

End to End Accessibility Testing

Presented by Tim Wright (he/him), Director of Front End Engineering



On the Agenda

- Why is testing so important?
- Who does accessibility testing help?
- What are the types of testing?
- How can testing scale?

**Why is accessibility
testing so important?**

**What is our goal
with testing?**

“If you can teach a human to do it, you can teach a robot to do it.”

- A guy named Chris I used to work with at BU.

**Editorial
Team**

**Product
Team**

Editorial Team

“Please help.”

- Very likely, your editorial team.





- Education (scaling)
- Inline guidance



Education

Education









- Covering common editorial issues
- Presentation vs. Structure
- Heading structure
- Meaningful links
- ALT text
- Audio & video

Inline Guidance


Publish...    

Accessibility Scanner  


Errors (6) Warnings (0)





Non-Text Content(0)	
Info and Relationships(3)	
Color Contrast(0)	
Keyboard Accessible(0)	
Enough Time(0)	
Navigable(0)	
Understandable(0)	
Robust(3)	



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[Learn more about accessibility](#) 

Publish...    


Accessibility Scanner  


Errors (6) Warnings (0)


Non-Text Content(0) 


Info and Relationships(3) 


- 1 Fieldset does not contain a legend element. All fieldsets should contain a legend element that describes a description of the field group.
- 2 This form field should be labelled in some way. Use the label element (either with a "for" attribute or wrapped around the form field), or "title", "aria-label" or "aria-labelledby" attributes as appropriate.


Color Contrast(0) 

Keyboard Accessible(0) 


Enough Time(0) 

Navigable(0) 

Understandable(0) 

Robust(3) 

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Product Team

“Please help.”

- Very likely, your product team.

- Testing
- Collaboration
- Sharing solutions (scaling)

Common Types of Testing

Basic Testing

HTML_CODESNIFFER BY SQUIZ



Standards:

WCAG2AA ▾

6

Errors



148

Warnings



395

Notices



Select the types of issues to include in the report

View Report



Scope	Global Elements: Header, Footer, Navigation					
URL						
Compliance Goal	WCAG 2.1, Level AA					
Current Status	Fail					
Guideline Issues	14					

Guideline	Name	Compliance Level	Test Result	Notes	CSS Selector
1	Perceivable				
1.1	Text Alternatives				
1.1.1	Non-text Content	Level A	Fail	1. Logo is missing some form of ALT text. Set logo SVG to hidden and add aria-label to link 2. Social icons in footer missing ALT (same recommendation)	1. .site-header .logo & footer .logo & .nav-mobile .logo 2. .footer-followus a & .nav-mobile .share a
1.2	Time-based Media				
1.2.1	Audio-only and Video-only (Prerecorded)	Level A	N/A		
1.2.2	Captions (Prerecorded)	Level A	N/A		
1.2.3	Audio Description or Media Alternative (Prerecorded)	Level A	N/A		
1.2.4	Captions (Live)	Level AA	N/A		
1.2.5	Audio Description (Prerecorded)	Level AA	N/A		
1.3	Adpatable				
1.3.1	Info and Relationships	Level A	Fail	1. Missing ARIA landmark roles 2. "Premium Services" heading in the navigaiton should be an h2	1. header, nav, footer, main 2. .section-headline-d
1.3.2	Meaningful Sequence	Level A	Pass		
				1. When small screen nav is opened, the first item in the navigation should take focus	1. .nav-toggle 2. .nav-mobile

Functional Testing

A Web browser
(Puppeteer)

A tester
(Jest)

**“Do all the correct ARIA
roles exist?”**

“Are the keyboard bindings on this accordion correct?”

**“Can I navigate this UI
without a mouse?”**

“Is focus properly trapped in this modal dialog?”

```
277 PASS tests/accordion.spec.js
278   Accessibility Tests
279     ✓ Open and close a panel with the keyboard (295ms)
280     ✓ Open and close a panel with a mouse (64ms)
281     ✓ Access panels with arrow keys (45ms)
```

```
282
283 Test Suites: 1 passed, 1 total
284 Tests:       3 passed, 3 total
285 Snapshots:  0 total
286 Time:        2.433s
```

```
287 Ran all test suites.
```

```
288 The command "npm run test" exited with 0.
```

```
▶ 289 store build cache
```

```
296
```

```
297
```

```
298 Done. Your build exited with 0.
```

**How do we scale custom
testing?**

**Editorial tests
looking
after content**

**Functional test
looking after the UI**

HOME

GETTING STARTED

COMPONENTS

Global Site Components

Navigation

Content

Forms & CTAs

Utility

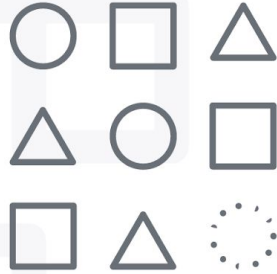
CONTRIBUTING

RESOURCES



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Already doing all this? [Careers at 10up](#)



Baseline

An accessible, production ready WordPress Component Library built by **10up Engineering**

At 10up, we strive to provide websites that yield a top-notch user experience. In order to improve both our efficiency and consistency, we need to standardize what we use and how we use it. Standardizing our approach to commonly-used front-end components allows us to understand better the inner workings of a client's project and produce better solutions.

While creating this library we took special care to ensure that each component meets the

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Animate


10up Animate is a small utility animation library. It consists of a series of CSS classes that can be combined or used in isolation to bring small elements of motion into a UI.

Accessibility Tests passing

```
▼ ✓ npm run test
8 PASS tests/animate.spec.js
9   Accessibility Tests
10    ✓ Test Reduced Motion for: fade-in (244ms)
11    ✓ Test Reduced Motion for: fade-out (22ms)
12    ✓ Test Reduced Motion for: rotate-90 (20ms)
13    ✓ Test Reduced Motion for: rotate-180 (19ms)
14    ✓ Test Reduced Motion for: rotate-270 (17ms)
15    ✓ Test Reduced Motion for: rotate-360 (20ms)
16    ✓ Test Reduced Motion for: scale-down-large (17ms)
17    ✓ Test Reduced Motion for: scale-down-small (29ms)
18    ✓ Test Reduced Motion for: scale-down (19ms)
19    ✓ Test Reduced Motion for: scale-up-large (18ms)
20    ✓ Test Reduced Motion for: scale-up-small (18ms)
21    ✓ Test Reduced Motion for: scale-up (20ms)
22    ✓ Test Reduced Motion for: shake-horizontal-large (20ms)
23    ✓ Test Reduced Motion for: shake-horizontal-small (18ms)
24    ✓ Test Reduced Motion for: shake-horizontal (26ms)
25    ✓ Test Reduced Motion for: shake-vertical-large (19ms)
26    ✓ Test Reduced Motion for: shake-vertical-small (22ms)
27    ✓ Test Reduced Motion for: shake-vertical (20ms)
28    ✓ Test Reduced Motion for: slide-in-down (24ms)
```

1 step at a time, please.

Thanks!

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Presentation Information

Feedback: <https://bit.ly/2X1gxYI>

Headings: Playfair Display

Body Copy: IBM Plex Sans

Typographic Rhythm: Diatonic scale, 18px - 64px