

What's new in WCAG 2.1

Advanced Principles



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Resources online at:

webaim.org/presentations/2022/mnit

Outline

- 1.4.11 Non-Text Contrast (AA)
 - UI components
- 1.4.12 Text Spacing (AA)
- 1.4.13 Content on Hover or Focus (AA)
- 1.3.5 Identify Input Purpose (AA)
- 2.1.4 Character Key Shortcuts (A)
- 4.1.3 Status Messages (AA)
- Mobile accessibility
 - 1.3.4 Orientation (AA)
 - 2.5.1 Pointer Gestures (A)
 - 2.5.2 Pointer Cancellation (A)
 - 2.5.4 Motion Actuation (A)
 - 2.5.5 Target Size (AAA)

Principle 1 – Perceivable

Information and user interface components must be presentable to users in ways they can perceive.

Guideline 1.1 – Text Alternatives

Provide text alternatives for any non-text content so that it can be changed into other forms people need, such as large print, braille, speech, symbols or simpler language.

➤ [Show techniques and failures for 1.1](#)

1.1.1 Non-text Content — Level A

All non-text content that is presented to the user has a text alternative that serves the equivalent purpose, except for the situations listed below. ➤ [Show full description](#)

📘 Understanding 1.1.1

➤ [Show techniques and failures for 1.1.1](#)

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Guideline 1.2 – Time-based Media

Provide alternatives for time-based media.

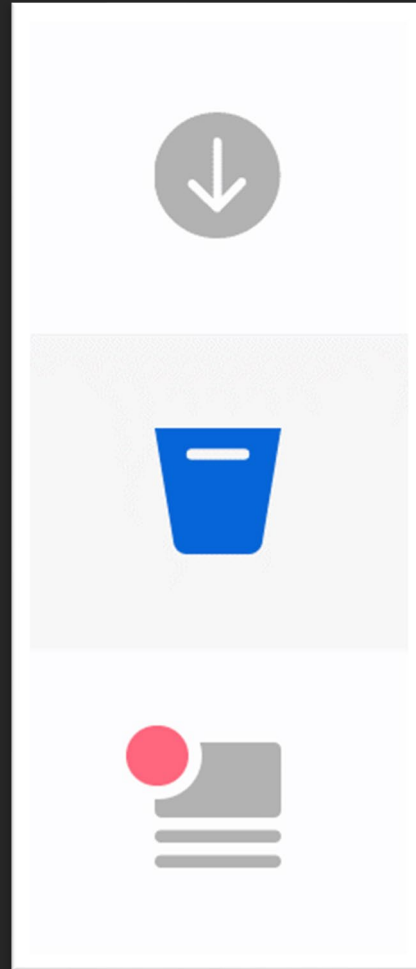
1.2.1 Audio-only and Video-only (Prerecorded) — Level A

For prerecorded audio-only and prerecorded video-only media, the following are true, except when the audio or video is a media alternative for text and is clearly labeled as such: ➤ [Show full description](#)

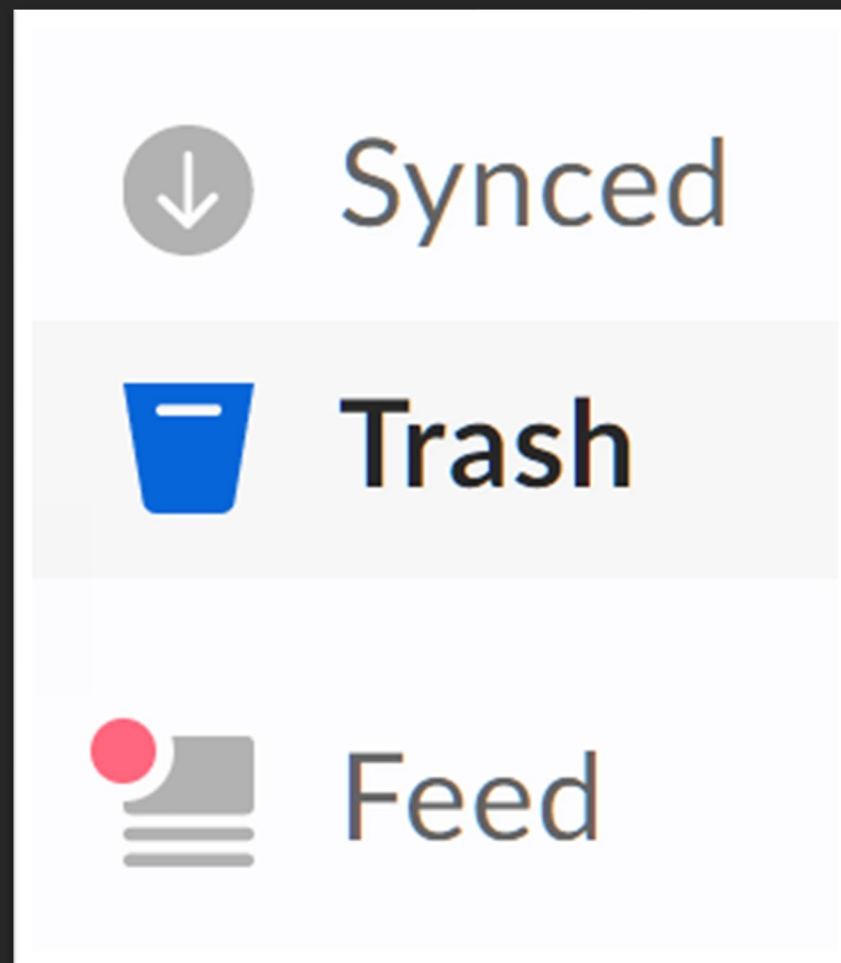
📘 Understanding 1.2.1

www.w3.org/WAI/WCAG21/quickref/

WCAG 2.1 – 3:1 Contrast of “Graphical Objects”



“...required to understand”



“Against adjacent color(s)”



Add a border



3:1 Contrast of UI “Boundaries”

☐

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WCAG 2.0 – Keyboard focus is visible

Avoid

```
a {outline:0;}
```

or

```
a {outline:none;}
```

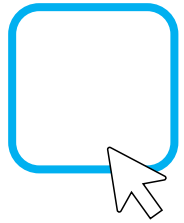
WCAG AA Failure

WCAG 2.1 – 3:1 contrast of keyboard focus indicators



Follow your interests.

You must test contrast of different states

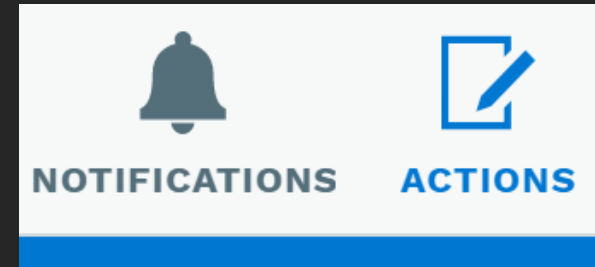
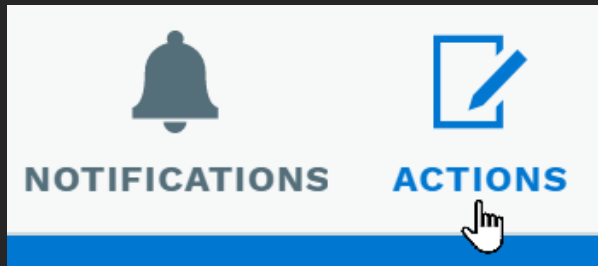


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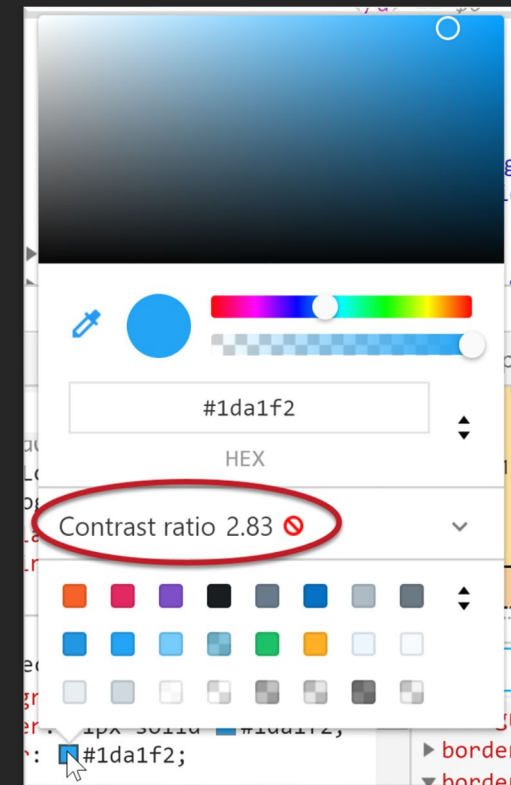
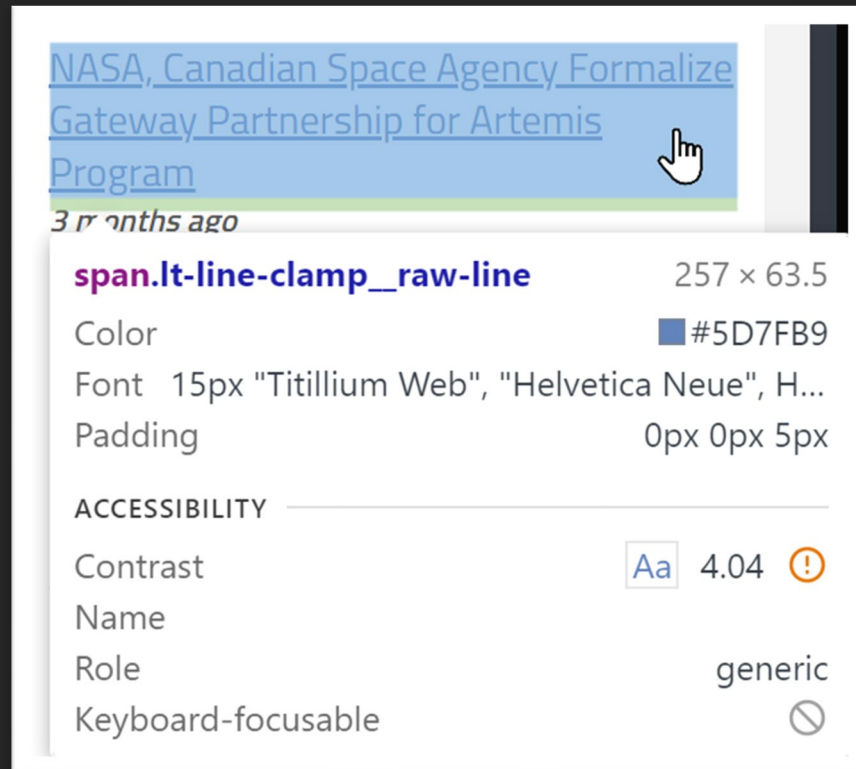


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Contrast between default and focus states



Chrome Developer Tools



Evaluating contrast with Chrome DevTools

WCAG 2.1 – 1.4.12 Text Spacing (Level AA)

“No loss of content or functionality occurs” when the *user* increases spacing between:


- Paragraphs: $2 \times$ font size
- Lines: $1.5 \times$ font size
- Words: 16% font size
- Letters: 12% font size

Evaluate text spacing

[Add text spacing bookmarklet](#)

Avoid CSS height

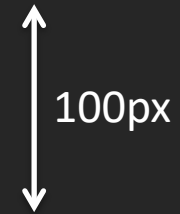
I am some text in a div
that has a pixel height



100px

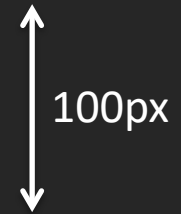
Avoid CSS height

I am some text in a
div that has a pixel
height

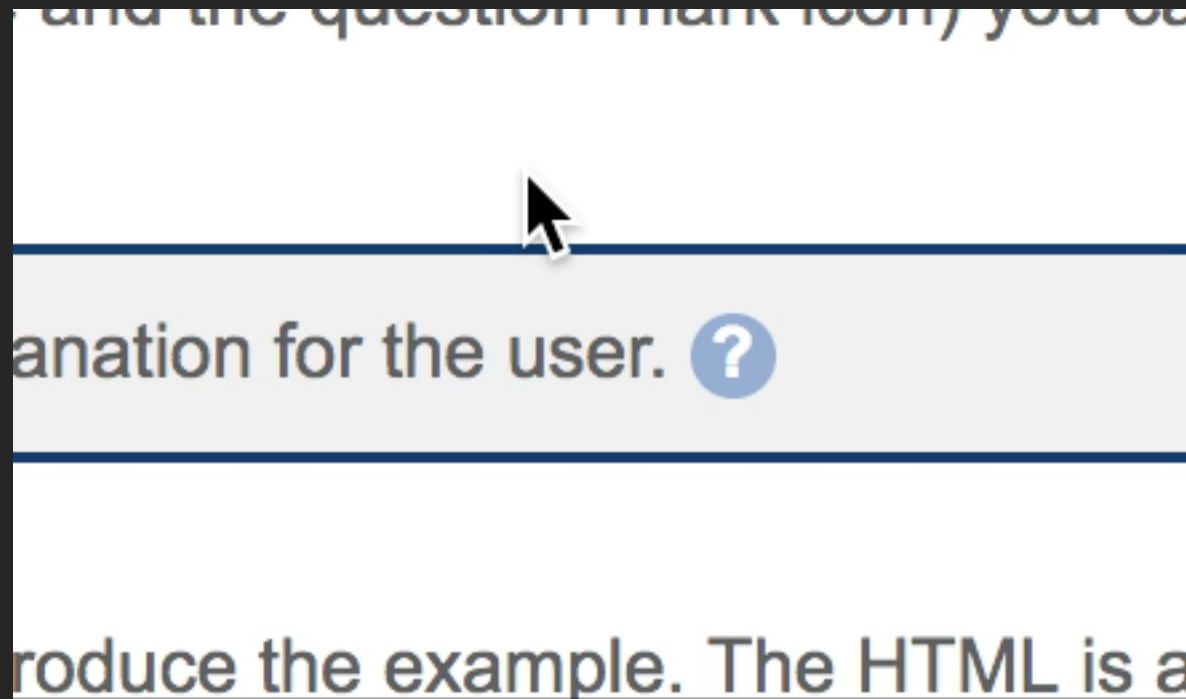


Use CSS `min-height`

I am some text in a
div that has a pixel
`min-height`



Mouse Hover interactions



1.4.13 - Content on Hover or Focus (Level AA)

Content that appears on hover and focus must be:

- “Dismissible...without moving pointer hover or keyboard focus”: Esc key dismisses
- “Hoverable”: Doesn’t disappear when moving the pointer to the new content
- “Persistent”: Visible until you move mouse away or dismiss it

Or use **mouse click** and **Enter/Spacebar** to trigger interactions.

1.3.5 Identify Input Purpose (AA)

“The purpose of each input field collecting information **about the user** can be programmatically determined”

www.w3.org/TR/WCAG21/#input-purposes

2.1.4 Character Key Shortcuts (A)

**Keyboard
shortcuts:**

[Learn more](#)



Keyboard shortcuts off



Keyboard shortcuts on

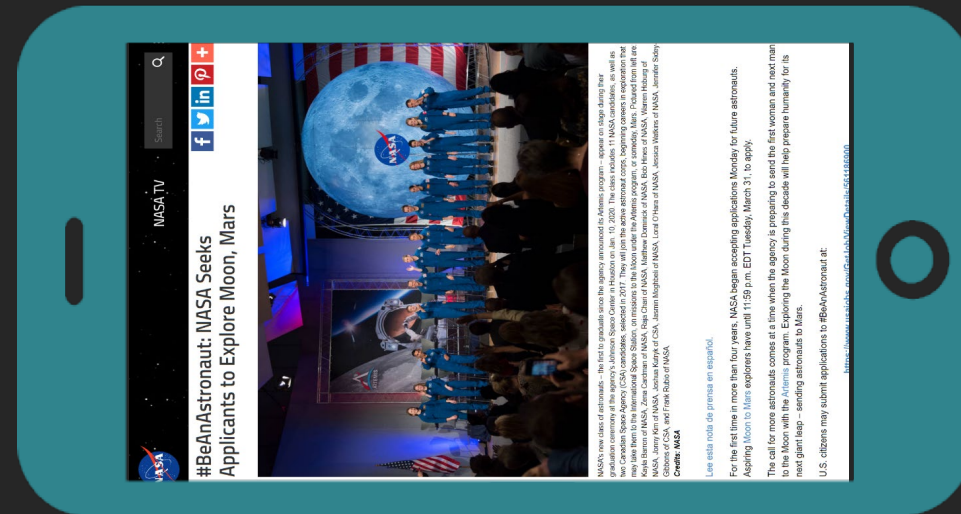
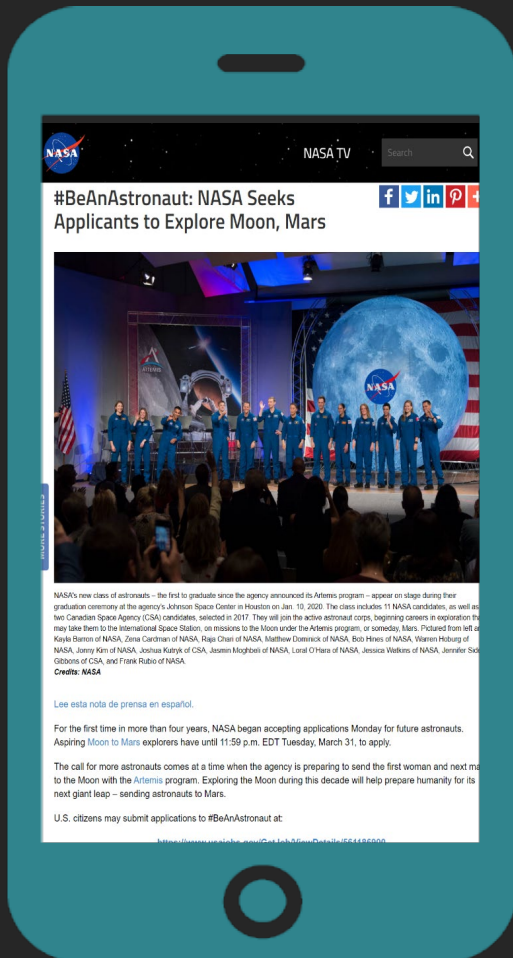
Disable or remap single-key shortcuts

SC 4.1.3 Status Messages (AA)

- ARIA live regions
 - `aria-live=assertive/role="alert"` – Read now
 - `aria-live=polite` – Read at a pause
- Don't set focus to status messages that disappear automatically
- Often best to have one messaging element, rather than multiple live regions

WCAG 2.1 - Mobile

1.3.4 (AA) – Don't lock orientation



Guideline 2.5 Input Modalities

- 2.5.1 (A) – Don't rely on multipoint or path-based gestures (e.g., swipe to navigate)
 - WCAG 2.2 proposes “dragging” functionality have single click/touch alternative
- 2.5.2 (A) – Pointer functionality can be canceled (e.g., no down-event to trigger)
- 2.5.3 (A) – “Label in Name” (already covered)
- 2.5.4 (A) – Don't rely on device motion (e.g., shake, tilt, or pan)
- 2.5.5 (AAA) – $\geq 44 \times 44$ -pixel clickable targets
- 2.5.6 (AAA) – Don't restrict input type (e.g., touch-only)

Questions?

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