

# Could browsers fix more accessibility problems automatically?

Hidde de Vries, Tech A11y Summit, online, 15 December 2021

Who?

@hdv

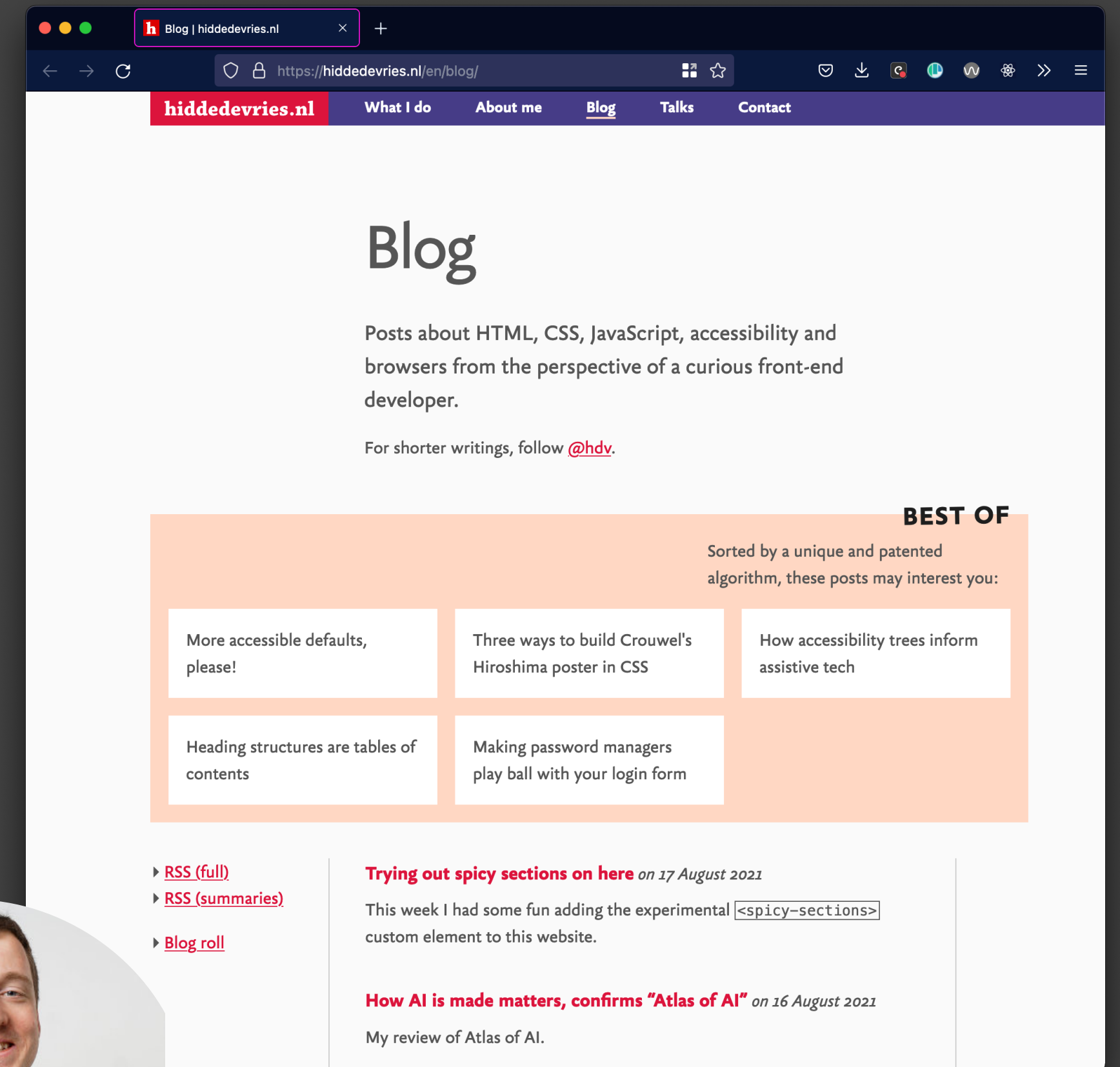
Hi, I'm Hidde.

Freelance accessibility and front-end consultant for organisations like the Dutch Government, Mozilla & W3C.

I write at [hidde.blog](https://hidde.blog).



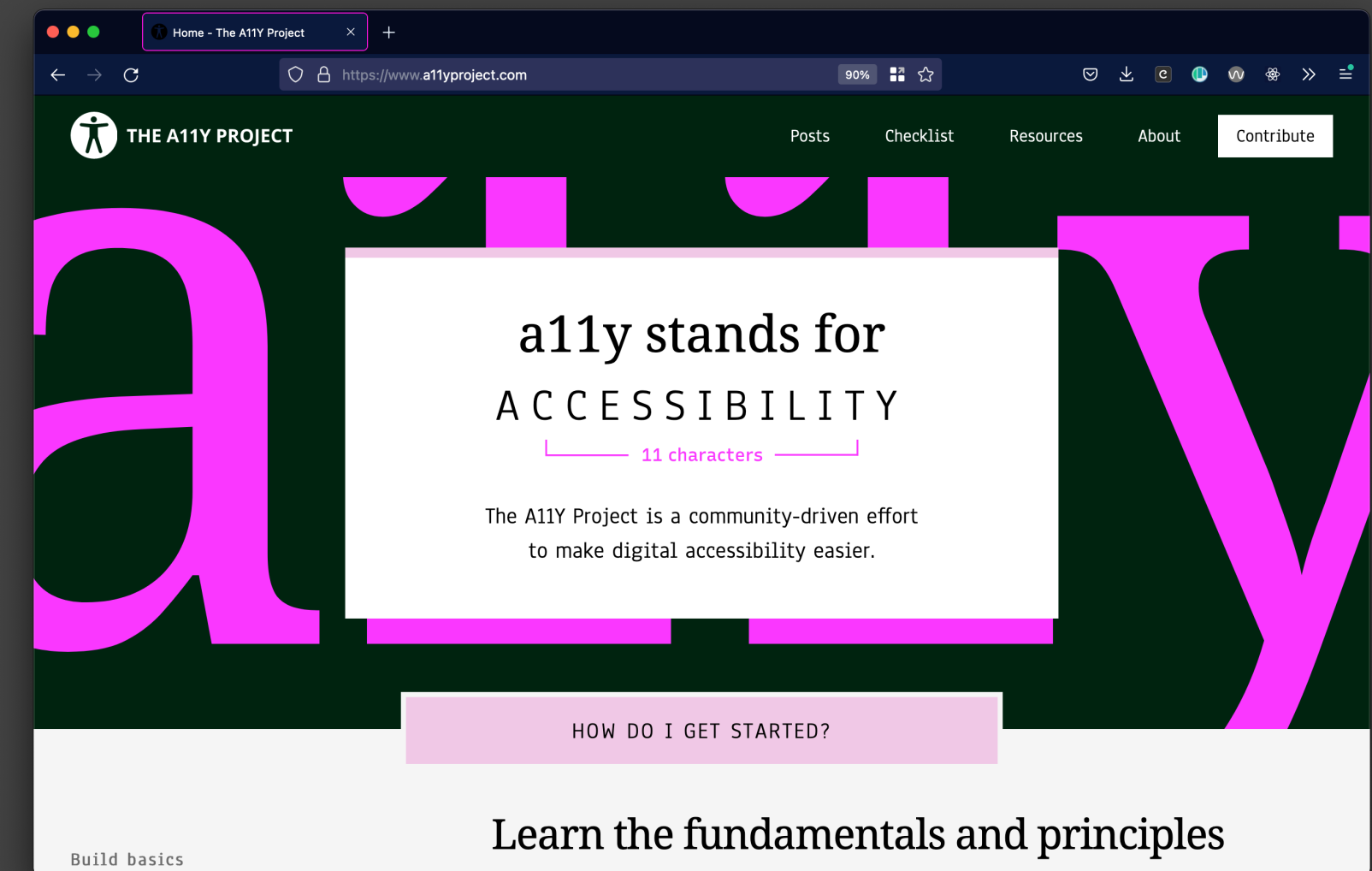
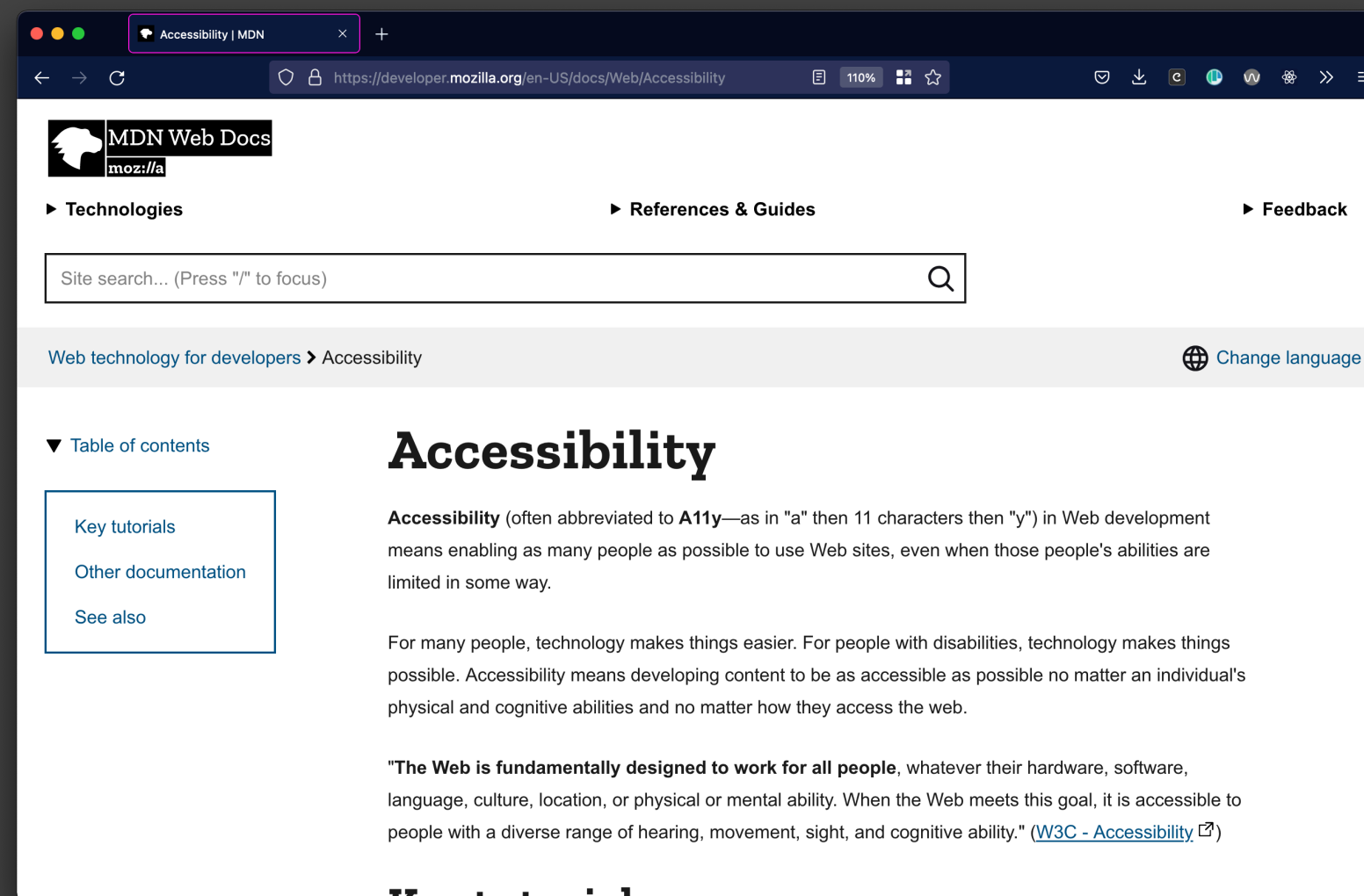
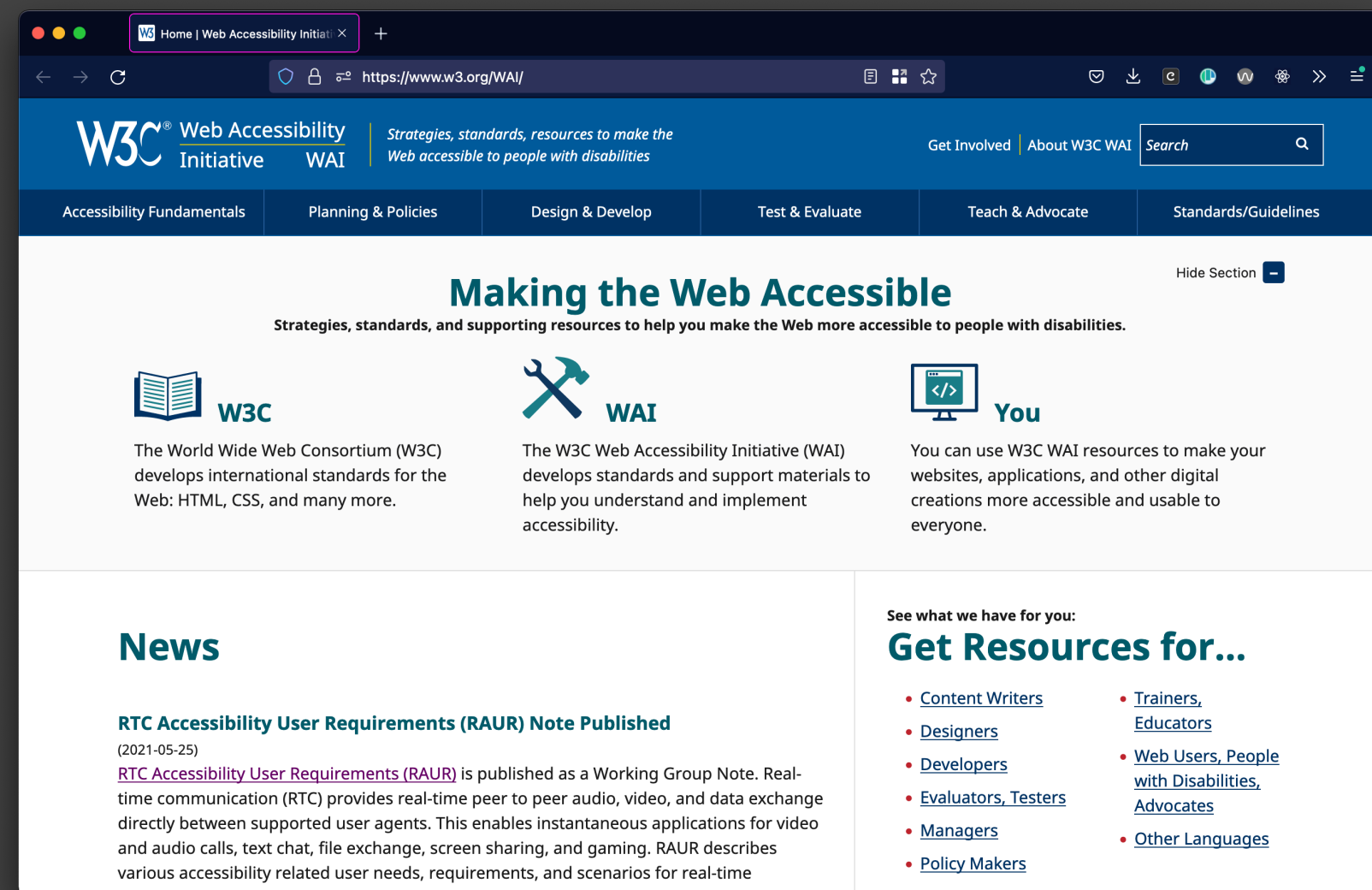
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Currently...

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websites, workshops, conferences

**accessibility  
outreach is  
great, but does  
not reach all**

**we can detect  
problems  
automatically**

Currently...

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# ACT-Rules

<https://act-rules.github.io/pages/about/>

Currently...

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interpretation  
is hard

See also: “A11y Wars” by Glenda  
Sims and Wilco Fiers

A11y Wars: The Accessibility Inte X


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← → ↺

https://www.deque.com/blog/the-web-accessibility-interpretation-problem/

120%

☆





By Glenda Sims

May 17, 2018

Categories

[Accessibility](#)

[Compliance Matters](#)

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# A11y Wars: The Accessibility Interpretation Problem

Without a shared testing perspective, achieving accurate test results for compliance with WCAG 2.0 can be challenging and expensive. A common cause for inconsistent accessibility results between experts is accessibility testers doing their work with different goals in mind. A natural tension exists



Maybe we can...

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**Automatically  
detect  
issues**



**Automatically  
fix  
issues**

Maybe we can...

@hdv

Automatically  
detect

*a small  
subset of* issues



Automatically  
fix

*a small  
subset of* issues

this does not relieve  
websites from their  
responsibility



**organisations  
to get their  
accessibility  
right**

**browsers to  
fix things  
when they  
are able to**

With caveats in mind,  
**could browsers  
fix more  
accessibility  
problems  
automatically?**





**force readability**

**“Web design is  
95% typography”**

— Oliver Reichenstein, iA

**What if browsers let us...**

 **force readability**

@hdv

Leverage agile frameworks to provide a robust synopsis for high level overviews. Iterative approaches to corporate strategy foster collaborative thinking to further the overall value proposition. Organically grow the holistic world view of disruptive innovation via workplace diversity and empowerment.

Capitalize on low hanging fruit to identify a ballpark value added activity to beta test. Override the digital divide with additional clickthroughs from DevOps. Nanotechnology immersion along the information highway will close the loop on focusing solely on the bottom line.

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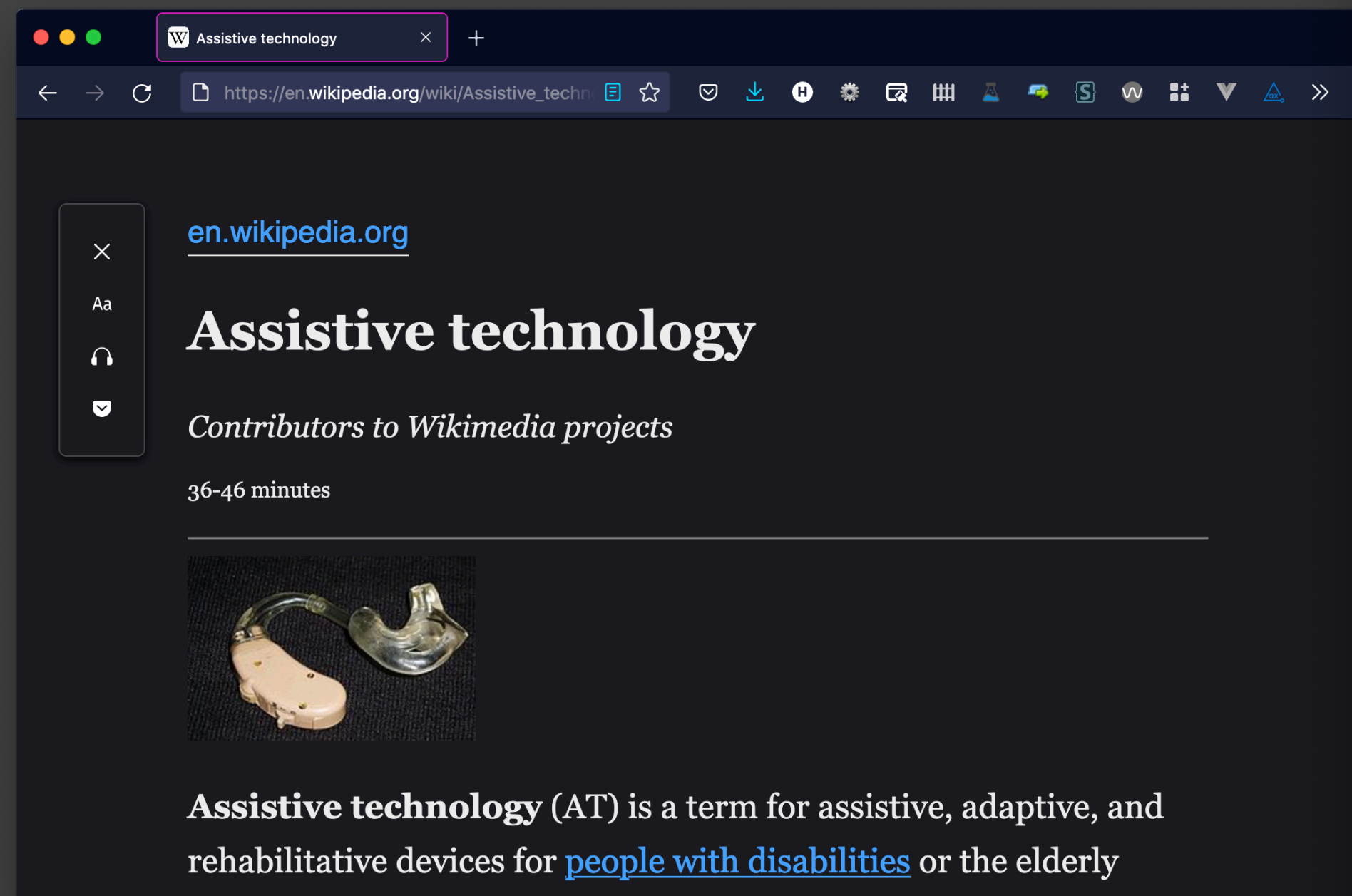
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What if browsers let us...

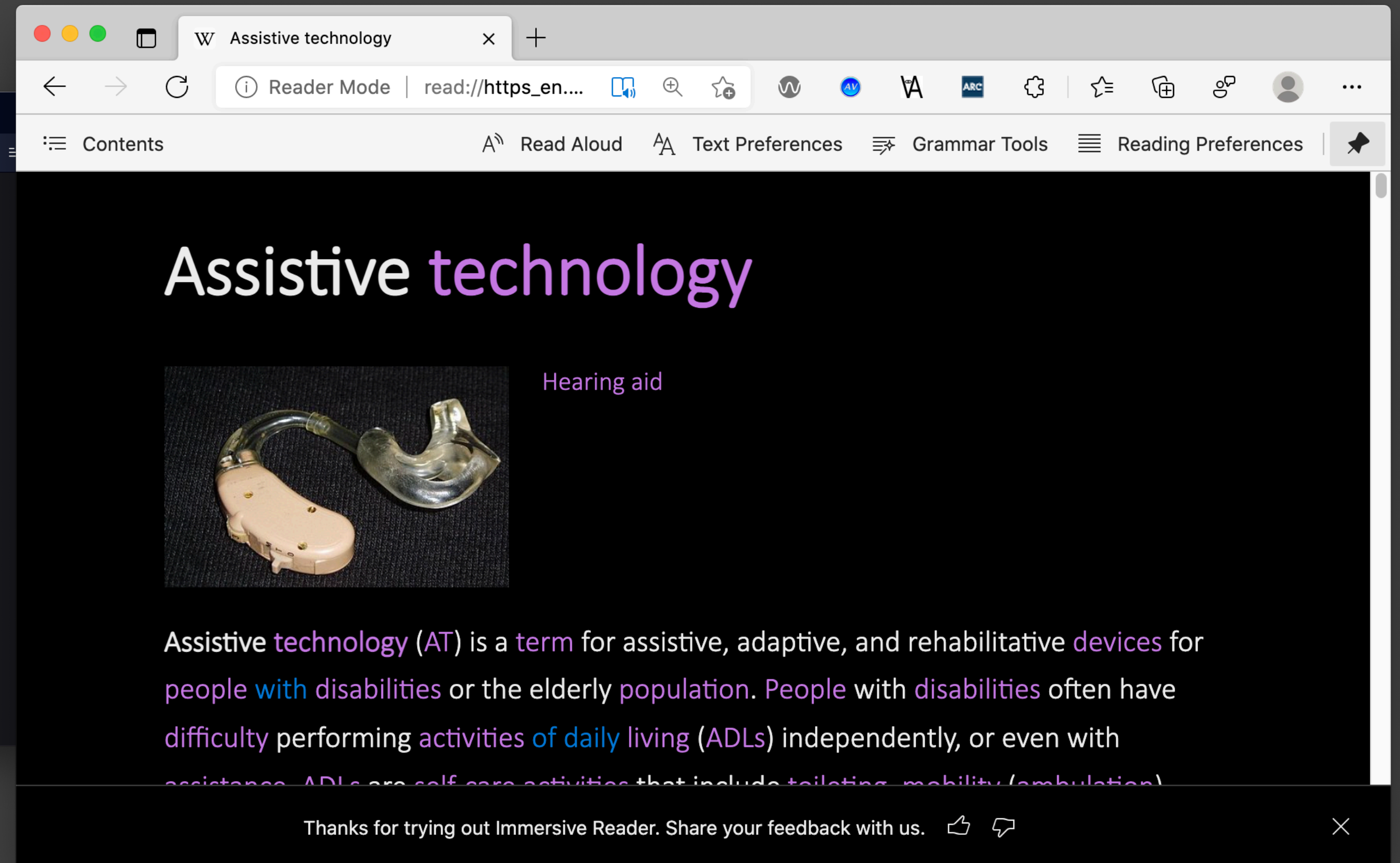


force readability

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Firefox reading mode



read:// in Edge





**enforce contrast**



What if browsers let us...

☐ enforce contrast

@hdv







“Low contrast text, below the WCAG 2 AA thresholds, was found on 86.4% of home pages. This was the most commonly-detected accessibility issue. On average, home pages had 31 distinct instances of low-contrast text.”

– WebAIM Million

86.4%



What if browsers let us...

☐ enforce contrast

@hdv





What if browsers let us...



enforce contrast



<https://booktravel.business>

**Booktravel**

**Visit Kinderdijk**







## Fix Contrast

A browser extension that automatically increases contrast on sites.

Download for  **Firefox**

Also available for these browsers:



Chrome



Edge



Brave



Vivaldi



Opera



coming  
soon

## Fix Contrast

Fix color contrast issues on websites automatically.

☒ Active

Set minimum contrast level

☒ Medium

☐ High

Or choose your own values (advanced)

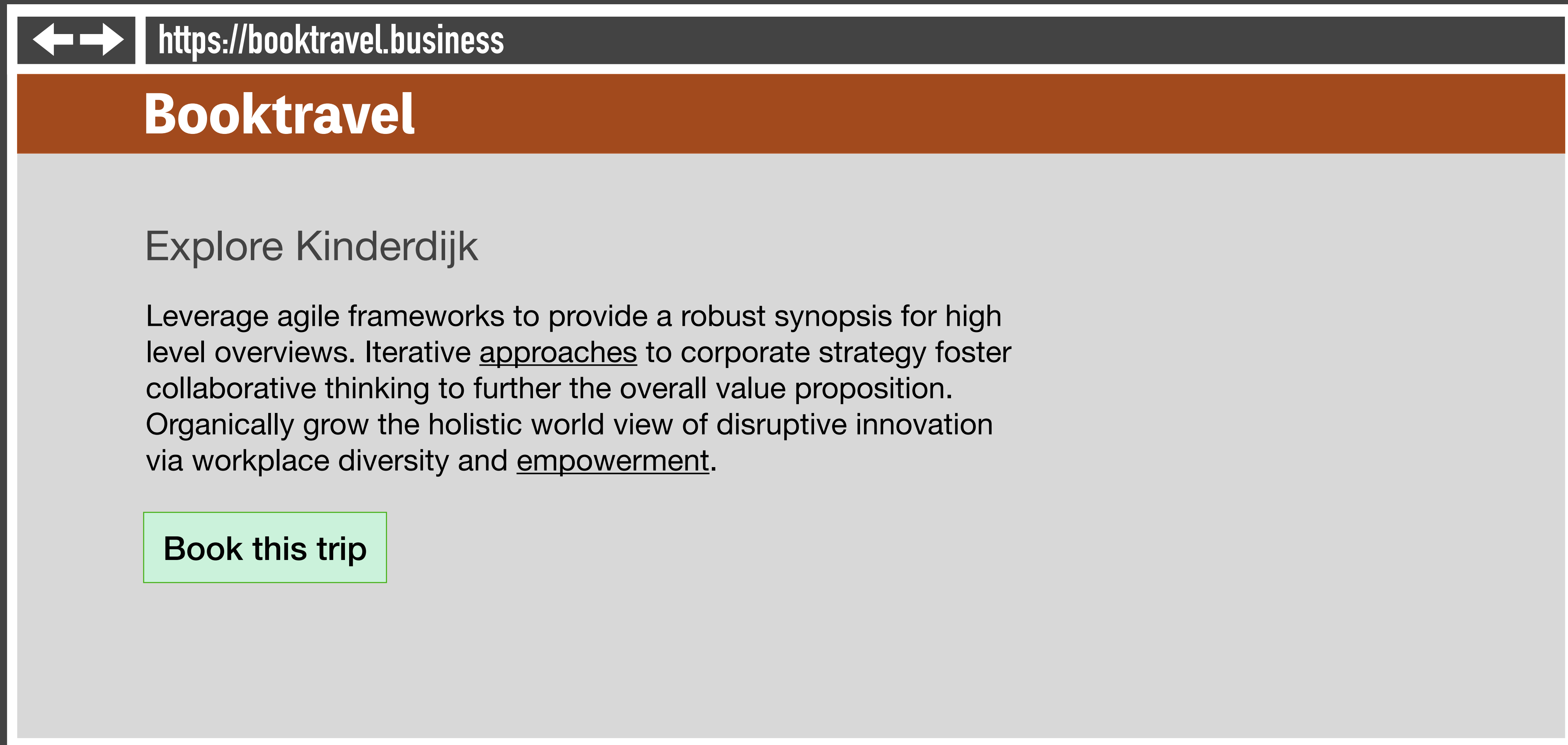
Small text  4.5

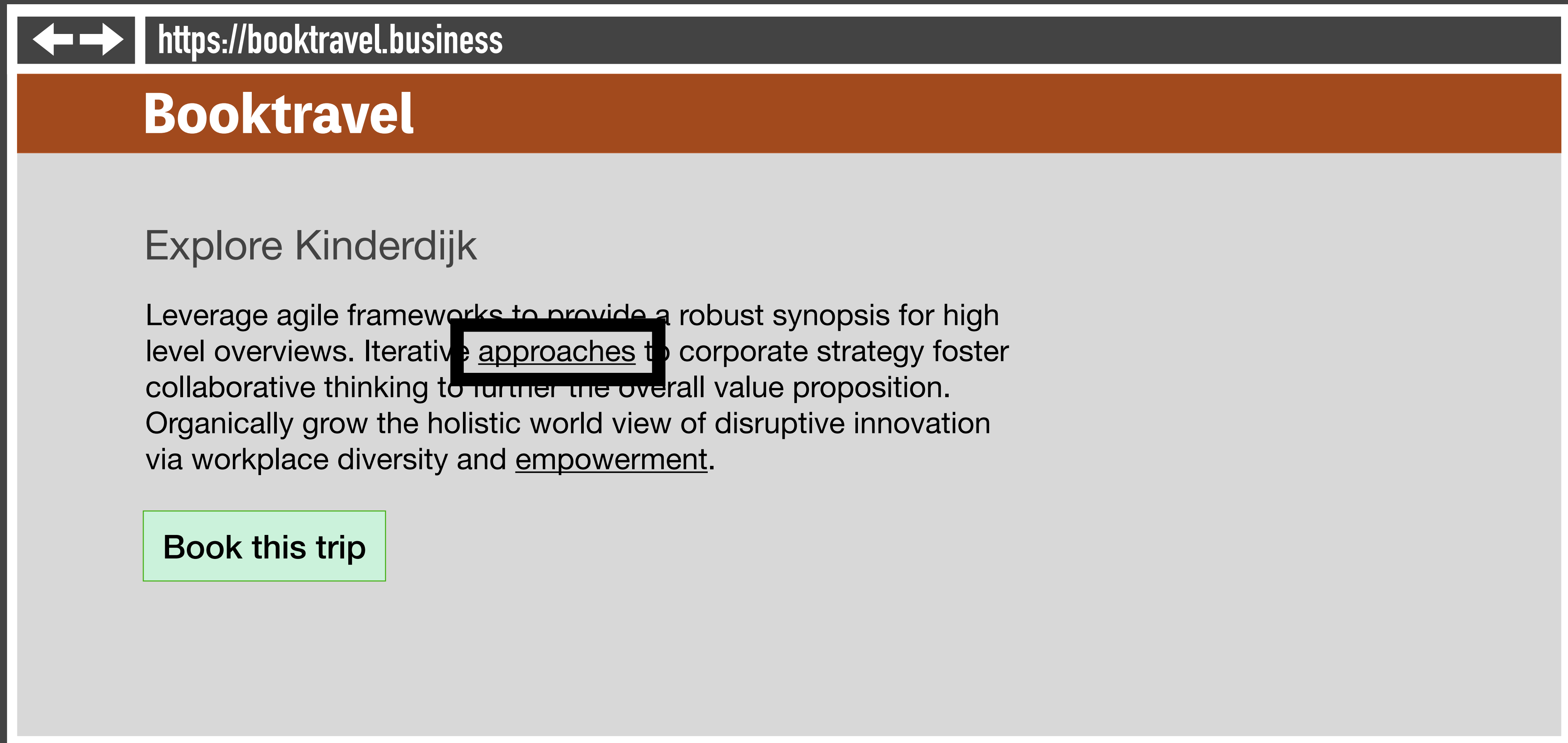
Large text  3

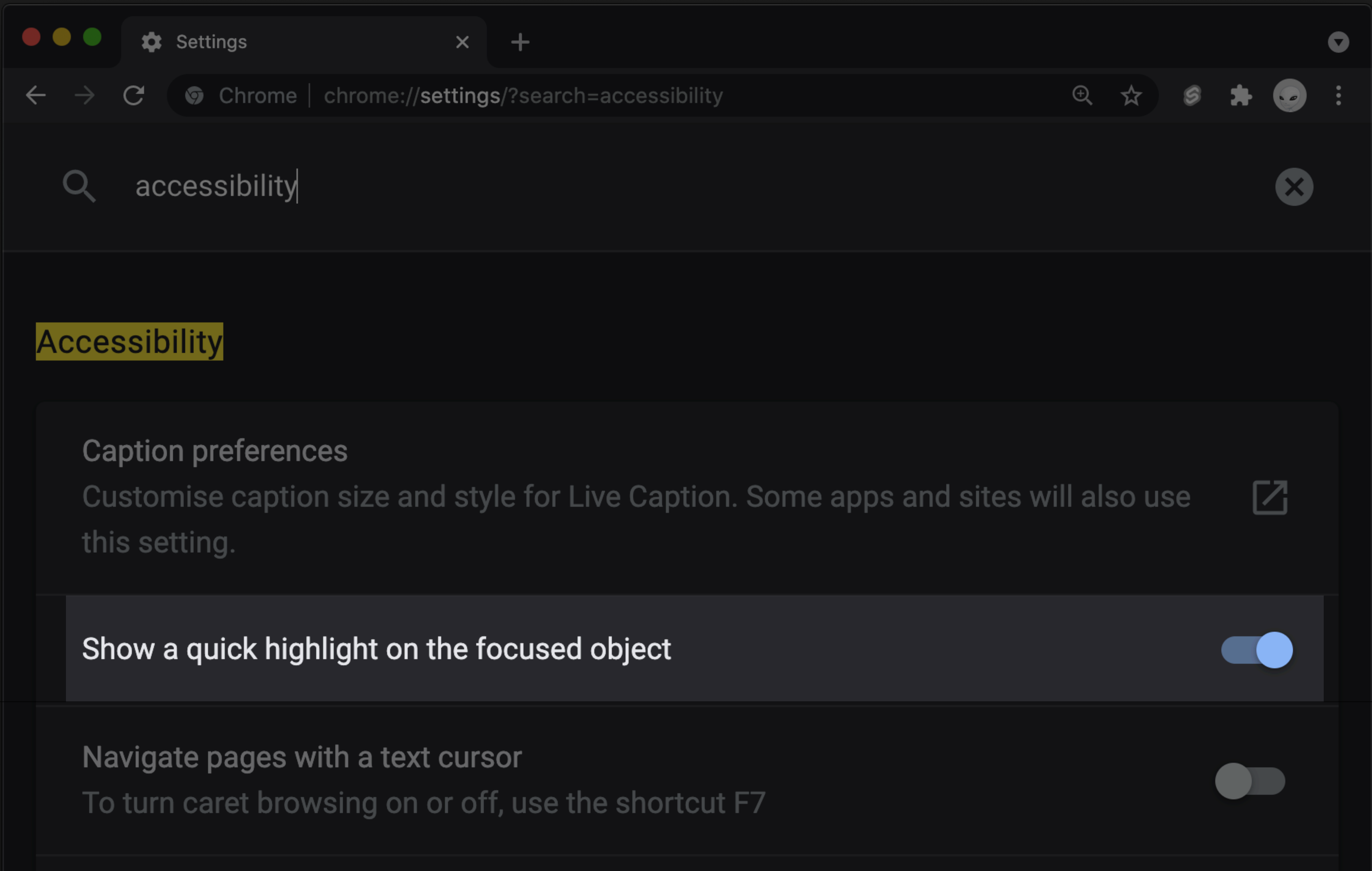
☒ Change background color when needed.



**force focus indication**







## Accessibility

### Caption preferences

Customise caption size and style for Live Caption. Some apps and sites will also use this setting.



Show a quick highlight on the focused object



Navigate pages with a text cursor

To turn caret browsing on or off, use the shortcut F7





**navigate by landmark**

What if browsers let us...

☐ navigate by landmark

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landmarks can make it  
easier to efficiently  
jump to specific parts  
of a web page

landmarks can only be  
navigated using certain  
assistive technologies



What if browsers let us...



navigate by landmark

@hdv

'Blah, blah, blah': Greta Thunberg ×

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←

→

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🔒

https://www.theguardian.com/environment/2021/sep/2

📄

90%

🗖

☆

📧

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🔍

⏏

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Most viewed

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Damian Carrington

Environment editor

🐦 @dpcarrington

Tue 28 Sep 2021 10.00 BST

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**unstick content**

Currently...

☐ unstick content

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**sticky elements can cover too  
much of the screen, especially  
when zoom is used**

What if...



unstick content

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**browsers could stop the sticking**

not a “get out  
of jail free” card



**should browsers  
guess more?**

**Safari  
guesses  
accessible  
names**



are all one line paragraphs  
that end with a period  
headings?

**browsers could use the  
button role as a hint?**

**are all sequences of  
strings that start with  
a bullet or number  
lists?**

With caveats in mind,  
**could browsers  
fix more  
accessibility  
problems  
automatically?**

More of this?

@hdv

Accessibility Features Communi X

+

← → ↺

https://a11yfeat.com

🗖️ ☆

🔒 ⬇️ 🔍 🌐 📶 🔌 ⌵ ☰

a11y  
feat

accessibility features  
community group

Introducing AFCG · Meeting Minutes · FAQ · Get involved

Let's find features that can  
fix accessibility issues in any  
web content.

## Introducing AFCG

The Accessibility Features Community Group (AFCG) promotes the development of features that can address accessibility issues in web content. Such features could be added to browsers, other user agents, and operating systems.

### Examples

These accessibility features can come in a variety of forms, such as:

Always-on features  
such as page and app

Toggles  
such as always-visible

a11yfeat.com

**That's all!**

@hdv

# thanks for listening!

@hdv   hidde@hiddedevries.nl   hidde.blog