

Accessibility Workshop: Building a Digitally Inclusive Brand

with:

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**What comes to mind when you
think of Accessibility?**

1B+ people in the world

have some type of impairment affecting their ability to read the web



1 in 25 people are blind
or **vision impairment**

285M affected



1 in 12 men are **color**
blind

300M affected



1 in 10 people have
Dyslexia

700M affected



1 in 11 people are
65+ today and 1 in 6 by 2050

600M affected

80%

of disabilities are invisible

In the meantime

70%

Of digital content is not accessible to them



71%*

of disabled customers with accessibility needs leave a website they find difficult to use

82%*

of clients with accessibility needs would want to spend more time on websites if they were more accessible.

95%*

of health professionals recommend to adapt texts for students with dyslexia

The Contentsquare Foundation Approach

Contentsquare is committed to solving the inequality of accessing digital information through its technology solutions and promote them through its foundation

1. Contentsquare has acquired **Adapt My Web (AMW)**, a **software accessibility company**. The move is part of an expanded initiative to ensure Contentsquare's goal of empowering brands to create better experiences is relevant not just for some, but for *all*. Adapt My Web's technology and expertise help make the world's digital content accessible to those with reading issues including visual impairment and dyslexia. It allows readers to customize their user experience based on their needs by simply clicking on an icon and setting-up a personalized reading profile.
2. The Contentsquare Foundation is developing an **Easy-Reading Platform** to increase the ease of reading for students with Dyslexia. This solution is designed to modify texts making them easier to read. Texts can be digital documents (word, PDF, ppt), Epub, photos, web pages viewed through a browser or a smartphone.
3. The Contentsquare Foundation goes beyond technology alone and collaborates with corporations, education, the software development community to create a World of accessibility for digital information.

OBJECTIVE OF THE FOUNDATION

Object

Non-profit organization aiming to promote **digital accessibility** for people **with disability** in the areas of education, science, social, and corporate responsibility.



Pillars

Strengthen Education



Deploy educational projects for people with disabilities to gain easy access to digital content and acquire the fundamental foundation of education

Invest in Social responsibility



Invest in start-ups & enterprises to develop solutions facilitating the digital accessibility of people with disabilities

Raise Awareness



Educate people and corporations on the immediate need to give equal access to digital content to all, regardless of disabilities

“The power of the web is in its
universality.

-

Access by everyone regardless of
disability is an essential aspect”.

Tim Berners-Lee, inventor of the World Wide Web

“In the UK, £17 billion consumer spend could be driven away by inaccessible websites.”

[The Click-Away Pound Report](#)



CONTENTSSQUARE
foundation

Disability market

The disability market is larger than China and is emerging as other markets have in the past.

1.85 billion
people

\$1.9 trillion
annual
disposable
income

Return on disabilities research :

<https://www.rod-group.com/insights#:~:text=The%20disability%20market%20is%20larger.China%20plus%20the%20European%20Union.>



CONTENTSQUARE
foundation

Covid-19...

BBC NEWS

Covid: Lockdown 'turned back the clock' for disabled shoppers

By **Kevin Peachey**
Personal finance correspondent

🕒 03 November 2020 | **Business**

✉️  



Mike Adams says businesses would benefit from good online accessibility

Shoppers with disabilities have been excluded from some websites and apps needed during lockdown to buy essential items or services, research has found.

Born with a physical disability, Mr Adams uses dictation and a pen held in his mouth to operate his laptop computer.

Features such as drop down menus are awkward for people with sight problems or other disabilities and some websites are impossible to navigate.

Among the issues being raised are:

- Online forms which are difficult for people with sight loss to navigate using screen readers
- Product information failing to make clear whether an item is suitable for disabled people
- Reports of some rail websites that do not have facilities to book priority seating online
- Missed delivery slots leading to difficulties collecting from depots

Latest Baymard Report

KEY TAKEAWAYS

- Our rating of **33 top-grossing e-commerce sites** against 4 core accessibility guidelines reveals that **94% of sites** are **incompliant** (WCAG 2.1 AA):
 - 82% of sites have accessibility-compliance issues with image
 - 73% of sites have accessibility-compliance issues with links
 - 58% of sites have accessibility-compliance issues with form t
 - 64% of sites have accessibility-compliance issues with keybo
- markup
- navigation

Up to 94% of Top-Grossing Sites Have Accessibility Issues

627 Accessibility Success Criteria (based on WCAG 2.1, AA) • 2021 • © Baymard.com/research

	Images	Links	Form Fields	Keyboard Nav
Home Depot	✗	✗	✗	✗
Argos	✗	✗	✓	✗
Crate & Barrel	✗	✗	✗	✗
Ann Taylor	✗	✗	✗	✗
John Lewis	✗	✗	✗	✗
Wayfair	✗	✗	✗	✗
Macys	✗	✗	✗	✗
Walgreens	✗	✗	✓	✗
Nordstrom	✗	✗	✗	✗
H&M	✓	✓	✓	✓
Victoria's Secret	✗	✓	✓	✗
Disney	✗	✗	✓	✗

	Images	Links	Form Fields	Keyboard Nav
Office Depot	✗	✗	✓	✗
Best Buy	✗	✓	✓	✓
Sears	✗	✗	✗	✗
Northern Tools	✗	✗	✗	✗
Kohls	✗	✗	✗	✗
Williams-Sonoma	✗	✗	✗	✗
Lowes	✗	✗	✗	✗
REI	✓	✓	✓	✓
Apple	✗	✓	✓	✓
ASOS	✓	✗	✓	✓
B&H Photo	✗	✗	✓	✓
Ikea	✗	✓	✓	✗

	Images	Links	Form Fields	Keyboard Nav
Crutchfield	✗	✓	✗	✗
Nike	✗	✗	*	✗
Sephora	✓	✗	✗	✗
Zalando	✗	✗	✗	✓
Adidas	✗	✗	✗	✓
Walmart	✓	✗	✗	✓
Target	✓	✓	✗	✓
Amazon	✗	✗	✓	✓
Staples	✗	✓	✓	✓

*: Unable to rate

Impairments

→ **Visual Impairments:**

- ◆ Blindness, low vision, and colour blindness.

→ **Auditory Impairments:**

- ◆ Deafness and hearing loss.

→ **Motor Impairments:**

- ◆ Paralysis, limited sensation, or lack of fine motor control.

→ **Cognitive Impairments:**

- ◆ Epilepsy, dyslexia, learning disability, autism, ADHD, and more.



“Web Content Accessibility
Guidelines (WCAG) 2.1 **defines how to
make Web content more accessible
to people with disabilities**”.

w3

About WCAG 2.1 - The FOUR Principles of Accessibility

Perceivable

Provide text alternatives for non-text content.

Provide captions and other alternatives for multimedia.

Create content that can be presented in different ways, including by assistive technologies, without losing meaning.

Make it easier for users to see and hear content.

Operable

Make all functionality **available from a keyboard**.

Give users **enough time to read and use content**

Do not use content that causes seizures or physical reactions.

Help users navigate and find content.

Make it easier to use inputs other than keyboard.

Understandable

Make text readable and understandable

Make content appear and operate in predictable ways.

Help users avoid and correct mistakes.

Robust

Maximize compatibility with current and future user tools.

Visual





“The intent is to provide enough contrast between text and its background so that it can be read by people with moderately low vision.”



*Understanding Success Criterion 1.4.3:
Contrast (Minimum)*

**What are the acceptable ratios
when it comes to colour
contrasting?**

What is a contrast ratio?



The **contrast ratio** between 2 colours is a **number** between **1** (same colour) and **21** (black/white) resulting from a calculation



Background Colour **#ffffff**  

Foreground Colour **#ffffff**  

1.00

Fail	Fail	Fail	Fail
AA Large	AAA Large	AA Normal	AAA Normal

Background Colour **#ffffff**  

Foreground Colour **#000000**  

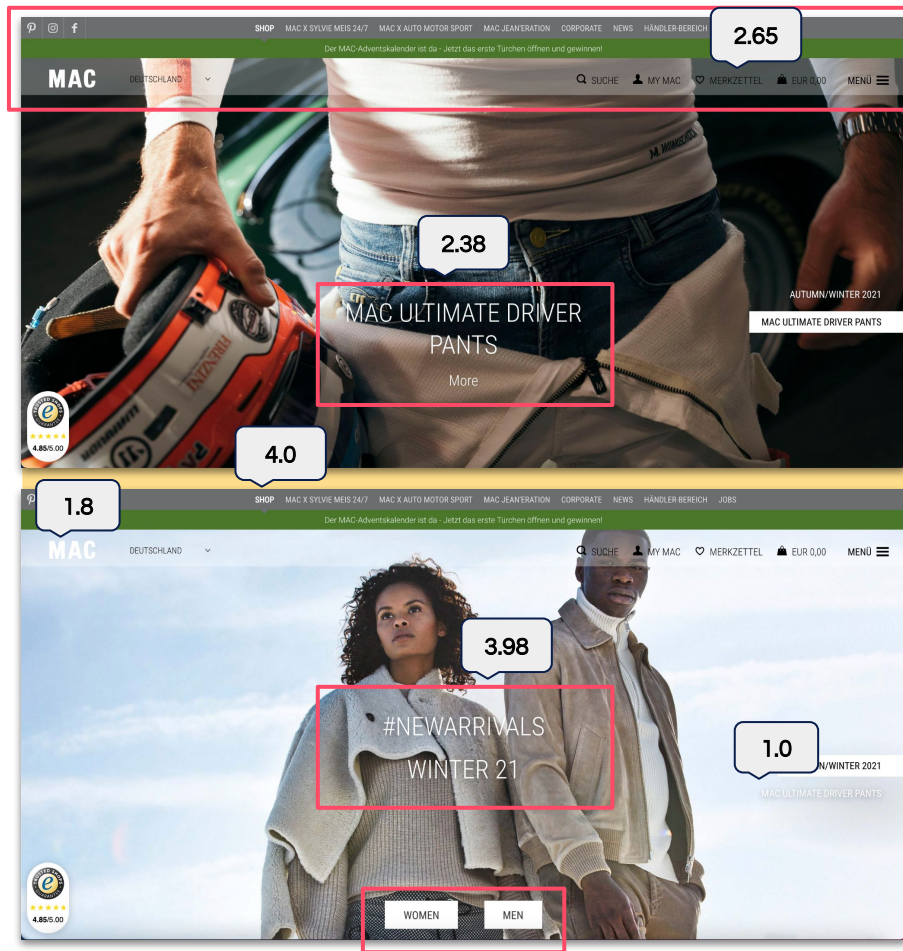
Aa **21.00**

Pass	Pass	Pass	Pass
AA Large	AAA Large	AA Normal	AAA Normal



The **contrast ratio** between **text colour** and **background colour** needs to be **equal or superior** to:

- **4.5:1**
- **3.1** for
 - **Bold text** $\geq 18.5\text{px}$
 - **Large text** $\geq 24\text{px}$

Example



Example

 Pass	<div>9.59</div> <div>Large Header</div>
 Fail	<div>2.52</div> <div>Large Header</div>

Good Contrasting (?)

The screenshot shows the giffgaff website with a prominent orange and yellow banner. The banner features the text "New 10 GB for £10" in large, bold, black letters with a white outline. Below this, it says "We've added even more data to our £10 golden goodybag. Result." and "See our plans". The banner also includes the "Uswitch Network of the Year Winner 2021" logo and two buttons: "Order your free SIM" and "Activate your SIM". Below the banner, there is a "£10 golden goodybag" logo and "10 GB data Unlimited minutes".

Overlaid on the right side of the image is a ContentSquare summary panel. The panel has a title "Summary" and a navigation bar with tabs: "Summary", "Details", "Reference", "Structure", and "Contrast". The main content area displays the following metrics:

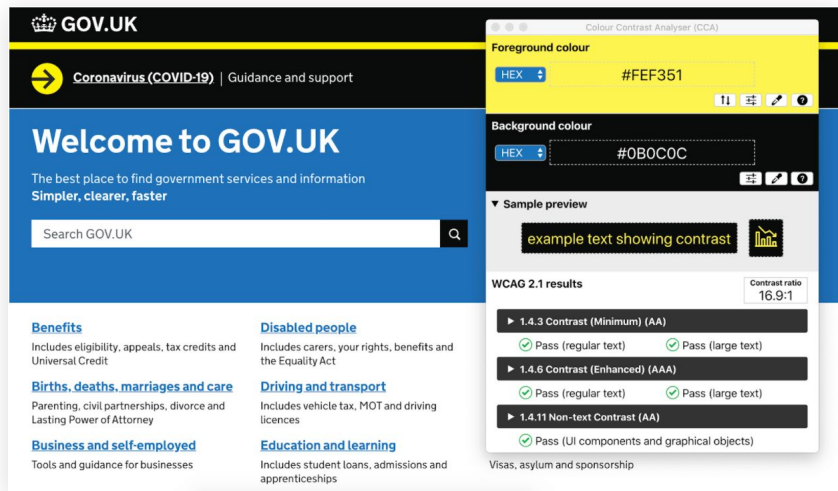
Metric	Value
Errors	0
Contrast Errors	0
Alerts	19
Features	30
Structural Elements	86
ARIA	18

At the bottom of the panel, there is a button labeled "View details" and a message: "Congratulations! No errors were detected! Manual testing is still necessary to ensure compliance and optimal accessibility."



Contrast tools

Colour Contrast Analyser



The screenshot shows the GOV.UK website with the Colour Contrast Analyser (CCA) tool overlaid. The tool is analyzing the foreground color (#FEF351) and background color (#0B0C0C). The sample preview shows the text "example text showing contrast" on a black background. The WCAG 2.1 results are displayed, showing that the contrast ratio is 16.9:1, which passes all three levels of contrast (AA, AAA, and Non-text Contrast).

GOV.UK
Coronavirus (COVID-19) | Guidance and support

Welcome to GOV.UK
The best place to find government services and information
Simpler, clearer, faster

Search GOV.UK

Benefits
Includes eligibility, appeals, tax credits and Universal Credit

Disabled people
Includes carers, your rights, benefits and the Equality Act

Births, deaths, marriages and care
Parenting, civil partnerships, divorce and Lasting Power of Attorney

Driving and transport
Includes vehicle tax, MOT and driving licences

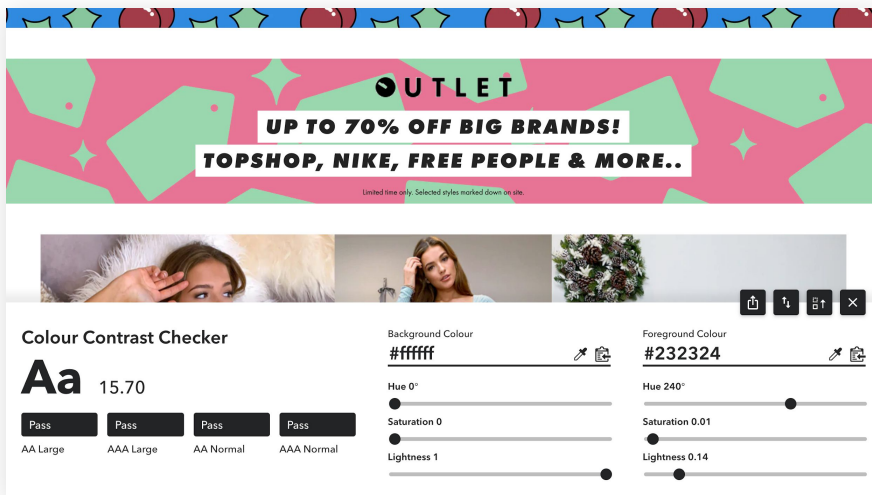
Business and self-employed
Tools and guidance for businesses

Education and learning
Includes student loans, admissions and apprenticeships

Visas, asylum and sponsorship

Colour Contrast Analyser (CCA)
Foreground colour: #FEF351
Background colour: #0B0C0C
Sample preview: example text showing contrast
WCAG 2.1 results: Contrast ratio 16.9:1
1.4.3 Contrast (Minimum) (AA): Pass (regular text), Pass (large text)
1.4.6 Contrast (Enhanced) (AAA): Pass (regular text), Pass (large text)
1.4.11 Non-text Contrast (AA): Pass (UI components and graphical objects)

Colour Contrast Checker



The screenshot shows the Colour Contrast Checker tool interface. It displays the foreground color (#232324) and background color (#ffffff). The contrast ratio is 15.70. The tool also shows the text "Aa" and "15.70". The background of the tool interface is a colorful geometric pattern.

Colour Contrast Checker
Aa 15.70
Pass Pass Pass Pass
AA Large AAA Large AA Normal AAA Normal

Background Colour
#ffffff
Hue 0°
Saturation 0
Lightness 1

Foreground Colour
#232324
Hue 240°
Saturation 0.01
Lightness 0.14

Figma / Sketch - Plugin

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Make the world's software more accessible

More than 300,000 designers, developers and product managers at companies of all sizes use Stark's integrated suite of tools to make their software products more accessible and compliant. Join them and get started today!

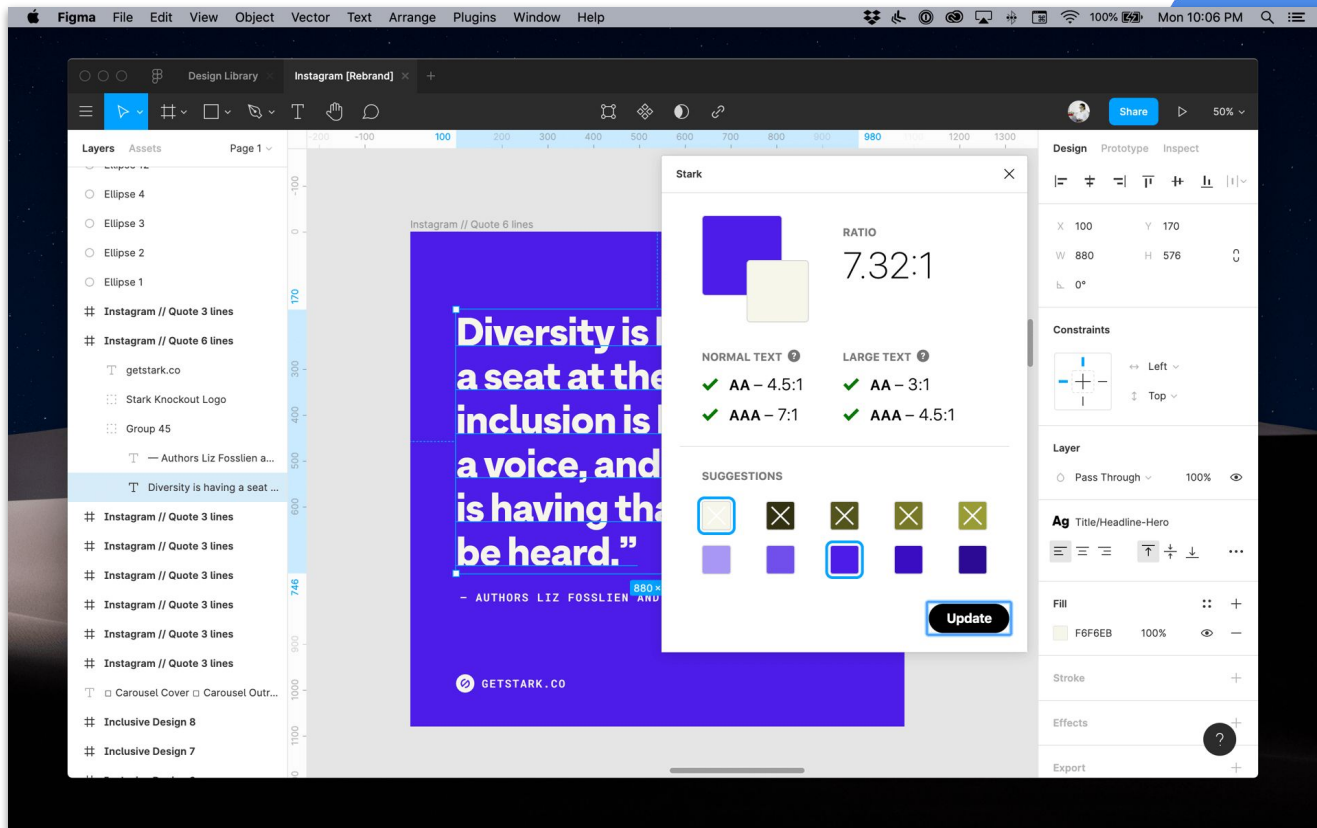
[Sign up for free](#)

[Learn more](#)

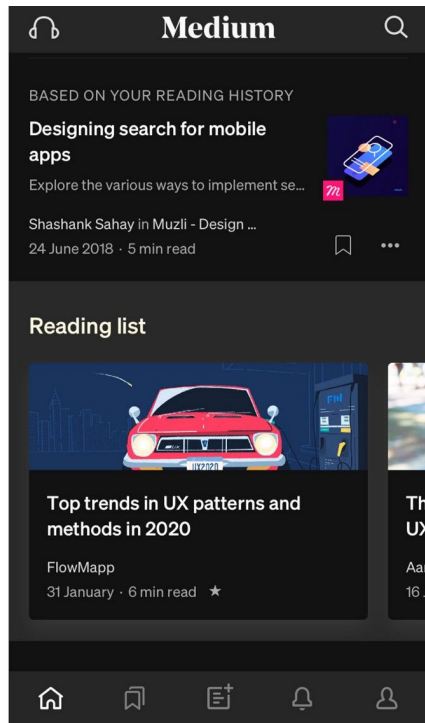
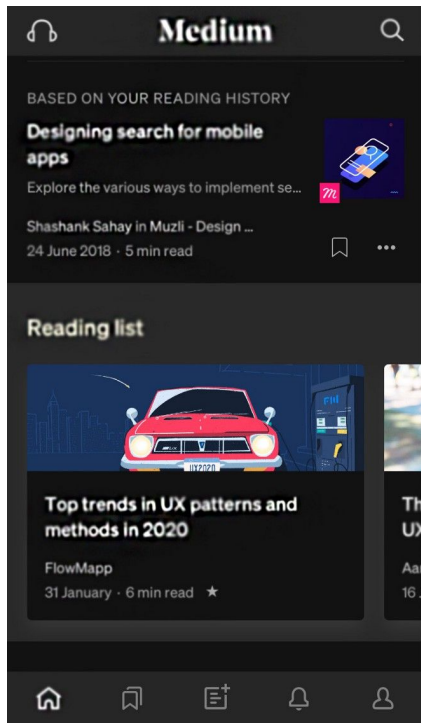


Stark

Figma / Sketch - Plugin



Dark mode...



halation [hey-ley-shuh n, ha-] [SHOW IPA](#)

[SEE SYNONYMS FOR halation ON THESAURUS.COM](#)

noun *Photography.*

- 1 a blurred effect around the edges of highlight areas in a photographic image caused by reflection and scattering of light through the emulsion from the back surface of the film support or plate.

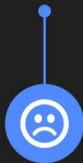
Astigmatism is a condition affecting a large percentage of humans. You find different stats everywhere, but in the UK it's roughly 47% who need corrective treatment for this condition (by which we mean glasses or contact lenses in order to be able to see properly).

Dark mode...

Design is nothing but a thought.

Philosophy of design is the study of definitions of design, and the assumptions, foundations, and implications of design. There are also countless informal or personal philosophies for guiding design purposes for all cases.

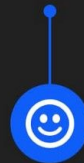
In the sensemaking-coevolution-implementation framework, designers alternate between its three titular activities. Sensemaking includes both framing and evaluating moves that are visibly present.



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**What are acceptable
(readable) font sizes?**



Text & Typography

- **Body Text - 16px** (browsers default text size)
 - ◆ **No lower than 14px**
- **Optimum line length:** between 50 and 80 characters
- **Do not justify text**
- **Avoid full caps** for blocks of text
- Use **headings, lists** and **paragraphs**



Fonts Ninja

overused, and most definitely doesn't represent brands have faced during the first half of 2020, yet it's that [predicting our w](#) [beginning to open up th](#) [overnight. So perhaps "th](#) [roach each new day of u](#) [ral and social challenges we face so that they can](#) [be competitive online.](#)

Christmas is trending two months earlier than usual this year – people have more time at home to plan, and the trend we've seen over the years whereby the holiday period to encompass Black Friday (or Black Friday) and Christmas rush, and an ultra-competitive January sales period is set to be the biggest revenue opportunity for

How are brands elevating their search strategy for maximum impact during the holiday shopping season? The search landscape

Proxima Nova A Regular
16px 25.6px 0px #2A2B2D

clid Flex Regular Bold

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789

Bookmark

Info

Proxima Nova A Regular Bold

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789

Bookmark

Info

**Motor/
Cognitive**



Some users find it difficult
or impossible to use a
mouse/trackpad or
touchscreen

**How can a user navigate a site,
without using a mouse or
touchpad?**

On most web browsers

You can use your keyboard alone - without a mouse or trackpad
- to navigate the content of the page.

→ **Tab Key:** 

- ◆ Can be used to cycle through all interactive elements on a page, from top to bottom

→ **Shift + Tab key combination:**  

- ◆ Can be used to cycle through all interactive elements on a page, from bottom to top

→ **Enter or space keys:**

- ◆ These keys interact with elements - activate links, check a box, display a dropdown menu

Content Structure

```
<h1>My heading</h1>
```

```
<p>This is the first section of my document.</p>
```

```
<p>I'll add another paragraph here too.</p>
```

```
<ol>
```

```
  <li>Here is</li>
```

```
  <li>a list for</li>
```

```
  <li>you to read</li>
```

```
</ol>
```

```
<h2>My subheading</h2>
```

```
<p>This is the first subsection of my document. I'd love people to be able to find this content!</p>
```

```
<h2>My 2nd subheading</h2>
```

```
<p>This is the second subsection of my content. I think is more interesting than the last one.</p>
```

Non-text content




- Make sure that all **img** elements have an **alt** attribute.
- Make sure that decorative images use **null alt** (empty) attribute values.
- Provide a **text alternative** for **complex images** such as **charts, graphs, and maps**.
- For **images containing text**, make sure the **alt** description includes the image's text.
 - ◆ For example, the **Contentsquare logo** should have an **alt** value of **“Contentsquare”**

Images & Alt-Text

Customer Rating ▾ Results: 1 - 12 (0.74) | Show 99 per page

Sort by Best Sellers

1 2 3 4 5 6 7 ... 77 ▶



Accessoryze
Soho Soft Beanie

£12

In Stock

🏆 Best seller

Accessoryze
Soho Soft Beanie

£12

In Stock

Katie Loxton
Eco Blanket Scarf - Black

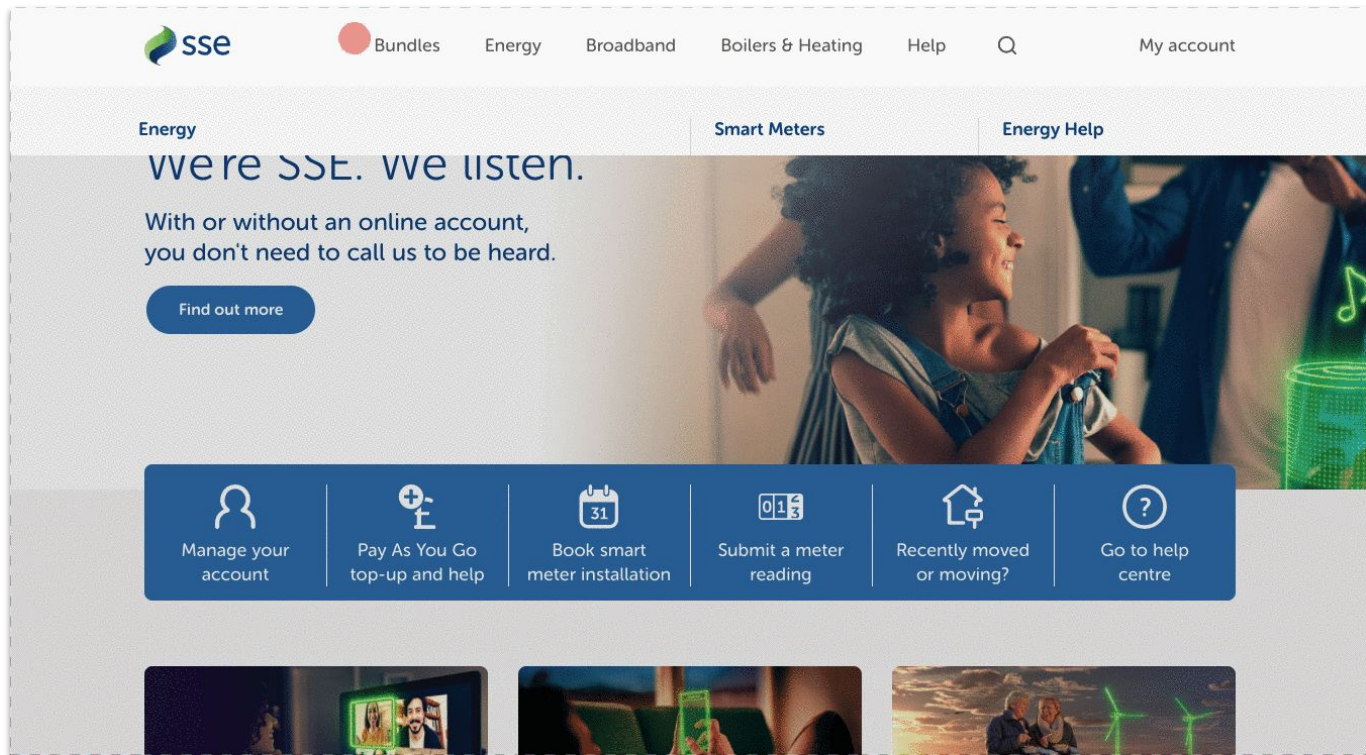
£25

In Stock

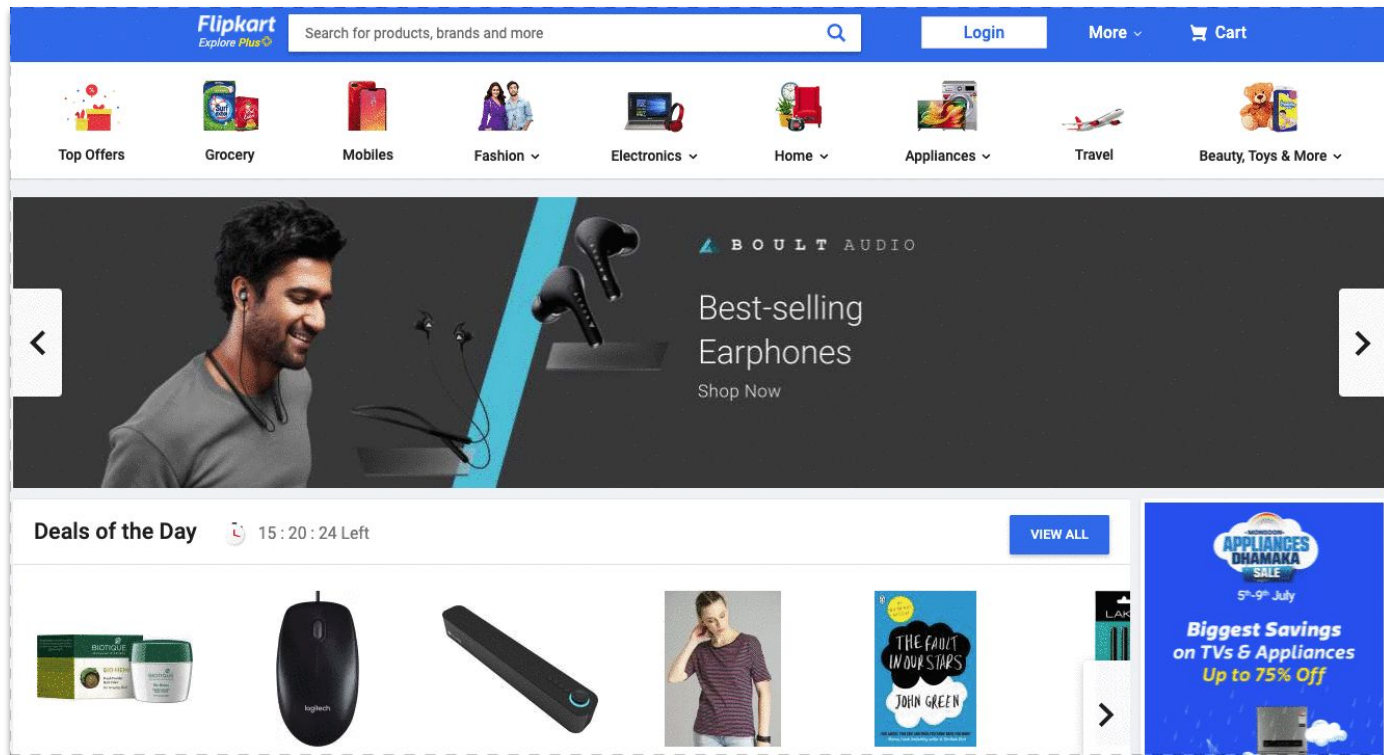
```
DevTools - www.very.co.uk/women/accessories/e/b/1590.end
Elements Console Sources Network Performance >>
<picture alt="accessorize-soho-soft-beanie">
  <source type="image/webp" srcset="https://media.very.co.uk/i/very/TK
  HN7_S01_0000000057_CAMEL_Slf/accessorize-soho-soft-beanie.jpg?5234x3
  12_retinax2&fmt=webp">
  <source type="image/jpg" srcset="https://media.very.co.uk/i/very/TKH
  N7_S01_0000000057_CAMEL_Slf/accessorize-soho-soft-beanie.jpg?5234x31
  2_retinax2">
   == $0
</picture>
</div>
...
html.js.desktop body div#pageContainer.pageContainer.pageContainer-very div#contentWrap div# ...
Styles Computed Layout Event Listeners DOM Breakpoints Properties Accessibility
Filter :show .cls +
element.style {
}
.gridView[data-lazywebpenabled=true][data-newgallery=true].lazy-pictureWrap gallery.css:1
img f
```

Very

Keyboard accessible

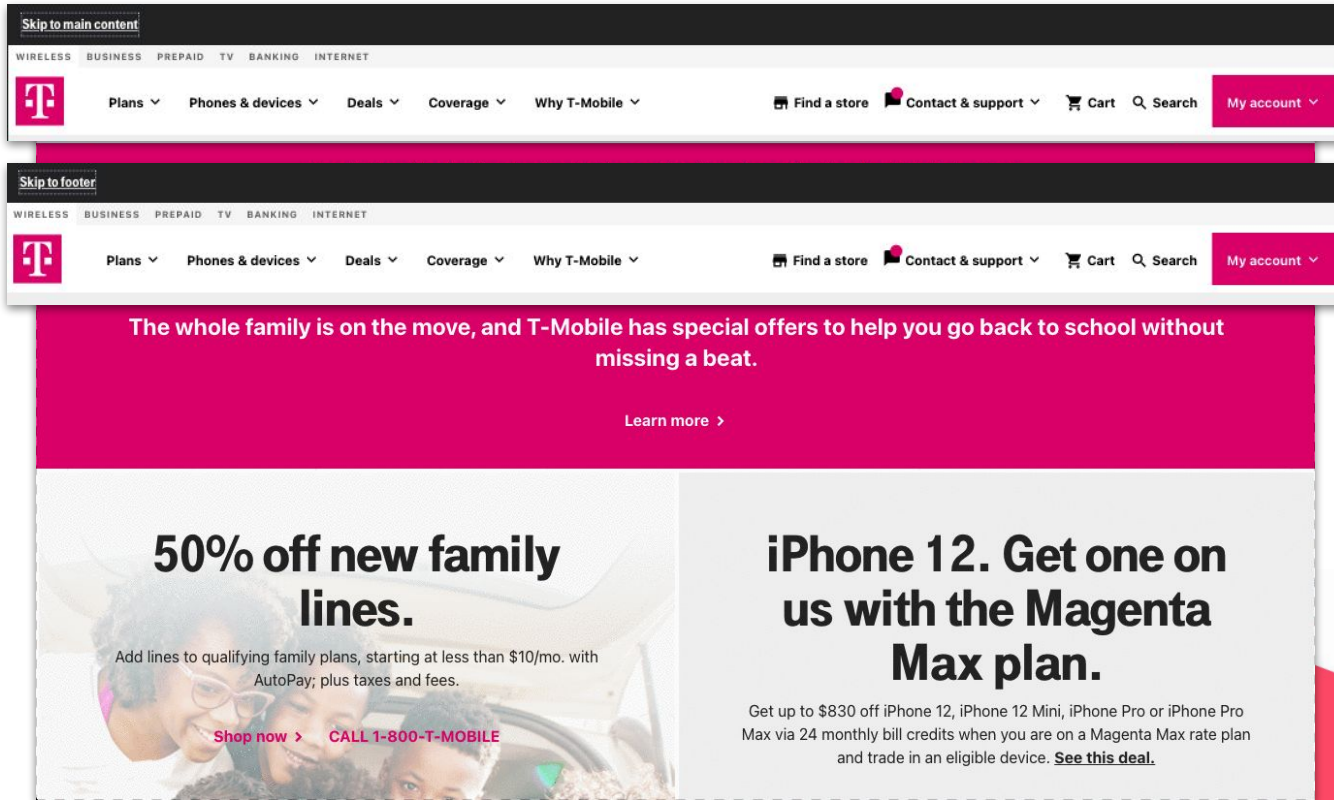


Keyboard inaccessible



FLIPKART


Keyboard accessible







The screenshot displays the T-Mobile website with two identical header and footer sections overlaid to demonstrate keyboard accessibility. The header section includes a 'Skip to main content' link, a navigation menu with categories like WIRELESS, BUSINESS, PREPAID, TV, BANKING, and INTERNET, and a secondary menu with links for Plans, Phones & devices, Deals, Coverage, and Why T-Mobile. It also features icons for finding a store, contacting support, a shopping cart, a search function, and a 'My account' button. The footer section contains a 'Skip to footer' link and the same navigation and secondary menu. Below the footer, a large pink banner promotes school-related offers with the text 'The whole family is on the move, and T-Mobile has special offers to help you go back to school without missing a beat.' and a 'Learn more' link. The main content area is divided into two columns. The left column features a '50% off new family lines.' promotion with a photo of a family and details about adding lines to qualifying family plans. The right column features an 'iPhone 12. Get one on us with the Magenta Max plan.' promotion, detailing a \$830 discount on various iPhone models for Magenta Max plan subscribers.

[Skip to main content](#)


WIRELESS BUSINESS PREPAID TV BANKING INTERNET





 Plans ▾ Phones & devices ▾ Deals ▾ Coverage ▾ Why T-Mobile ▾

 Find a store  Contact & support ▾  Cart  Search [My account ▾](#)

[Skip to footer](#)

WIRELESS BUSINESS PREPAID TV BANKING INTERNET

 Plans ▾ Phones & devices ▾ Deals ▾ Coverage ▾ Why T-Mobile ▾

 Find a store  Contact & support ▾  Cart  Search [My account ▾](#)

The whole family is on the move, and T-Mobile has special offers to help you go back to school without missing a beat.

[Learn more >](#)

50% off new family lines.

Add lines to qualifying family plans, starting at less than \$10/mo. with AutoPay; plus taxes and fees.

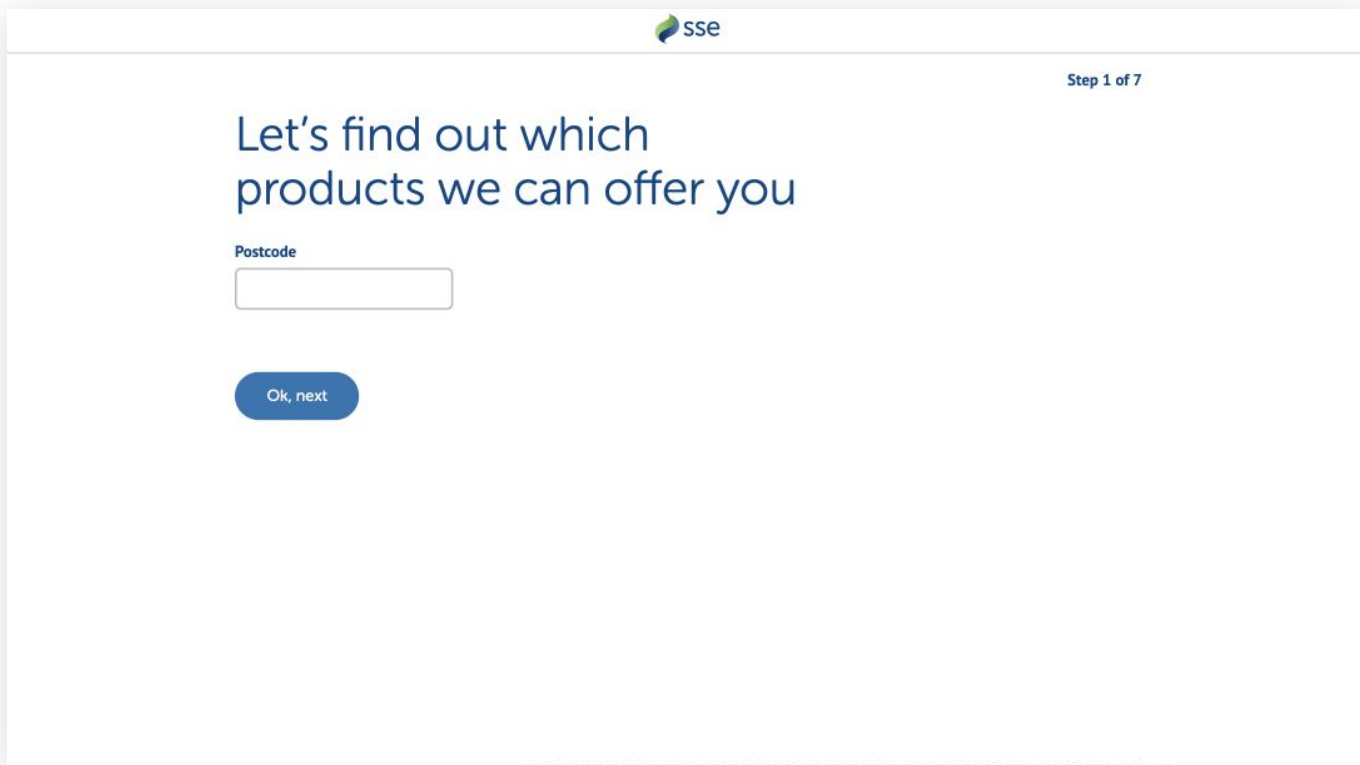
[Shop now >](#) [CALL 1-800-T-MOBILE](#)

iPhone 12. Get one on us with the Magenta Max plan.

Get up to \$830 off iPhone 12, iPhone 12 Mini, iPhone Pro or iPhone Pro Max via 24 monthly bill credits when you are on a Magenta Max rate plan and trade in an eligible device. [See this deal.](#)

T-Mobile

Keyboard accessible



sse

Step 1 of 7

Let's find out which
products we can offer you

Postcode

Ok, next

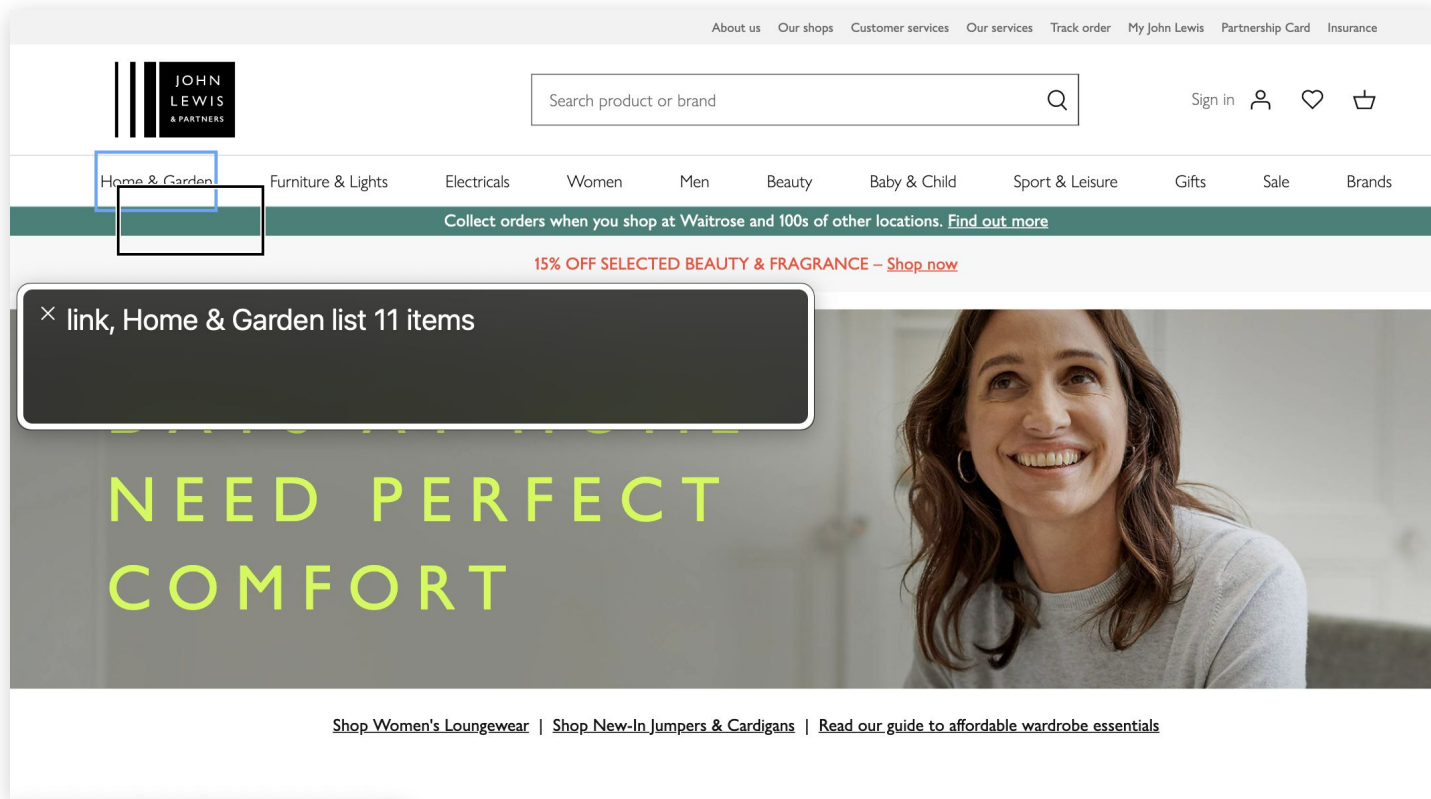


Using Clear Language

- Don't use dashes if you can avoid it. Instead of writing '5–7', write '5 to 7'.
- Expand abbreviations: instead of writing 'Jan', write 'January'.
- Expand acronyms, at least once or twice. Instead of writing 'HTML' in the first instance, write 'Hypertext Markup Language'.



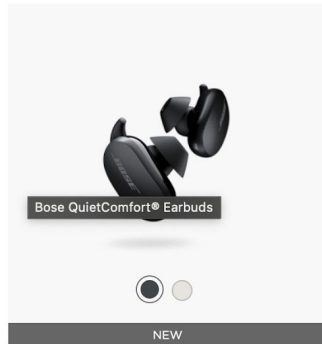
Screen Reader - Labels and Links



Screen Reader - Alt-text (Images)

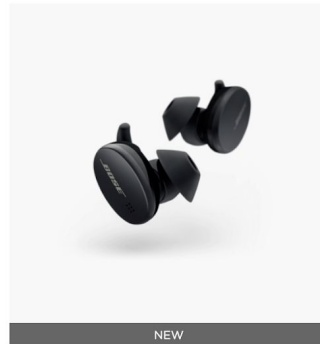


RECOMMENDED



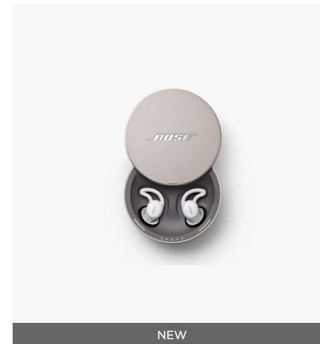
Bose QuietComfort® Earbuds
Earbuds

\$279.95



Bose Sport Earbuds
Earbuds

\$179.95



Bose Sleepbuds™ II
Sleep

\$249.95



**QC20 noise cancelling
headphones - Apple devices**
Earbuds

\$249.95

BOSE

Checking alt-text (and more!)

WAVE Evaluation Tool

The screenshot displays the WAVE Evaluation Tool interface, which is powered by WebAIM. The tool is used to evaluate the accessibility of a webpage. The interface is divided into a left sidebar and a main content area.

Left Sidebar:

- WAVE logo:** web accessibility evaluation tool
- powered by WebAIM**
- Styles:** OFF (toggle switch)
- Summary:** Home, Details, Reference, Structure, Contrast
- Summary Data:**
 - 31 Errors (red X icon)
 - 44 Contrast Errors (red circle icon)
 - 44 Alerts (yellow triangle icon)
 - 33 Features (green checkmark icon)
 - 50 Structural Elements (blue triangle icon)
 - 164 ARIA (purple square icon)
- View details >**

Main Content Area:

- Header:** The following apply to the entire page: en_US
- Summary:** New report based on 20B+ user sessions: 2021 Digital Experience Benchmarks
- Page Content:** The Experience Analytics Leader. English (United States), Careers, Login, Q.
- Footer:** CONTENTSQUARE, Why Contentsquare, Platform, Customers, Company, Insights, Get a Demo, Accessibility logo.

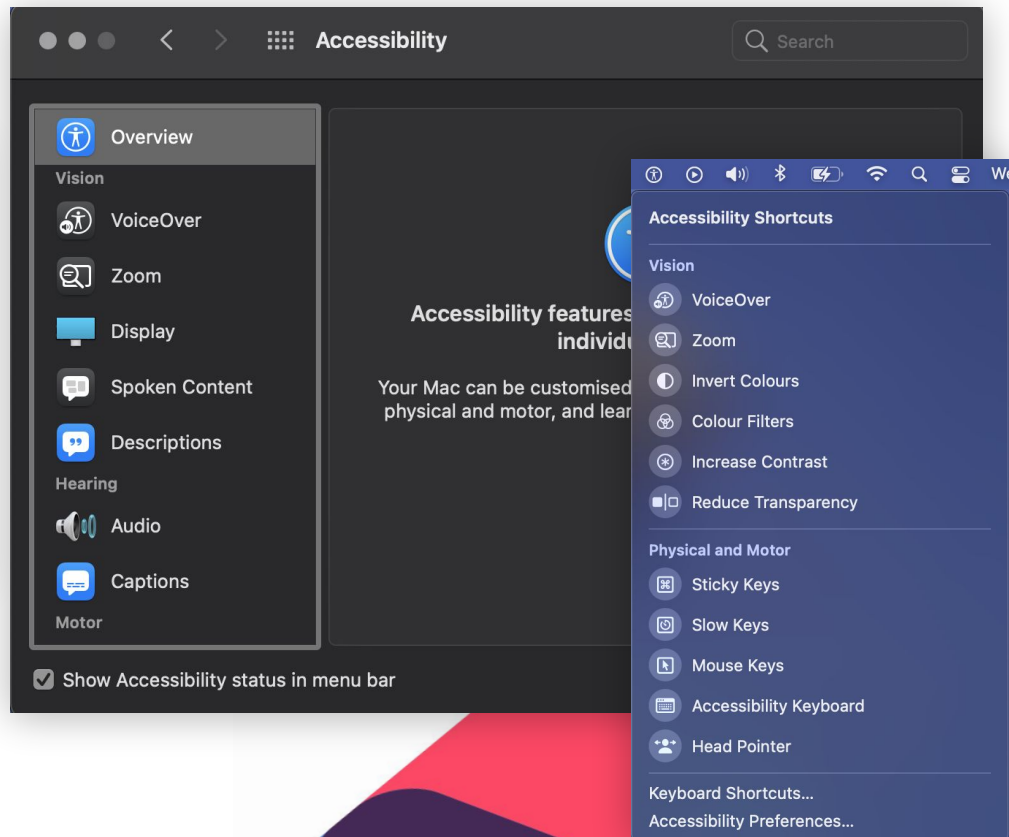
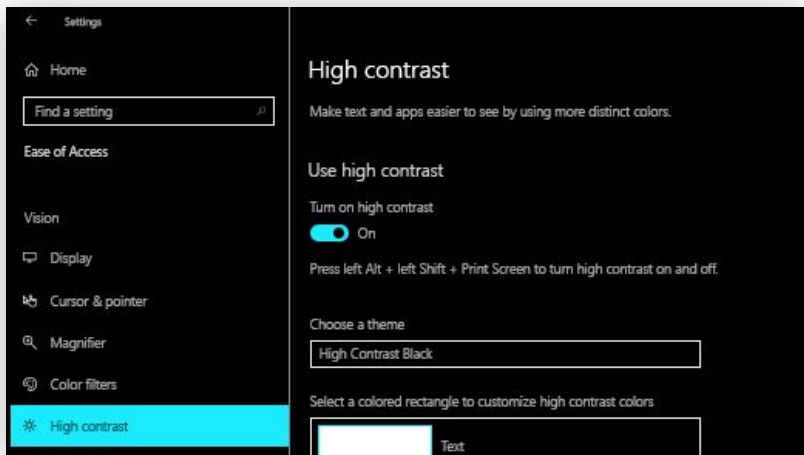


When you have a free moment...

**Look at your built-in
Accessibility tool**



Windows | Mac





— More tips...

Courtesy of GOV UK

Designing for users on the autistic spectrum



Do...

use simple colours



write in plain English

Do this.

use simple sentences and bullets



make buttons descriptive

[Attach files](#)

build simple and consistent layouts



Don't...

use bright contrasting colours



use figures of speech and idioms



create a wall of text



make buttons vague and unpredictable

[Click here!](#)

build complex and cluttered layouts



Designing for users of screen readers



Do...

describe images and provide transcripts for video

`<alt>`

follow a linear, logical layout



structure content using HTML5

`<h1>`
`<nav>`
`<label>`

build for keyboard use only



write descriptive links and headings

[Contact us](#)

Don't...

only show information in an image or video



spread content all over a page



rely on text size and placement for structure

36pt, bold
IHeader

force mouse or screen use



write uninformative links and headings

[Click here](#)

Designing for users with low vision



Do...

use good colour contrasts and a readable font size

Aa

publish all information on web pages



use a combination of colour, shapes and text

Start >

follow a linear, logical layout



put buttons and notifications in context

[Submit](#)

Don't...

use low colour contrasts and small font size

Aa

bury information in downloads



only use colour to convey meaning



spread content all over a page



separate actions from their context

[Submit](#)

Designing for users with physical or motor disabilities



Do...

make large clickable actions



give form fields space



design for keyboard or speech only use



design with mobile and touchscreen in mind



provide shortcuts



Don't...

demand precision



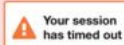
bunch interactions together



make dynamic content that requires a lot of mouse movement



have short time out windows



tire users with lots of typing and scrolling



Designing for users who are Deaf or hard of hearing



Do...

write in plain English

Do this.

use subtitles or provide transcripts for videos



use a linear, logical layout



break up content with sub-headings, images and videos



let users request an interpreter for appointments



Don't...

use complicated words or figures of speech



put content in audio or video only



make complex layouts and menus



make users read long blocks of content



don't make telephone the only means of contact with users



Designing for users with dyslexia



Do...

use images and diagrams to support text



align text to the left and keep a consistent layout



consider producing materials in other formats (for example, audio or video)



keep content short, clear and simple



let users change the contrast between background and text



Don't...

use large blocks of heavy text



underline words, use italics or write in capitals



force users to remember things from previous pages - give reminders and prompts



rely on accurate spelling - use autocorrect or provide suggestions



put too much information in one place

