Accessibility In Drupal Is My Jam!

Practical Use of Accessibility Tools in Drupal

Hello!

I am Kat Shaw

- Senior Frontend Developer @ Lullabot (we're hiring!)
- 13+ years in local government
- 10+ years in A11y + Drupal
- Find me at @katannshaw

A few quick notes

Demos provided by

- Check out tugboat.qa
- Thank you James & Ben!

Tugboat

Common terms you'll hear
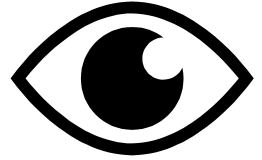
- WCAG: Web Content Accessibility Guidelines
- A11y: A + 11 chars + y = A11y (aka Accessibility)

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Core themes

A small group of themes are installed in every instance of Drupal core.

Core themes:
The complete list

Bartik

- Default theme starting in Drupal 7+
- Due to be replaced by Olivero in Drupal 10

Claro

- Working towards being default admin theme in Drupal 10
- We'll talk more about it in a moment

Classy and Stable

- Classy is subtheme of Stable w/classes
- Stable aggregates all CSS from core into a single theme making it "stable"

Olivero

- Working towards being default main theme in Drupal 10
- We'll talk more about it in a moment

Seven

- Super simple grey on grey admin theme
- "Less is more" approach
- Due to be replaced by Claro in Drupal 10

Stark

- For demo purposes only for troubleshooting
- Should not use it as a base theme

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Core themes:
Two new stars

Claro (experimental in core)

- Admin theme based on Seven
- Uses
  Drupal's Admin Design System
- Fresh look and feel throughout admin interface

Olivero

- New front-facing theme replacing Bartik
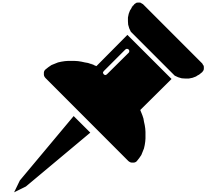- Clean user experience and customization
- Modern look and feel

Both themes were built with accessibility in mind from the beginning!

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Core features and modules

Drupal comes with some great accessibility features out-of-the-box!

Core features and modules - 1

Semantic markup

- Semantic HTML5 elements
- Uses ARIA for screen readers
- Uses headings for page navigation
- Removes bad coding practices
- Addition of Olivero and Claro as default themes

Controlled tabbing

- Uses Drupal.tabbingManager() to access actionable elements in logical order
- Constraints keyboard tabbing within window (i.e. modals)
- Testing with Modal module

Core features and modules - 2

Focus handling & hiding content

- Focus is visible by default
- Options to hide content properly using CSS:
    - `.visually-hidden`
    - `.visually-hidden.focusable`
    - `.hidden`
    - `aria-hidden="true"`

Form fieldsets

- Groups related elements in a form for better organization
- Radiobuttons and checkboxes use fieldsets
- Advanced search results uses it by default

Core features and modules - 3

JavaScript/jQuery

- jQuery UI removed from core
- Moved JS to asset libraries
- Uses `Drupal.behaviors()`
- Cean JS provides device independence (i.e. not exclusive to mouse users)

Aural alerts

- Changes on the page read aloud to screen reader users
- Uses JS method `Drupal.announce()`
- Uses WAI-ARIA (i.e. `aria-role="alert"`)

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Core features and modules - 4

Responsive images

- Creates image styles for different screens based on breakpoints
- Helps images load faster, especially for mobile users
- Included in core, but not enabled by default

Text editor/WYSIWYG

- Requires alt text for all media entities
- Limits allowed HTML for different editors
- There's no real solution in core for decorative images at this time

Core features and modules - 5

Views

- Rewrite generic links (i.e. Read more, Learn more, etc.)
- Shorten output to make it readable (i.e. limit body text to 200 characters)
- Add CSS classes and HTML5 elements to content items

Inline form errors

- Places form errors inline with the form elements
- Displays a summary listing all errors at the top of the form
- Included in core, but not enabled by default

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Contributed modules

The Drupal community continues to shine with helpful accessibility tools.

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Contributed modules - 1

Contact storage

- Used with the core Contact module
- Provides customizable on-screen & email confirmations
- Stores contact form submissions

Style guide

- Test all elements and components for accessibility on one page for each of your themes
- This works for all installed themes

Contributed modules - 2

Block ARIA landmark roles

- Add ARIA landmarks roles and ARIA labels at the block level through the Blocks UI
- Best used when you can't add it in your Twig templates

Block class

- Add CSS classes to your blocks through the Blocks UI
- Helps you to avoid inline CSS
- Add multiple CSS classes using a space as a separator

Contributed modules - 3
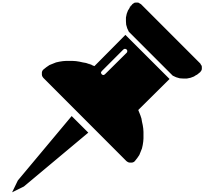
CKEditor accessibility auditor

- Provides button in CKEditor that runs HTML Code Sniffer
- Results shown immediately on screen in a modal
- Report shows issue details, code snippet, and tips and links on how to fix issue

Editoria11y accessibility checker

- Low-profile accessibility checker
- JavaScript library based on Sa11y accessibility checker
- Supported by Princeton University

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Contributed modules - 4

High contrast

- User can switch between the active theme and high contrast version
- After install, add block to region via Block UI
- Click enable/disable to toggle tool

CKEditor abbreviation

- Adds a button to CKEditor for inserting and editing abbreviations
- When an existing abbreviation tag is selected, the context menu also contains a link to edit the abbreviation

Resources - 1

- [Drupal core accessibility features](#)
- [Hide content properly](#)
- [Drupal 7 contributed modules to help with accessibility](#)
- [Drupal 8+ contributed modules for extending accessibility in Drupal](#)

- [How to do an accessibility review](#)
- [A11y office hours](#)
- [How Cool Accessibility Tools Can Make Your Life Easier](#)
- [What the Heck is ARIA? A Beginner's Guide to ARIA for Accessibility](#)

Resources - 2

- Understanding WCAG 2.1
- WCAG 2.1 at a Glance
- WAI-ARIA 1.1
- WAI-ARIA Design Pattern Examples
- ATAG 2.0
- ATAG Overview
- ACT Rules Community

- A11yTalks
- WebAIM
- Deque Code Library (beta)
- The A11y Project
- W3C Web Accessibility Tutorials
- a11ymatters

Thanks!

Any questions?

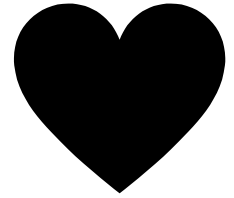Find me at @katannshaw on Drupal, GitHub, LinkedIn & Twitter

Credits - 1

Special thanks to all the people who made and released these awesome resources for free:

- Presentation "Minimal Black" template by SlidesCarnival
- Photographs by Unsplash

Credits - 2

- Girl listening to music photo by Eric Nopanen
- Vinyl + Grado headphones photo by blocks
- Record player photo by Adrian Korte
- Cassette tapes photo by Hello I'm Nik
- David Bowie "Heroes" photo by Gabriel Bassino

Credits - 3

- I wanted to share my Amazon Florida Playlist if you're at all interested
- You can find it at https://amzn.to/3v8zaMz