

Could browsers  
fix more  
accessibility  
problems  
automatically?

# Who?

@hdv

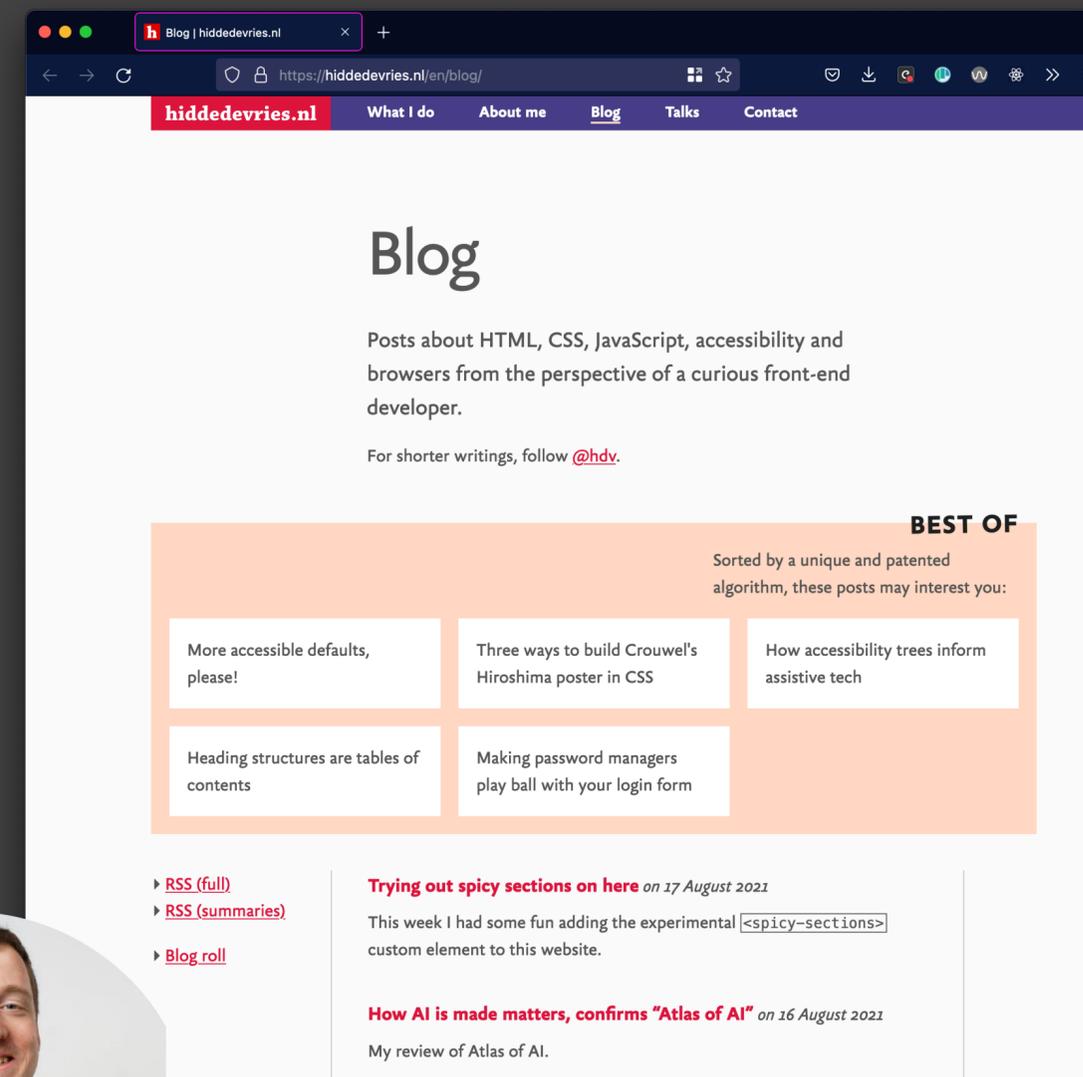
# Hi, I'm Hidde.

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

# I write at hidde.blog.

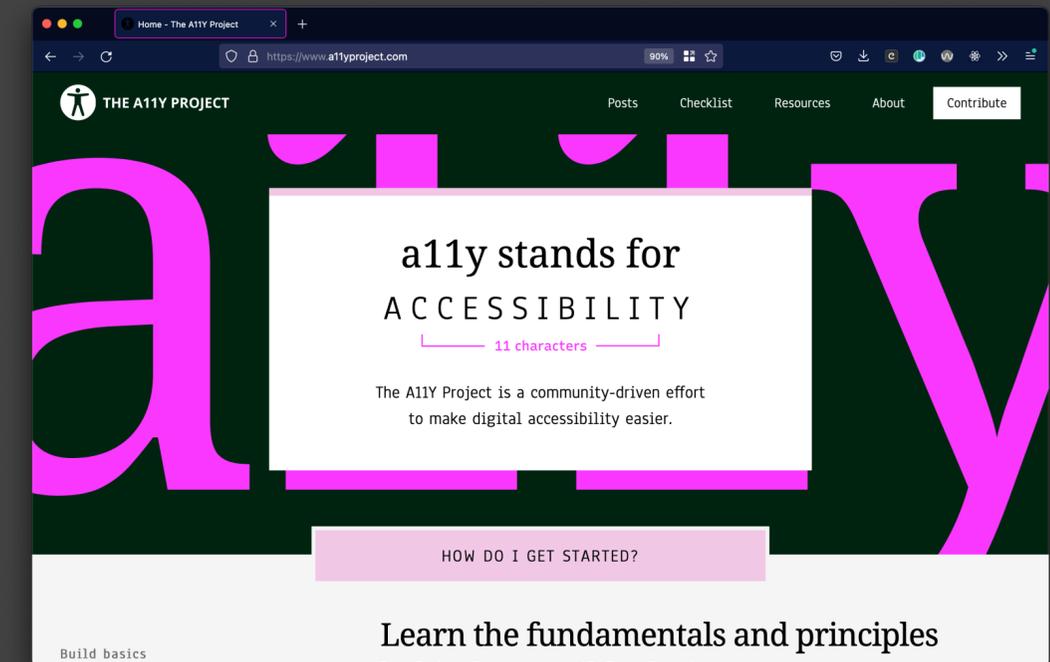
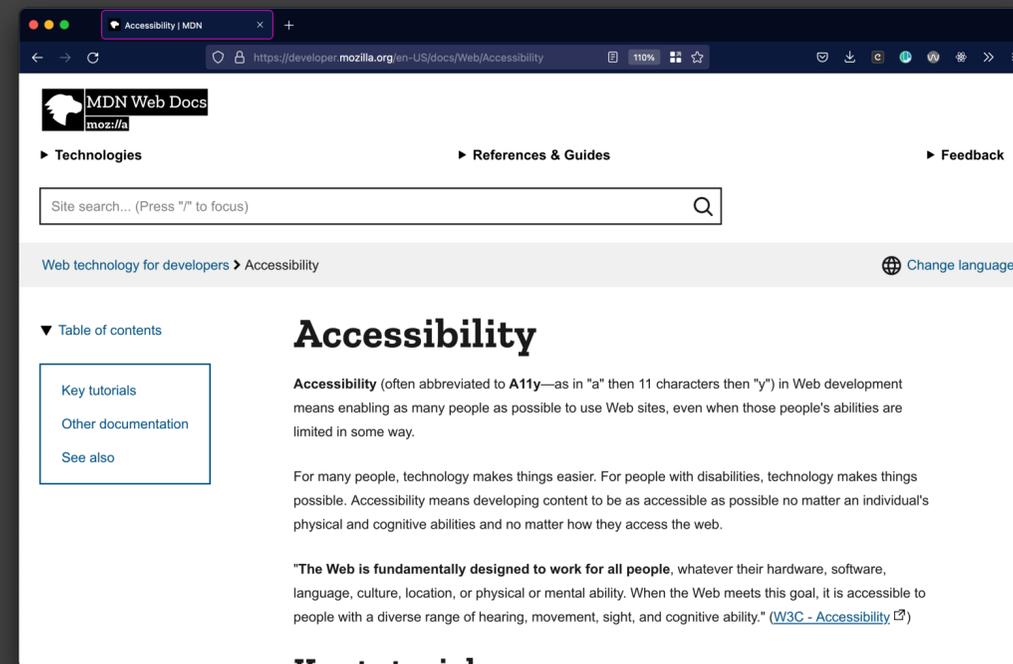
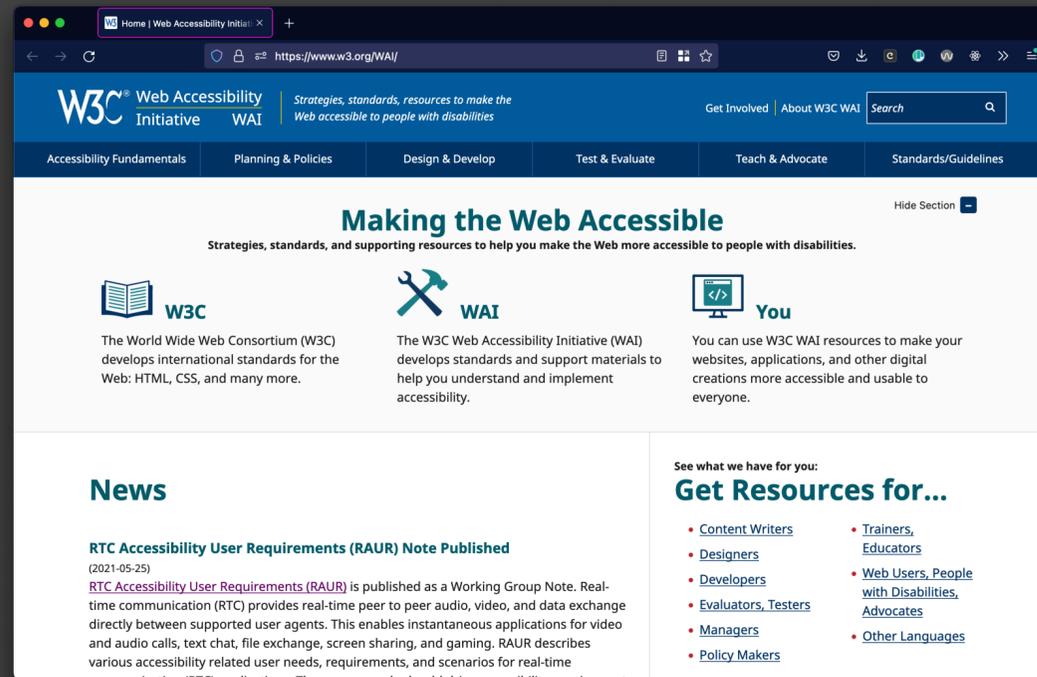


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# Currently...

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# websites, workshops, conferences

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

**we can detect  
problems  
automatically**

# ACT-Rules

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

Currently...

@hdv

interpretation  
is hard

See also: "A11y Wars" by Glenda  
Sims and Wilco Fiers

A11y Wars: The Accessibility Interpretation Problem

Home » Blog » Accessibility Compliance Matters

By Glenda Sims  
May 17, 2018

**Categories**

[Accessibility](#)  
[Compliance Matters](#)

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...

@hdv

**Automatically  
detect  
issues**



**Automatically  
fix  
issues**

**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

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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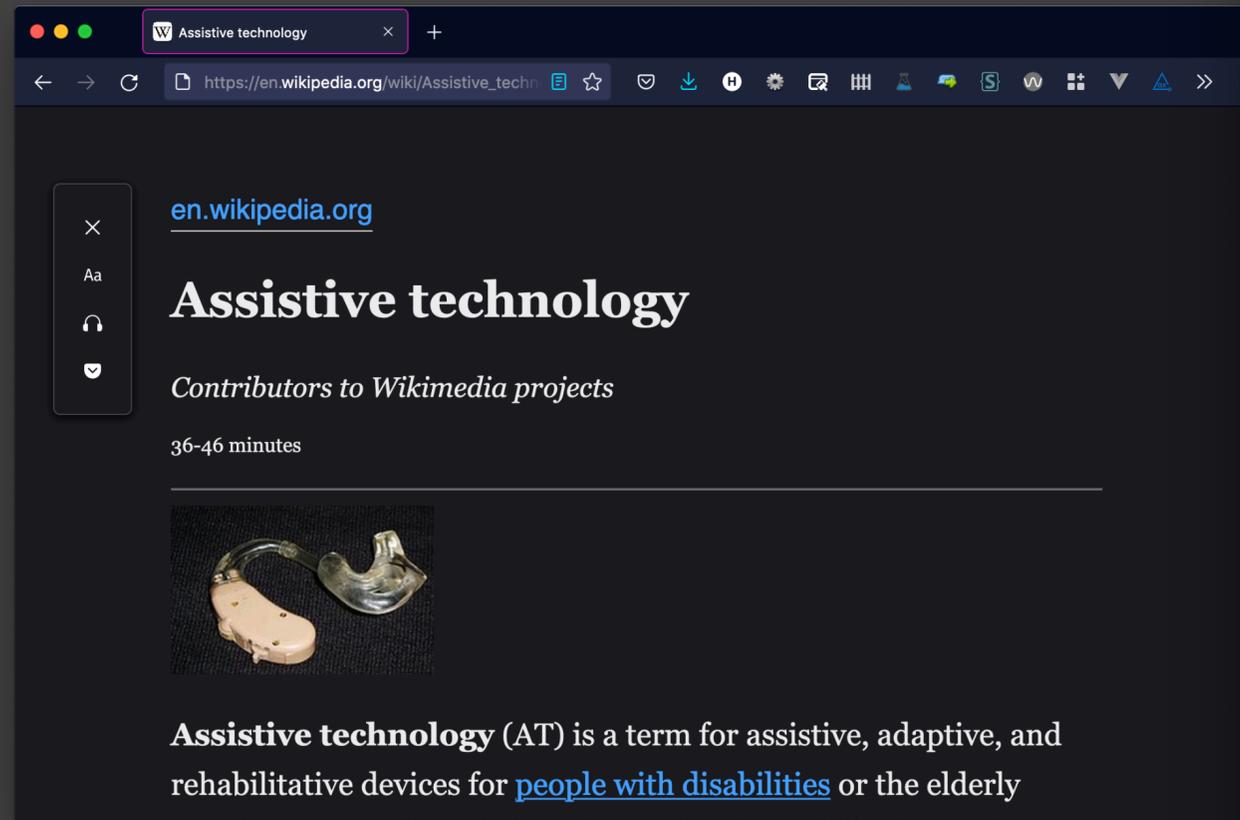
Capitalize on low hanging fruit to identify a ballpark value added activity to beta test. Override the digital

What if browsers let us...

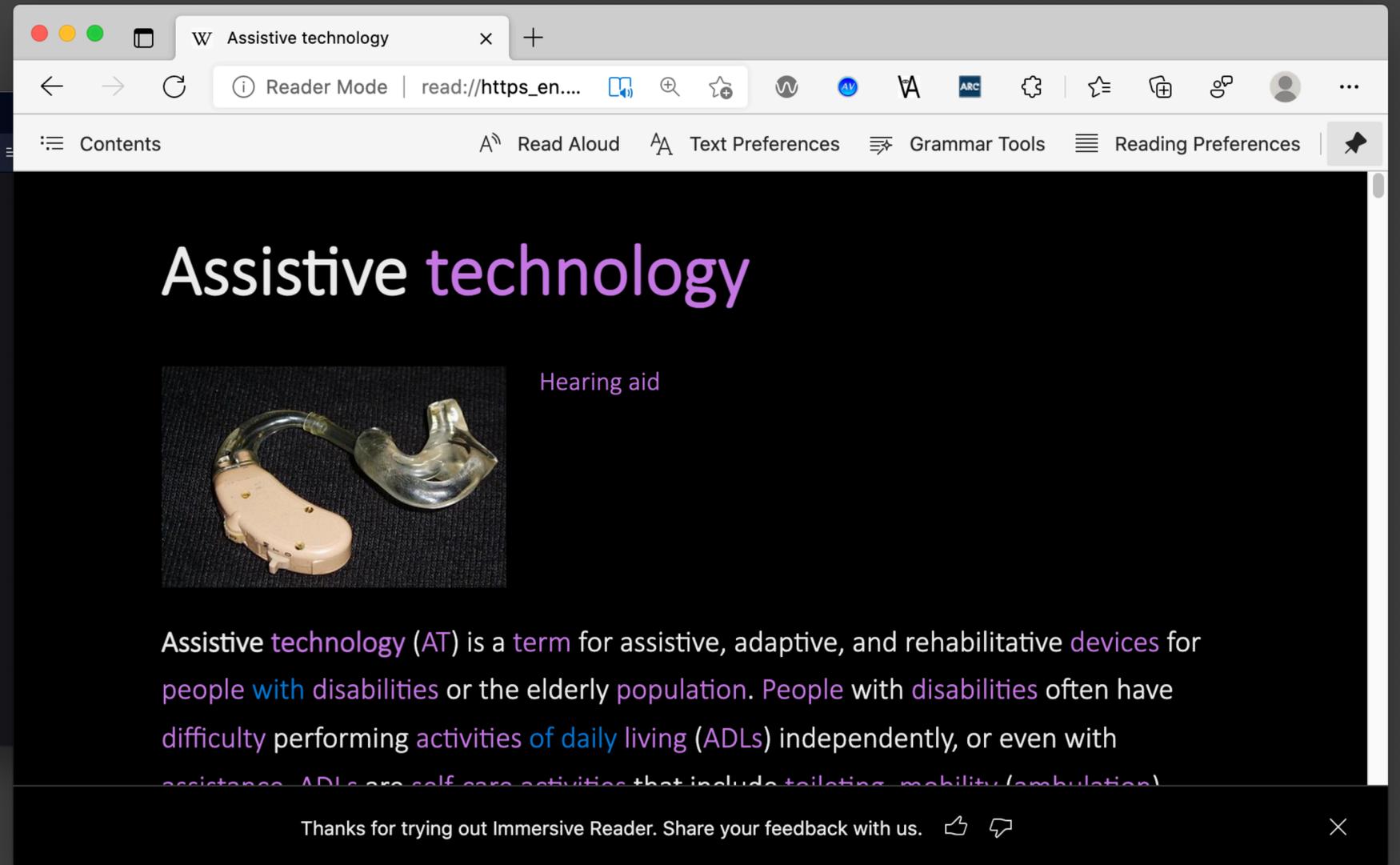


force readability

@hdv



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

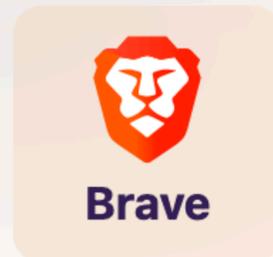
Also available for these browsers:



Chrome



Edge



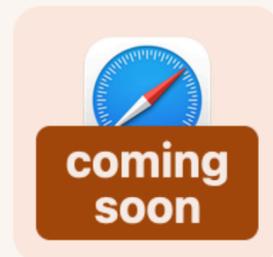
Brave



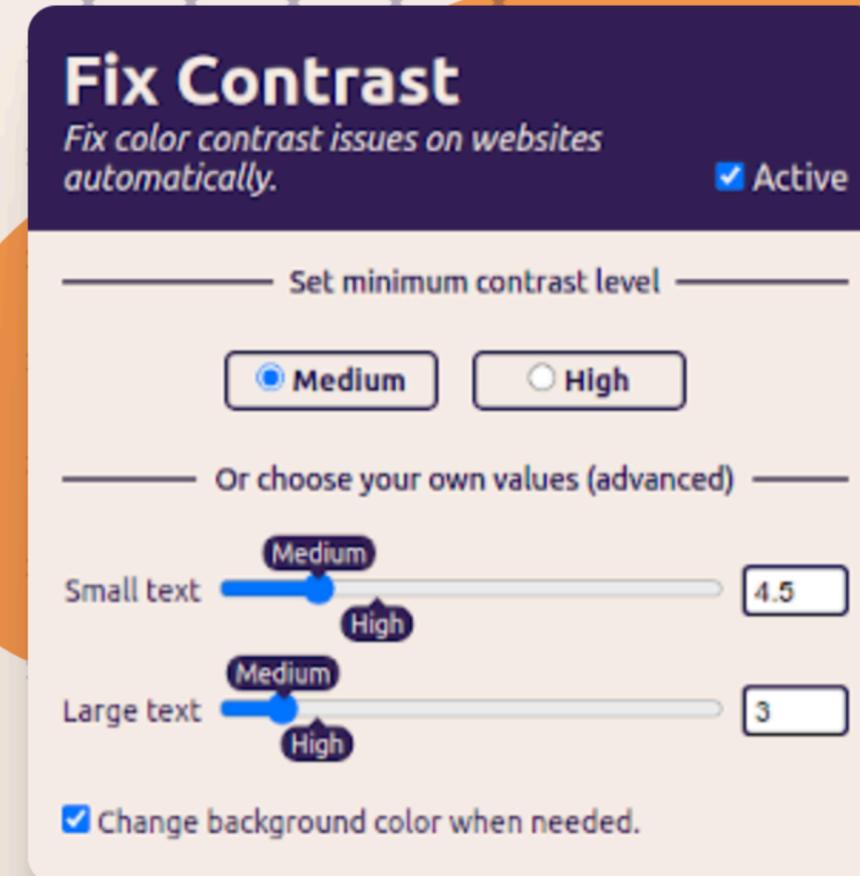
Vivaldi



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**

The image shows a simulated browser window. The address bar contains the URL `https://booktravel.business`. The page title is **Booktravel**. The main content area has a heading **Explore Kinderdijk** followed by a paragraph of text: "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." Below the text is a button labeled **Book this trip**. A thin green rectangular border highlights the button, indicating it is the current focus of the browser.



The screenshot shows a browser window with the address bar containing "https://booktravel.business". The page title is "Booktravel". The main content area features the heading "Explore Kinderdijk" followed by a paragraph of text: "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." A black rectangular box highlights the word "approaches" in the text. Below the text is a green button labeled "Book this trip".



accessibility



## 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**

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

The screenshot shows a web browser window with the URL `https://www.theguardian.com/environment/2021/sep/2`. The browser's address bar and tabs are visible at the top. The page content is from The Guardian, featuring a main article titled **'Blah, blah, blah': Greta Thunberg lambasts leaders over climate crisis**. The article is categorized under **Climate crisis** and includes a sub-headline: **Exclusive: Activist says there are many fine words but the science does not lie - CO2 emissions are still rising**. The author is identified as **Damian Carrington**, Environment editor. A sidebar on the left provides navigation options (Main, Subjects, Support), sections (Main article, Most viewed, Related articles, etc.), and content information (Main footer). A 'Most viewed' section on the right lists other articles like 'No Time to Daniel Craig James Bond rage - and c...' and 'China's new underlines Aukus pact...'. The Guardian logo and 'For 200 years' anniversary text are also visible.



**unstick content**

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

What if...



unstick content

@hdv

**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

The screenshot shows a web browser window with the URL <https://a11yfeat.com>. The browser tab is titled "Accessibility Features Communi X". The website has a dark purple header with the "a11y feat" logo on the left and navigation links "Introducing AFCG · Meeting Minutes · FAQ · Get involved" on the right. Below the header is a teal banner with the text "Let's find features that can fix accessibility issues in any web content." The main content area is white and features the heading "Introducing AFCG" followed by a paragraph: "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." Below this is a section titled "Examples" with the text "These accessibility features can come in a variety of forms, such as:" and two columns of examples: "Always-on features such as page and app" and "Toggles such as always-visible".

a11yfeat.com

**That's all!**

@hdv

**thanks for listening!**

**@hdv hidde@hiddedevries.nl hidde.blog**