



Accessibility Testing

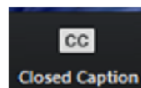
AFB American Foundation[®]
for the Blind

Expanding possibilities for people with vision loss

RAISE CENTER

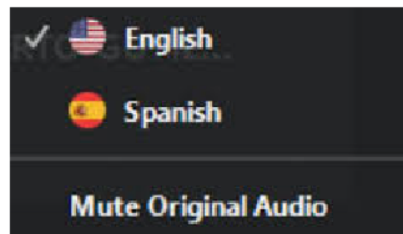
Using Closed Captioning

- To start using CC, click the caption button



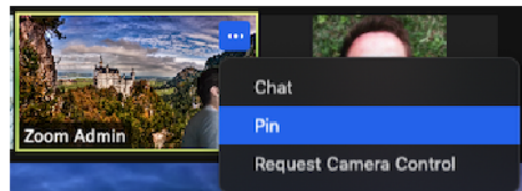
Uso de la interpretación de idiomas

- Hagan clic en el icono de interpretación
- Seleccionen "Spanish"
- Después de seleccionar "español", opriman donde dice "Mute Original Audio"



Using ASL

- To pin the interpreter, hover over the video of the participant you want to pin and click ...
- From the menu, click Pin.



Presenters



William Reuschel
Director, Client Services
& Technical Development



Syed Hassan
Usability Specialist



Matthew Janusauskas
Chief Technology Officer

What's in the toolkit provided?

- Basic Testing Guide
- Procurement Checklist
- Collected References

Web Content Accessibility Guidelines (WCAG 2.1)

FOR ALL DIGITAL CONTENT

[WCAG 2.1 Quick Reference Guide](#)



WCAG Principle and Guideline Hierarchy

The WCAG consists of 4 primary principles that should be followed to make digital content accessible:

1. Perceivable:

Can I see it or can I tell that it is there?

2. Operable:

Can I interact with it with my main mode of interaction (mouse, keyboard, touch screen, switch)?

3. Understandable:

Does this make sense?

4. Robust:

Is it coded correctly to stand the test of time and meet compatibility requirements with many different devices?

The WCAG Principles and their guidelines are organized into a hierarchy, represented as **X.Y.Z**

1.	Perceivable
1.1	Text Alternatives
1.1.1	Non-text Content
1.2	Time-based Media
1.2.1	Audio-only and Video-only (Prerecorded)
1.2.2	Captions (Prerecorded)
1.2.3	Audio Description or Media Alternative (Prerecorded)
1.2.4	Captions (Live)
1.2.5	Audio Description (Prerecorded)

Testing for Accessibility

Types of accessibility testing (Do both!)

Automated Testing

- Requires less experience
- Can run automatically and provide reports
- Only finds 20-30% of total issues
- Does not test full workflows, only pages.

Manual Testing

- Requires more experience
- Must be done manually
- Is the only way to reliably predict actual usability

Automated Testing Tools

- [axe DevTools](#)
- [Lighthouse \(Chrome\)](#)
- [WAVE \(WebAIM\)](#)
- (Hybrid) [accessibilityinsights.io](#)



CITYLIGHTS

your access to the city



Electricity

Go

Traffic: Construction work on Main Road

Today: Thursday 23 September 2021, Sunny Spells, 23°C



HOME



NEWS



TICKETS



SURVEY

Citylights Survey

This Week's Survey: More city parks - a pain or a gain?

Fields are required if not otherwise noted.

Favorite Park



DevTools

Elements

Console

Sources

Network

Performance

Memory

Application

axe DevTools

2

1



[Upgrade](#)

/ [Sign in](#)

Let's get started

You're **one click away** from scanning your site with the most widely used and **trusted accessibility tool in the world.**



Scan ALL
of my page



Scan PART
of my page

OR

URL <https://www.w3.org/WAI/demos/bad/before/survey.html>

TOTAL ISSUES

51

AUTOMATIC ISSUES 51

NEEDS REVIEW 2

GUIDED ISSUES 0

Critical 37 Serious 5

Moderate 7 Minor 0

Best Practices: ON

EXPORT ISSUES

CRITICAL ISSUES: 37

Guided Tests

Images must have alternate text 24

Form elements must have labels 11

Select element must have an accessible name 2

highlight inspect more info share issue more details

Impact: critical

Found on: 9/23/2021 at 12:40 PM

Found: Automatically

Issue Tags:

[cat.text-alternatives](#) [wcag2a](#) [wcag111](#) [section508](#) [section508.22.a](#) [ACT](#)

Issue Description

Ensures elements have alternate text or a role of none or presentation

Element location

`img[src$="border_left_top\.gif"]`

Element source

``

To solve this issue, you need to...

Fix at least one (1) of these issues:

Manual testing

Three Testing Checkpoints

1. Visual Design
2. Keyboard accessibility
3. Screen reader accessibility

Contrast & Text Size

4.5:1 – Regular Text

3.0 - Large Text (18 point, or 14 point bold)

3.0 – All other UI elements

Exempt:

- Text in logos
- Inactive components

1.5:1 #D4D4D4

2.0:1 #B3B3B3

2.5:1 #A4A4A4

3.0:1 #949494

3.5:1 #888888

4.0:1 #808080

4.5:1 #777777


7.0:1 #5A5A5A

20:1 #000000

Checking contrast

Contrast Checker

[Home](#) > [Resources](#) > Contrast Checker

Foreground Color
#0000FF 
Lightness


↔

Background Color
#FFFFFF 
Lightness


Contrast Ratio

8.59:1

[permalink](#)

Normal Text

WCAG AA: **Pass**

WCAG AAA: **Pass**

The five boxing wizards jump quickly.

Large Text

WCAG AA: **Pass**

WCAG AAA: **Pass**

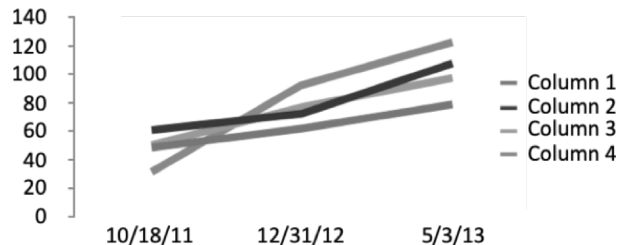
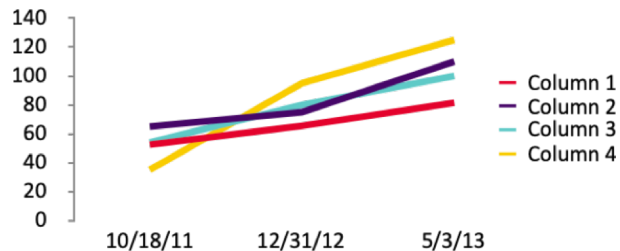
The five boxing wizards jump quickly.

Color Contrast checker:

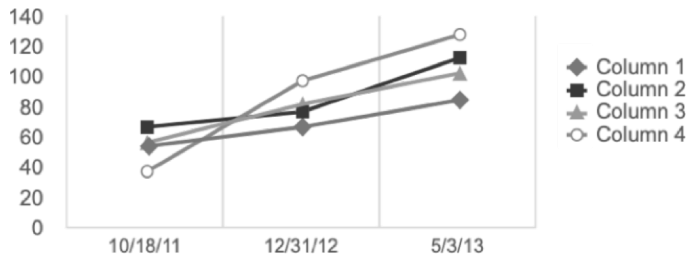
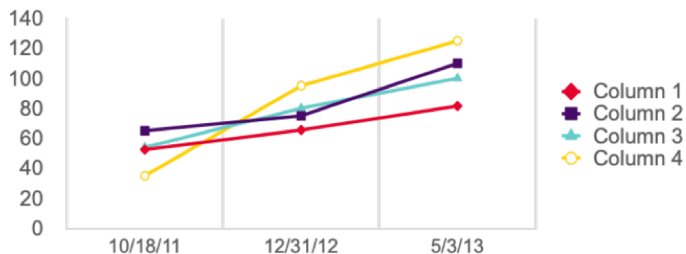
<https://webaim.org/resources/contrast-checker/>

LINE CHART EXAMPLES

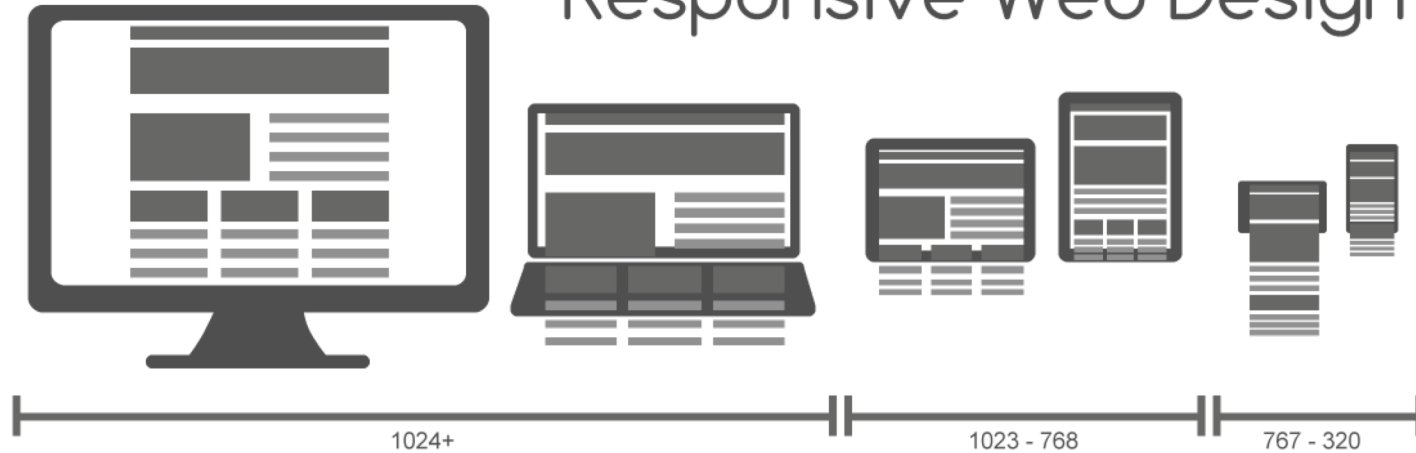
BAD EXAMPLE



GOOD EXAMPLE



Responsive Web Design



https://commons.wikimedia.org/wiki/File:Responsive_Web_Design_for_Desktop,_Notebook,_Tablet_and_Mobile_Phone.png



[Home](#) [About](#) [Partners](#) [RSA Parent Centers](#) [Resources](#) [Site Map](#)

Welcome to RAISE!

The National Resources for Advocacy, Independence, Self-determination and Employment (RAISE) Technical Assistance Center works with the eight (8) Rehabilitation Service Administration (RSA)-funded Parent Training & Information Centers to develop and disseminate information and resources that increase their capacity to serve youth and young adults with disabilities and their families.

WHAT'S NEW FROM RAISE?

[The STANDARD: 7.5, July 2021](#)

JUL 22, 2021 | NEWSLETTER

In this issue of RAISE The Standard, we focus on youth empowerment. When youth are empowered, they have the skills, critical awareness, and opportunities to positively impact their own lives and their communities. Continue Reading The STANDARD: 7.5, July 2021



Job Training & Employment (hover & click arrow for next slide)

[Join us for the RAISE Center Accessibility 101 Webinars](#)

Accessibility 101 Webinar Synopsis

The importance of diversity, equity, and inclusion is currently at the forefront of the

Reflow



Select Page



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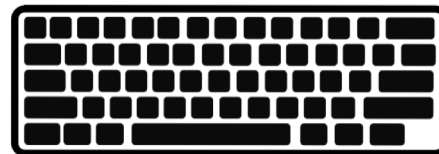
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[read more](#)

Keyboard Testing

Keyboard Commands

Key	Function
Tab	Moves focus to the next interactive element
Shift plus Tab	Holding “Shift” while pressing “Tab” will move your focus backwards
Spacebar	Scrolls down OR Activates an element that has focus
Enter	Submits a form OR Use as a backup to activate an element
Arrow keys	Scroll the page OR When focused on an element, sometimes this will change a value. For example, radio buttons



Basic Keyboard Testing procedure

1. Every element has a visible focus indicator.
2. Check for a logical order.
3. Interact with all of the elements you can.

Screen reader testing

Understanding what you see versus what you hear



Accessible Name (Labels)



Alternative Text

Screen reader needs an alternative way to describe an image

We provide "alt text" as an accessible description

Tutorial:

<https://www.w3.org/WAI/tutorials/images/decision-tree/>



Alternative Text

"Push the cap down and turn it counter-clockwise (From right to left)"



Button Elements



Literal (unhelpful)

Magnifying Glass

Action-oriented

Search



Diagonal

Expand or Fullscreen



Down Arrow

Expand



Up Arrow

Return to top

Labels for form fields

All fields must have visual labels

Placeholder text is not sufficient

Medium Headline Will Be Here

Label

Placeholder

Label

Placeholder

Label

Placeholder

Label

Placeholder

☐ Checkbox

PRIMARY BUTTON

Focus Order

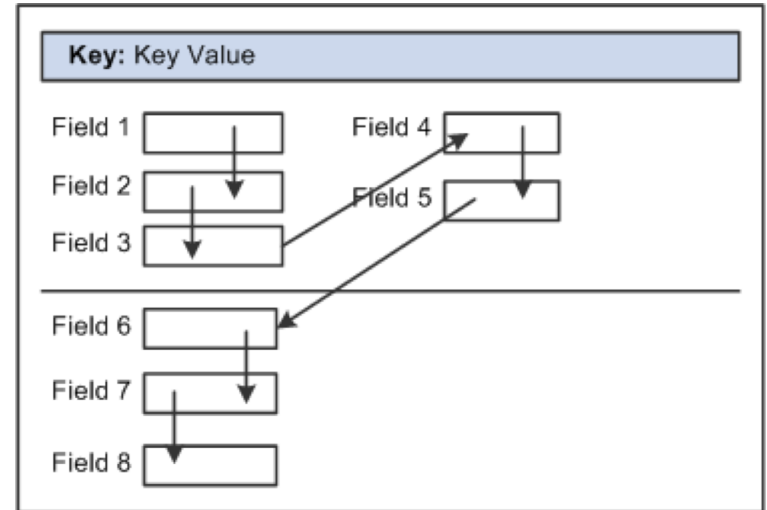


Focus order

In what order is the content focused?

Does this order match the visual or reading order of the content?

Does the focus get “lost” anywhere?



Card One

My cards are laid out using CSS Grid to create a neatly aligned set of cards.

This is the footer.

Card Two

My cards are laid out using CSS Grid to create a neatly aligned set of cards.

This is the footer. This footer has much more content then the designer expected.

Card Three

My cards are laid out using CSS Grid to create a neatly aligned set of cards.

This is the footer.

Card Four

My cards are laid out using CSS Grid to create a neatly aligned set of cards.

This is the footer.

Card Five

My cards are laid out using CSS Grid to create a neatly aligned set of cards.

This is the footer.

Card Six

My cards are laid out using CSS Grid to create a neatly aligned set of cards.

This is the footer.



Feedback Form

What is on your mind?

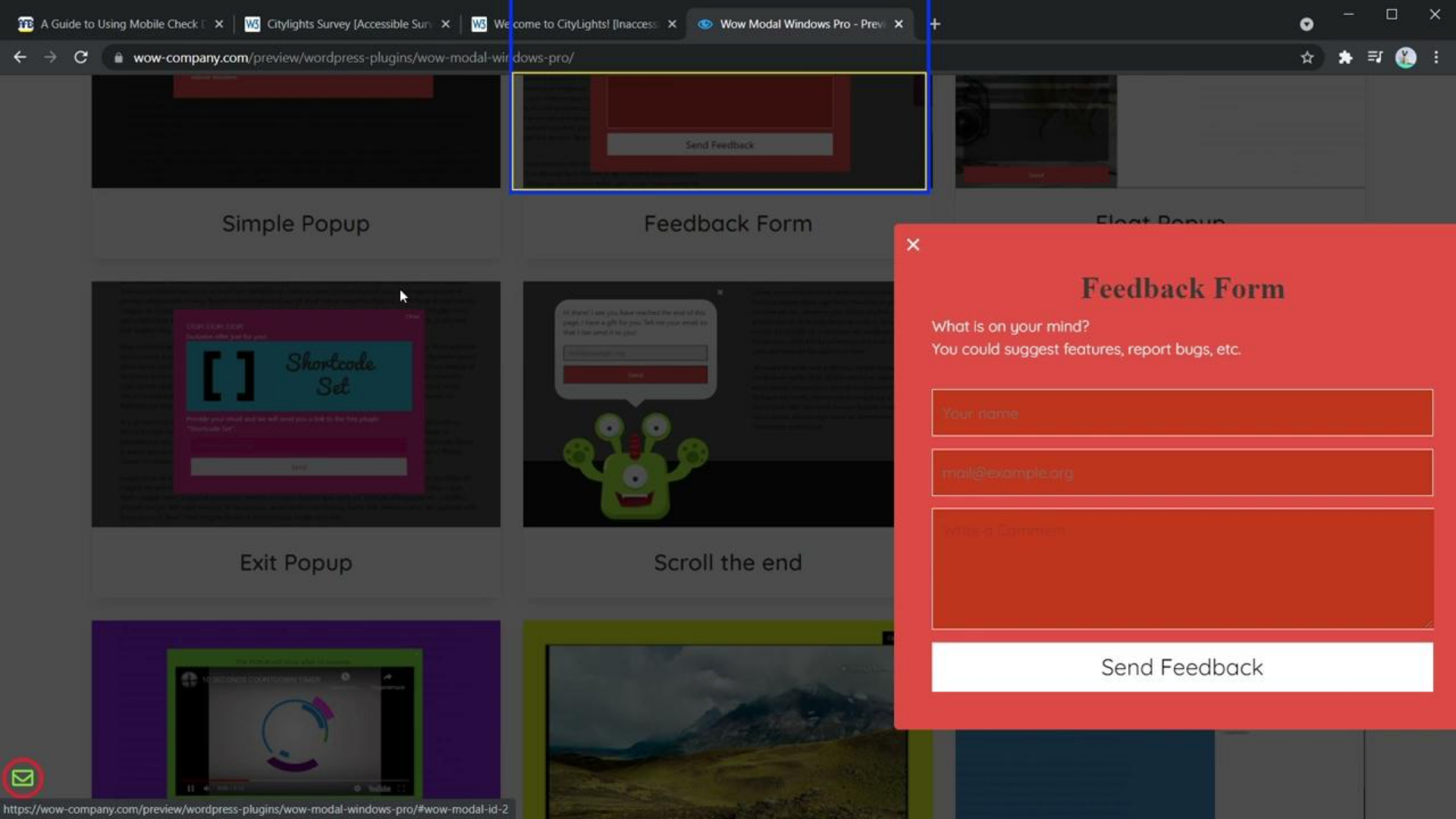
You could suggest features, report bugs, etc.

Your name

mail@example.org

Write a Comment

Send Feedback



Page Structure



Use Headings

Headings should be logical and provide meaningful structure to a page.

- They should be short.
- They should logically nest.
 - A heading level one is a **title**.
 - A heading level two is a **subconcept** of heading level one.
 - A heading level three is a **subtopic** of heading level two.

Use true headings, not only visual font styles that appear to be headings.

Region/Landmarks

In addition to headings, regions (or landmarks) define the purpose of sections of a page.

In HTML5, these are called "semantic" elements

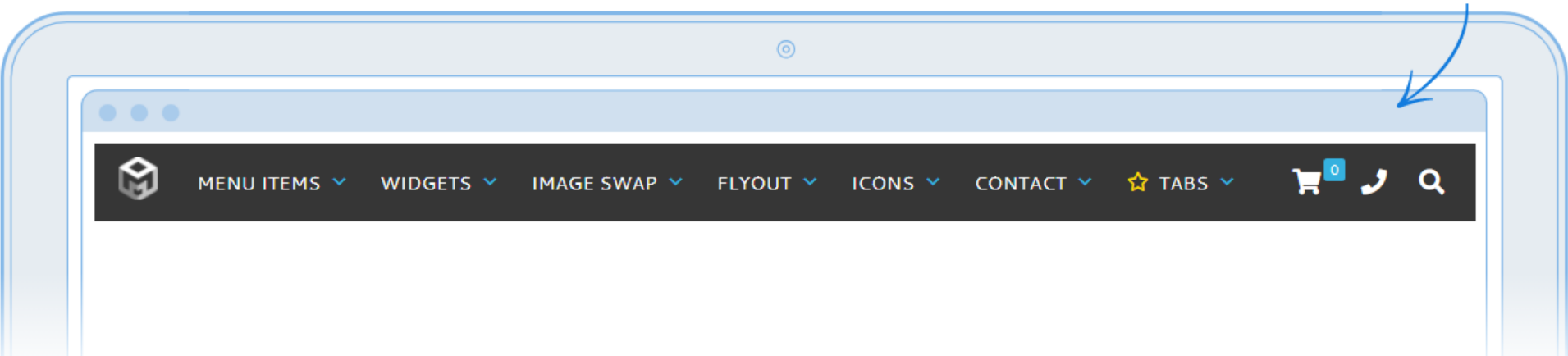


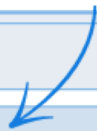
Common Components

Menus

Is the user able to open the menu

Can the user find the links and expand sub menus





MENU ITEMS ▾

WIDGETS ▾

IMAGE SWAP ▾

FLYOUT ▾

ICONS ▾

CONTACT ▾

★ TABS ▾



Getting Started

Installation

Mega Menus

Flyout Menus

Menu Item Options



View all



Menu Output Options ▾



Pro Features

Accordion Menu

Custom Item Styling

Search Box

Menu Item Badges



View all



Theme Integration Guides ▾



Frequently Asked Questions

How to change the arrow color

Hide icons on mobile

Adjust Menu Width

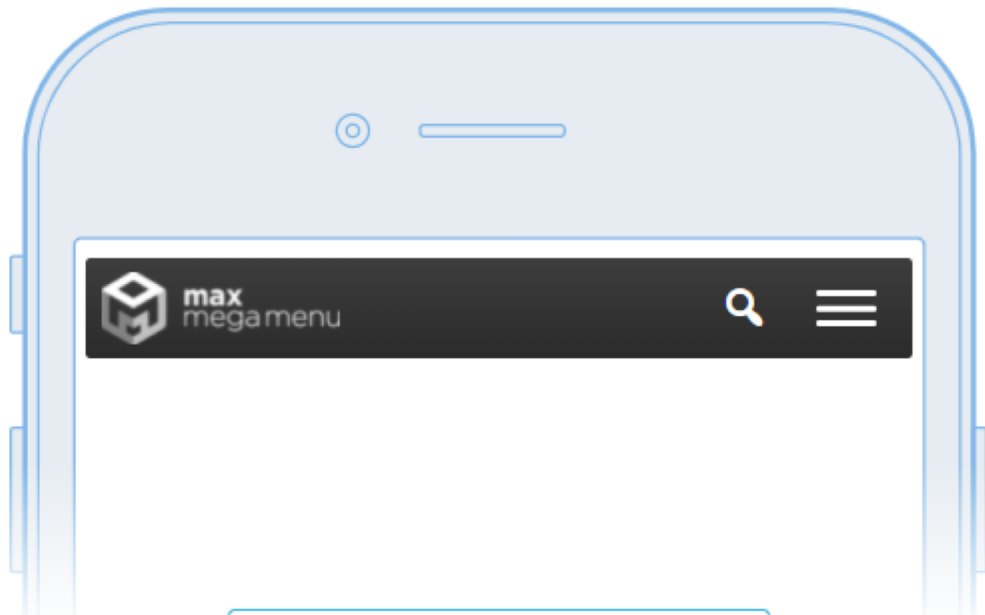
Hide Sub Menus on Mobiles



View all



Developers ▾





max
mega menu



MENU ITEMS



WIDGETS



IMAGE SWAP



FLYOUT



ICONS



CONTACT

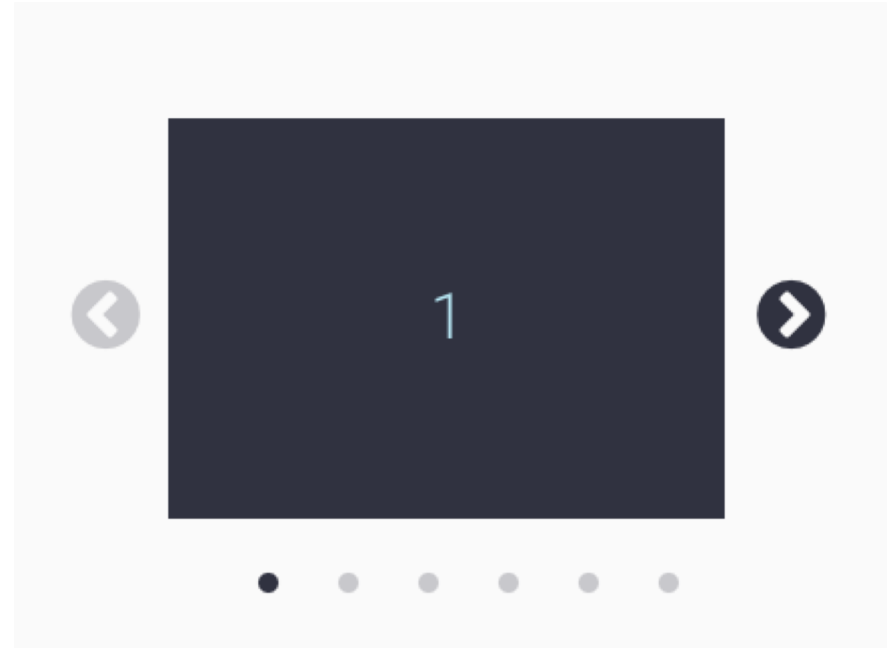


★ TABS



Carousels

Rotating content, or "slide show"



simple



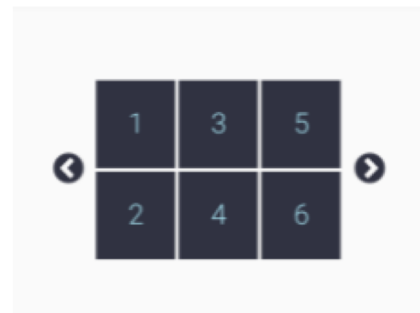
center mode



multiple



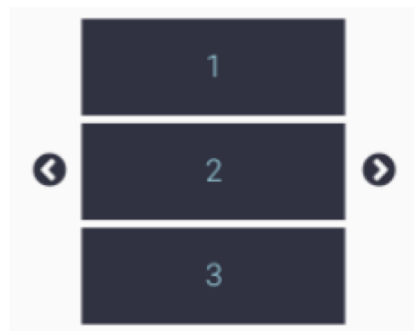
rows



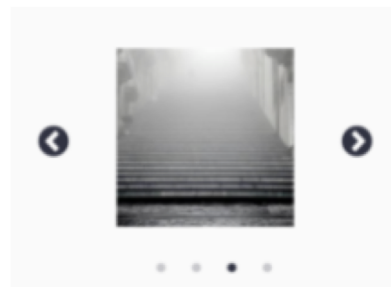
variable width



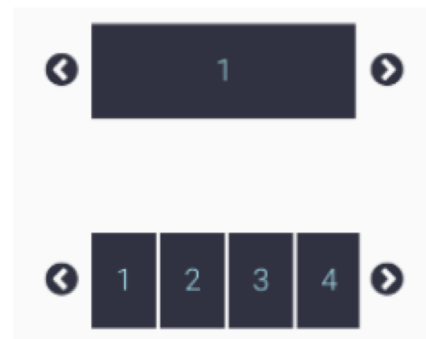
vertical



lazy load



synced sliders

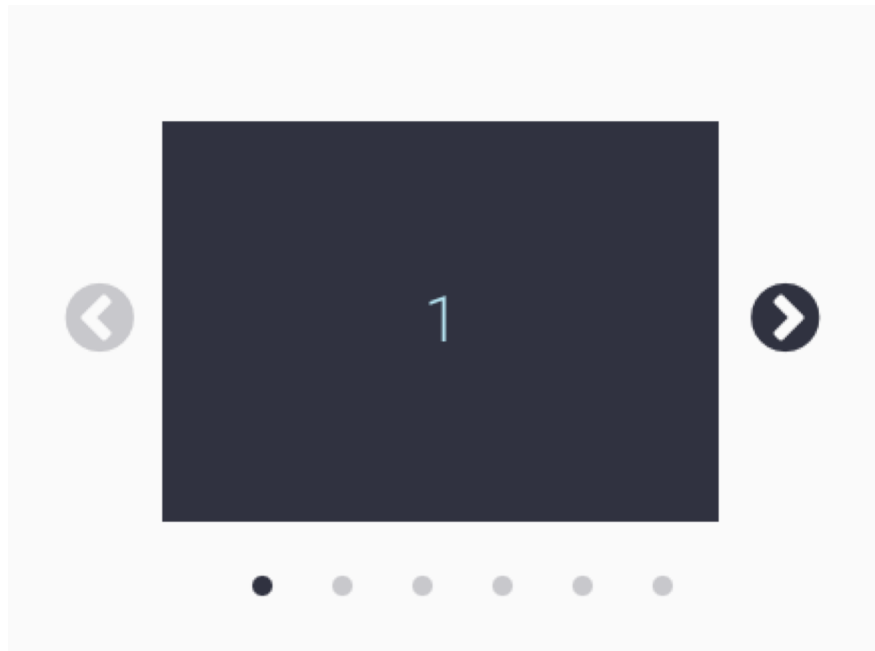


Considerations for Carousels

Can users focus on the content in the carousel?

Does the carousel pause when the user focuses on it?

Do the buttons and the content come in the right order?



What to do when we find a problem



Remediation strategies

- Explore options in your CMS to see if you can fix the problem yourself
- If it's a bug, report the bug to the vendor
- Find a different solution
- Work with a 3rd party to remediate

What's Next?

Workshops with AFB

- Review the toolkit and testing strategy before you come
- 2 Workshop opportunities with AFB experts
- Bring something you're working on

Thank you!

