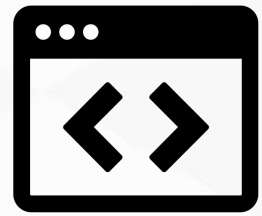
# Development

- Web extensions and command-line tools
- **Semantic markup (ARIA if absolutely necessary)**



# Development

- Web extensions and command-line tools
- Semantic markup (ARIA if absolutely necessary)
- **Responsive framework and compression**



# Development

- Web extensions and command-line tools
- Semantic markup (ARIA if absolutely necessary)
- Responsive framework and compression
- **Test, test, test!**



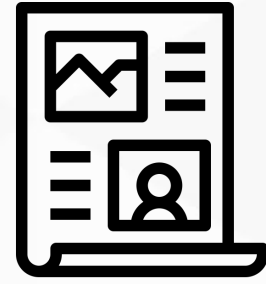
# Content Creation

- **Use CKEditor's Accessibility Checker**



# Content Creation

- Use CKEditor's Accessibility Checker
- **Be mindful of image size**



# Content Creation

- Use CKEditor's Accessibility Checker
- Be mindful of image size
- **Learn to write awesome alt-text (especially for complex images)**





# Content Creation

- Use CKEditor's Accessibility Checker
- Be mindful of image size
- Learn to write awesome alt-text (especially for complex images)
- **Check your content's reading level**



**How do I get people to care?**

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# Getting Buy In



As an  
Investment



Ask  
Questions



Share  
Responsibility



# Question and Answer

Booth #801 / [kara@messageagency.com](mailto:kara@messageagency.com)



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# Join us for contribution opportunities

Friday, April 12, 2019

## Mentored Contribution

9:00-18:00  
Room: 602

## First Time Contributor Workshop

9:00-12:00  
Room: 606

## General Contribution

9:00-18:00  
Room: 6A

**#DrupalContributions**



# What did you think?

Locate this session at the DrupalCon Seattle website:

<http://seattle2019.drupal.org/schedule>

Take the Survey!

<https://www.surveymonkey.com/r/DrupalConSeattle>

**Thank you!**