

A black and white line drawing of a diverse group of people of various ages and abilities. In the foreground, a woman with a cane stands on the left, a young boy stands next to her, and an elderly woman sits on a chair. Behind them, a man in a suit and glasses stands, a man with a beard and glasses stands, a woman with glasses and a polka-dot shirt stands, a woman with a headband and a baby in a carrier stands, and a man in a tuxedo stands. The group is diverse in age, gender, and physical ability.

a11y and UX

Junaid Masoodi





*Accessibility enables people with disabilities to perceive, understand, navigate, interact with, and contribute to the web**

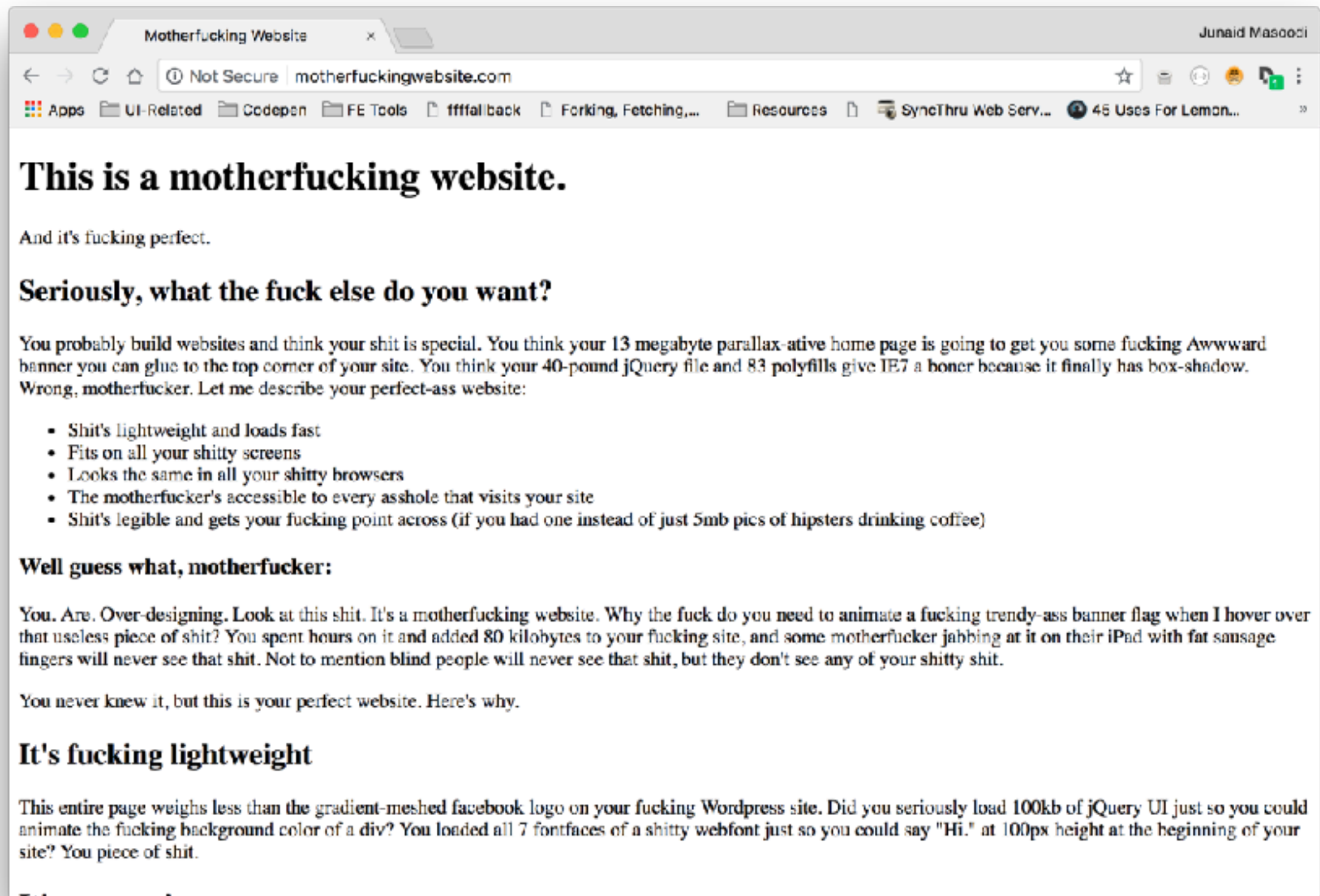
Digital accessibility refers to the practice of building digital content and applications that can be used by a wide range of people, including individuals who have visual, motor, auditory, speech, or cognitive disabilities.

* because we are talking about web accessibility only

myth

gossip





```
<button onClick="openModal(e)">  
  Open Modal  
</button>
```

achieved....

- **Focusable** via the keyboard or screen reader
- Clickable by **Mouse, Enter Key** and **space bar**
- Accessible **name and state** provided to assistive tech
- An **interaction** is expected when clicked

codepen.io

26 4 0

Search

Elements

Styles Computed Node Layers

HTML

1 <button

onClick="

l(e)">

2 open Modal

3 </button>

CSS

1

JS

1

open Modal

micro

phone

;

camer

a;

midi;

vr"

allow

fulls

creen

=

"true

"

allow

payme

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"true

"

allow

trans

paren

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"true

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"resu

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id=

"iFra

meKey

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aa852

265-

b09e-

71f5-

fe97-

4e337

5e14b

input:matches([type="button"], User Agent Stylesheet

[type="submit"], [type="reset"]],

input[type="file"]::-webkit-file-upload-button,

button {

align-items: flex-start;

text-align: center;

cursor: default;

color: buttontext;

padding-top: 2px;

padding-right: 6px;

padding-bottom: 3px;

padding-left: 6px;

border-top-width: 2px;

border-right-width: 2px;

border-bottom-width: 2px;

border-left-width: 2px;

border-top-style: outset;

border-right-style: outset;

border-bottom-style: outset;

border-left-style: outset;

border-top-color: buttonface;

border-right-color: buttonface;

border-bottom-color: buttonface;

border-left-color: buttonface;

border-image-source: initial;

border-image-slice: initial;

border-image-width: initial;

border-image-outset: initial;

border-image-repeat: initial;

background-color: buttonface;

box-sizing: border-box;

}

input, textarea, keygen, select, User Agent Stylesheet

button {

margin-top: 0em;

margin-right: 0em;

margin-bottom: 0em;

margin-left: 0em;

font-style: normal;

+ Filter

Classes

Change in markup..

```
<div onClick="openModal(e)">  
  Open Modal  
</div>
```

Costs extra work

```
<div
  tabIndex="0"
  role="button"
  onKeyPress="handleBtnKeyPress(e)"
  onClick="openModal(e)">
  Open Modal
</div>
```

Costs **more** extra work

```
function handleBtnKeyPress(e) {  
  
    // Check to see if space or enter were pressed  
    if ( e.keyCode === 32 || e.keyCode === 13) {  
  
        // Open modal dialog  
        openModal(e);  
    }  
  
}
```

Costs **more and more** extra work

```
[role="button"] {  
  align-items: flex-start;  
  text-align: center;  
  cursor: default;  
  color: buttontext;  
  background-color: buttonface;  
  box-sizing: border-box;  
  padding: 2px 6px 3px;  
  border-width: 2px;  
  border-style: outset;  
  border-color: buttonface;  
  border-image: initial;  
  text-rendering: auto;  
  letter-spacing: normal;  
  word-spacing: normal;  
  text-transform: none;  
  text-indent: 0px;  
  text-shadow: none;  
  display: inline-block;  
  margin: 0em;  
  font: 11px system-ui;  
  -webkit-appearance: button;  
}
```

^well it isn't hard

Web is for everyone, ~~it doesn't have to be hard!~~

How do I get started with a11y



Web Content Accessibility Guidelines (WCAG) 2.1

W3C Recommendation 05 June 2018

This version:

<https://www.w3.org/TR/2018/REC-WCAG21-20180605/>

Latest published version:

<https://www.w3.org/TR/WCAG21/>

Latest editor's draft:

<https://w3c.github.io/wcag/21/guidelines/>

Implementation report:

<https://www.w3.org/WAI/WCAG21/implementation-report/>

Previous version:

<https://www.w3.org/TR/2018/PR-WCAG21-20180424/>

Previous Recommendation:

<https://www.w3.org/TR/2008/REC-WCAG20-20081211/>

Editors:

[Andrew Kirkpatrick](#) (Adobe)

[Joshue O Connor](#) (Invited Expert, InterAccess)

[Alastair Campbell](#) (Nomensa)

[Michael Cooper](#) (W3C)

WCAG 2.0 Editors (until December 2008):

Ben Caldwell (Trace R&D Center, University of Wisconsin-Madison)

Loretta Guarino Reid (Google, Inc.)

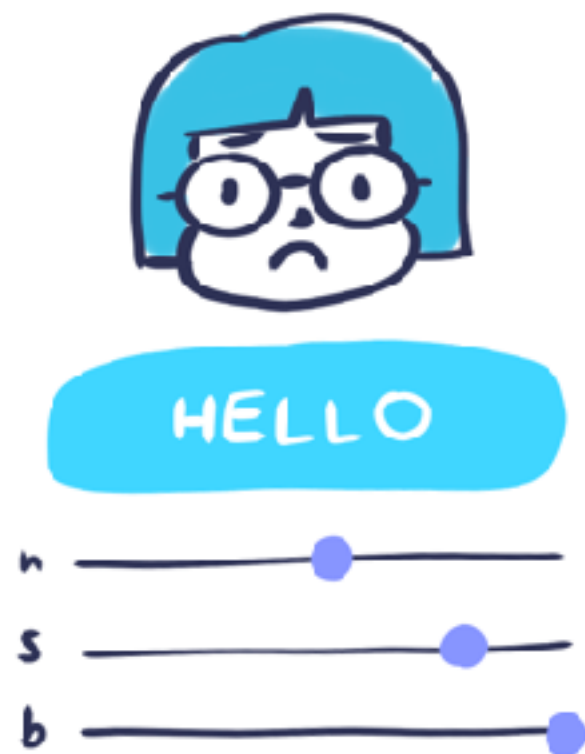


User experience (UX) design is the process of creating products that provide meaningful and relevant experiences to users.

$$a_{11}y + UX = ?$$

Why designing for accessibility?

- Better experience irrespective of context or situation
- It is important
- Have bigger out reach
- SEO Friendly
- Faster than ordinary (normal in informal) websites
- Best practises



Add enough colour contrast 🖍



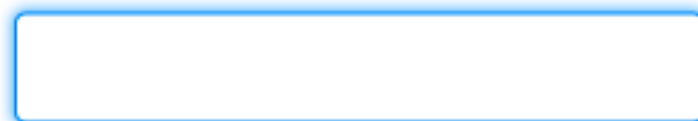
Don't use colour alone to make critical information understandable 🚫



HOLA BONJOUR MERHABA

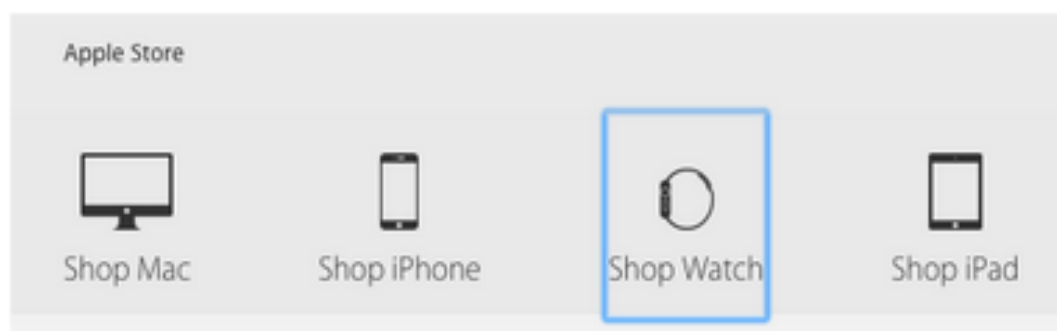


Design usable focus states



Accessibility - W3C - World Wide Web Consortium

www.w3.org/standards/.../accessibility ▾ World Wide Web Consortium ▾
The mission of the Web Accessibility Initiative (WAI) is to lead the Web to its full potential to be accessible, enabling people with disabilities to participate equally ...
[Introduction to Web Accessibility](#) - Web Content Accessibility ...



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Default visual focus states for Chrome and Firefox



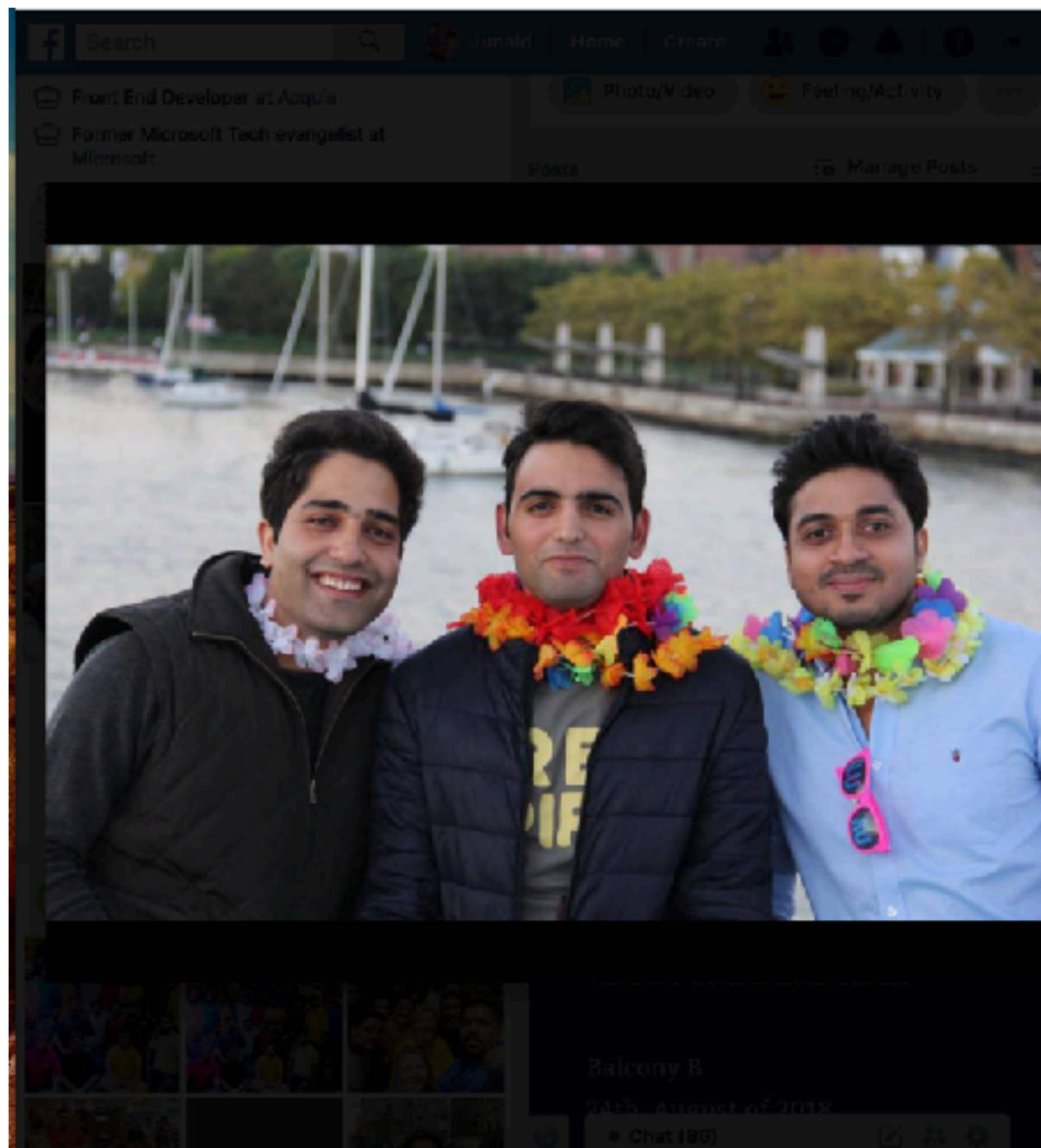
Use labels or instructions with form fields and inputs

sacrificing usability in favour of simplicity



Write useful alternative text for your images and other non-text content

- Within the `<alt>` attribute of the image element.
- Within context or surroundings of the image itself.



Elements Console Performance Sources »

```
<div class="fbPhotoSnowliftContainer snowliftPayloadRoot
uiContextualLayerParent" data-ft="{"tn":"F"}">
  <div class="clearfix fbPhotoSnowliftPopup" style="width: 1020px;
height: 520px;">
    <div class="stageWrapper lfloat _che" style="width: 660px;
line-height: 520px;">
      <div class="stage" data-ft="{"tn":"E"}">
        <div class="fbPhotosPhotoTagBoxes tagContainer" id=
"fbPhotoSnowliftTagBoxes">...</div>
        <div class="fbPhotoTagApproval hidden_elem" id=
"fbPhotoSnowliftTagApproval"></div>
        <div class="_2-sx" style="width: 660px; height: 439px;">
          ...
          
        </div>
      </div>
      <div class="videoStage" data-ft="{"tn":"F"}"></div>
    <div class="_4g9v">...</div>
    <div class="stageActions" id="snowliftStageActions" data-ft=
"{"tn":"+&u0040"}">...</div>
    <div class="_4d47" id=
"fbPhotoSnowliftLocationSuggestionOverlay"></div>
    <a class="snowliftPager prev" href="#" title="Previous"
data-ft="{"tn":"+>"}" role="button">...</a>
    <a class="snowliftPager next highlightPager" href="#" title=
"Next" data-ft="{"tn":"+<"}" role="button">...</a>
  </div>
</div>
```

... body #photos_snowlift div div div div div div div img.spotlight

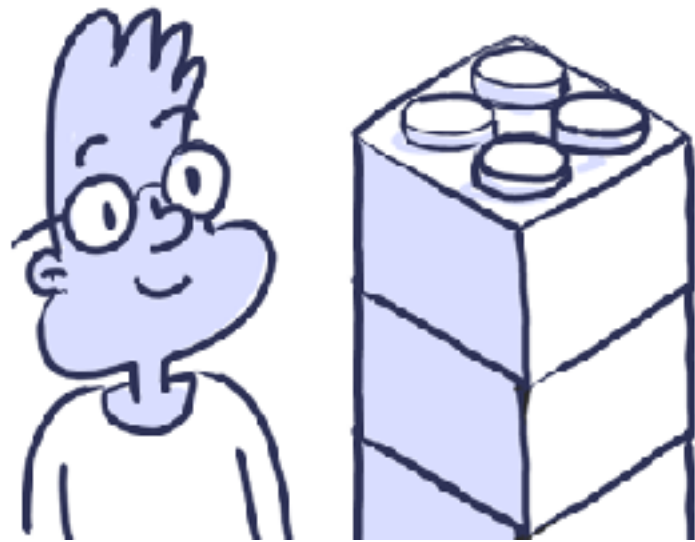
Styles Event Listeners DOM Breakpoints Properties Accessibility

:hov .cls +

element.styl
e {

margin -

border -



Use correct markup on your content



Support keyboard navigation

Avoid component identity crises.

Q: When is a menu no longer a menu?

A: When it's a non-modal dialog.

Design responsibly

Thank you

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