

Making Wagtail accessible



Work in progress

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Slides: bit.ly/2Yf2Weo



From the Wagtail 2.6 release notes:

Wagtail now aims for compliance with [WCAG 2.1](#), AA level

Wagtail isn't fully compliant just yet, but we have made many changes to the admin interface to get there. We thank the UK Government (in particular the CMS team at the Department for International Trade), who commissioned many of these improvements.

[Wagtail 2.6 release notes](#)

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Why do we care about making Wagtail accessible

For users of assistive technologies, Wagtail's admin interface is difficult to use ([#4199](#)).

For organisations choosing between CMSes, this might make Wagtail a bad option – because of legislation that mandates compliance with accessibility standards.

US: [Section 508](#)

UK: [Public Sector Bodies \(Websites and Mobile Applications\) \(No. 2\) Accessibility Regulations 2018](#)



More positive reasons to care

We want all Wagtail users to have a great experience, no matter how they use Wagtail.

We want people relying on assistive technology to be successful in the workplace.

We want to provide an [inclusive](#) experience.



And it's not just Wagtail

Intranet, CRMs, ERPs, dashboards. Django admin.

Internal tools shouldn't compromise on accessibility just because their audience is smaller.

What we* did

We* = Beth Menzies, Katie Locke, Thibaud Colas, Helen Chapman, Jordan Bauer, Andreas Bernacca, people who reviewed PRs, people in [#accessibility](#) on Slack

Targets: Compliance

WCAG 2.1, AA level

Targets: Assistive technology support

[NVDA](#) on Windows with Firefox ESR

[VoiceOver](#) on macOS with Safari

[Windows Magnifier](#) & macOS Zoom

Windows Speech Recognition & macOS Dictation

VoiceOver on iOS, [TalkBack](#) on Android

[2016 GOV.UK assistive technology survey](#)

Tooling

[Axe](#) – Accessibility rules engine with support for WCAG & Section 508

[Accessibility Insights](#) – Browser extension with Axe and more

[React Axe](#) – Axe integrated directly in our UI components

[Pa11y](#) – Command line tool for accessibility checks with Axe & HTML_CS

[GDS accessibility tools audit](#)

Tooling

Automated accessibility test suite with 100+ scenarios

Automated visual regression test suite, 87 scenarios ([BackstopJS](#))

GitHub: [thibaudcolas/wagtail-tooling](https://github.com/thibaudcolas/wagtail-tooling)

Audit: UI overview

1	Category	View	Used	By who	How often	Automated tests	Admin path (example)	UI states
2								
3	Dashboard							
4		Dashboard	Yes	Writer	Daily	Yes	/	Wagtail upgrade, Most rece
5	Authentication							
6		Login	No	Writer	Weekly	Yes	/login/	Validation error
7		Logout	No	Writer	Weekly	Partial	/logout	
8		Password reset	No	Writer	Yearly	Yes	/password_reset/	Validation error
9		Password reset done	No	Writer	Yearly	Yes	/password_reset/done/	
10	Navigation							
11		Main menu	Yes	Writer	Daily	Yes		Search form, Account men
12		Pages menu	Yes	Writer	Daily	Yes		Loading, Server error
13		Edit bird	No	Writer	Daily	N/A		Active
14		No JS	Yes	Writer	Yearly	No		
15		Page not found (404)	Yes	Writer	Monthly	Yes		
16		Unauthorised access (403)	Yes	Writer	Monthly	No		
17	User account							
18		Account actions	Yes	Writer	Yearly	Yes	/account/	
19		Change profile picture	No	Writer	Yearly	Yes	/account/change_avatar/	Validation error
20		Change email	No	Writer	Yearly	Yes	/account/change_email/	Validation error, Success
21		Change password	No	Writer	Yearly	Partial	/account/change_password/	Validation error, Success
22		Notification preferences	Yes	Writer	Yearly	Yes	/account/notification_preferences/	Success
23		Language preferences	Yes	Writer	Yearly	Yes	/account/language_preferences/	Success

Audit: results

340 different scenarios identified

190 (ish) scenarios tested

336 issues found by automated testing 🐱

A few more issues already identified manually ([#4199](#))

Let's look at the issues





Live auditing

bakerydemo-thibaudcolas.herokuapp.com/admin/

Wagtail 2.5.1

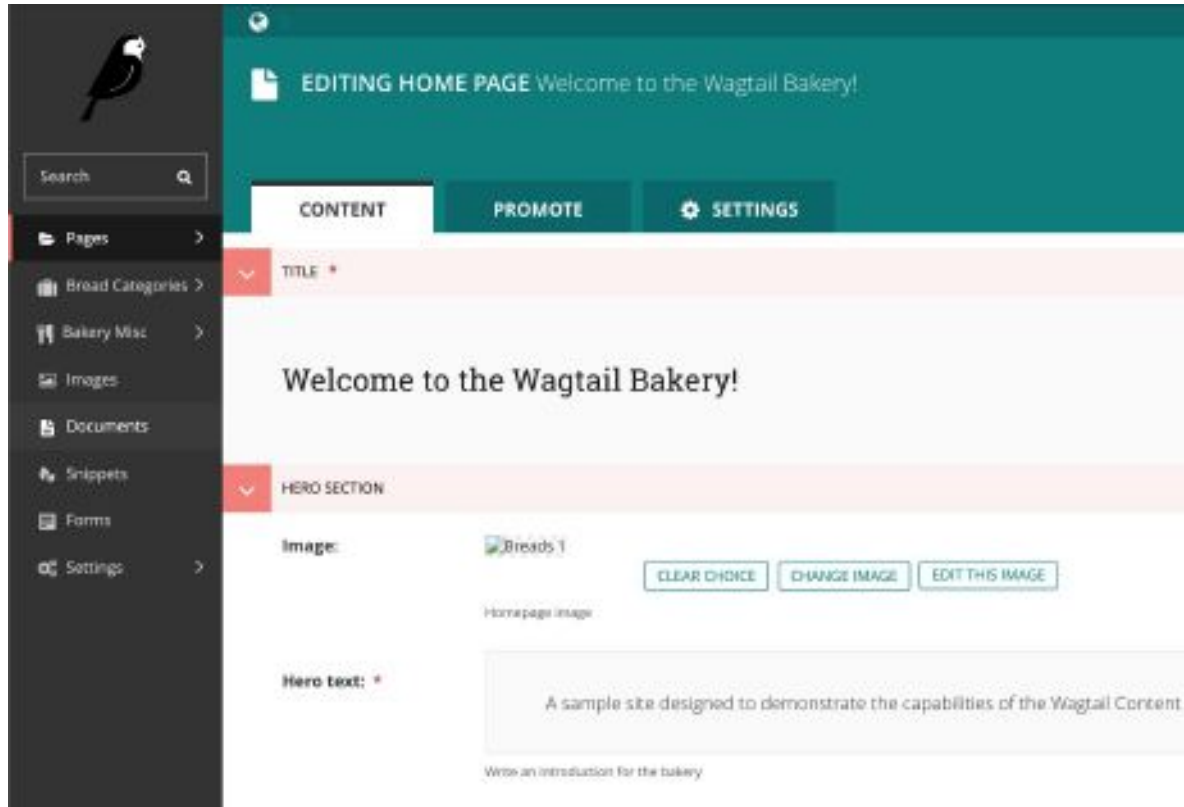
User: **wagtailspace**, pw: **threeten**

What issues can you spot? Focus indicator

Good example: great.gov.uk

- Can you spot where the keyboard focus is?
- Can you see parts of the UI where there is no focus indicator at all?
- How many focus styles can we see here?

What issues can you spot? Focus indicator



What issues can you spot? Tab stops

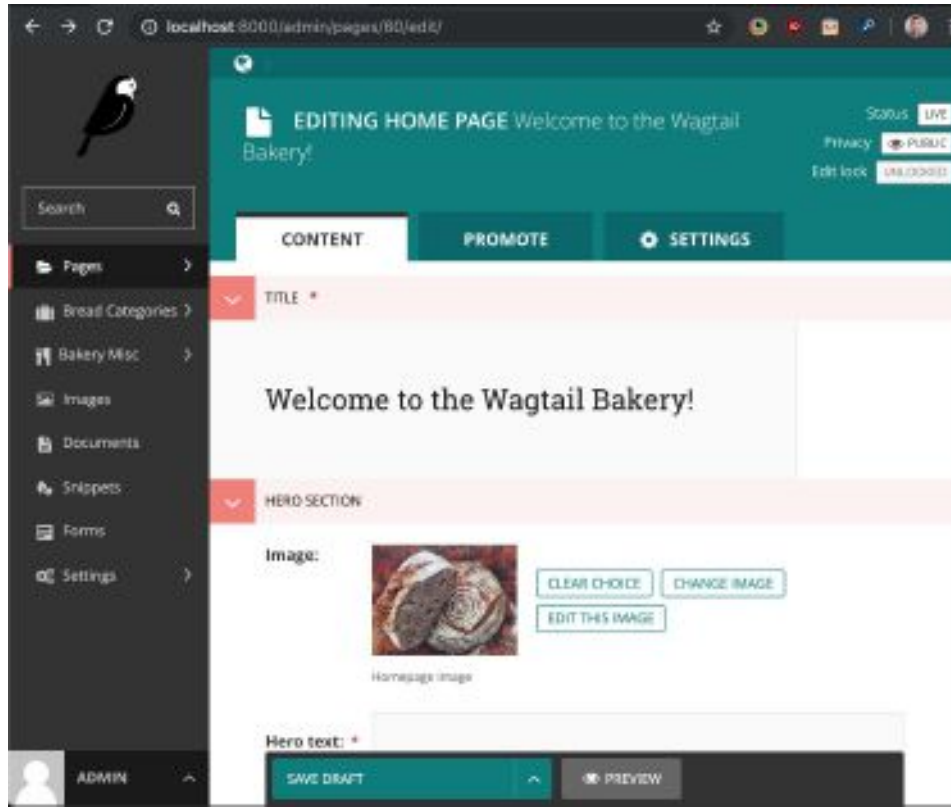
Tab stops with Accessibility Insights, Wagtail 2.5.1

Good example: consumerfinance.gov

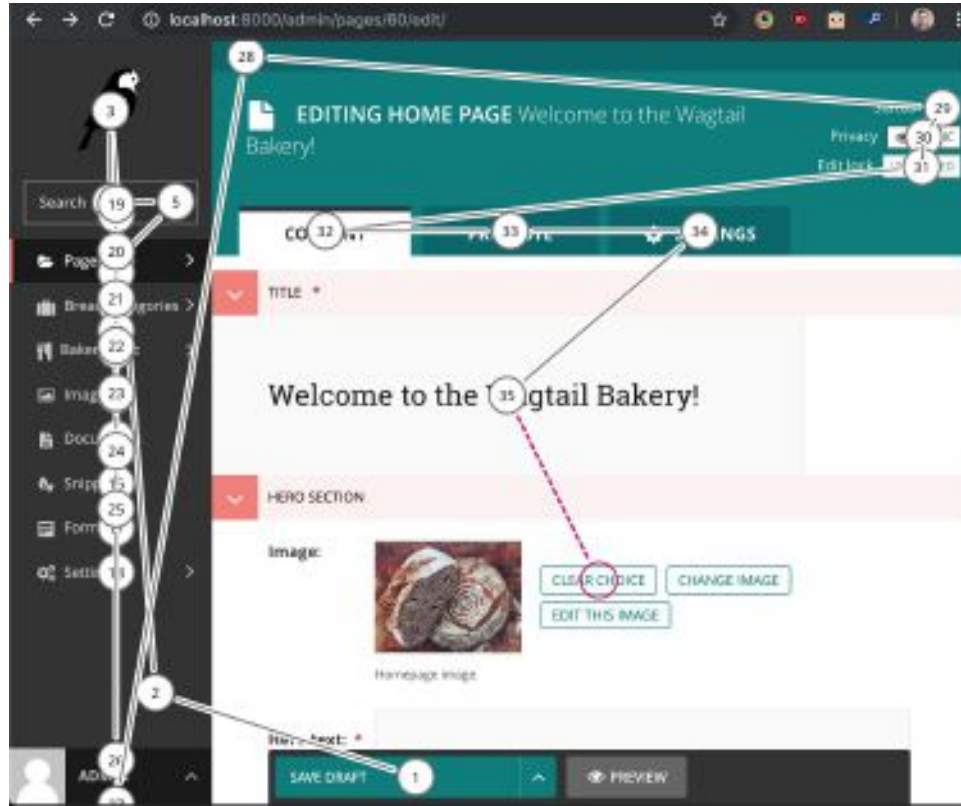
- How many tab stops to reach the title field?
- Bonus: what will be the first element to receive focus?

<https://bakerydemo-thibaudcolas.herokuapp.com/admin/>

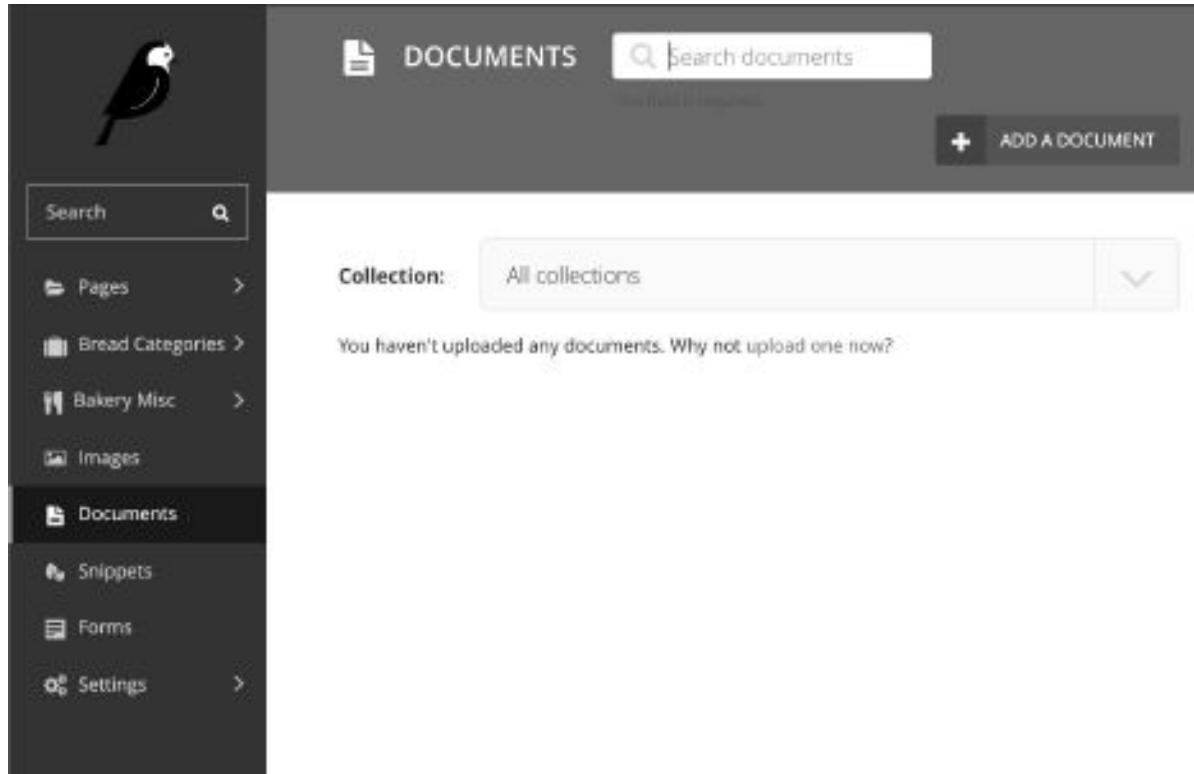
What issues can you spot? Tab stops



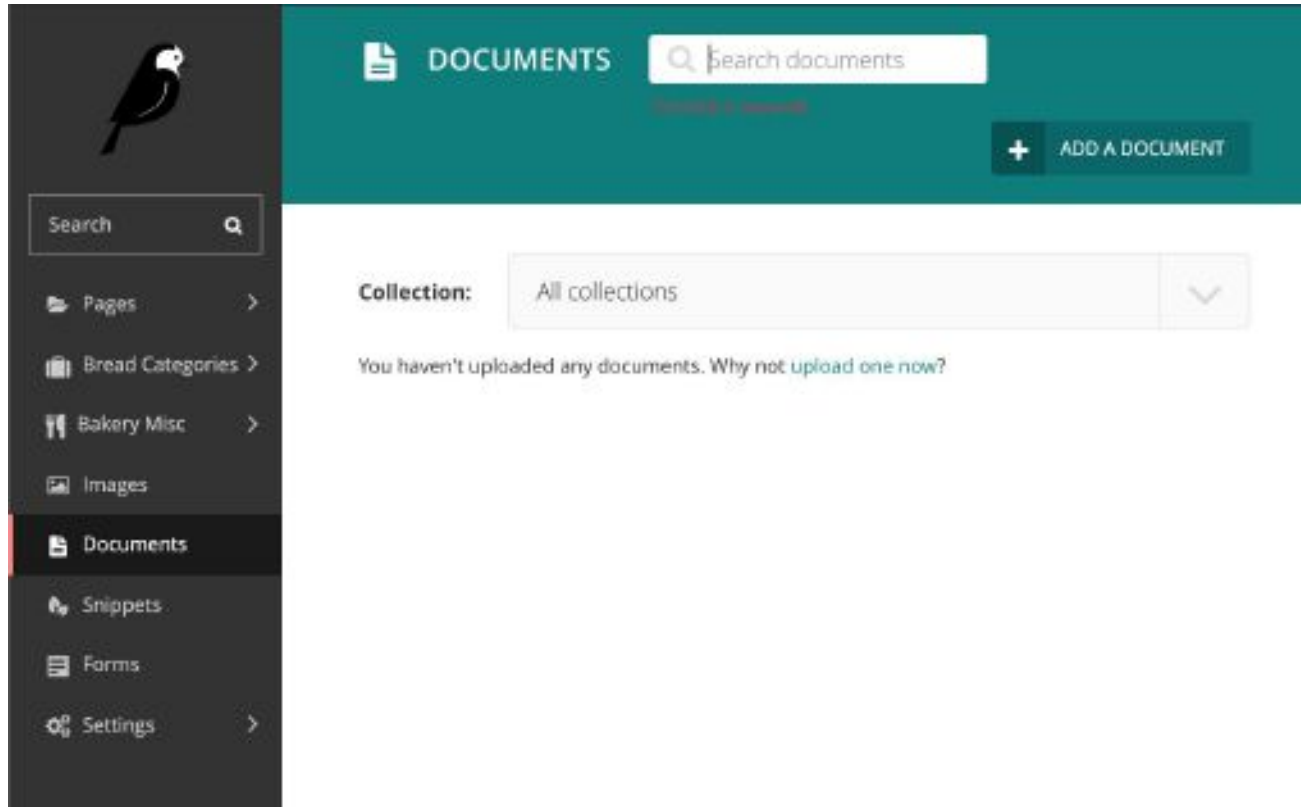
What issues can you spot? Tab stops



What issues can you spot? Color contrast



What issues can you spot? Color contrast



What issues can you spot? Using a screen reader

VoiceOver on macOS Safari, Wagtail 2.5.1

Backup: [youtube.com/watch?v=f98wE4SwGLk](https://www.youtube.com/watch?v=f98wE4SwGLk)

Search “VoiceOver accessibility testing: Wagtail 2.5 demo”

What we fixed

Many things

- Better text-to-background color contrast across the whole CMS
- Increased font size across the board as well
- Added focus outline styles
- Added more ARIA landmarks and refactored heading structure
- Added a lot more contextual information to links for screen reader users
- Fixed the icons implementation (more or less 🤖)
- Fixed focus not moving to the pages explorer
- [youtube.com/watch?v=CELYUMFiuEQ](https://www.youtube.com/watch?v=CELYUMFiuEQ)
- Search “VoiceOver accessibility testing: Wagtail 2.6 demo”

[Wagtail 2.6 release notes](#)

What's next

A cultural change?

Accessibility should be part of the design & dev workflow for any UI changes, rather than an occasional one-off push

Contributors to Wagtail should have clear information on what to do to make sure they build accessible UIs

Work in progress

RFC: [Making Wagtail Accessible for users of assistive technologies](#)

Backlog: [WCAG2.1 AA compliance project on GitHub](#)

Let's work on this together this sprint?

Thank you!

Let's work on this together during the sprint? ❤️

[#accessibility](#) on Slack

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