

A11y - Accessibility

a11y

accessibility

bit.ly/a11y-numeronym

a11y

bit.ly/a11y-numeronym

accessibility

degree to which an environment is usable by as many people as possible

web accessibility

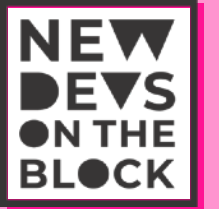
degree to which a website is usable by as many people as possible

1,000,000,000

 *World Health Organization*

bit.ly/who-at

How people **interact** with the web



Assistive technology

Screen readers



- JAWS - job access with speech
- Apple's VoiceOver
- Microsoft's Narrator



 **Hello**

So you want to learn GraphQL?

Learning new tech we know, so we are here to help you.

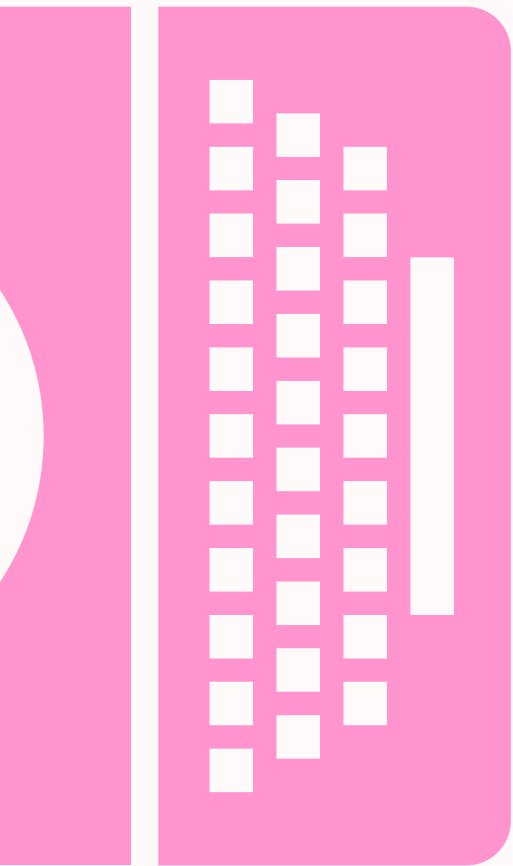
First question: Do you Know what GraphQL is?

Yes

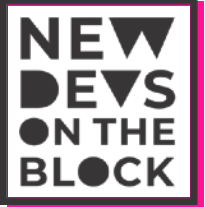
No

× visited, link, <https://so-you-want-to-learn-graphql.now.sh/>

Keyboard navigation



- Tab
- Shift + Tab
- Enter



Power the world's entrepreneurs

Build for 600,000 businesses that are transforming the world of commerce.

Sign up

Sign up as a Shopify Partner to get a free API key.

Docs

Read our API documentation and step-by-step guides.

App development

Create apps to earn regular income on the Shopify

Custom development

Work with clients to get them started on Shopify and solve

bit.ly/shopify-dp

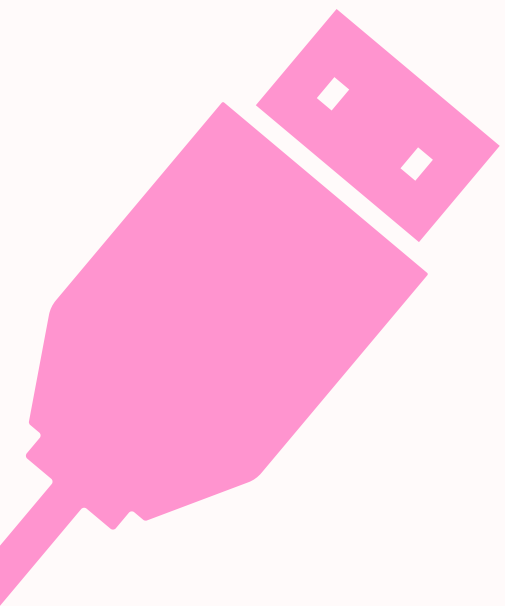
Navigation hardware



- Touchscreens
- Mouth sticks
- Foot-operated mice

Switch inputs

- Mechanical buttons
- Foot plates
- Electronic sensors



Trackers



- Eye
- Head
- Dwell Control

**Accessibility can be
intimidating**

“Accessibility is often viewed as making your site work on screen readers. In reality, web accessibility is a subset of UX focused on making your websites usable by the **widest range of people possible**, including those who have disabilities.”

 *Dave Rupert, The A11y Project*

bit.ly/a11y-myths

- Visual
- Auditory
- Motor
- Cognitive

There's also a **business case** for a11y

Structure and hierarchy

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

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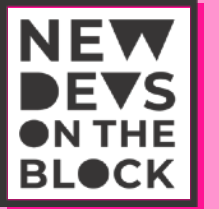
[Redacted text line]

[Redacted text line]

[Redacted text block]

[Redacted text line]

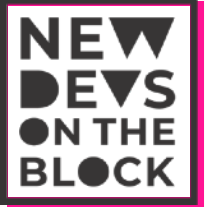
[Redacted text line]



HTML - HyperText Markup Language

bit.ly/a11yfore

- h1
- nav
- aside
- ul / ol



Getting Started

This page is an overview of the React documentation and related resources.

React is a JavaScript library for building user interfaces. Learn what React is all about on [our homepage](#) or [in the tutorial](#).

- [Try React](#)
- [Learn React](#)
- [Staying Informed](#)
- [Versioned Documentation](#)
- [Something Missing?](#)

INSTALLATION ^

Getting Started

[Add React to a Website](#)

[Create a New React App](#)

[CDN Links](#)

MAIN CONCEPTS v

ADVANCED GUIDES v

API REFERENCE v

CONTRIBUTING v

FAQ v



React

[Docs](#)[Tutorial](#)[Community](#)[Blog](#)[v16.5.0](#)[GitHub](#)

Getting Started

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Try React

React has been designed from the start for gradual adoption, and **you can use as little or as much React as you need**. Whether you want to get a taste of React, add some interactivity to a simple HTML page, or start a complex React-powered app, the links in this section will help you get started.

Online Playgrounds

If you're interested in playing around with React, you can use an online code playground. Try a Hello World template on [CodePen](#) or [CodeSandbox](#).

If you prefer to use your own text editor, you can also [download this HTML file](#), edit it, and open it from the local filesystem in your browser. It does a slow runtime code transformation, so we'd only recommend using this for simple demos.

Add React to a Website

You can [add React to an HTML page in one minute](#). You can then either gradually expand its presence, or keep it contained to a few dynamic widgets.

bit.ly/react-gs

Avoid `<div>` and ``
elements when possible

Focus indicators

🏠 Home

💳 Payments

📄 Billing

🔗 Connect

Connect Overview

Learn how to use [Connect](#), our solution for any business that has multiple parties.

bit.ly/stripe-connect

- Links
- Form fields
- Widgets
- Buttons
- Menu items

Welcome to GOV.UK

The best place to find government services and information
Simpler, clearer, faster



Popular on GOV.UK

[Find a job](#)

[Renew vehicle tax](#)

[Log in to student finance](#)

[Book your theory test](#)

[Personal tax account](#)

[Benefits](#)

Includes eligibility, appeals, tax credits and Universal Credit

[Births, deaths, marriages and care](#)

Parenting, civil partnerships, divorce and Lasting Power of Attorney

[Business and self-employed](#)

Tools and guidance for businesses

[Childcare and parenting](#)

Includes giving birth, fostering, adopting, benefits for children, childcare and schools

[Citizenship and living in the UK](#)

Voting, community participation, life in the UK, international projects

[Crime, justice and the law](#)

Legal processes, courts and the police

[Disabled people](#)

Includes carers, your rights, benefits and the Equality Act

[Driving and transport](#)

Includes vehicle tax, MOT and driving licences

[Education and learning](#)

Includes student loans, admissions and apprenticeships

[Employing people](#)

Includes pay, contracts and hiring

[Environment and countryside](#)

Includes flooding, recycling and wildlife

[Housing and local services](#)

Owning or renting and council services

[Money and tax](#)

Includes debt and Self Assessment

[Passports, travel and living abroad](#)

Includes renewing passports and travel advice by country

[Visas and immigration](#)

Visas, asylum and sponsorship

[Working, jobs and pensions](#)

Includes holidays and finding a job

- Can I tab through the page without getting lost?
- Do all focusable elements have focus states?
- Can I operate menus, forms, buttons, etc with just my keyboard?

Images

alt tags

Sat
Jan 6

Mainly sunny



-17°C

Sun
Jan 7

A few flurries



-7°C

Mon
Jan 8

Scattered
flurries



2°C

Tue
Jan 9

A mix of sun
and clouds



-1°C

Sat
Jan 6

Mainly sunny



-17°C

Sun
Jan 7

A few flurries



-7°C

Mon
Jan 8

Scattered
flurries



2°C

Tue
Jan 9

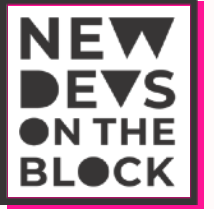
A mix of sun
and clouds



-1°C

Forecast for Toronto temperatures, showing -18 C today improving to -1 C by Tuesday.

bit.ly/robothugs-tweet



Joe Barone
Head of Brand Safety,
Americas | GroupM



Rob Beeler
Founder | Beeler.Tech



Richard Bush
Chief Product & Technology
Officer | NYIAX



Tim Cadogan
CEO | OpenX



Malcolm Cox
Marketing Director |
Grapeshot



Andy Evans
CMO | Sovrn



Marc Goldberg
CEO | Trust Metrics



Jim Hirshfield
Head of Sales, Americas |
GeoEdge

bit.ly/robothugs-tweet



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Founder | Beeler.Tech



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Tim Cadogan
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Marketing Director |
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Andy Evans
CMO | Sovrn



Marc Goldberg
CEO | Trust Metrics



Jim Hirshfield
Head of Sales, Americas |
GeoEdge

8 headshots of featured conference speakers that are all white and male.

bit.ly/robothugs-tweet

- Don't say 'Image of' or 'Photo of'
- Describe what the image is conveying
- Keep it short
- Any description is better than no description



Is there Uber in _____ ?

Search by **algolia**

isthereuber.in



Is there Uber in _____ ?

Search by **algolia**

isthereuber.in

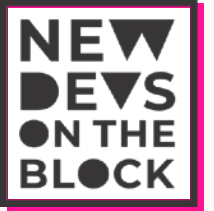
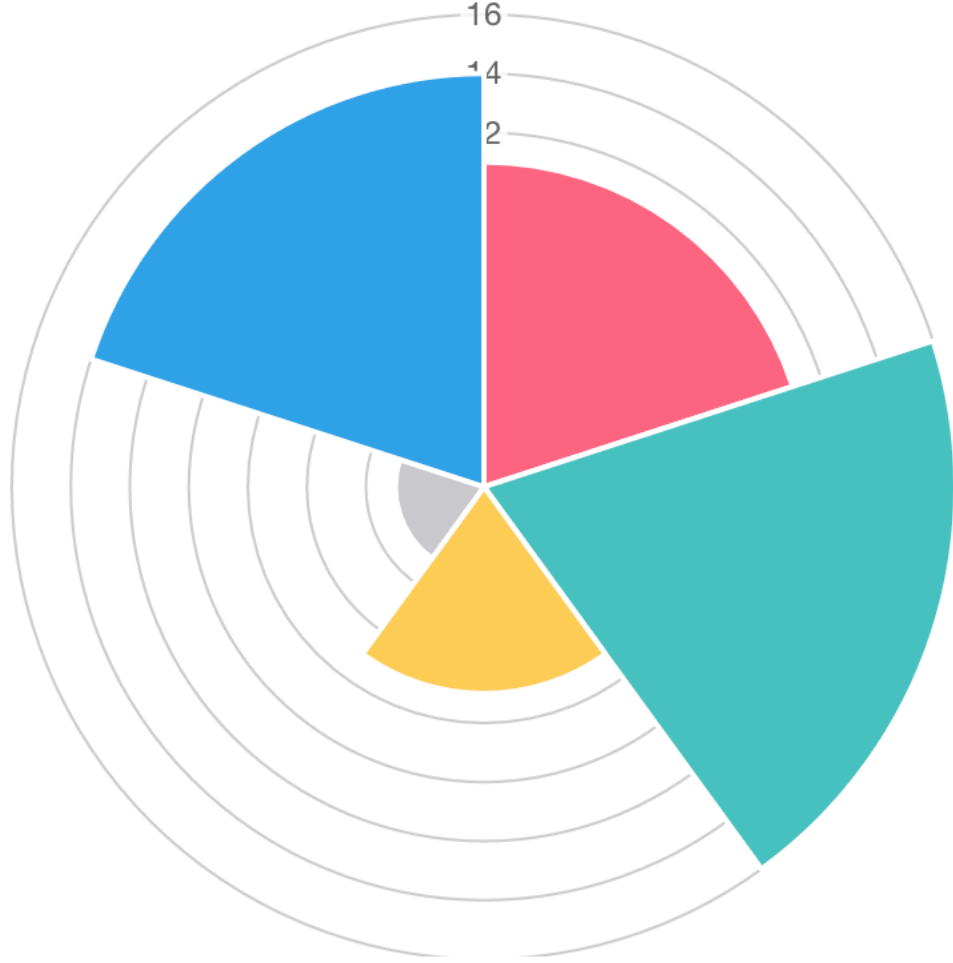
918e15484df8b5806ef5
612f985260e9.svg

```

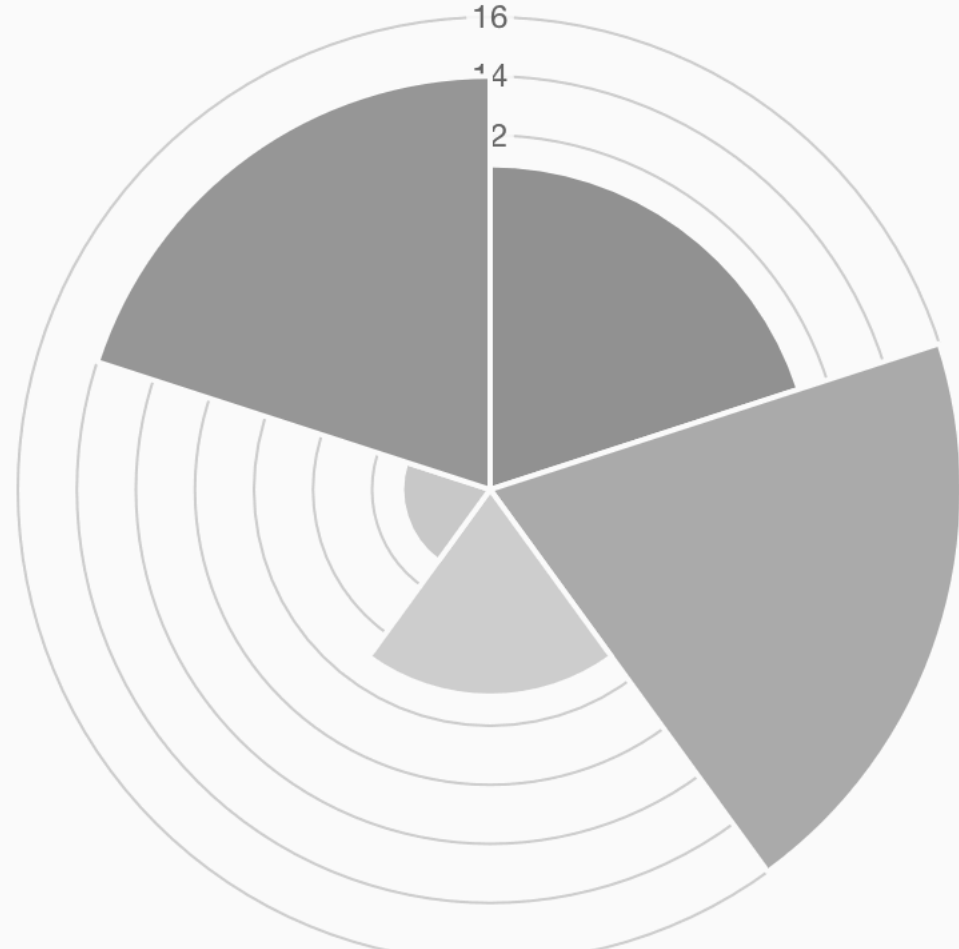
```

Colors

Red Green Yellow Grey Blue









Red Green Yellow Grey Blue



Labels ×

Search labels...







- Improvement** 
- 
- 
- 
- New idea** 
- Housekeeping** 

[Create a new label](#)

[Disable color blind friendly mode.](#)

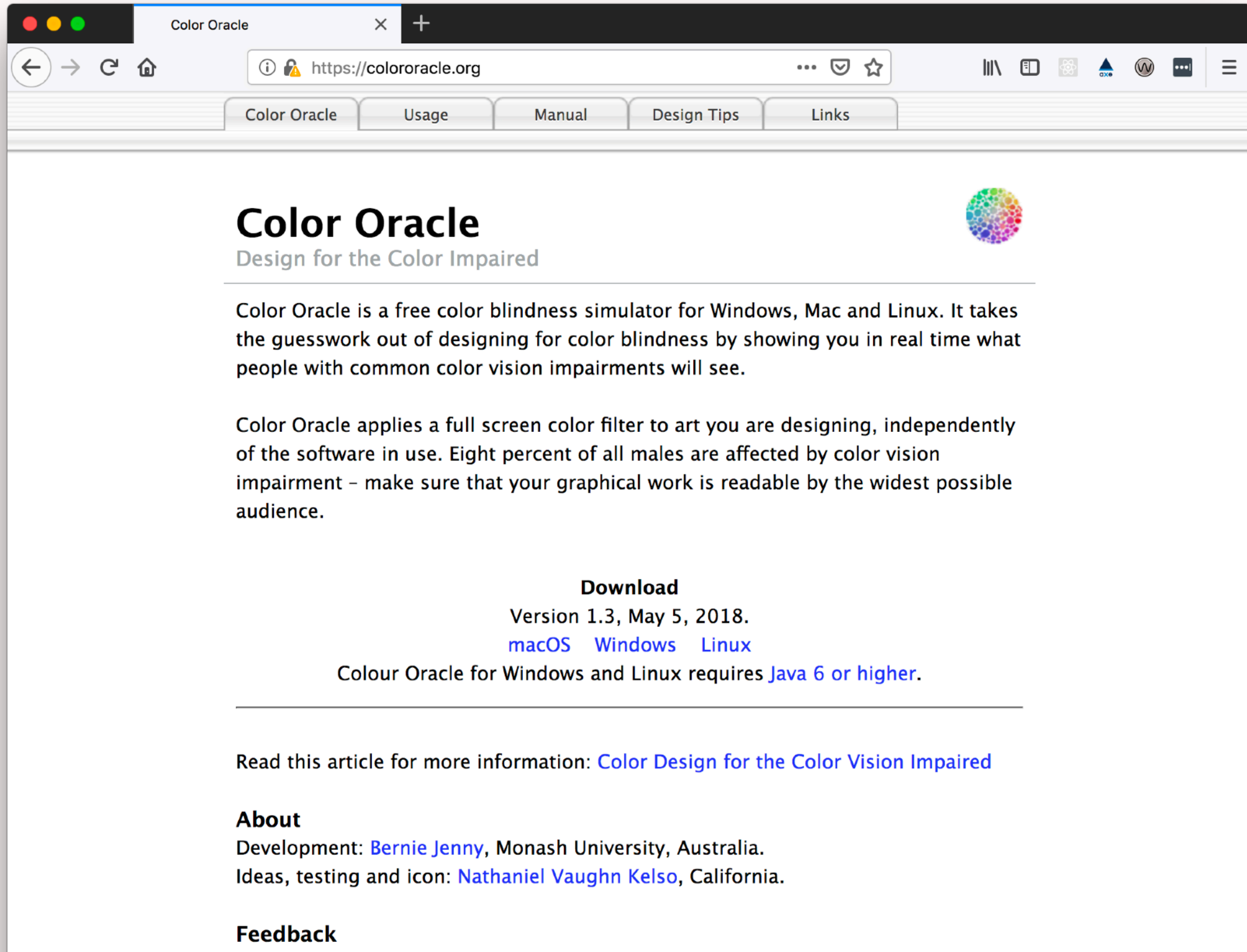
Labels ×

Search labels...

- Improvement** 
- 
- 
- 
- New idea** 
- Housekeeping** 

[Create a new label](#)

[Disable color blind friendly mode.](#)



The image shows a browser window with the URL <https://colororacle.org>. The browser's address bar includes navigation icons (back, forward, refresh, home) and a search bar. Below the address bar is a navigation menu with tabs for "Color Oracle", "Usage", "Manual", "Design Tips", and "Links". The main content area features the "Color Oracle" logo, a circular color palette icon, and a heading "Color Oracle" with the subtitle "Design for the Color Impaired". The text describes the software as a free color blindness simulator for Windows, Mac, and Linux, highlighting its real-time simulation capabilities. A "Download" section provides version information (1.3, May 5, 2018) and links for macOS, Windows, and Linux. A note specifies that Windows and Linux versions require Java 6 or higher. A link to a related article, "Color Design for the Color Vision Impaired", is provided. The page concludes with an "About" section crediting Bernie Jenny for development and Nathaniel Vaughn Kelso for ideas, testing, and the icon, followed by a "Feedback" section.

Color Oracle

Usage Manual Design Tips Links

Color Oracle

Design for the Color Impaired

Color Oracle is a free color blindness simulator for Windows, Mac and Linux. It takes the guesswork out of designing for color blindness by showing you in real time what people with common color vision impairments will see.

Color Oracle applies a full screen color filter to art you are designing, independently of the software in use. Eight percent of all males are affected by color vision impairment - make sure that your graphical work is readable by the widest possible audience.

Download
Version 1.3, May 5, 2018.
[macOS](#) [Windows](#) [Linux](#)
Colour Oracle for Windows and Linux requires [Java 6 or higher](#).

Read this article for more information: [Color Design for the Color Vision Impaired](#)

About
Development: [Bernie Jenny](#), Monash University, Australia.
Ideas, testing and icon: [Nathaniel Vaughn Kelso](#), California.

Feedback


WebAIM: Color Contrast Checker X

https://webaim.org/resources


Color Contrast Checker

Home > Resources > Color Contrast Checker


Foreground Color

#000000 


Lightness



Background Color

#FF94CF 

Lightness



Contrast Ratio

10.38:1

[permalink](#)

Normal Text

WCAG AA: **Pass**

WCAG AAA: **Pass**

The five boxing wizards jump quickly.

Large Text

WCAG AA: **Pass**

WCAG AAA: **Pass**

The five boxing wizards jump quickly.

Graphical Objects and User Interface Components

WCAG AA: **Pass**

✓

Text Input

Inclusive writing

Plain language

Bold Italic H1 H2 H3 Quote Bullets Numbers Link

Write Edit

Hemingway Editor

Hemingway App makes your writing bold and clear.

The app highlights lengthy, complex sentences and common errors; if you see a yellow sentence, shorten or split it. If you see a red highlight, your sentence is so dense and complicated that your readers will get lost trying to follow its meandering, splitting logic — try editing this sentence to remove the red.

You can utilize a shorter word in place of a purple one. Mouse over them for hints.

Adverbs and weakening phrases are helpfully shown in blue. Get rid of them and pick words with force, perhaps.

Phrases in green have been marked to show passive voice.

You can format your text with the toolbar.

Paste in something you're working on and edit away. Or, click the Write button and compose something new.

Readability

Grade 6

Good

Words: 133

Show More ▾

2 adverbs, meeting the goal of 2 or fewer.

1 use of passive voice, meeting the goal of 2 or fewer.

1 phrase has a simpler alternative.

1 of 11 sentences is hard to read.

1 of 11 sentences is very hard to read.

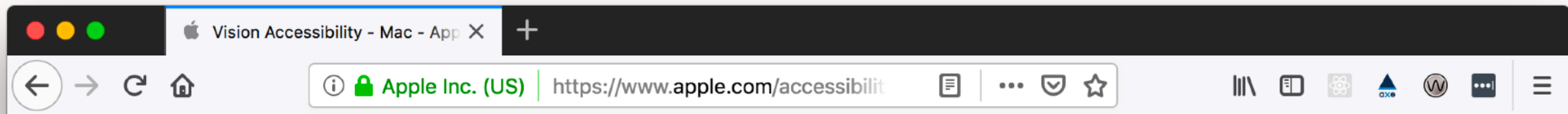
“No one has ever
complained that something
was too easy to read”

— Ashley Bischoff, copy editor at The Paciello Group

bit.ly/ashley-fronteers

Testing for accessibility

Most assistive
technologies are
free or inexpensive



Accessibility

Mac iPad iPhone Watch TV HomePod Stories

VoiceOver

VoiceOver does more than tell you what’s happening on your Mac. It helps you make things happen. It gives you auditory descriptions of each onscreen element and provides helpful hints along the way — whether you prefer using gestures, a keyboard, or a braille display. And it supports more than 35 languages, including multiple voice options.

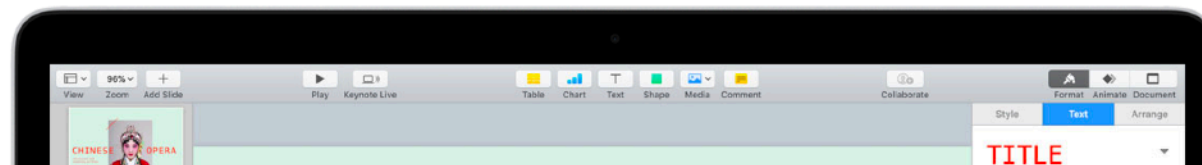
[Explore the *VoiceOver User Guide* >](#)

[Learn about supported languages for VoiceOver >](#)

VoiceOver in Apps

VoiceOver is unique because it’s not a standalone screen reader. It’s deeply integrated in macOS and all the built-in apps on Mac. And as developers update their apps to take advantage of the accessibility interfaces provided by Apple, their apps can start working with VoiceOver right away.

[Learn how third-party apps can support VoiceOver >](#)



The screenshot shows a web browser window with the URL <https://www.nvaccess.org/about-nvda>. The page features the NV Access logo, which consists of a stylized eye icon with a gear-like border in purple, teal, and orange. To the right of the logo is the text "NV Access" in a bold, sans-serif font, with "NV" in orange and "Access" in purple. Below this is the tagline "Empowering lives through non-visual access to technology". In the top right corner, there is an orange button with the word "DONATE" in white. A navigation menu is located below the logo, containing links for "Home", "About", "Download", "Get Help", "Corporate / Government", and "News". At the bottom of the menu, there are links for "Support Us" and "Shop".

Join the NVDA
REVOLUTION!
Finally, a
FAST, FUNCTIONAL
& Totally Free
SCREEN READER.

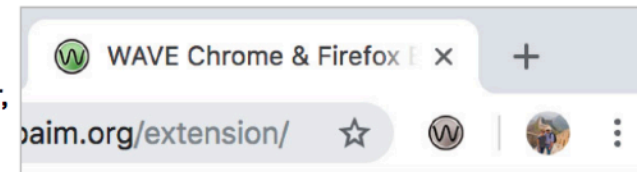


Free extensions and validators

[Site-wide WAVE Tools](#)[Browser Extensions](#)[Help](#)[About/Terms of Use](#)[Feedback](#)

WAVE Browser Extensions

The WAVE Chrome and Firefox extensions allows you to evaluate web content for accessibility issues **directly within Chrome and Firefox browsers**. Because the extension runs entirely within your web browser, **no information is sent to the WAVE server**. This ensures 100% **private and secure accessibility reporting**. The extension can check intranet, password-protected, dynamically generated, or sensitive web pages. Also, because the WAVE extension evaluates the rendered version of your page, **locally displayed styles** and **dynamically-generated content from scripts or AJAX** can be evaluated.



Chrome Extension

[WAVE Chrome Extension at the Google Web Store](#)

Firefox Extension

[WAVE Firefox Extension at Mozilla Add-ons](#)

Using the WAVE extension

Updates to the WAVE extension will automatically be sent to your browser when they are made available.

To run a WAVE report, simply click on the WAVE icon to the right of your browser address bar. Click the icon again or refresh the page to remove the WAVE interface.

You can also trigger a WAVE report by pressing Control + Shift + U (Command + Shift + U on Mac) or by activating the "WAVE this page" context (right click) menu item.

Use a **checklist**

Web Accessibility Checklist - TI X

https://a11yproject.com/checklist

The A11Y Project

Patterns Checklist Resources Events Follow About

Web Accessibility Checklist

A beginner's guide to web accessibility

Landmarks

ARIA Landmark roles can help assistive technology users to quickly navigate to and past blocks of content in a web interface.

Note: When you [validate HTML](#) that utilizes most landmark roles, you'll receive a warning stating these roles are redundant.

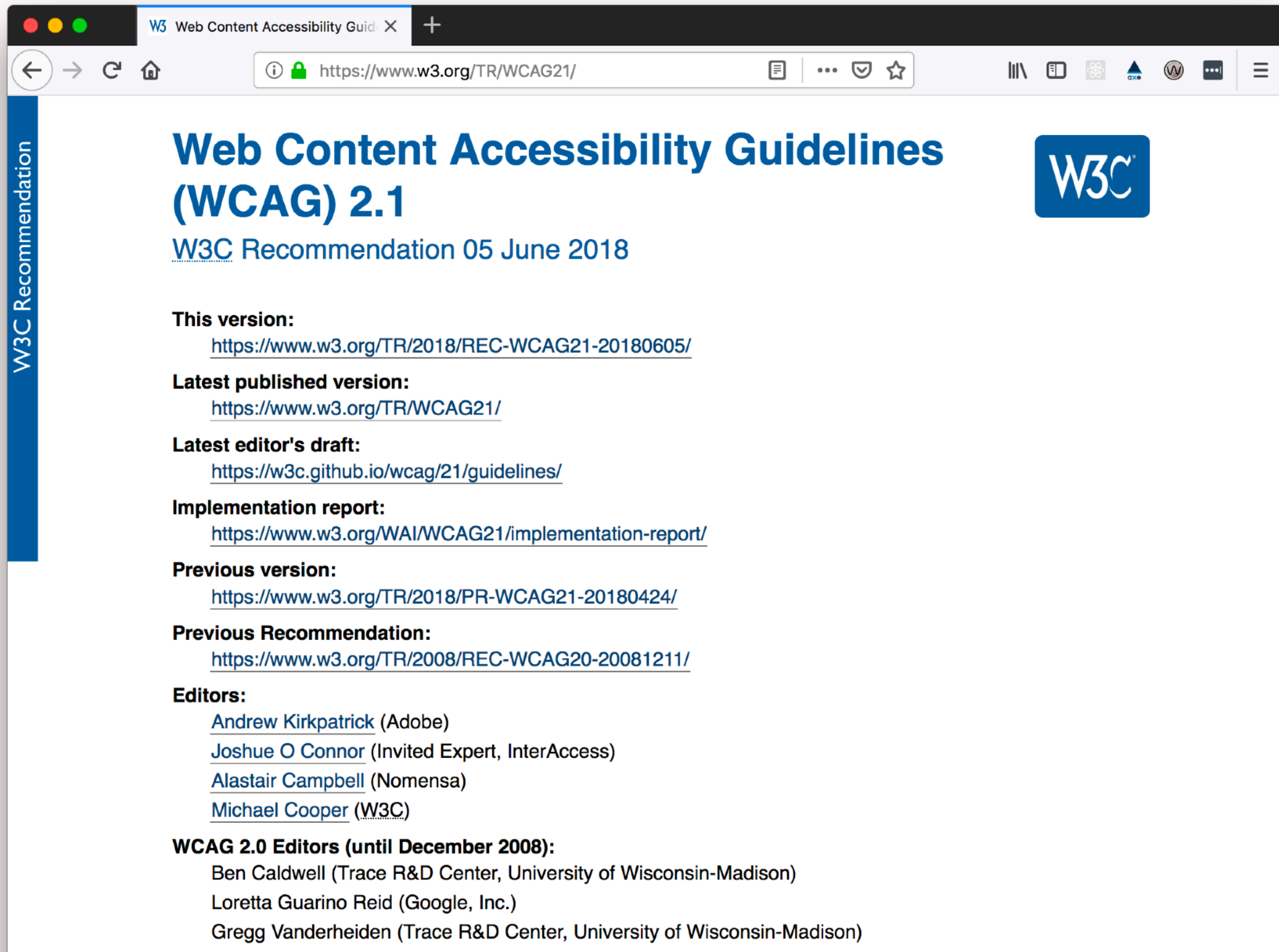
In HTML5, several of the landmark roles are implicit via the native structural elements which are supported by modern [desktop browsers](#). With that said, if you need to support older browsers, you'll want to check their support for landmark roles. If you find support to be lacking, then use the landmark roles regardless of the validation warnings. For more information, read [Quick Tip:](#)

Categories

- Landmarks
- Language Attribute
- Document Outline
- Links
- Images
- JavaScript
- Forms
- Media (Audio and Video)
- Color and Contrast
- Test for Color Blindness


Terms to know

WCAG - Web Content Accessibility Guidelines



W3C Recommendation

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.)
Gregg Vanderheiden (Trace R&D Center, University of Wisconsin-Madison)

ARIA - Accessible Rich Internet Applications

ARIA example

```
<div role="status">  
  Your changes were automatically saved.  
</div>
```

A11y community

Follow Joschi Kuphal

@jkphl

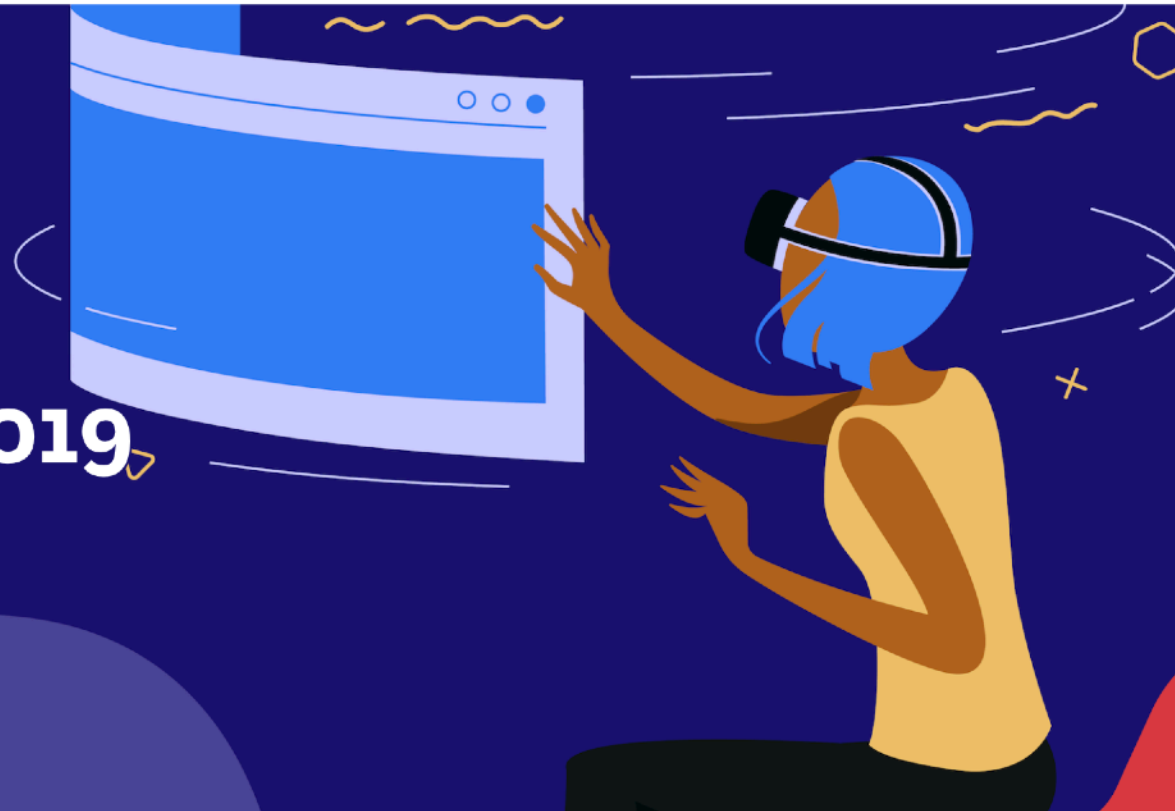


Accessibility Club

Community events
around web accessibility
& assistive technology

accessibility-club.org

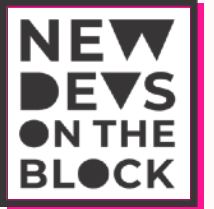
Developer Roadshow 2019



Monday, August 26 - FREE

**Make accessibility a
priority**

Browse the web from
a different perspective



Accessibility

Languages

Edit



Jump to: [Key tutorials](#) [Other documentation](#) [Join the Accessibility community](#)

[Web technology for developers](#) >

Accessibility

Related Topics

[Web Development](#)

[Web Standards](#)

[Accessibility and Mozilla](#)

Accessibility (often abbreviated to **A11y**—as in "a" then 11 characters then "y") in Web development means enabling as many people as possible to use Web sites, even when those people's abilities are limited in some way.

For many people, technology makes things easier. For people with disabilities, technology makes things possible. Accessibility means developing content to be as accessible as possible no matter an individual's physical and cognitive abilities and no matter how they access the web.

"The Web is fundamentally designed to work for all people, whatever their hardware, software, language, culture, location, or physical or mental ability. When the Web meets this goal, it is accessible to people with a diverse range of hearing, movement, sight, and cognitive ability." [1]

Key tutorials

The MDN [Accessibility Learning Area](#) contains modern,

Other documentation

[Understanding the Web Content Accessibility](#)

Final thoughts

This is for everyone