

Hiding content

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hiddedevries.nl





A group of nine diverse business professionals, including men and women of various ethnicities, are walking towards the camera in a brightly lit hallway. They are dressed in professional business attire, such as suits, blouses, and trousers. The image is semi-transparent, allowing the text to be clearly visible over the group. The text "People centered development" is written in a large, bold, white sans-serif font, centered horizontally and vertically across the image.

People centered development

**This is actually an
accessibility talk**

Physical accessibility

Tactile paving



Elevator



Digital accessibility

Colour



Language

THE OXFORD

ENGLISH

DICTIONARY

THE OXFORD

ENGLISH

DICTIONARY

The background is a dark blue gradient filled with floating binary digits (0s and 1s) in various sizes and colors (white, light blue, and dark blue). A prominent feature is a dense, glowing blue cloud of fine lines and dots on the left side, which tapers into a horizontal beam of light extending towards the right. The word 'Code' is displayed in a white box in the upper right corner.

Code

When you send your
markup to the browser,
it generates two trees

(amongst others)

DOM tree

DOM tree

```
Elements Console Sources Network >>
[endif]-->
<!--[if IE 8]><html class="no-js lt-ie10 lt-ie9" lang="nl"><![endif]-->
<!--[if (gt IE 8) & (!IEMobile)]><html class="no-js lt-ie10 ie9-desktop"
lang="nl"><![endif]-->
<!--[if (gt IE 8) & (IEMobile)]><html class="no-js lt-ie10 ie9-mobile"
lang="nl"><![endif]-->
<!--[if !IE]><!-->
<html class="js applicationcache audio canvas hashchange history postmessage
no-touchevents video cssanimations backgroundsize bgsizcover borderradius
boxsizing csscalc csscolumns csscolumns-width csscolumns-span csscolumns-fill
csscolumns-gap csscolumns-rule csscolumns-rulecolor csscolumns-rulestyle
csscolumns-rulewidth csscolumns-breakbefore csscolumns-breakafter csscolumns-
breakinside flexbox flexboxlegacy fontface cssgradients rgba csstransforms
csstransitions localStorage" lang="nl">
  ▶ #shadow-root (open)
    <!--<![endif]-->
    ▶ <head>...</head>
    ▼ <body class="homepage cookiewall" data-comscore="{\"name\":
    \"track.click.homepage\"}\" style="position: relative; margin-top: 474px;">
      ▶ <div id="npo_cc_notification" style="top: -474px;">...</div>
      ▶ <header id="nav" class="nav-wrapper">...</header>
      ▼ <main id="content" role="main">
        ::before
        ... ▼ <section id="topstories" class="js-topstories js-topstories-
        interactive" data-comscore="{\"nos_origin\":\"topstory\"}"> == $0
          <h2 class="vh">Topstories</h2>
          ▶ <div class="topstories_wrapper topstories-twostories">...</div>
          </section>
          ▶ <div id="main">...</div>
          ▶ <section id="most_viewed_videos">...</section>
          ▶ <section id="editors_picks">...</section>
          ▶ <section id="nieuws_in_beeld">...</section>
          ▶ <section id="websites">...</section>
          ▶ <section id="categories">...</section>
          ::after
        </main>
html body main#content section#topstories.js-topstories.js-topstories-interactive
```


Accessibility tree

Accessibility tree

...
news js-dashboard-trigger" data-js-dashboard-target="nieuws"
data-comscore="{\"nos_menu\":\"nieuws\"}">... == \$0
▶...
▶<div id=\"menu-nieuws\" class=\"subnav nav__item_hover\">...</div>

▶<li id=\"nav-sport\" class=\"nav__item nav__item--hover js-menu-item\">...
▶<li id=\"nav-uitzendingen\" class=\"nav__item nav__item--hover js-menu-item\">...

... #menu #nav-nieuws a.nav__category.js-event-click.js-news.js-dashboard-trigger

Styles Event Listeners DOM Breakpoints Properties Accessibility Accessibility Properties

▼ Accessibility Tree

▼ WebArea "NOS.nl - Nieuws, Sport en Evenementen | Nederlandse Omroep Stichting"

▼ Unknown

▼ banner

▼ navigation

▼ list

▼ listitem "Nieuws Overzicht□Binnenland Buitenland Regio Politiek Economie Konin

▼ link "Nieuws"

text "Nieuws"

▼ ARIA Attributes

No ARIA attributes

▼ Computed Properties

▼ Name: "Nieuws"

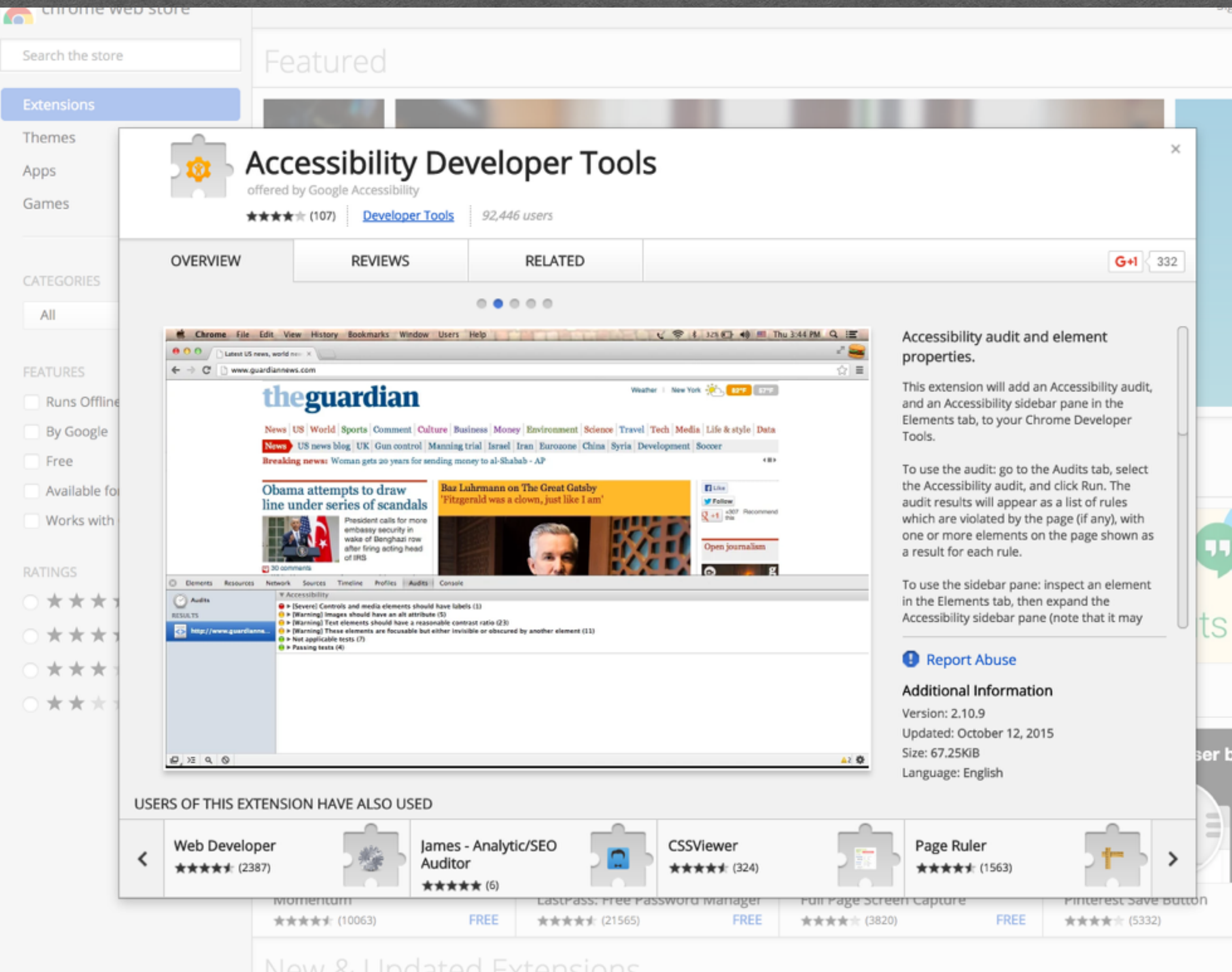
aria-labelledby: Not specified


aria-label: Not specified

Contents: "Nieuws "

title: Not specified

Role: **link**



THEPACIELLOGROUP

HOME SERVICES ABOUT CONTACT **RESOURCES**

[Resources](#) > Accessibility Viewer (aViewer)

Accessibility Viewer

The Accessibility Viewer (aViewer) is an inspection tool for Windows that displays the accessibility API information (MSAA, IAccessible2, UI Automation, ARIA, HTML DOM) exposed by web browsers to the operating system, and thus to any assistive technology (AT) such as screenreaders.


Acknowledgements

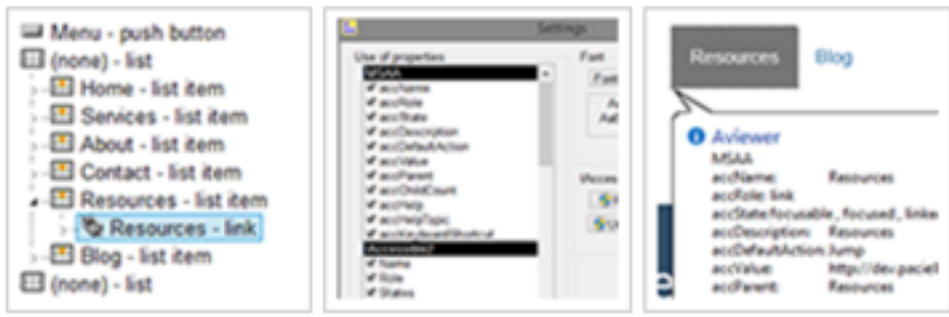
The Accessibility Viewer (aViewer) is developed by Jun and Steve Faulkner (The Paciello Group, Europe), with support from Hans Hillen, Gez Lemon (The Paciello Group, Europe), and Google.

Support and development

For questions concerning the Accessibility Viewer (aViewer), or to report bugs, suggest improvements, contribute to the code, see the [Accessibility Viewer \(aViewer\) repository on GitHub](#). Alternatively, you can email us at info@pacielllogroup.com.

Licensed under the Apache License, Version 2.0 (the "License"). Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

 **Download from GitHub**
Accessibility Viewer (aViewer) (latest release)



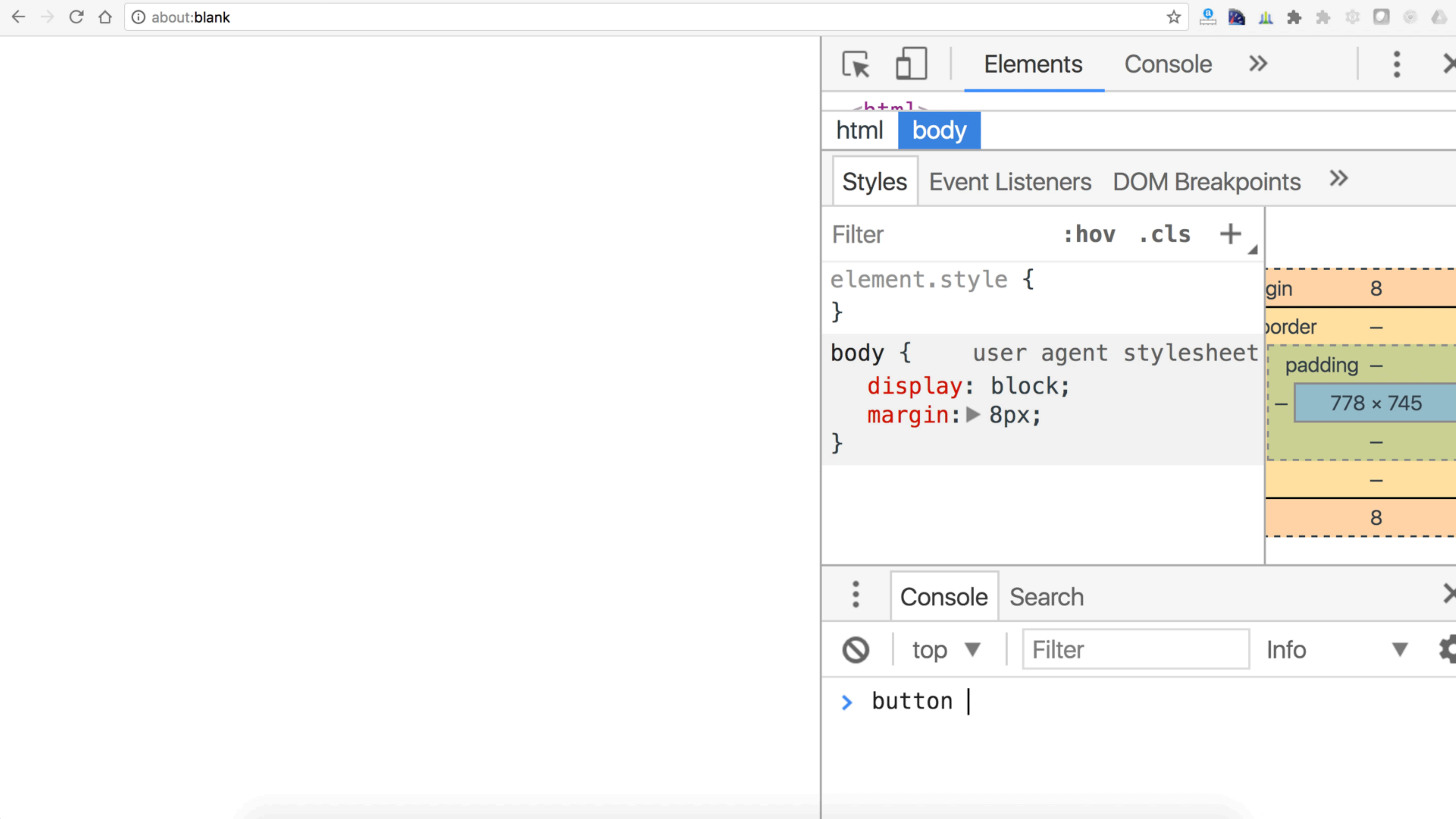
<https://chrome.google.com/webstore/detail/accessibility-developer-t/fpkknkljclfencbdbgkenhalefipecmb>

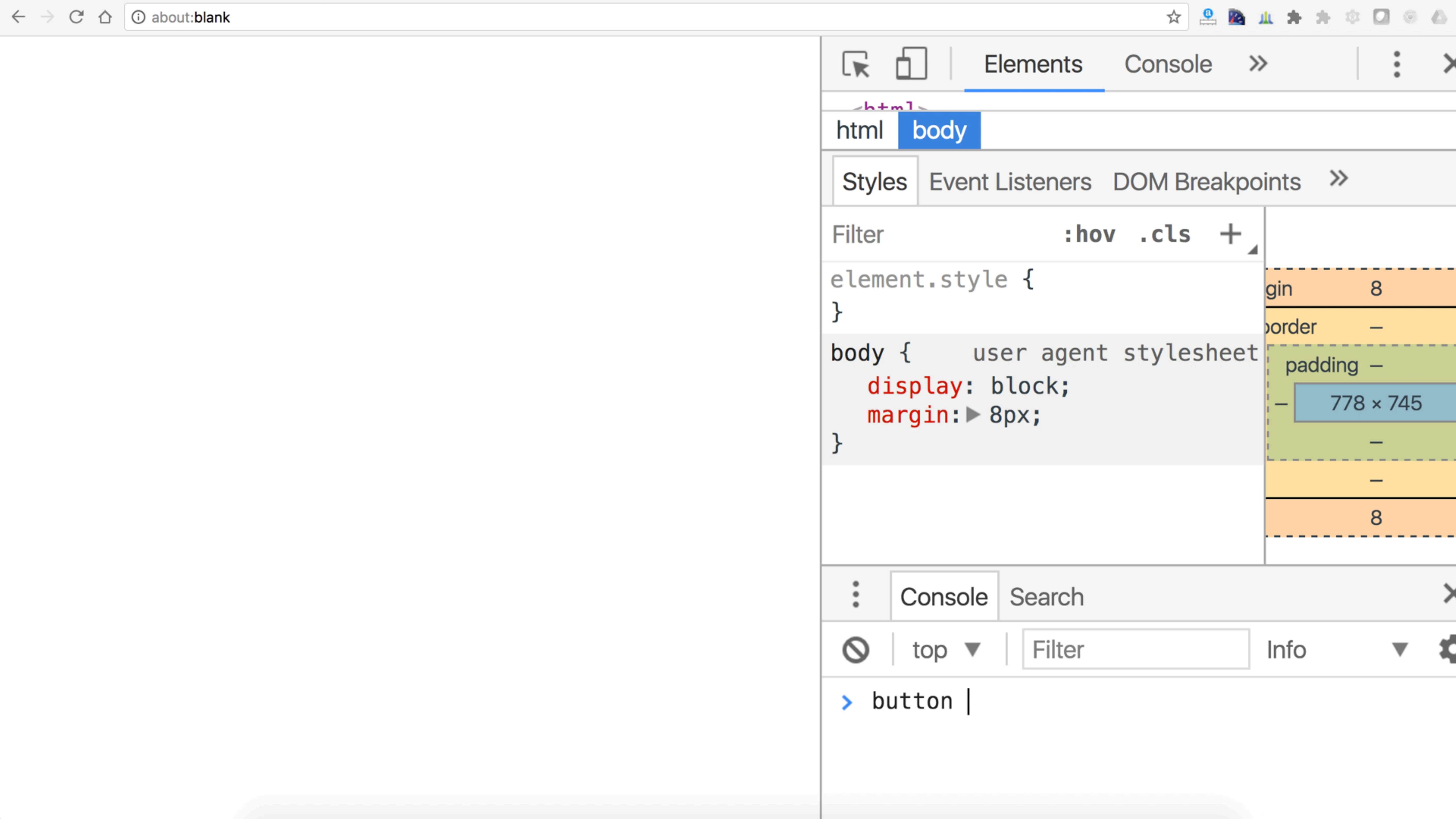
<https://www.pacielllogroup.com/resources/aviewer/>

1 `<p>The Blue Book was dictated between 1933 and 1934, and contains certain themes unaddressed in Wittgenstein's later works, including deliberations on thinking as operating with signs. An early conception of what would later become known as language games is present in the text, which represents the first period of Wittgenstein's thought after 1932, a method of linguistic analysis which would later become ordinary language philosophy.</p>`

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role = link





role = alert

role = link

role = button

role = checkbox

role = tab

role = radio

role = dialog

role = progressbar

role = slider

role = tooltip

Properties

Labels

States

**Hiding
content**

Hiding content

1. Visually hiding
2. Hiding from AT
3. Really hiding
4. Inertifying

Visually hiding

You want text to be
present for machines,
but don't want to see it
on the screen.

Contextual cues
to supplement
visual cues

*[visually hiding] can resolve some of
the tension between the **demands of**
accessibility and the **demands of**
visual design*

<http://webaim.org/techniques/css/invisiblecontent/>

EXAMPLE

Navigation heading

EXAMPLE

Navigation heading

About us

Products

Projects

Contact

EXAMPLE

Navigation heading

About us

Products

Projects

Contact

```
1  <nav>
2      <h2 class="visually-hidden">Navigation</h2>
3      <ul>
4          <li>About us</li>
5          <li>Products</li>
6          <li>Projects</li>
7          <li>Contact</li>
8      </ul>
9  </nav>
```


EXAMPLE

Icon button

EXAMPLE

Icon button

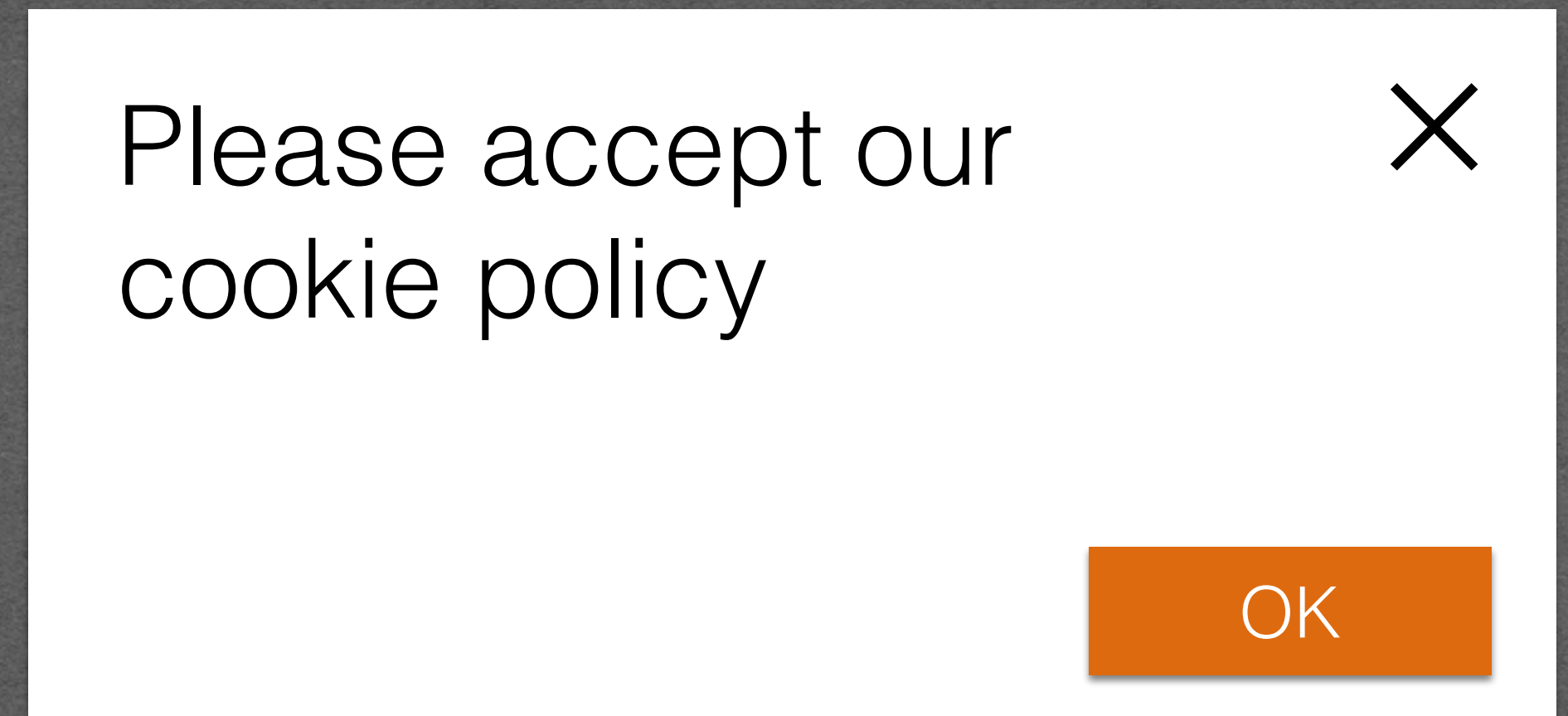
Please accept our
cookie policy



OK

EXAMPLE

Icon button



1

```
<button type="button">Close</button>
```

EXAMPLE

Required indicator

EXAMPLE

Required indicator

First name *

EXAMPLE

Required indicator

First name *

```
1 <span class="required">required</span>
```


EXAMPLE


Hide label and rely on
placeholder instead

EXAMPLE

Hide label and rely on
placeholder instead

EXAMPLE

Hide label and rely on
placeholder instead



```
1 <label class="visually-hidden" for="
   name">Name</label>
2 <input id="name" type="text" />
```


EXAMPLE

~~Hide label and rely on
placeholder inst~~

AVOID

```
1 <label class="visually-hidden" for="
  name">Name</label>
2 <input id="name" type="text" />
```



```
text-indent: -9999em;
```


width: 0;

and/or

height: 0;

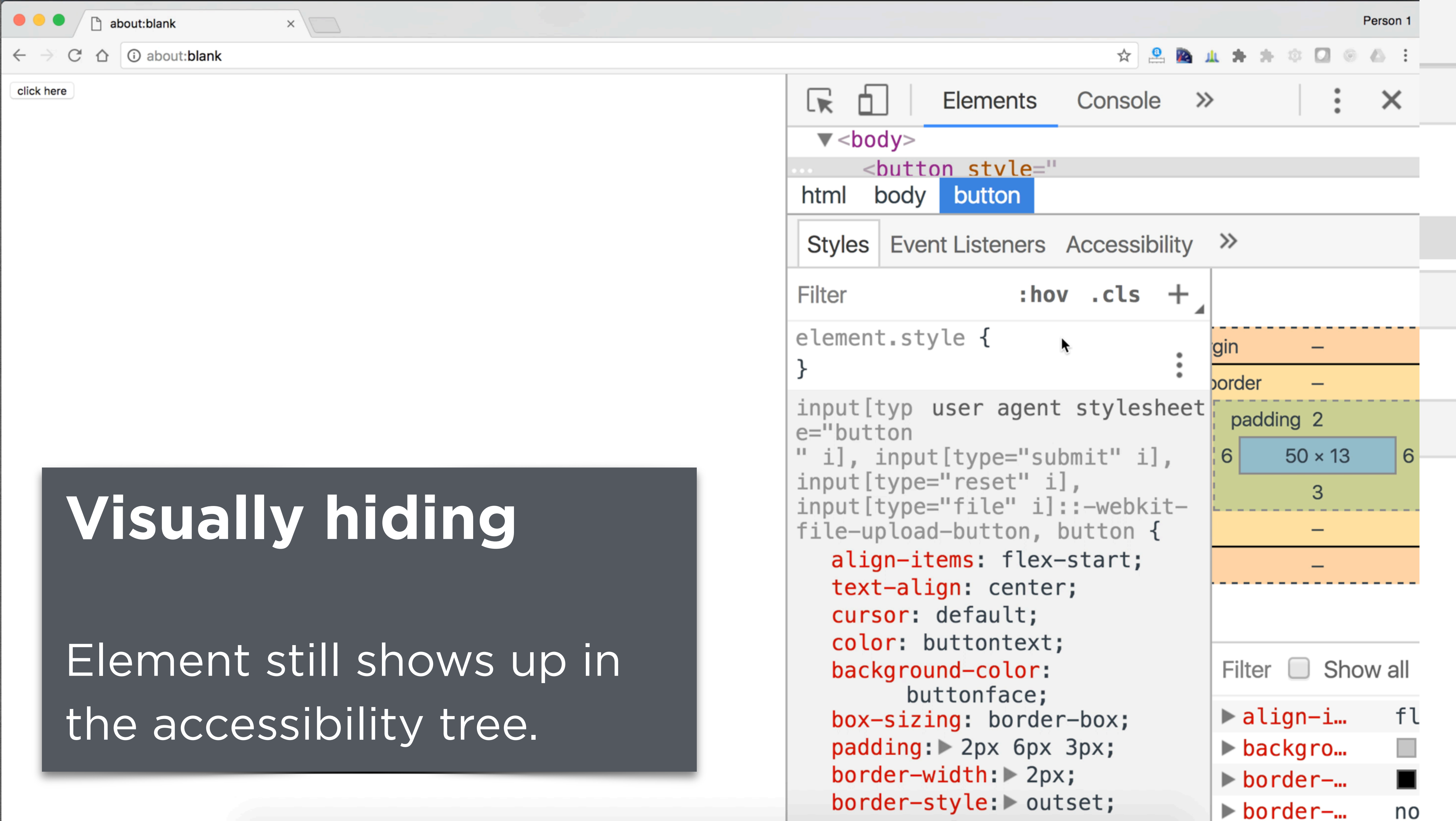
```
position: absolute;  
clip: rect(1px, 1px, 1px, 1px);
```



```
position: absolute;  
left: -9999em;
```

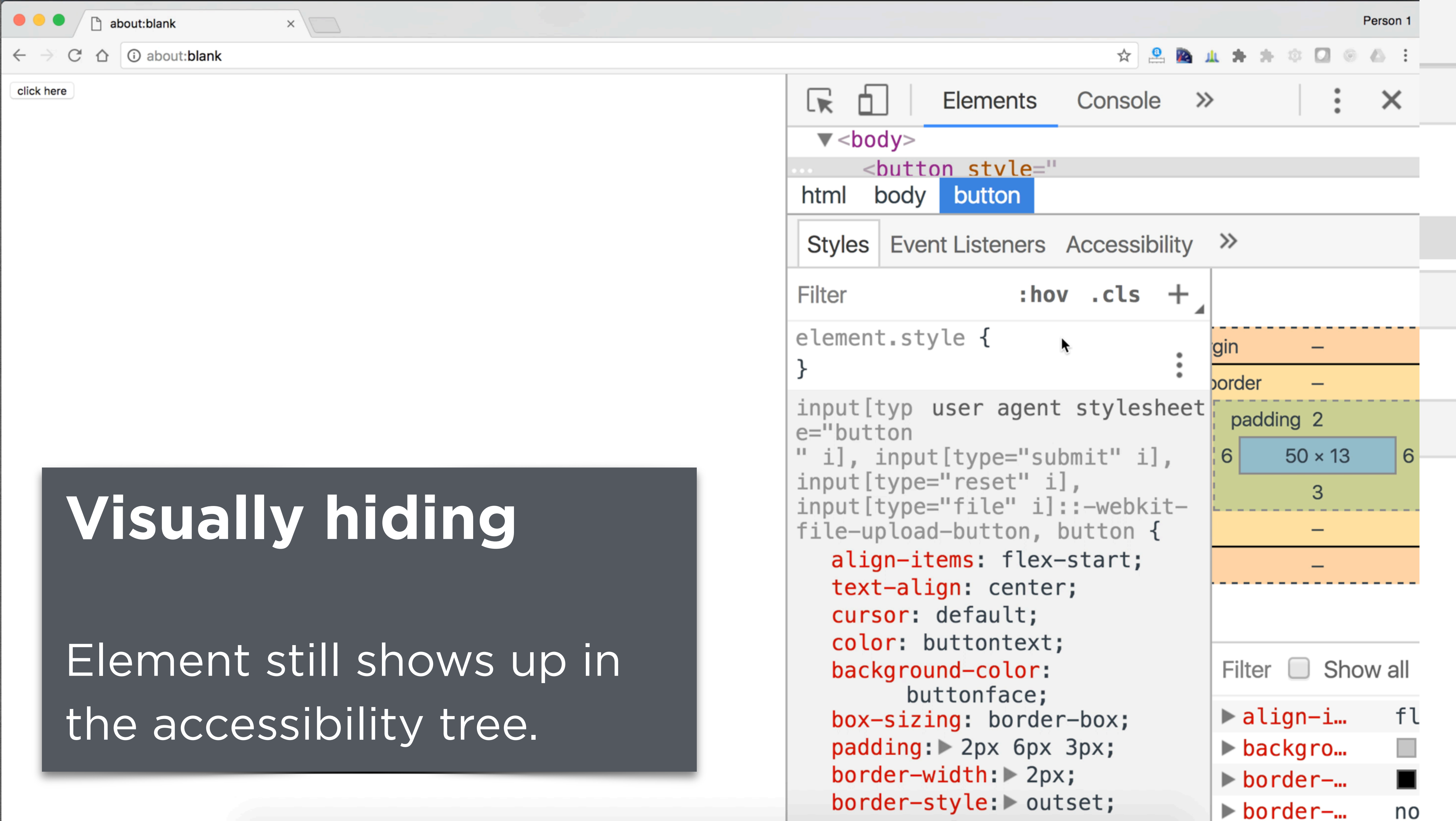

Visually hiding

Element still shows up in the accessibility tree.



Visually hiding

Element still shows up in the accessibility tree.



Hiding only from
screenreaders

You want text to be
invisible only for users of
Assistive Technology

EXAMPLE

Repeating text
that hinders AT users

EXAMPLE

Repeating text that hinders AT users

We opened a new office

With the great opening party that took place yesterday, it is now official: our new office in Utrecht is open!

[Read more](#)

We'll be at the trade show

The trade show is taking place next week and we will be presenting interesting new stuff. Visit our booth!

[Read more](#)

Our company won a prize

We are very proud to announce that we were nominated for an amazing prize and that we have actually won it, too.

[Read more](#)

EXAMPLE

Repeating text
that hinders AT users

Read more

Read more

Read more

aria-hidden


```
<div aria-hidden></div>
```


If you find you have to
use `aria-hidden`, this may
indicate there's something
wrong with the page

EXAMPLE

Repeating text that hinders AT users

We opened a new office

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[Read more](#)

We'll be at the trade show

The trade show is taking place next week and we will be presenting interesting new stuff. Visit our booth!

[Read more](#)

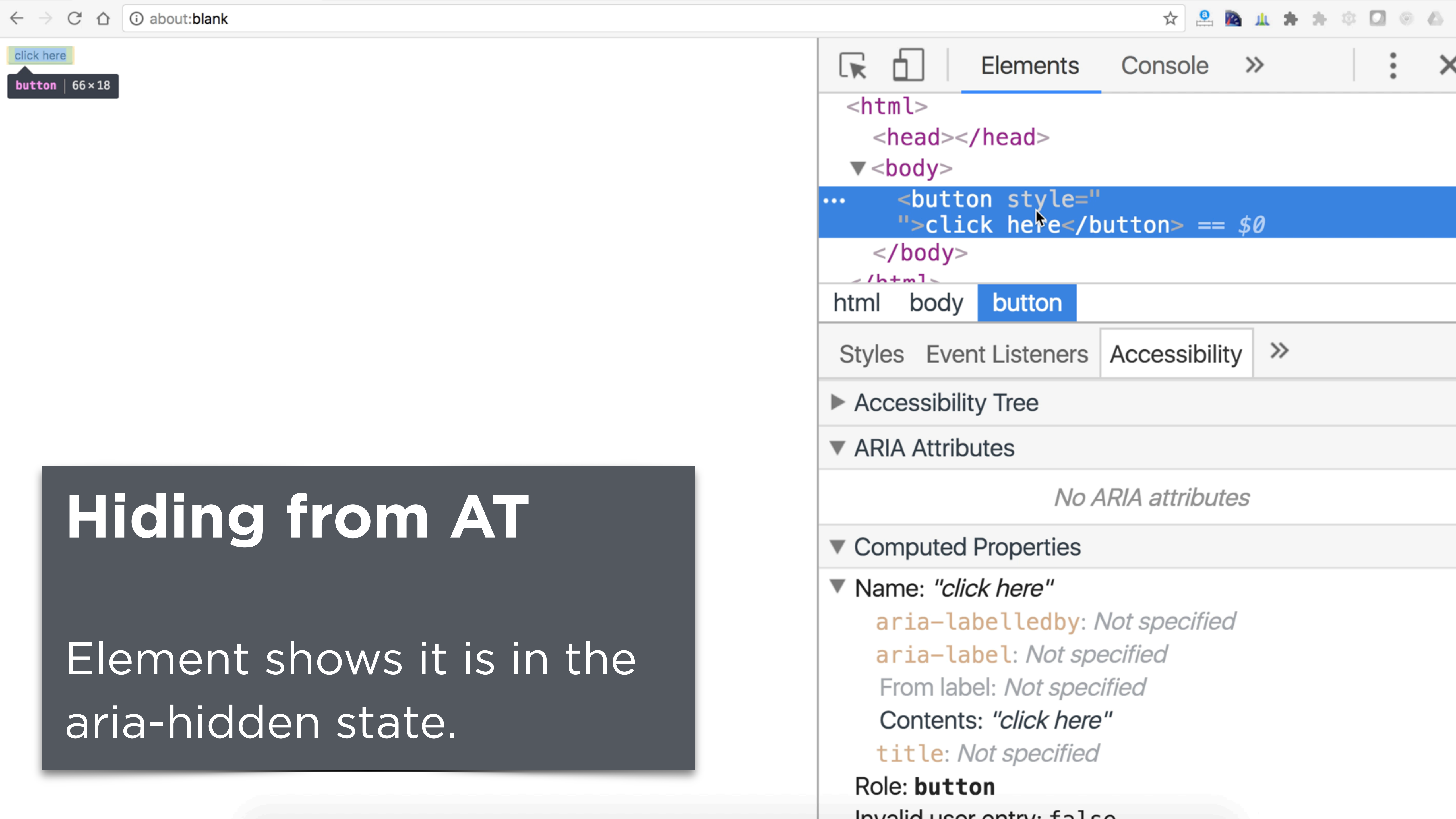
Our company won a prize

We are very proud to announce that we were nominated for an amazing prize and that we have actually won it, too.

[Read more](#)

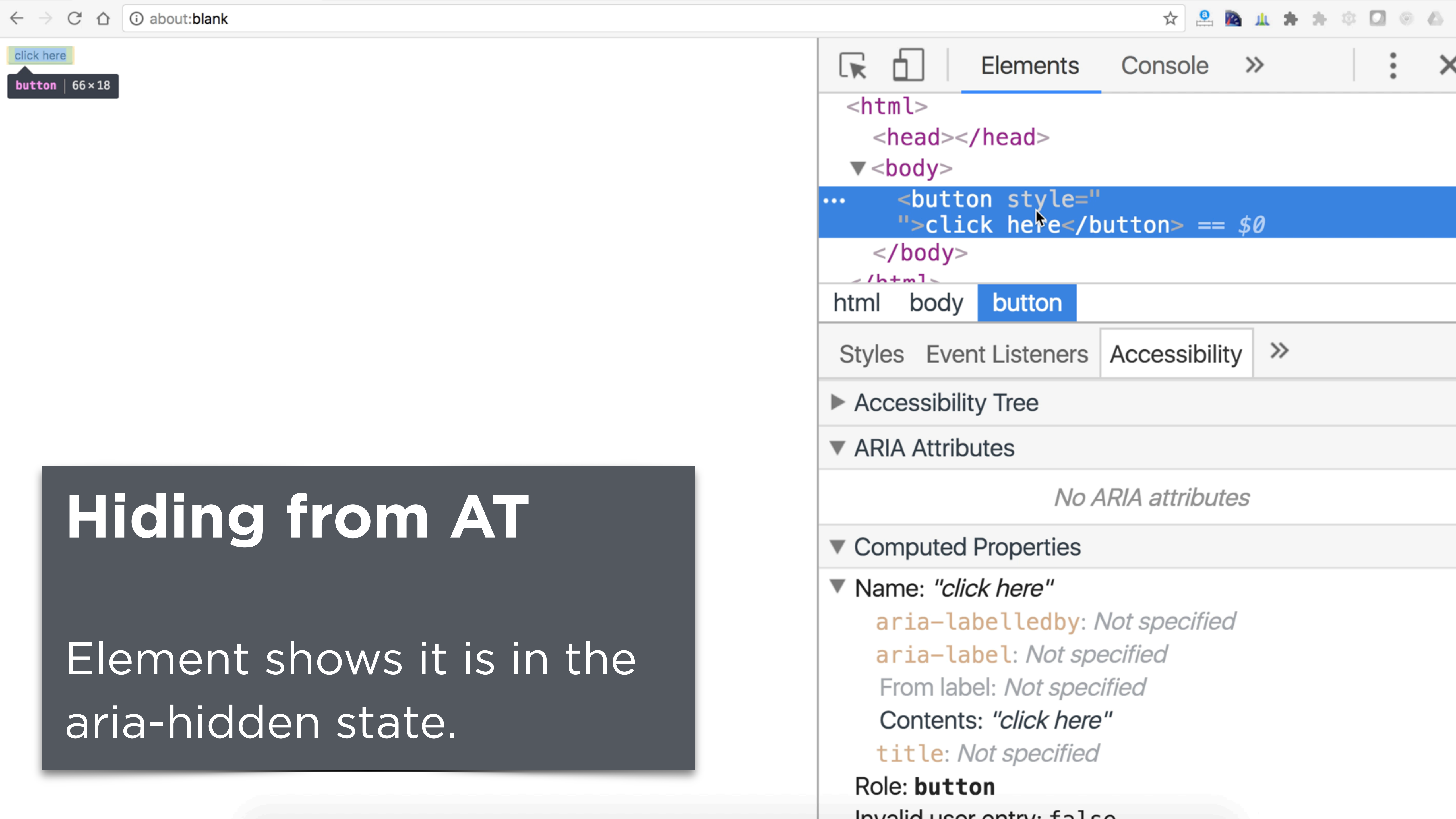
Hiding from AT

Element shows it is in the
aria-hidden state.



Hiding from AT

Element shows it is in the
aria-hidden state.



Really hiding
(on purpose)

You don't want anyone
to know about the
content and make it
invisible to all

EXAMPLE

A modal panel that
is not currently shown

EXAMPLE

A modal panel that is not currently shown

Perhaps the most heavily-repeated pattern in JavaScript-based page manipulation is showing and hiding content. Tabbed interfaces. Collapsible elements. Accordion widgets. It crops up nearly everywhere. In and of itself, this pattern is not bad. People realize how important the hiding mechanism is to your content and screen reader accessibility. JavaScript-based interfaces don't fully control the user's experience when you begin working with animation libraries like jQuery or Scriptaculous, the hiding mechanism is typically dictated by the library, leaving you little control over the accessibility of your

Are you sure?

NO

YES

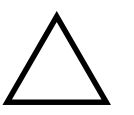
EXAMPLE

A tab control that
is closed

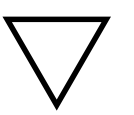
EXAMPLE

A tab control that
is closed

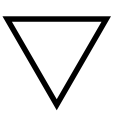
1. Personal details



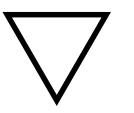
2. Your application



3. Agreement



4. Summary




```
visibility: hidden;
```



```
display: none;
```


hidden


```
<div hidden></div>
```


hidden attribute - LS

Netherlands 97.85%

Global 97.19%

The `hidden` attribute may be applied to any element, and effectively hides elements similar to `display: none` in CSS.

Current aligned

Usage relative

Date relative

Show all

IE	Edge *	Firefox	Chrome	Safari	Opera	iOS Safari *	Opera Mini *	Android Browser *	Chrome for Android	Samsung Internet
		45	49			9.2				
		52	57	9.1	43	9.3				
	14	53	58	10	44	10.2				4
11	15	54	59	10.1	45	10.3	all	56	59	5
	16	55	60	11	46	11				
		56	61	TP	47					
		57	62							

Notes

Known issues (0)

Resources (2)

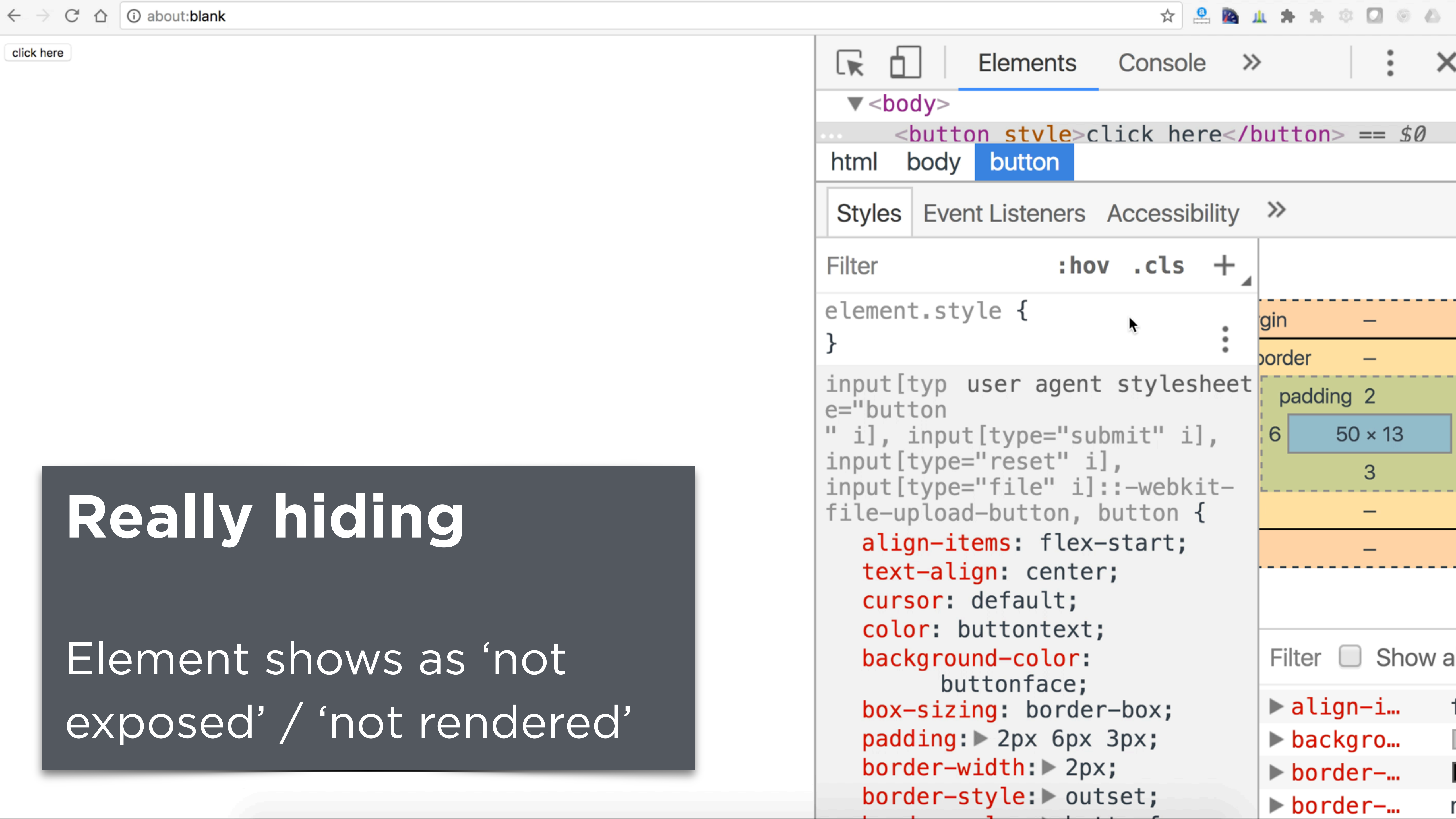
Feedback

The hidden state can be easily overridden with a CSS `display` property set to anything other than `none`.

Not exposed to a11y tree

Not rendered

Invisible to text search

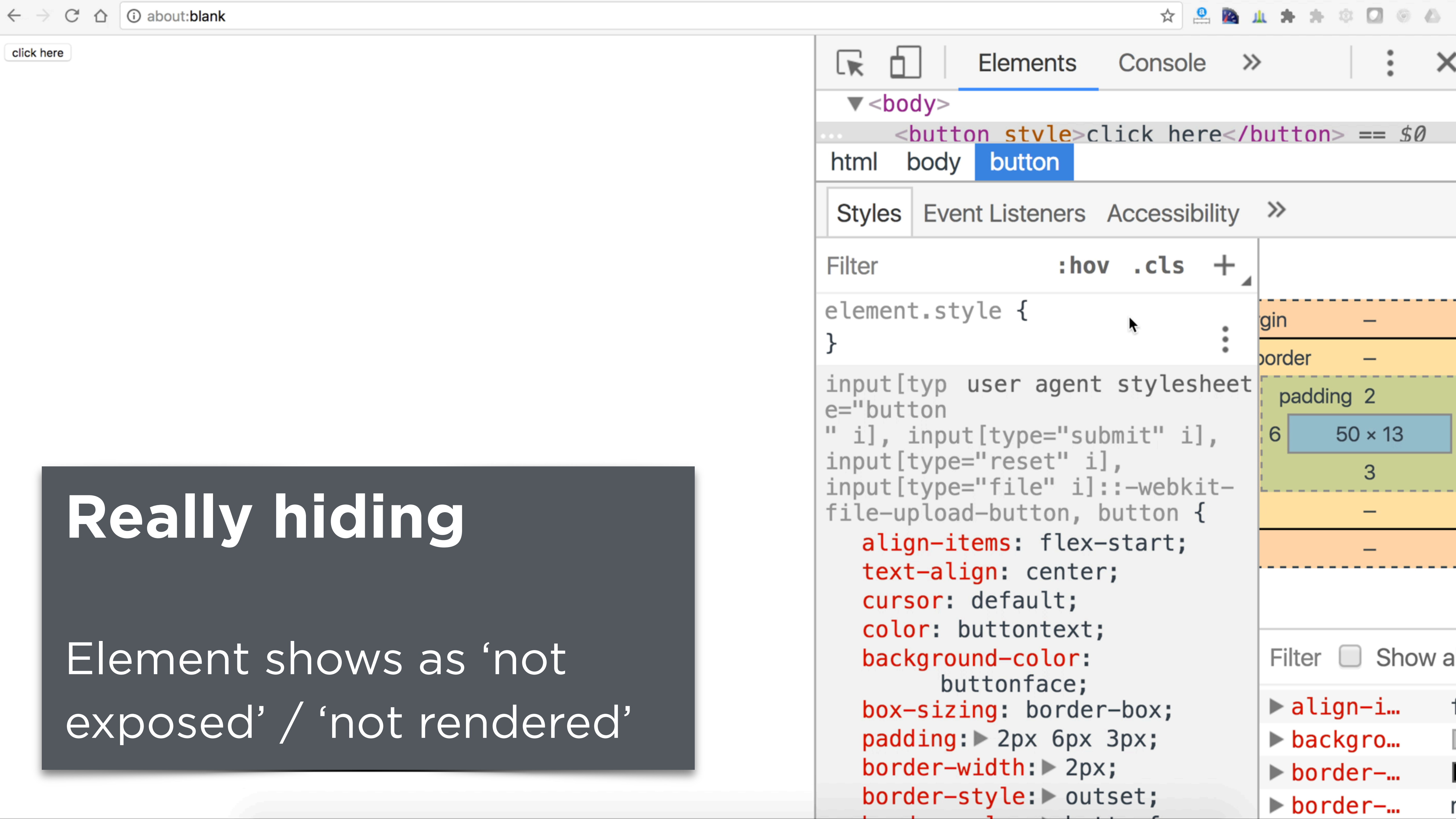


Really hiding

Element shows as 'not exposed' / 'not rendered'

Really hiding

Element shows as 'not exposed' / 'not rendered'



Inert

inert

<https://github.com/WICG/inert>

<https://html.spec.whatwg.org/multipage/interaction.html#inert>

**Makes the element and
its entire subtree inert**

No pointer events.

No focus.

Invisible to text search.

Impossible to select.

EXAMPLE

Rest of the page
while modal is open

(“<dialog> without <dialog>” – Hixie)

EXAMPLE

Rest of the page while modal is open

(“<dialog> without <dialog>” – [Hixie](#))

Perhaps the most heavily-repeated pattern in JavaScript-based page manipulation is showing and hiding content. Tabbed interfaces. Collapsible elements. Accordion widgets. It crops up nearly everywhere. In and of itself, this pattern is not a problem. People realize how poor the default hiding mechanism is, and they hide your content from screen readers. JavaScript-based solutions don't fully control the content when you begin working with animation libraries like jQuery or Scriptaculous, the hiding mechanism is typically dictated by the library, leaving you little control over the accessibility of your

Are you sure?

NO

YES

EXAMPLE

Rest of the page while modal is open

(“<dialog> without <dialog>” – [Hixie](#))

Perhaps the most heavily-repeated pattern in JavaScript-based page manipulation is showing and hiding content. Tabbed interfaces. Collapsible elements. Accordion widgets. It crops up nearly everywhere. In and of itself, this pattern is not a problem. People realize how poor the default hiding mechanism is, and they try to make your content accessible to screen readers. JavaScript-based libraries that allow you to fully control the hiding mechanism when you begin working with animation libraries like jQuery or Scriptaculous, the hiding mechanism is typically dictated by the library, leaving you little control over the accessibility of your

Are you sure?

NO

YES

EXAMPLE

Non current carousel items



Now playing



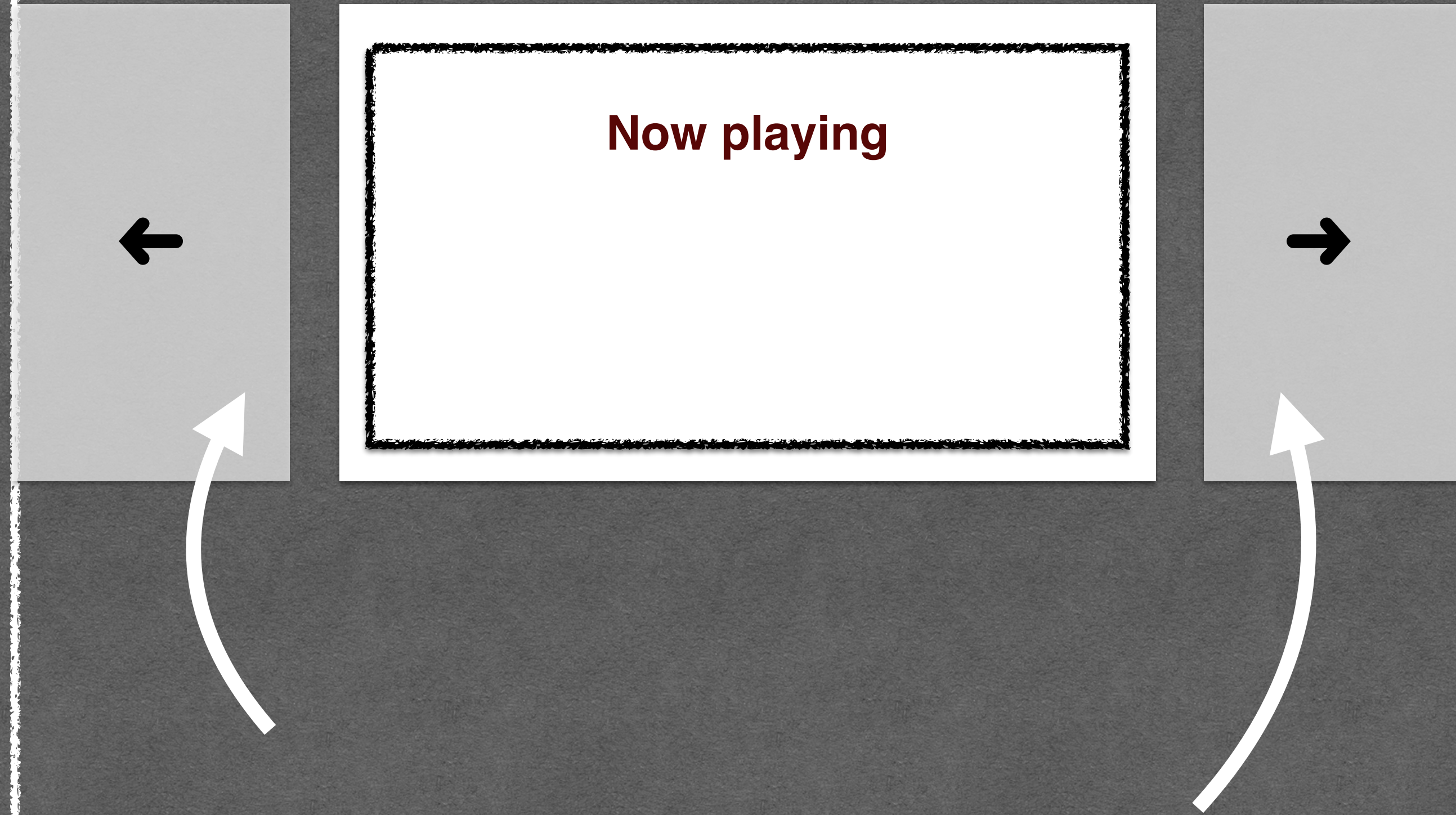
EXAMPLE

Non current
carousel items



EXAMPLE

Non current
carousel items



EXAMPLE

‘Shipping address’
section when ‘Same
as billing address’ is
checked



EXAMPLE

‘Shipping address’
section when ‘Same
as billing address’ is
checked

Billing address

Street *

Postal code *

City *

Shipping address

☒ Same as billing address

Street *

Postal code *

City *

Hiding content

1. Visually hiding
2. Hiding from AT
3. Really hiding
4. Inertifying

Further reading

<http://www.scotthara.me/blog/2017/04/14/inclusively-hidden.html>

Questions?

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