

If it's interactive, it needs a focus style

October 15, 2018

#a11yTOConf



Is it beautiful?

Is it useful?



Is it beautiful?

Is it useful?



Is it beautiful?

Is it useful?

```
* {  
outline: none;  
}  
}
```

Focus styles
aren't ugly.

It's your thinking
that is.

What makes a good link?



link

link

link

home

stores

deals

lists

gifts

registry

locations

departments

help

faq

tracking

shipping

your profile

returns

services

events

catalogs

feedback

rewards

corporate

jobs

press

investors

privacy

site map

Affordances are hints
about how something
should be used

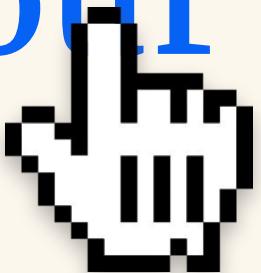


update your profile information

update your profile information

update your profile info

update your profile information



update your profile information



update your profile info

update [your profile](#) information

update [your profile](#) information

update [your profile](#) information

update your profile information

your profile

a { ... }

your profile

a:hover { ... }

your profile

a:focus { ... }

your profile

a:active { ... }

your profile ✓

a:visited { ... }

```
a {  
    text-decoration: underline;  
}
```

```
/* Quick and dirty */  
→ a:hover,  
a:focus {  
    text-decoration: none;  
}
```



SAVE



SAVE



SAVE

button { ... }

button:hover { ... }

button:focus { ... }



SAVE



SAVE

button:active { ... }

button[disabled] { ... }

Identify and activate



<a>

<button>

<select>

<details>

<object>

(sometimes)

<label>

with

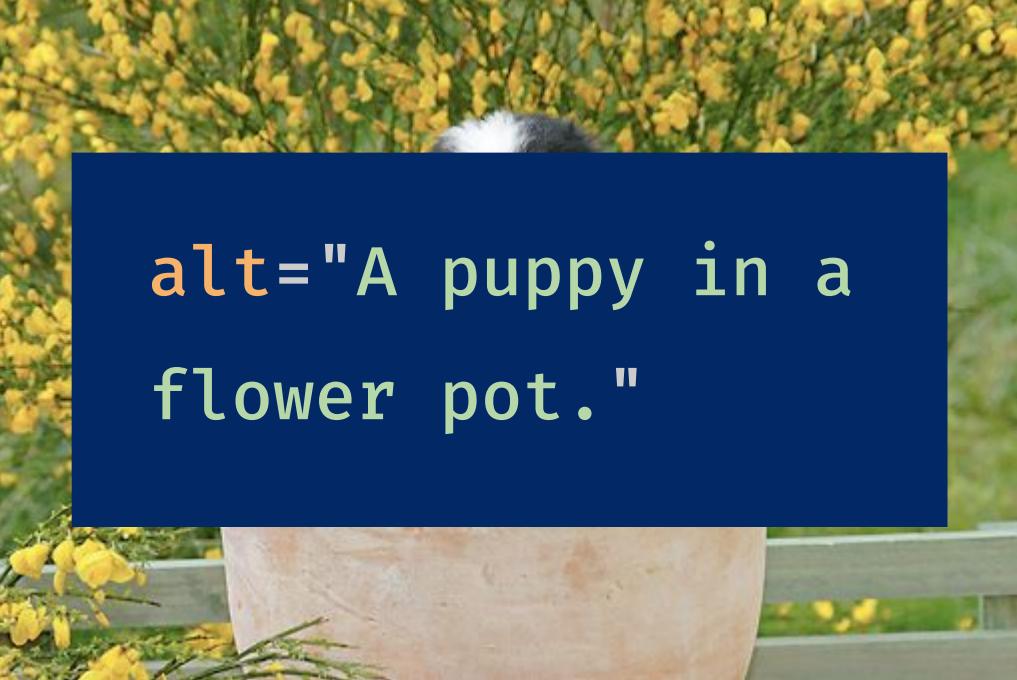
<input>

or

<textarea>







`alt="A puppy in a
flower pot."`

| | | | | | |
|----------------------------|---------------------------|-------------------------|-----------------------|------------------------|----------------------------|
| align-content | border-inline-end-color | content | grid-template-columns | min-inlin-size | tab-size |
| align-items | border-inline-end-style | counter-increment | grid-template-rows | min-width | table-layout |
| align-self | border-inline-end-width | counter-reset | hanging-punctuation | mix-blend-mode | text-align |
| all | border-inline-start | cursor | height | negative | text-align-last |
| animation | border-inline-start-color | direction | hyphens | object-fit | text-combine-upright |
| animation-delay | border-inline-start-style | display | image-orientation | object-position | text-decoration |
| animation-direction | border-inline-start-width | empty-cells | image-rendering | opacity | text-decoration-color |
| animation-duration | border-left | filter | inherit | order | text-decoration-line |
| animation-fill-mode | border-left-color | flex | initial | orphans | text-decoration-style |
| animation-iteration-count | border-left-style | flex-basis | inline-size | outline | text-emphasis |
| animation-name | border-left-width | flex-direction | inset-block-end | outline-color | text-emphasis-color |
| animation-play-state | border-radius | flex-flow | inset-block-start | outline-offset | text-emphasis-position |
| animation-timing-function | border-right | flex-grow | inset-inline-end | outline-style | text-emphasis-style |
| backface-visibility | border-right-color | flex-shrink | inset-inline-start | outline-width | text-indent |
| background | border-right-style | flex-wrap | isolation | overflow | text-justify |
| background-attachment | border-right-width | float | justify-content | overflow-wrap | text-orientation |
| background-blend-mode | border-spacing | font | justify-items | overflow-x | text-overflow |
| background-clip | border-style | font-family | justify-self | overflow-y | text-rendering |
| background-color | border-top | font-feature-settings | left | padding | text-shadow |
| background-image | border-top-color | font-kerning | letter-spacing | padding-block-end | text-transform |
| background-origin | border-top-left-radius | font-language-override | line-break | padding-block-start | text-underline-position |
| background-position | border-top-right-radius | font-optical-sizing | line-height | padding-bottom | top |
| background-repeat | border-top-style | font-size | list-style | padding-inline-end | touch-action |
| background-size | border-top-width | font-size-adjust | list-style-image | padding-inline-start | transform |
| block-size | border-width | font-stretch | list-style-position | padding-left | transform-box |
| border | bottom | font-style | list-style-type | padding-right | transform-origin |
| border-block-end | box-decoration-break | font-synthesis | margin | padding-top | transform-style |
| border-block-end-color | box-shadow | font-variant | margin-block-end | page-break-after | transition |
| border-block-end-style | box-sizing | font-variant-alternates | margin-block-start | page-break-before | transition-delay |
| border-block-end-width | break-after | font-variant-caps | margin-bottom | page-break-inside | transition-duration |
| border-block-start | break-before | font-variant-east-asian | margin-inline-end | perspective | transition-property |
| border-block-start-color | break-inside | font-variant-ligatures | margin-inline-start | perspective-origin | transition-timing-function |
| border-block-start-style | caption-side | font-variant-numeric | margin-left | place-content | translate |
| border-block-start-width | caret-color | font-variant-position | margin-right | place-items | turn |
| border-bottom | clear | font-weight | margin-top | pointer-events | unicode-bidi |
| border-bottom-color | clip | gap | mask | position | unset |
| border-bottom-left-radius | clip-path | grid | mask-clip | quotes | vertical-align |
| border-bottom-right-radius | color | grid-area | mask-composite | range (@counter-style) | visibility |
| border-bottom-style | color-adjust | grid-auto-columns | mask-image | resize | white-space |
| border-bottom-width | column-count | grid-auto-flow | mask-mode | revert | widows |
| border-collapse | column-fill | grid-auto-rows | mask-origin | right | width |
| border-color | column-gap | grid-column | mask-position | rotate | will-change |
| border-image | column-rule | grid-column-end | mask-repeat | row-gap | word-break |
| border-image-outset | column-rule-color | grid-column-start | mask-size | scale | word-spacing |
| border-image-repeat | column-rule-style | grid-row | mask-type | scroll-behavior | word-wrap |
| border-image-slice | column-rule-width | grid-row-end | max-height | scroll-snap-type | writing-mode |
| border-image-source | column-span | grid-row-start | max-width | shape-image-threshold | Z-index |
| border-image-width | column-width | grid-template | min-block-size | shape-margin | |
| border-inline-end | columns | grid-template-areas | min-height | shape-outside | |
| | | | | | etc. |

Don't
shift layout
shift layout

```
button:focus {  
  box-shadow:  
    0 0 0 3px $color-background;  
    0 0 0 6px $color-focus;  
  outline: none;  
}
```



```
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  outline: none;
```

```
@media  
  screen and  
  (-ms-high-contrast: active) {  
  background-color: buttonFace;  
  color: window;  
}  
}
```



SAVE





FOXNOW

HBO NOW

HBO GO

A&E

NAT GEO TV

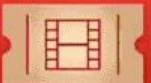
H
HISTORY



The Weather Channel



NASA



PBS

WWDC17



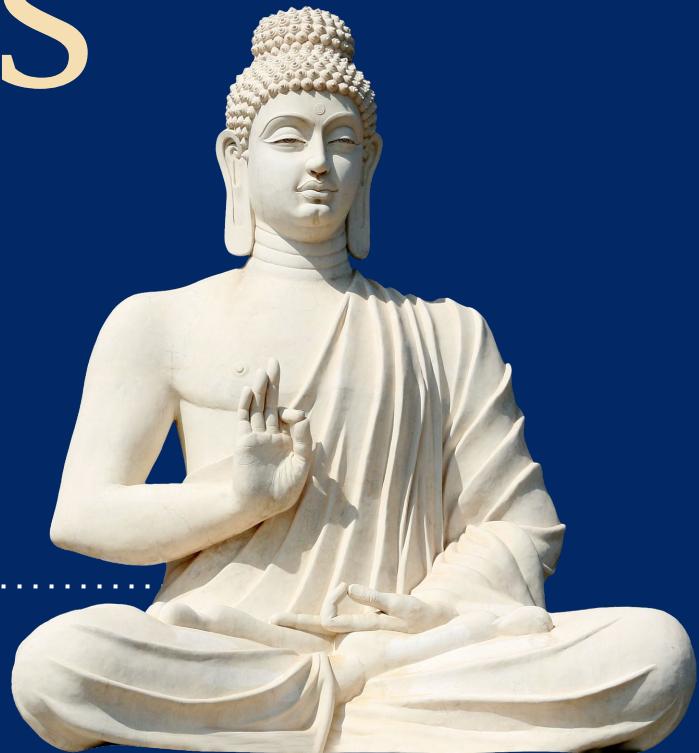
SHOWTIME

<https://youtu.be/Fjoo9Tcq9-0>

BH&W

- MOVIES & TV -
VIDU

New ways to focus



```
form:focus-within {  
  /* Your styles here */  
}
```

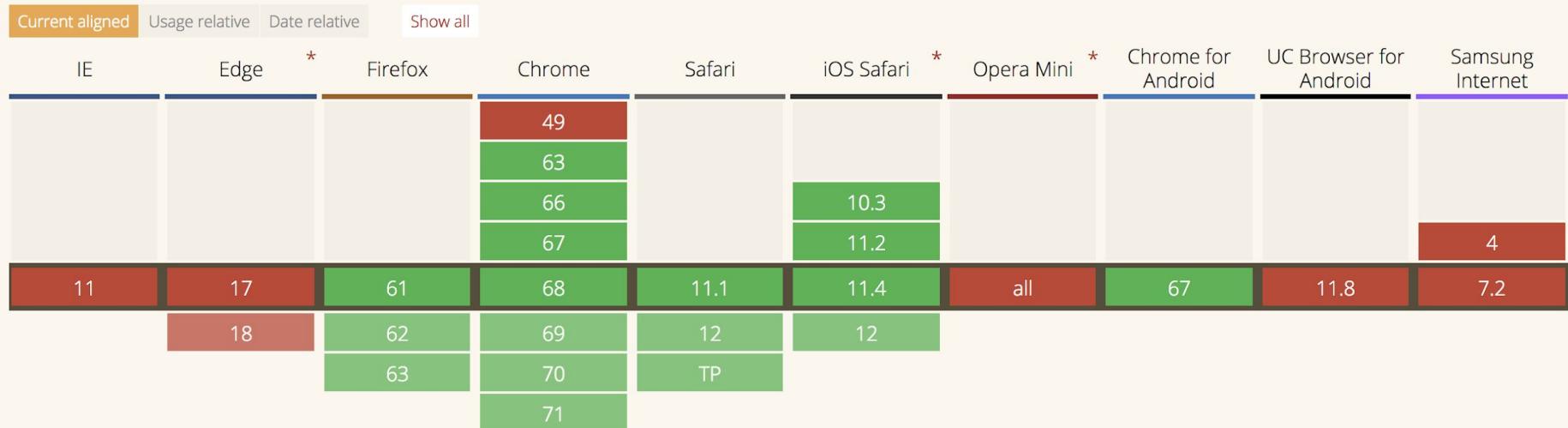
QQ A pseudo-class that is activated when an element is focused, or contains an element that is focused.” MDN

:focus-within CSS pseudo-class

UNOFF

Usage
Global
% of all users
74.25%

The `:focus-within` pseudo-class matches elements that either themselves match `:focus` or that have descendants which match `:focus`.



List of NBC television affiliates

| Station | Channel | City/Market | Owned Since |
|------------------------|---------|--|-------------|
| KNBC | 4 (36) | Los Angeles | 1949 |
| KNSD | 39 (40) | San Diego | 1996 |
| KNTV | 11 (12) | San Jose/San Francisco | 2002 |
| WRC-TV | 4 (48) | Washington, D.C. | 1947 |

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| WRC-TV | 4 (48) | Washington, D.C. | 1947 |

table

 |— caption

 |— tr

 |— td

 |— a

table

 |— caption

 |— tr:focus-within

 |— td

 |— a:focus

table

 |— caption

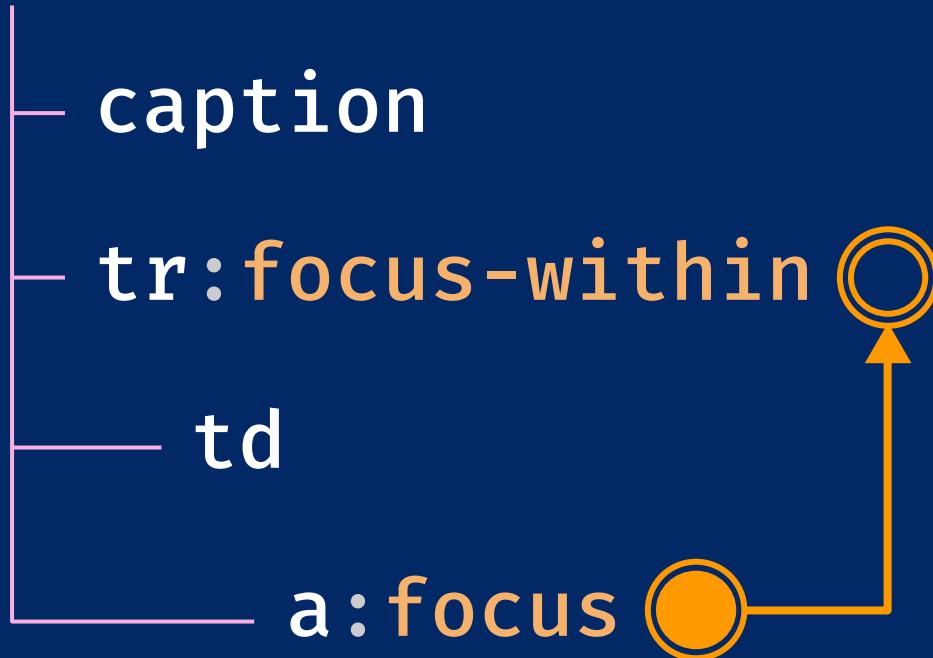
 |— tr:focus-within

 |— td

 |— a:focus 

Add background color

table



Add background color

table

 |— caption

 |— tr:focus-within

 |— td

 |— a:focus

Add background color

Add background color



keithjgrant
@keithjgrant

Note: if a selector list contains an invalid selector, the entire list is considered invalid. Thus this doesn't gracefully degrade:

```
... .main-nav:hover,  
... .main-nav:focus-within {  
...   background-color: rgba(0, 0, 0, 0.6);  
... }
```

6:06 PM - 8 May 2017

<https://twitter.com/keithjgrant/status/861749201725788160>

Other people's opinions



```
a:focus-visible {  
  /* Your styles here */  
}
```

QQ A pseudo-class that is activated when an element is focused and UA determines via heuristics the user's input modality.” MDN

This week, Ikea [opened its first store in India](#)-a feat the company has been planning for many years.



[**Website link**](#)

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Website link

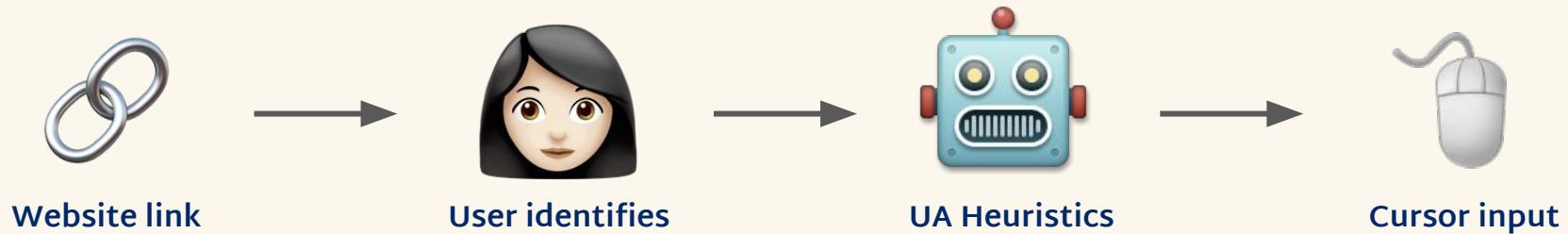


User identifies

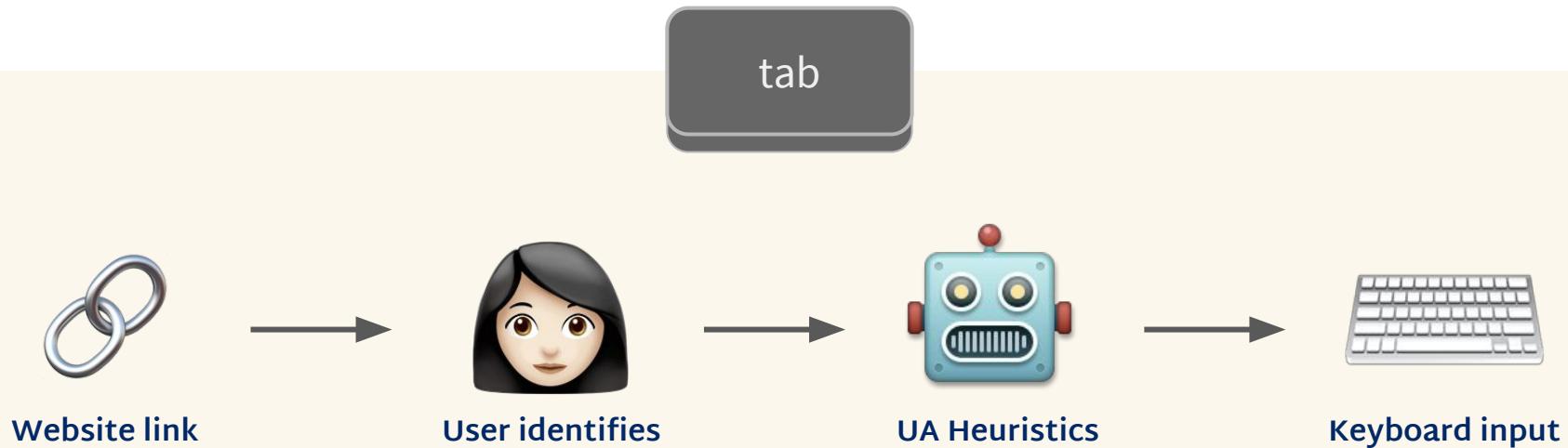
This week, Ikea [opened its first store in India](#)-a feat the company has been planning for many years.



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This week, Ikea opened its first store in India-a feat the company has been planning for many years.



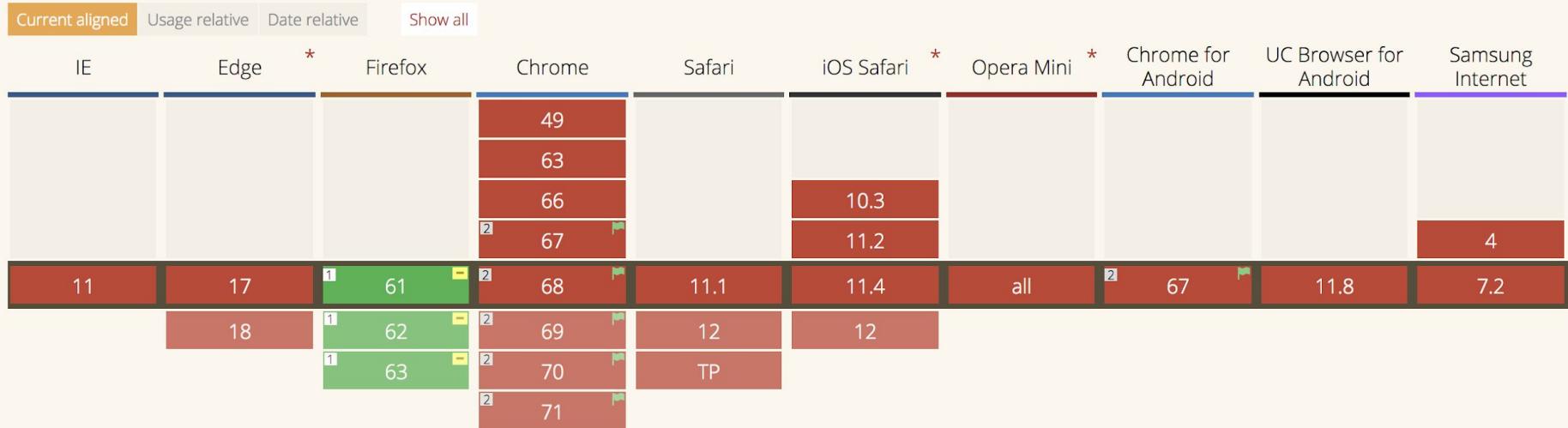
This week, Ikea
opened its first
store in India—a
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has been planning
for many years.

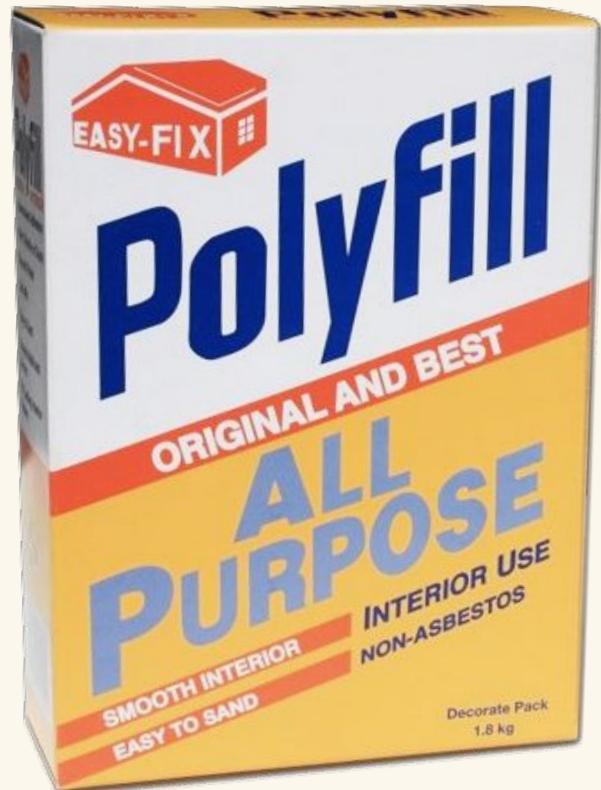
This week, Ikea
opened its first
store in India—a
feat the company
has been planning
for many years.

:focus-visible CSS pseudo-class

The `:focus-visible` pseudo-class applies while an element matches the `:focus` pseudo-class, and the UA determines via heuristics that the focus should be specially indicated on the element (typically via a “focus ring”).

Usage % of all users
Global 5.03%
unprefixed: 0%





Can you trust
your heuristics?

..... (I AM PARANOID SKEPTICAL)



All

Images

Shopping

News

Maps

More

Settings

Tools



The web is more
than just mice and
keyboards









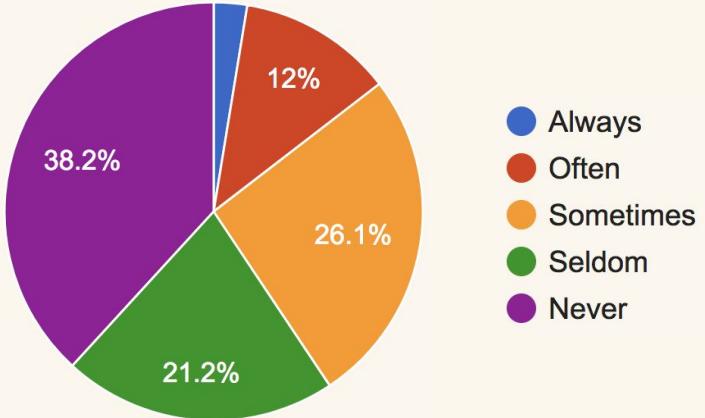












When using a mobile screen reader how often do you use an external keyboard?

| Response | # of Respondents | % of Respondents |
|-----------|------------------|------------------|
| Always | 39 | 3.9% |
| Often | 181 | 11.8% |
| Sometimes | 394 | 25.7% |
| Seldom | 320 | 20.9% |
| Never | 577 | 37.7% |

62.3%

Activate,
don't identify

Concerns

Repeating the mistakes
of browser sniffing

Concerns

Repeating the mistakes
of browser sniffing

Sharing PII without
knowing how it will be used

Concerns

Repeating the mistakes
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Bad design decisions
made in good faith

Concerns

Repeating the mistakes
of browser sniffing

Sharing PII without
knowing how it will be used

Bad design decisions
made in good faith

Being forced into an AT-only
companion experience

It's not about what a system
identifies me as.

It's about how well a system
responds to who I am and what
I'm experiencing when I use it.

Embrace the unknown

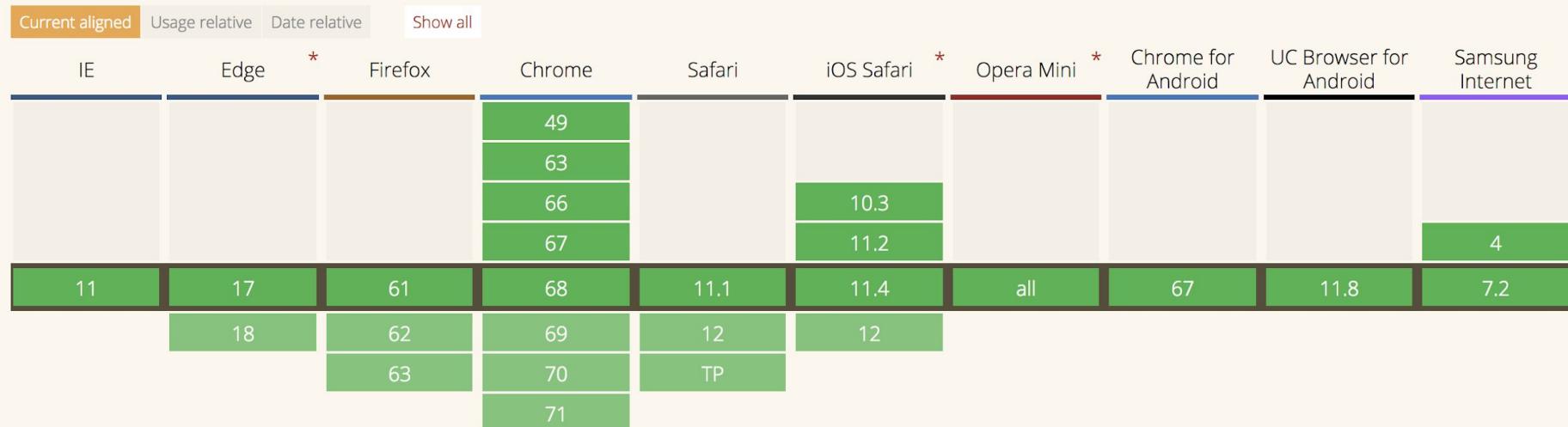


CSS 2.1 selectors

- REC

Usage
Global
% of all users
95.66%

Basic CSS selectors including: * (universal selector), > (child selector), :first-child, :link, :visited, :active, :hover, :focus, :lang(), + (adjacent sibling selector), [attr], [attr="val"], [attr~="val"], [attr|= "bar"], .foo (class selector), #foo (id selector)











Drew McLellan

@drewm

Just discovered that my new car has a web browser. And apps.



5:17 AM - 25 Mar 2018

<https://twitter.com/drewm/status/977882252943200257>

Good user experiences
meet the user where
they are, not where we
hope they'll be.

Thank you!

noti.st/ericwbailey

ericwbailey.design

[@ericwbailey](https://twitter.com/ericwbailey)

References

Reboot, Resets, and Reasoning

CSS-Tricks

<https://css-tricks.com/reboot-resets-reasoning/>

Link Contrast Checker

WebAIM

<https://webaim.org/resources/linkcontrastchecker/>

Accessible Links Re:visited

Filament Group, Inc.

<https://www.filamentgroup.com/lab/a11y-links.html>

How to Disable Links

CSS-Tricks

<https://css-tricks.com/how-to-disable-links/>

Privacy and the :visited selector

MDN Web Docs

https://developer.mozilla.org/en-US/docs/Web/CSS/Privacy_and_the_visited_selector

Assistive Technologies – The Switch

Axess Lab

<https://axesslab.com/switches/>

Supporting users who change colours on GOV.UK

GOV.UK

<https://accessibility.blog.gov.uk/2018/08/01/supporting-users-who-change-colours-on-gov-uk/>

§9.5. The Focus Container Pseudo-class: ':focus-within'

W3C Editor's Draft - Selectors Level 4

<https://drafts.csswg.org/selectors-4/#focus-within-pseudo>

:focus-within – CSS: Cascading Style Sheets

MDN Web Docs

<https://developer.mozilla.org/en-US/docs/Web/CSS/:focus-within>

CSS :focus-within

scottohara.me

<https://www.scottohara.me/blog/2017/05/14/focus-within.html>

§9.4. The Focus-Indicated Pseudo-class: ‘:focus-visible’

W3C Editor’s Draft - Selectors Level 4

<https://drafts.csswg.org/selectors-4/#the-focus-visible-pseudo>

:focus-visible – CSS: Cascading Style Sheets

MDN Web Docs

<https://developer.mozilla.org/en-US/docs/Web/CSS/:focus-visible>

Screen Reader User Survey #7 Results

WebAIM

<https://webaim.org/projects/screenreadersurvey7/>

The most popular smartphones in 2018

Device Atlas

<https://deviceatlas.com/blog/most-popular-smartphones#india>

Thoughts on screen reader detection

Tink

<https://tink.uk/thoughts-on-screen-reader-detection/>

Why screen reader detection on the web is a bad thing

Marco's Accessibility Blog

<https://www.marcozehe.de/2014/02/27/why-screen-reader-detection-on-the-web-is-a-bad-thing/>

Survey finds 85% of underserved students have access to only one digital device

Education Dive

<https://www.educationdive.com/news/survey-finds-85-of-underserved-students-have-access-to-only-one-digital-device/531919/>

The Web is Made of Edge Cases – Taylor Hunt

CodePen

<https://codepen.io/tigt/post/the-web-is-made-of-edge-cases>