

A photograph of a man in a motorized wheelchair riding down a busy Japanese street. The street is lined with numerous colorful signs for restaurants and shops, including one for '新 焼き牛重' (New Yakimochi) and another for '味自慢' (Taste Pride). The man is wearing a beige jacket and a cap, looking upwards. The image is overlaid with a large white text 'Intro to digital accessibility' and a smaller white text 'Heather Hepburn (she/her)' below it.

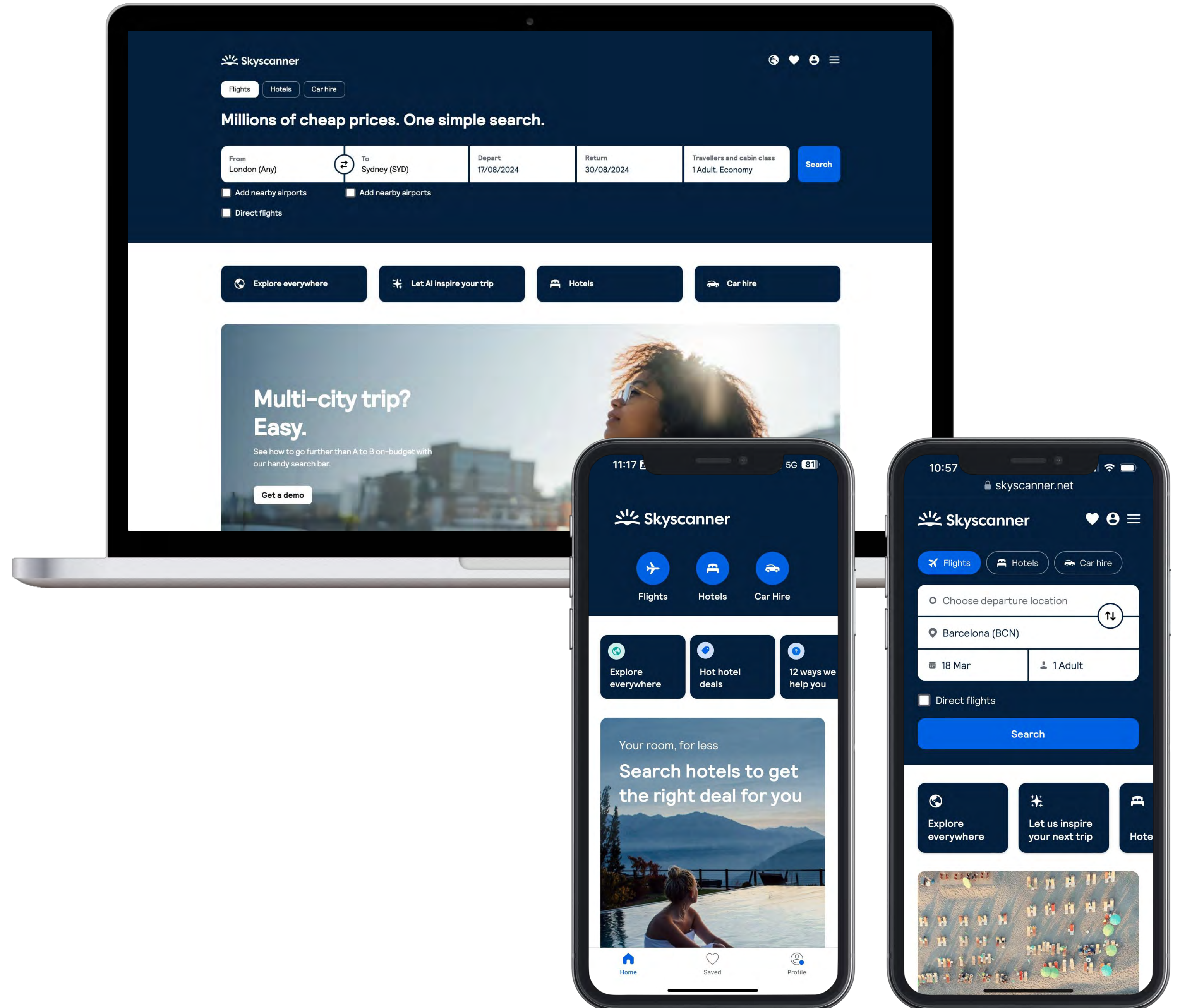
Intro to digital accessibility

Heather Hepburn (she/her)

About us

Skyscanner

- Global online travel marketplace
- Flights, hotels & car hire
- 1,400 staff
- 9 offices worldwide
- 37 languages
- 110 million monthly active users



About me

Heather Hepburn

- Was a UX Writer
- Now Head of Accessibility at Skyscanner
- Co-founder of Champions of Accessibility Network (CAN)
- On a mission!



Content

- **Accessibility – what, who, why**
- **Our accessibility programme**
- **Digital Empathy Lab (interactive!)**
- **How to make things accessible**
- **Q&A**

Accessibility – what, who, why

Q. Who is disabled here?



A: Neither

Both can enter the building as there are no barriers.



Medical model

Disability is caused by a health condition, disease or trauma



Social model

Disability is caused by society and the environment – not the condition

Definitions

Accessibility (a11y)

1. The qualities that make an experience open to all
2. A professional discipline aimed at achieving No. 1

Accessible products

“Websites, apps, tools, and technologies that are designed and developed so that people with disabilities can use them.”

Global set of standards:

- Web Content Accessibility Guidelines (WCAG)
- Version 2.2
- Aiming for Level AA

1 in 4

people have a **disability**

80%

of disabilities are **hidden**

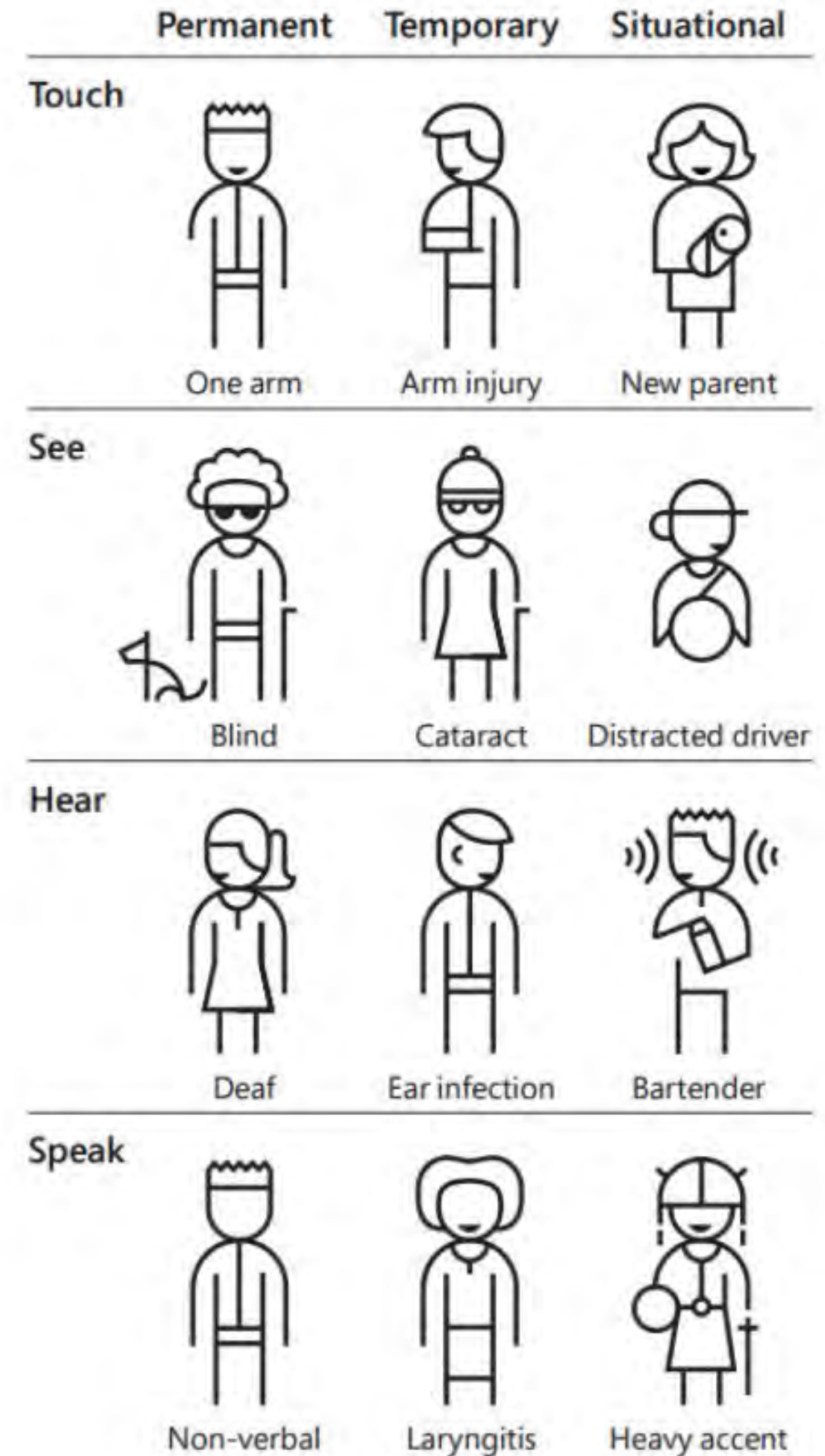


Disabled users from our 110 million

Our traveller base includes:

84,700,000	Visually impaired (blindness, low vision, cataracts & others)	12,100,000	Memory impairment
19,800,000	Deafness or hearing loss	11,000,000	Dyslexia
4,950,000	Colour blindness (8% men, 0.5% women)	9,350,000	ADHD
3,080,000	Blindness or severe vision impairment (would benefit from a screen reader)	6,600,000	Dyscalculia
2,200,000	Restricted to keyboard-only use	1,650,000	Autism

Disabilities can affect us **all**



**“The results of inclusive design
for accessibility always leads
to a better product for
everyone.”**



Phil Spencer

Head of Xbox

Business Case

Commercial

- Increase audience size
- Increase revenue
- Breed loyalty
- Avoid reputational damage
- Great for SEO

Legal

- **UK Equality Act 2010:** make *“reasonable adjustments”* to enable disabled persons to access our services
- **EU Accessibility Act:** by June 2025 our services should be designed to *“maximise their foreseeable use by persons with disabilities”*

Moral

- It’s the right thing to do
- Provide equitable experience for everyone
- Exclude nobody

Our accessibility programme

Our vision

To make Skyscanner a **flagship of disability inclusion**, our **products accessible to all**, and **travel easier for people with disabilities**.

our industry

our people

our travellers

Our strategy



Design processes

Brief

Considerations

Accessibility considerations

- 1. How might we make this work for a blind person who can't see the screen?
- 2. How might we make this work for a physically impaired person who can't use a mouse or touch a screen?
- 3. For more detailed considerations, visit our [Backpack Product Designer Accessibility Guidelines](#)

Checklists

Accessibility checks

Visual

- ☐ Passes colour contrast requirements
- ☐ Blocks of text are left aligned
- ☐ Meaning is not conveyed by colour alone and works through colourblind lenses

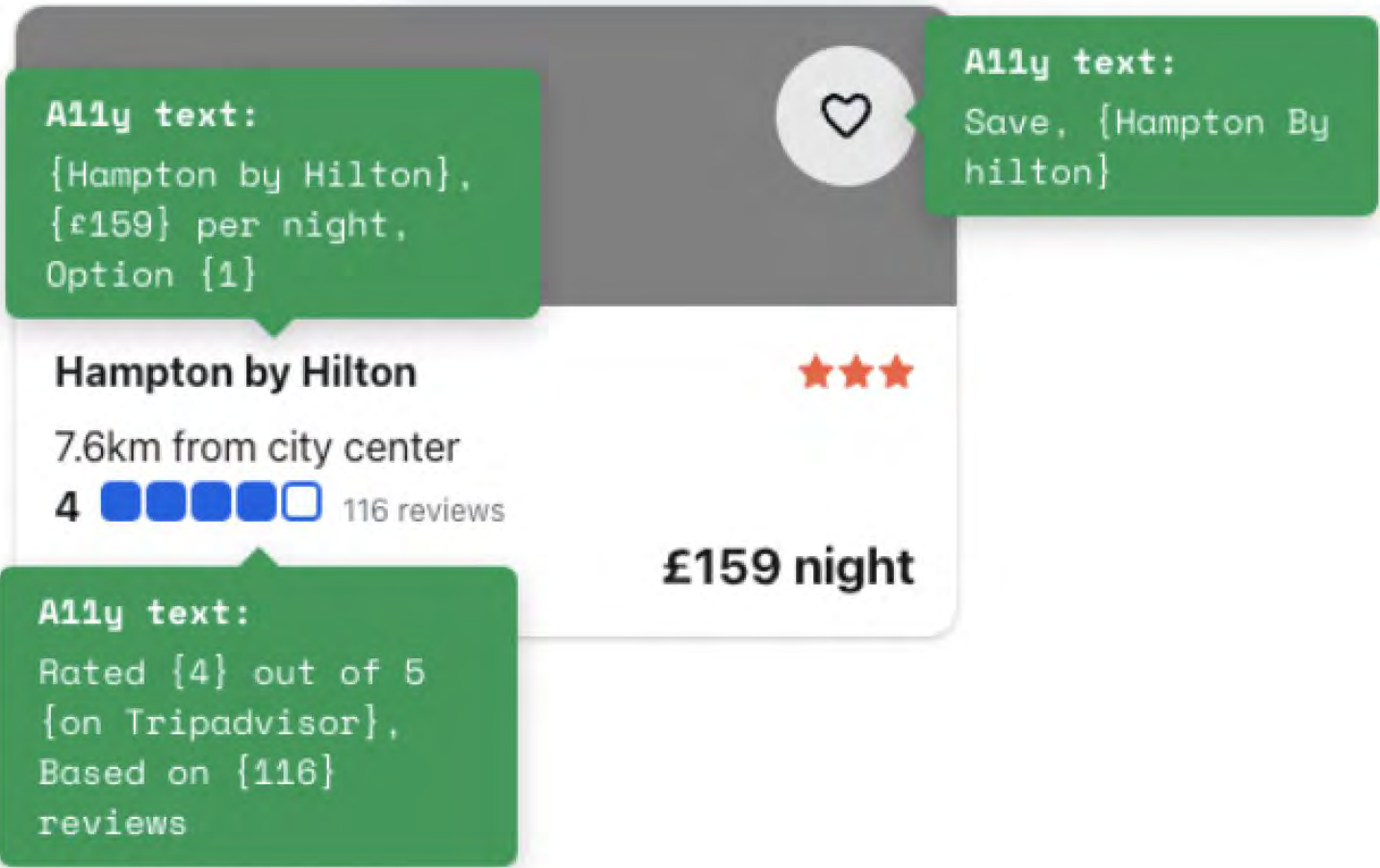
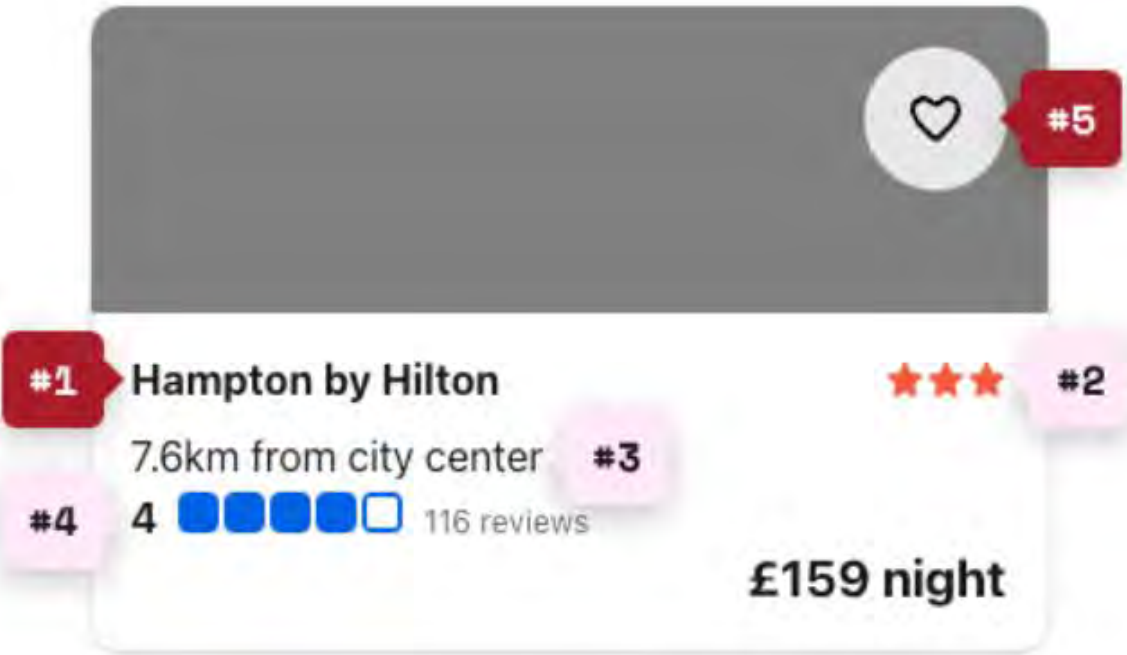
Content

- ☐ Content is easy to understand
- ☐ Headings are unique and descriptive
- ☐ All links and CTAs are unique (no "click here" or "read more")

Navigation and interaction

- ☐ Keyboard-only navigation has been considered
- ☐ Screen reader navigation has been considered
- ☐ Videos don't autoplay or can be paused

Design markup



Engineering processes

Design system

- A11y guidance
- Component a11y
- Testing guidance

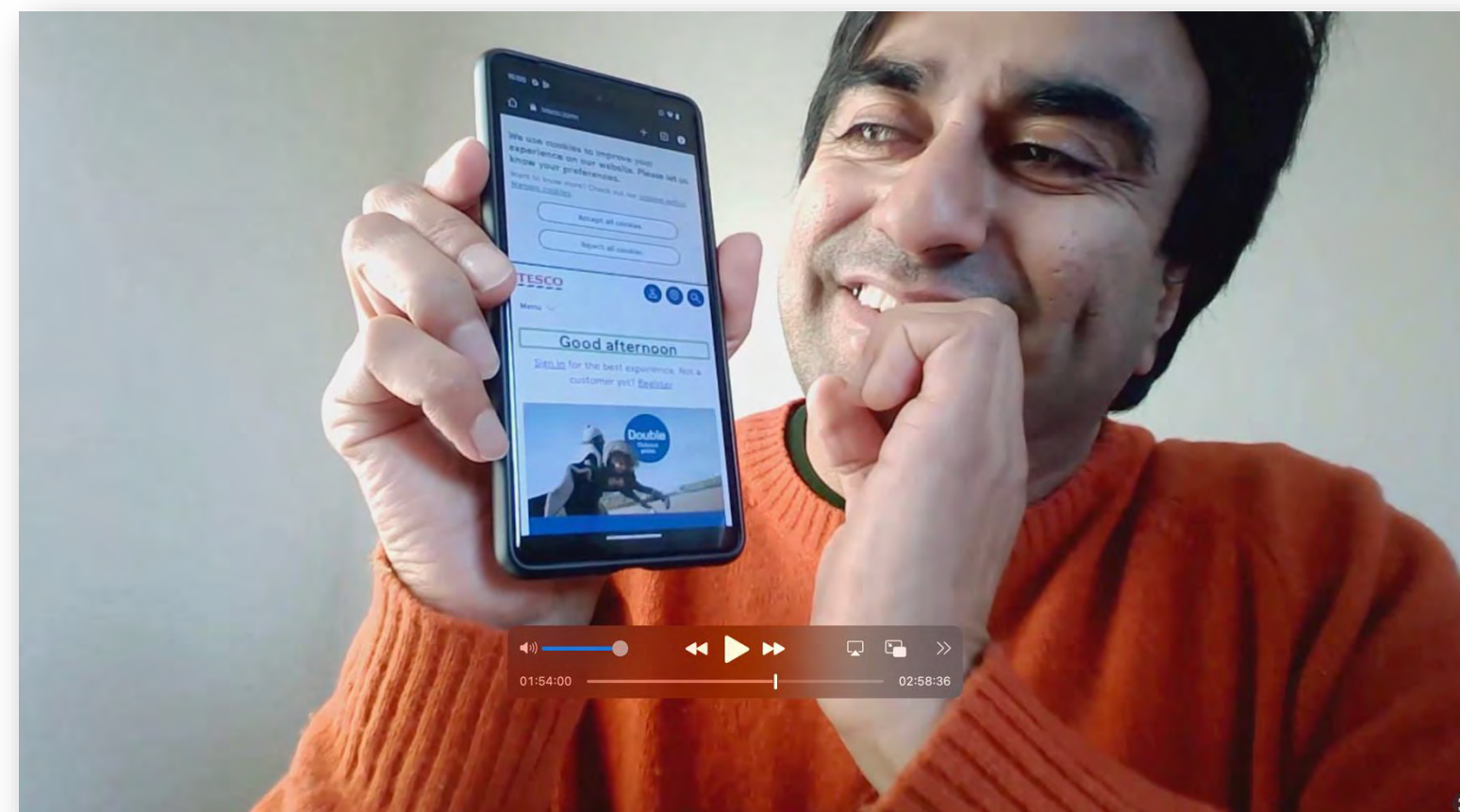
Build

- Web production standard
- App production standard
- Engineering Handbook
- axe DevTools
- axe Accessibility Linter
- Accessibility Insights

Testing

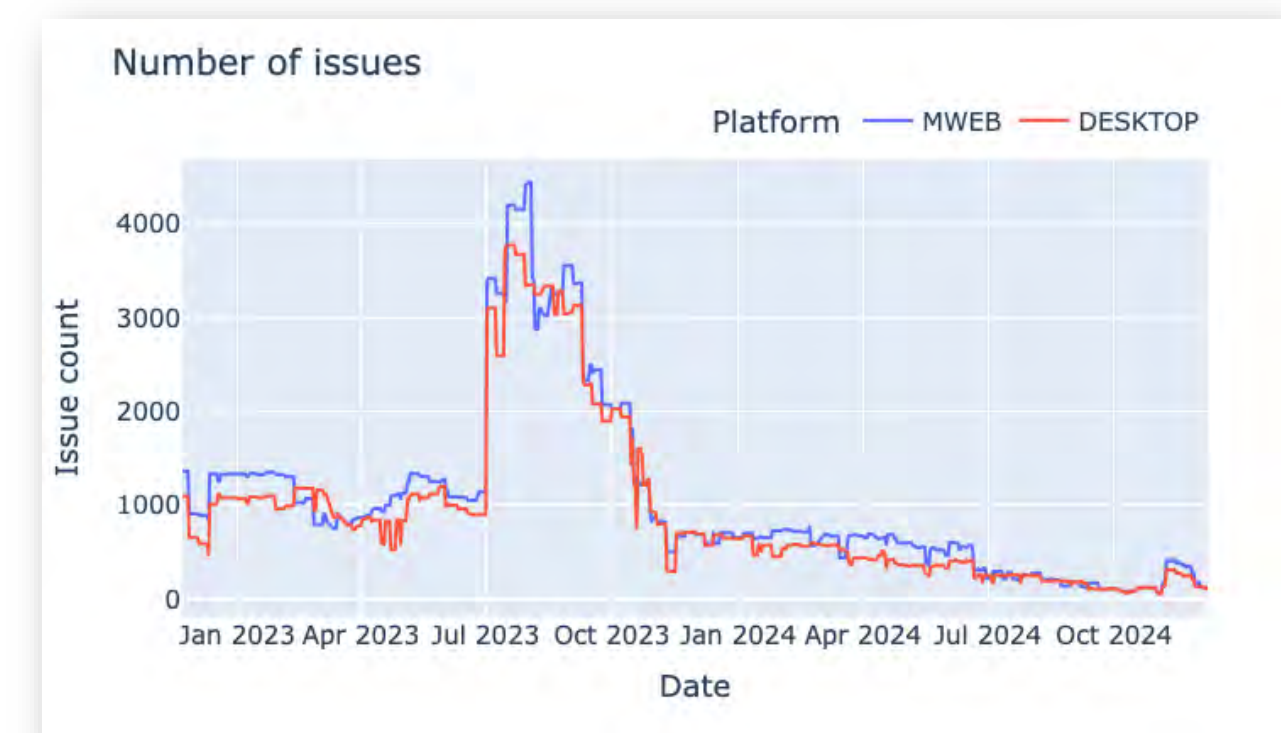
- Jest-axe (unit tests)
- Cypress a11y add-on (e2e tests)
- Manual testing in DoD
 - Keyboard only
 - Screen reader
 - Zoom

User testing



Production

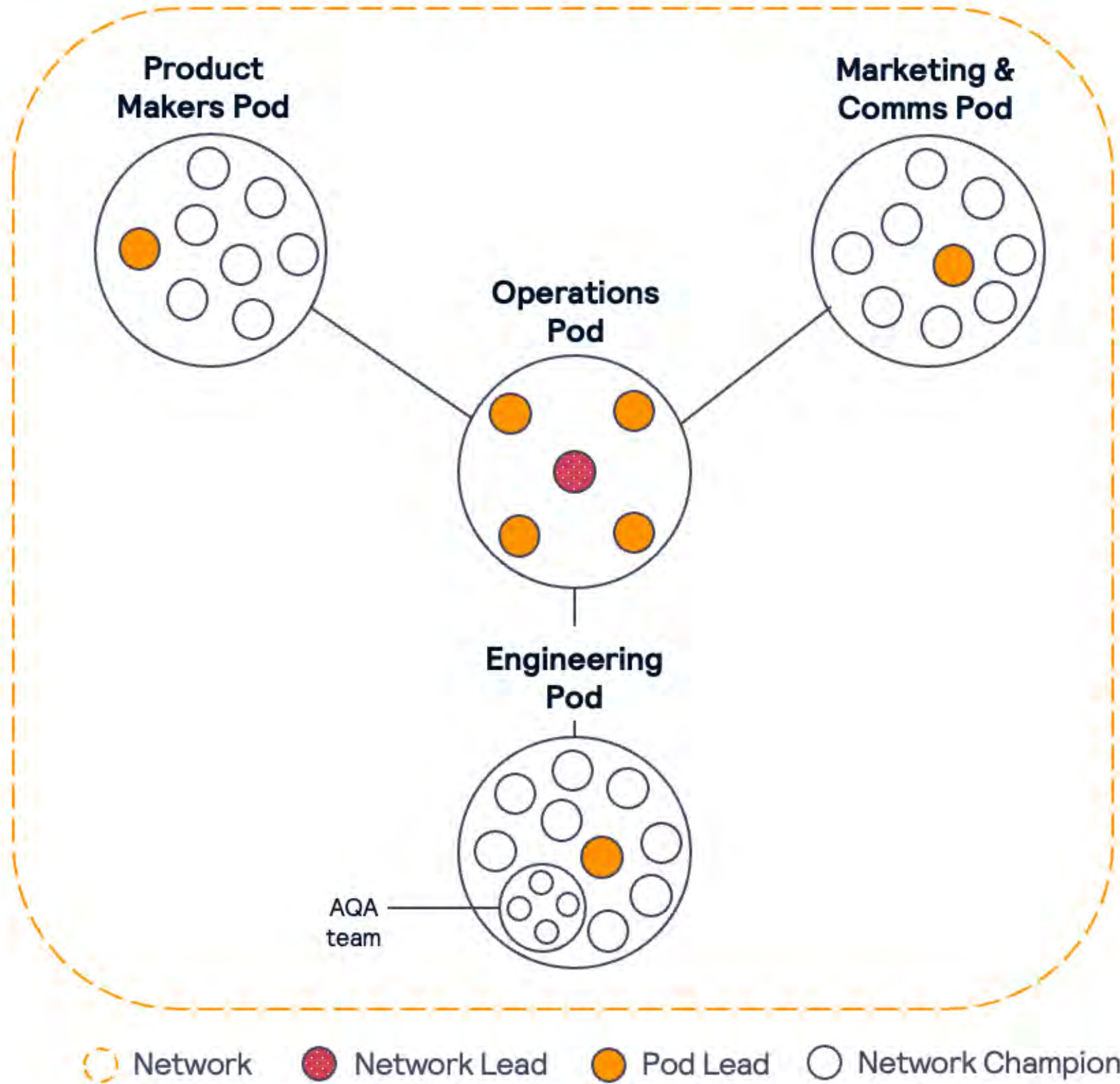
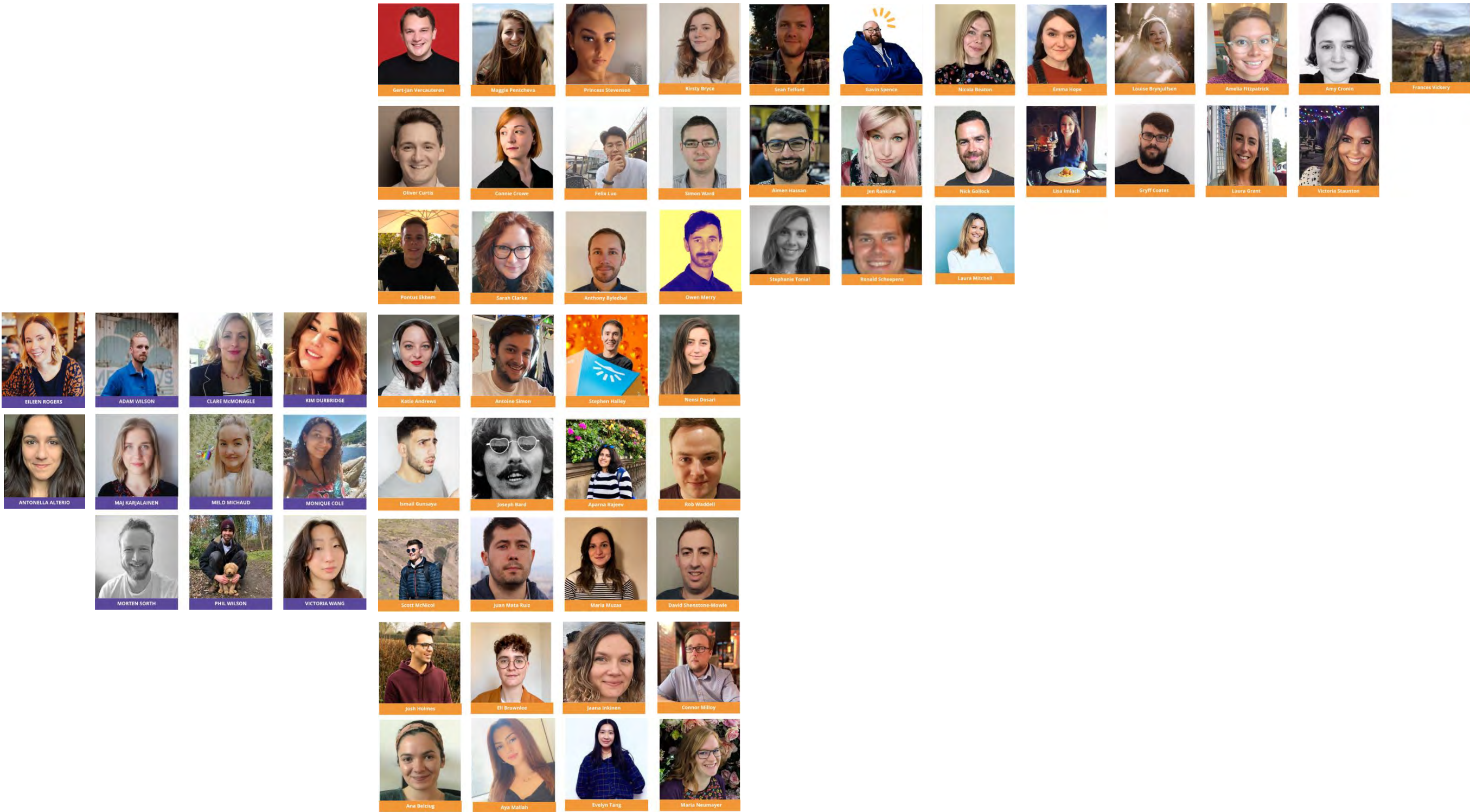
- New incidents process
- Auditing – AQA (currently automated only)



Our accessibility programme

Capability

Champions Network



Our accessibility programme

Capability

Global Induction & Empathy Lab



Training

- Squad training sessions
- Screen reader workshops
- Specific design training
- Deque University

Deque University

Login

Online Courses

Instructor-Led Training

Resources

Product Documentation

Courses in the Curriculum (by Topic)

- "Fast Track to Accessibility" role-specific intro courses
 1. [Fast Track to Accessibility for Any Role \(Non-Technical\)](#)
 2. [Fast Track to Accessibility for Designers](#)
 3. [Fast Track to Accessibility for Document Creators](#)
 4. [Fast Track to Accessibility for PDF Creators \(coming soon\)](#)
 5. [Fast Track to Accessibility for Web Developers \(coming soon\)](#)
- Accessibility Fundamentals
 1. [Accessibility Fundamentals: Disabilities, Guidelines, and Laws](#)
 2. [Designing an Accessible User Experience](#)
 3. [Basic Web and Document Accessibility for Content Contributors](#)
 4. [Section 508: Fundamentals of the Law and Technical Standards](#)
- Web Accessibility
 1. [IAAP Certification Quick Guide](#)
 2. [IAAP CPACC Certification Prep Course](#)
 3. [Accessibility Fundamentals - Disabilities, Guidelines, and Laws](#)
 4. [Designing an Accessible User Experience](#)
 5. [Semantic Structure and Navigation \(with WCAG 2.2 updates\)](#)
 6. [Visual Design and Colors \(with WCAG 2.2 updates\)](#)
 7. [Device-Independent Input Methods \(with WCAG 2.2 updates\)](#)
 8. [Form Labels, Instructions, and Validation \(with WCAG 2.2 updates\)](#)
 9. [Images, SVG, and Canvas](#)
 10. [Responsive Design and Zoom](#)

Resources

Accessibility

Share

...

Star this space

Accessibility Hub

Our vision

To make Skyscanner a flagship of **disability inclusion**, our products **accessible** to all, and travel **easier** for people with disabilities

Skyscanner

Accessibility

What is accessibility?

Accessibility is the degree to which our products can be used by as many people as possible

Inclusive design is the methodology that enables, and draws on, the full range of human diversity

Accessibility + Inclusive design = Truly inclusive products that work for **everyone**

Our Champions network

- [Get involved: Accessibility Champions Network](#)
- [Accessibility: Engineering Pod Dashboard](#)
- [Accessibility: Internal Pod Dashboard](#)
- [Accessibility: Marketing & Comms Pod Dashboard](#)
- [Accessibility: Product Makers Pod Dashboard](#)

Strategy	Activity	Tooling
<ul style="list-style-type: none">• Accessibility Champions Network• Accessibility Strategy 2024• Maturity model	<ul style="list-style-type: none">• Events• Projects• User research	<ul style="list-style-type: none">• AQA - Web auditing• Deque University - Self-led accessibility training <div>Quickstart</div>

Digital Empathy Lab

What's an Empathy Lab?

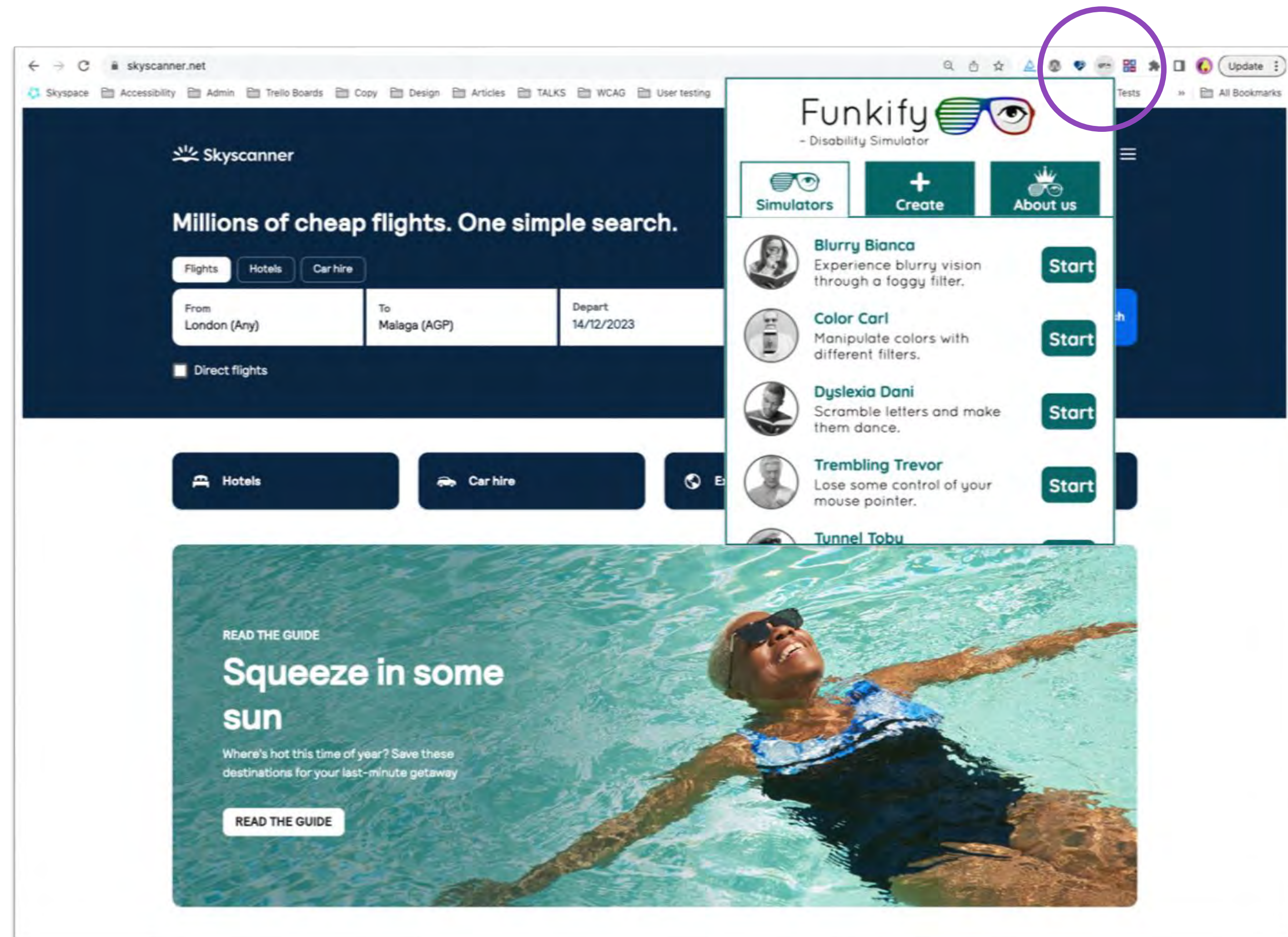
- These experiences are **simulations only**
- Everyone experiences disability differently
- Some simulations are more accurate than others

Task for YOU

Download the **Funkify Chrome plugin** and try out the disabled personas.

Steps:

1. Go to **Funkify.org**
2. Hit “Try it” button for “Funkify Free”
3. Open a website in Chrome, then open the extension by clicking the glasses icon
4. Try out the different disability personas by hitting “start”



How to make things accessible

How to make things accessible

5 key areas

- ① Design
- ② Content
- ③ Keyboard only
- ④ Screen readers
- ⑤ Magnification



5 key areas

1 Design	Use good colour contrast, large font size, clean layout, controlled motion, consistent navigation and accessible interactions
2 Content	Write copy in plain language. Use clear and unique links and Calls to Action (CTAs), alternative (ALT) text for images and hidden labels
3 Keyboard only	When only using a keyboard, have a clear focus indicator, move in the correct order and make all interactive elements reachable
4 Screen readers	Make it work with a screen reader by using semantic HTML, meaningful focus order, heading tags, image descriptions (ALT text) and labels
5 Magnification	Allow zoom up to 400% (or 200% text increase) without losing content or functionality

Remember:

Build accessibility in from the start. Don't make it an afterthought.

1

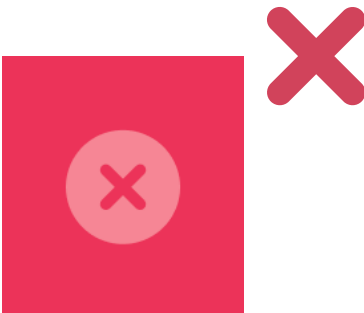
Design


Colour

AIM #1: Text is clearly visible against the background

Can you read this heading? ❌

It's not great, as there's not enough contrast between the colour of the heading text and the background.





Splendid Etoile

2.15 miles from city centre

4.4/5

Very good

134 reviews


£195 a night

Recommended by 44 couple travellers

Can you read this heading? ✅

That's much better. The contrast between the colour of the heading and the background is much higher.





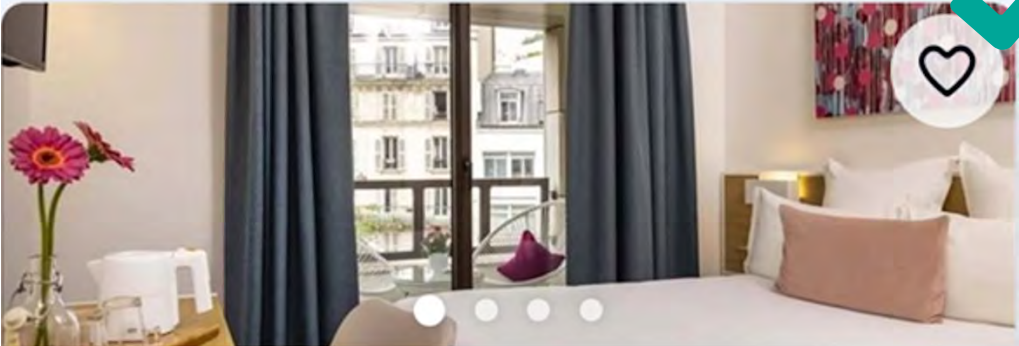
Hotel Peyris Opera

0.27 miles from hotel

4.0

849 reviews

£105 a night



Hotel Paris Louis Blanc

4.0

1,449 reviews

Booking.com

£115 night

Our lowest price £71

Colour

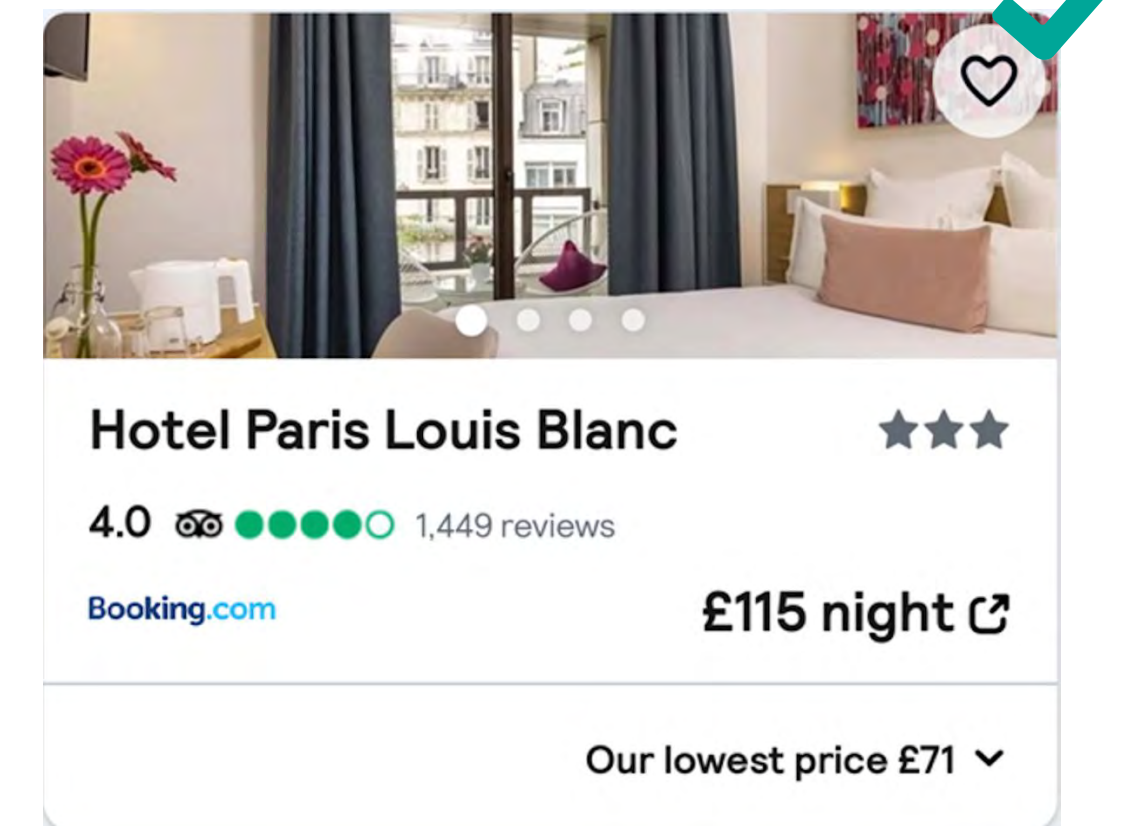
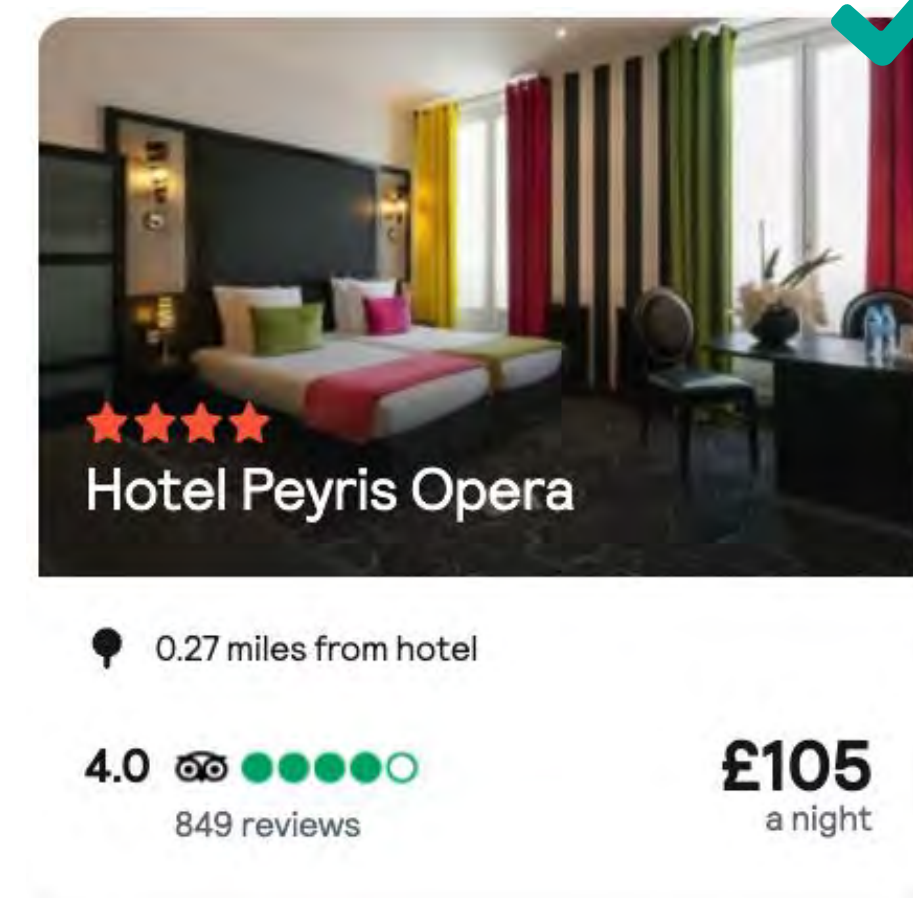
AIM #1: Text is clearly visible against the background

Colour contrast minimums

- Large text = **3:1**
Larger or equal to 24px or 19px bold
- Small text = **4.5:1**
Smaller than 24px or 19px bold
- Graphics = **3:1**

Can you read this heading?

That's much better. The contrast between the colour of the heading and the background is much higher.



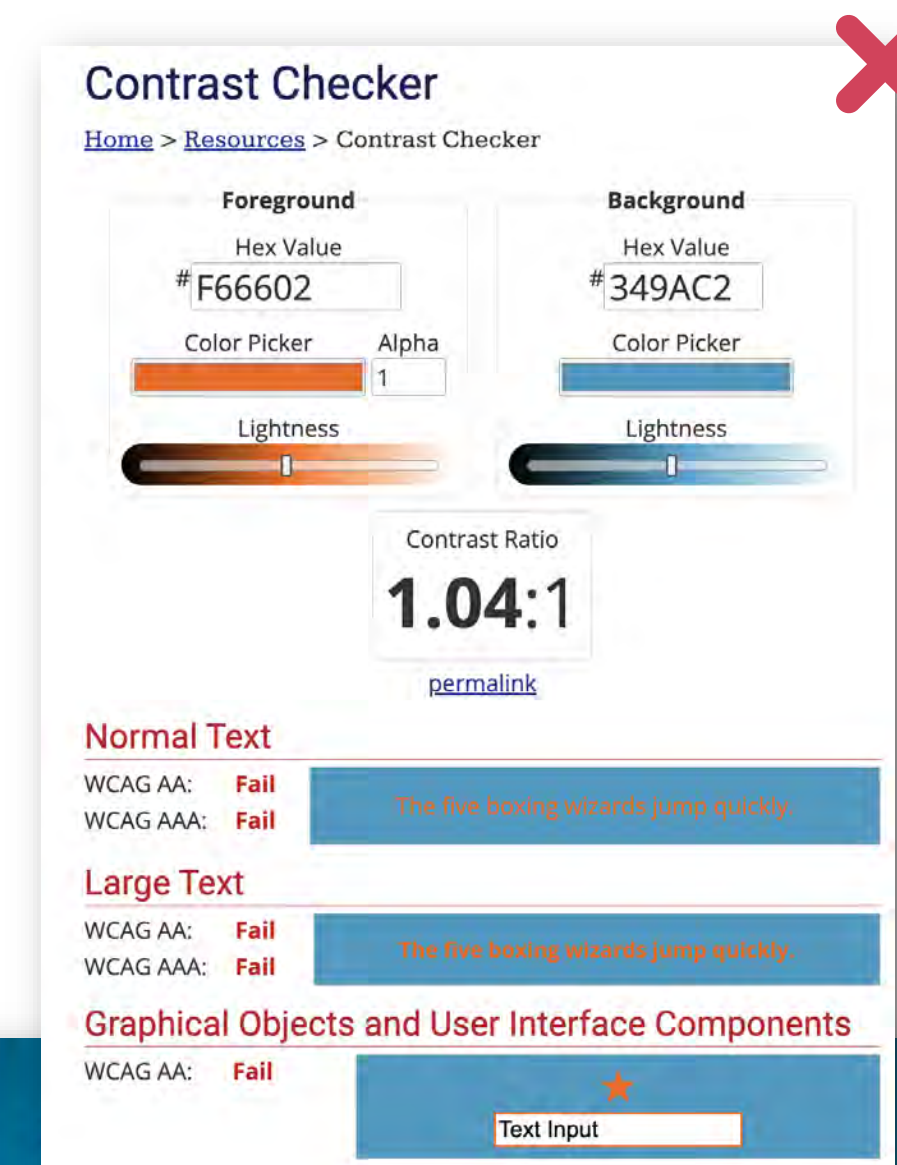
Colour

AIM #1: Text is clearly visible against the background

Colour contrast minimums

- Large text = **3:1**
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- Small text = **4.5:1**
Smaller than 24px or 19px bold
- Graphics = **3:1**

Testing



Contrast Checker

[Home](#) > [Resources](#) > Contrast Checker

Foreground

Hex Value: #F66602

Color Picker: [Color Picker]

Alpha: 1

Lightness: [Slider]

Background

Hex Value: #349AC2

Color Picker: [Color Picker]

Lightness: [Slider]

Contrast Ratio: **1.04:1**

[permalink](#)

Normal Text

WCAG AA: **Fail**

WCAG AAA: **Fail**

Large Text

WCAG AA: **Fail**

WCAG AAA: **Fail**

Graphical Objects and User Interface Components

WCAG AA: **Fail**

Text Input: [Text Input]

A dedicated, multilingual team available via chat, email and phone, ready to assist you anytime, anywhere.

- Find answers to frequently asked questions and more [here](#)
- Our friendly team is always here to help.
- For urgent assistance, please [chat](#) with us online. You can also find your local telephone numbers [here](#).

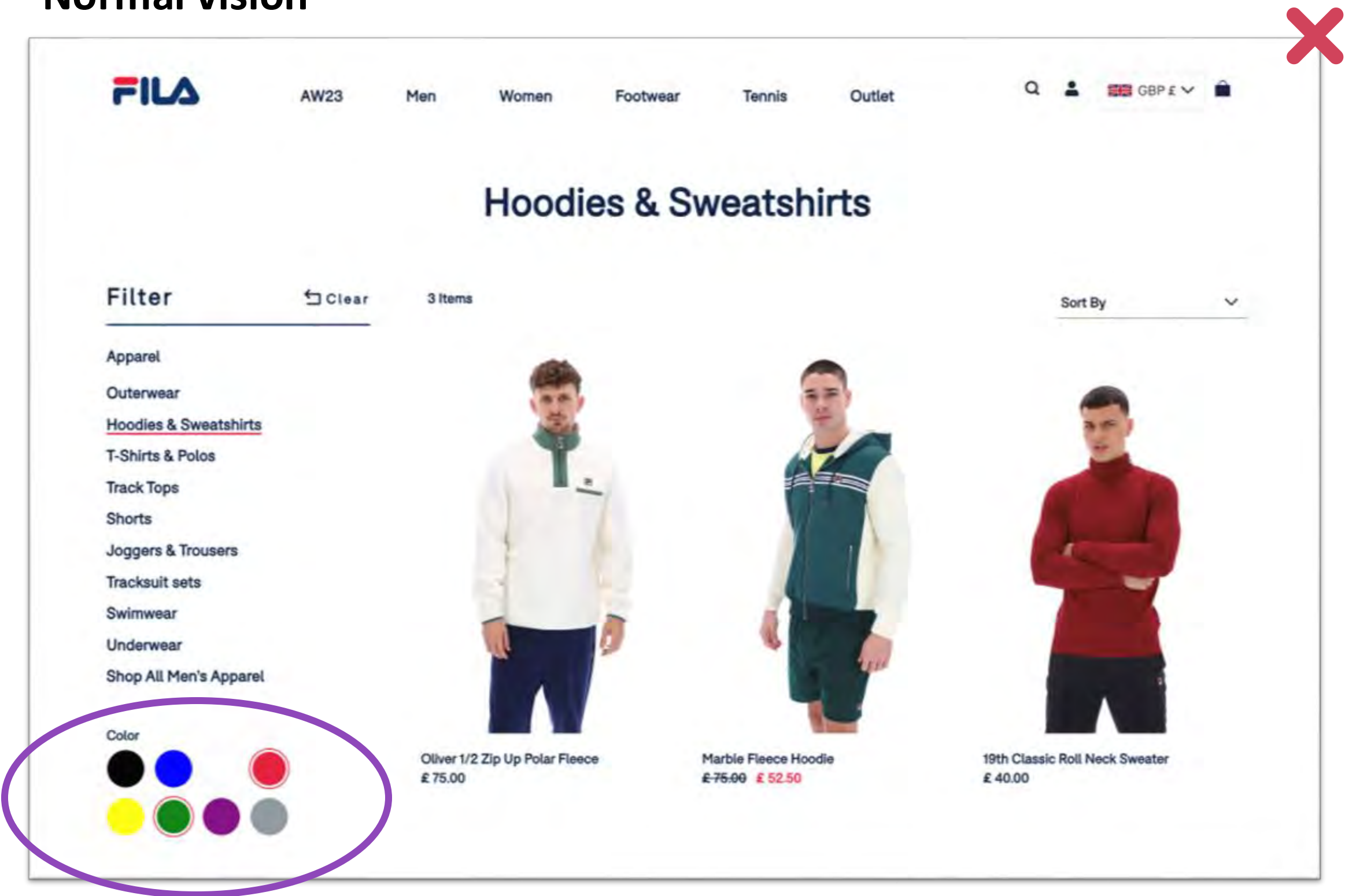
[Learn more](#)



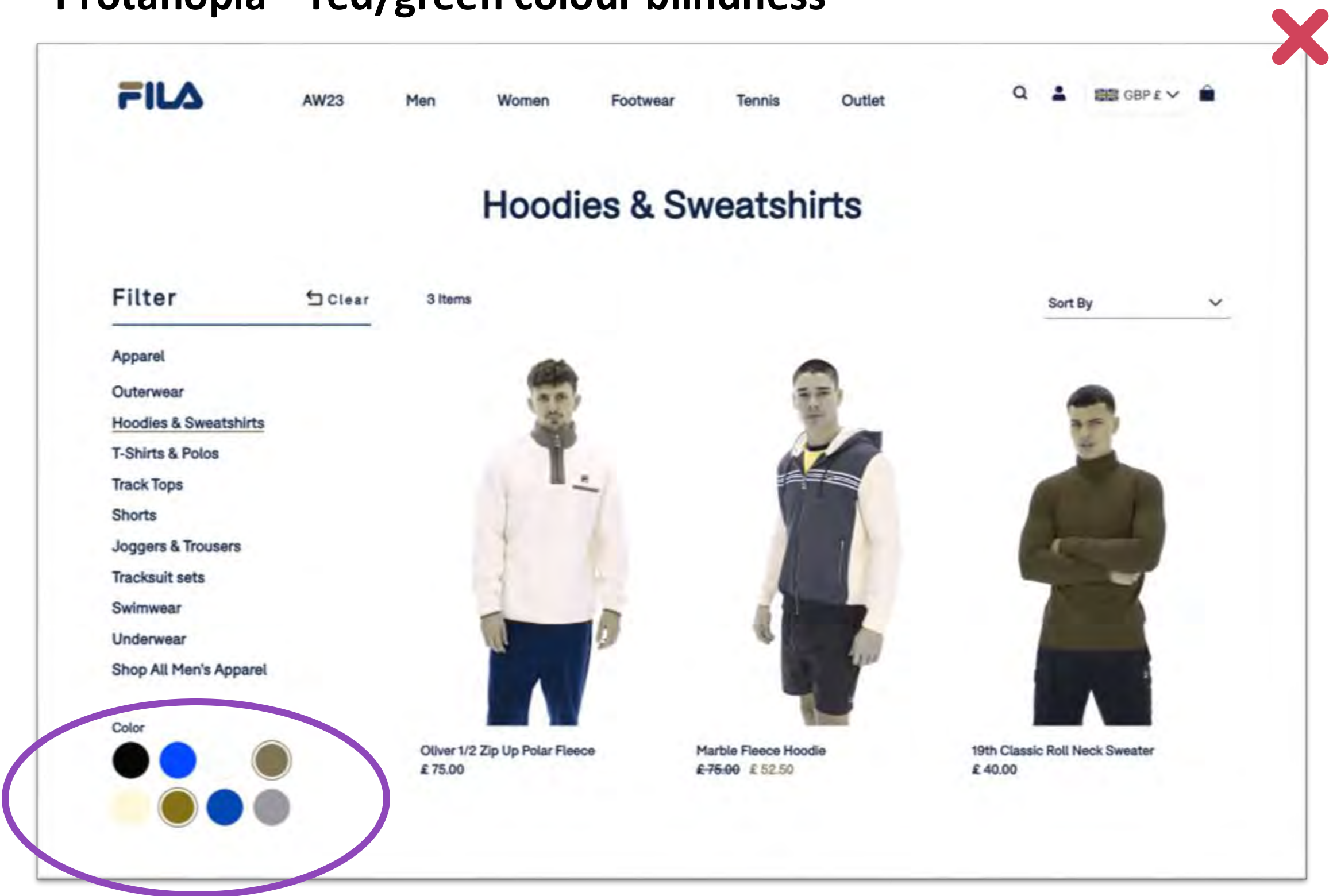
Colour

AIM #2: Colour is not the only means of communication

Normal vision



Protanopia – red/green colour blindness

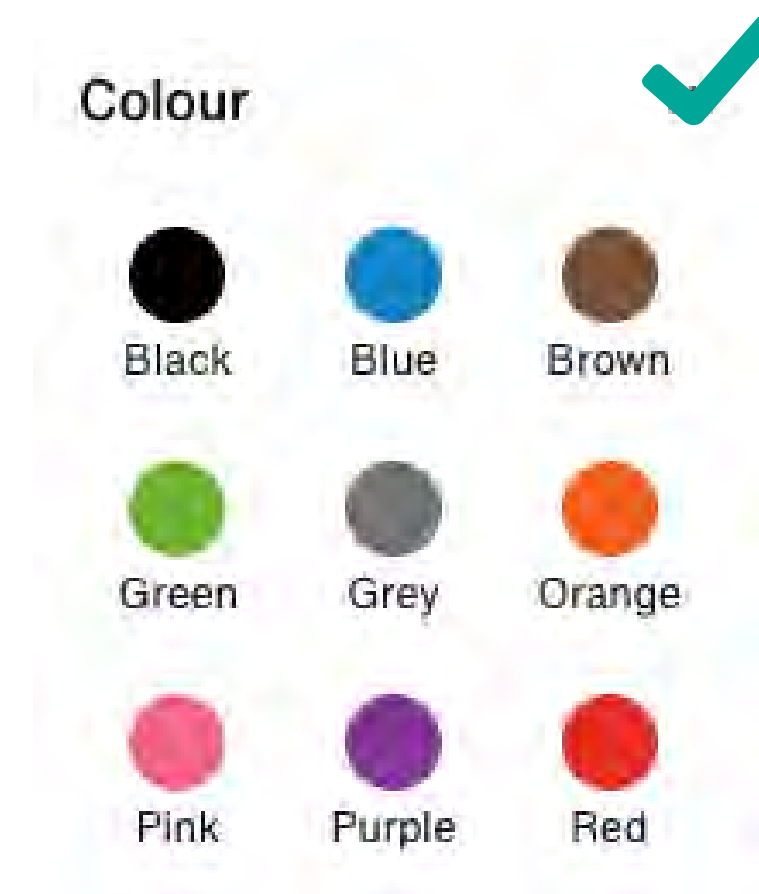


Colour

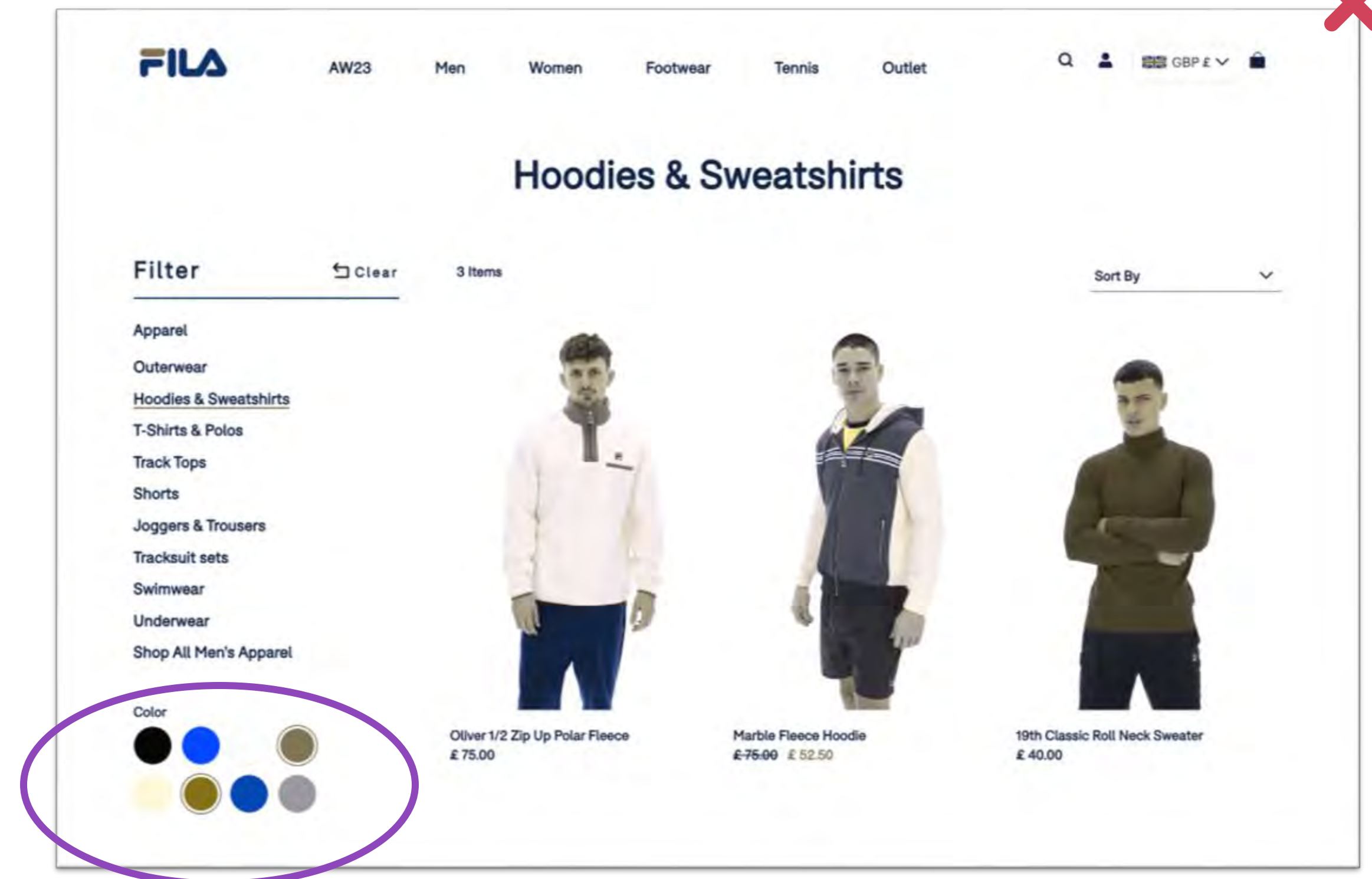
AIM #2: Colour is not the only means of communication

Tips

- Don't use colour alone to convey meaning
- Combine it with shape, size, icons or text
- Test through colour blind lens



Protanopia – red/green colour blindness

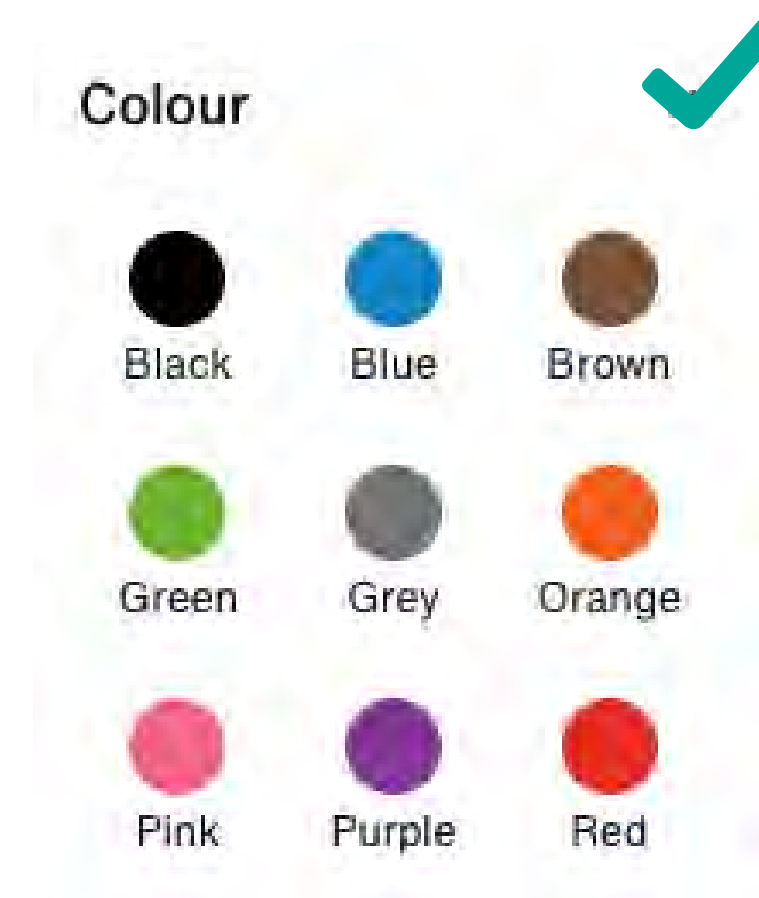


Colour

AIM #2: Colour is not the only means of communication

Tips

- Don't use colour alone to convey meaning
- Combine it with shape, size, icons or text
- Test through colour blind lens



Testing



Layout

AIM: Make content inviting to read

✗

Terms of Service

Last updated: February 2020

Who are we?

Skyscanner ("us", "we" or "our" as the context requires) provides online travel search services (including flight, hotel and car hire price comparison) and other travel related services (the "**Services**") to travellers throughout the world via our websites, apps and other platforms (the "**Platforms**").

Skyscanner is not a travel agent and is not responsible for providing, setting or controlling the prices applicable to, any of the travel options or products which you find and book via our Services ("**Third Party Travel Products**"). All such Third Party Travel Products are provided by independent travel agents, airlines, hotels, tour operators or other third parties ("**Travel Providers**") and are subject to the terms and conditions of those third parties.

Our Services and Platforms are provided by Skyscanner Limited, a private limited company incorporated and registered in England & Wales with company number 04217916. Other entities that directly or indirectly control, are controlled by, or are under common control with Skyscanner and referred to in these terms as "**Skyscanner Group Companies**". You can find our details, including correspondence address and registered office, on our [Company Details](#) page.

✓

Every traveler is different

To give you a personalized service, we (and the third parties we work with) use cookies and similar technologies.

We use cookies for things like...

- Making our site easier to use
- Remembering your details (like recent searches and the country you're in)
- Showing ads that are more relevant to you

We never use cookies for...

- Changing the prices you see

✗

"Travel allows people to discover new places and gain a level of understanding and empathy for other cultures which simply wouldn't otherwise be possible. It's our responsibility as leaders in this industry to make big bets and take real action to transform travel so we can preserve our world for future generations of travelers to enjoy."



Moshe Rafiah, CEO Skyscanner

✓

Never standing still

We're a group of talented, passionate individuals located around the world. Not afraid to innovate or try new things, we're committed to making things better for everyone by tackling the difficult problems of travel.

Part of the Trip.com Group family, Skyscanner is operationally independent and growing fast, with offices across Europe, North America and Asia.

1,000+
employees

50
nationalities

8 offices
worldwide

Layout

AIM: Make content inviting to read

Tips

- Minimum font size = 16px or **14px bold**
- Use short sentences and paragraphs
- Break up text with headings & bullets
- Create lots of white space
- Align text left
- Don't underline unless it's a link
- Don't overuse ALL CAPS or *italics*
- Keep it consistent

Every traveler is different

To give you a personalized service, we (and the third parties we work with) use cookies and similar technologies.

We use cookies for things like...

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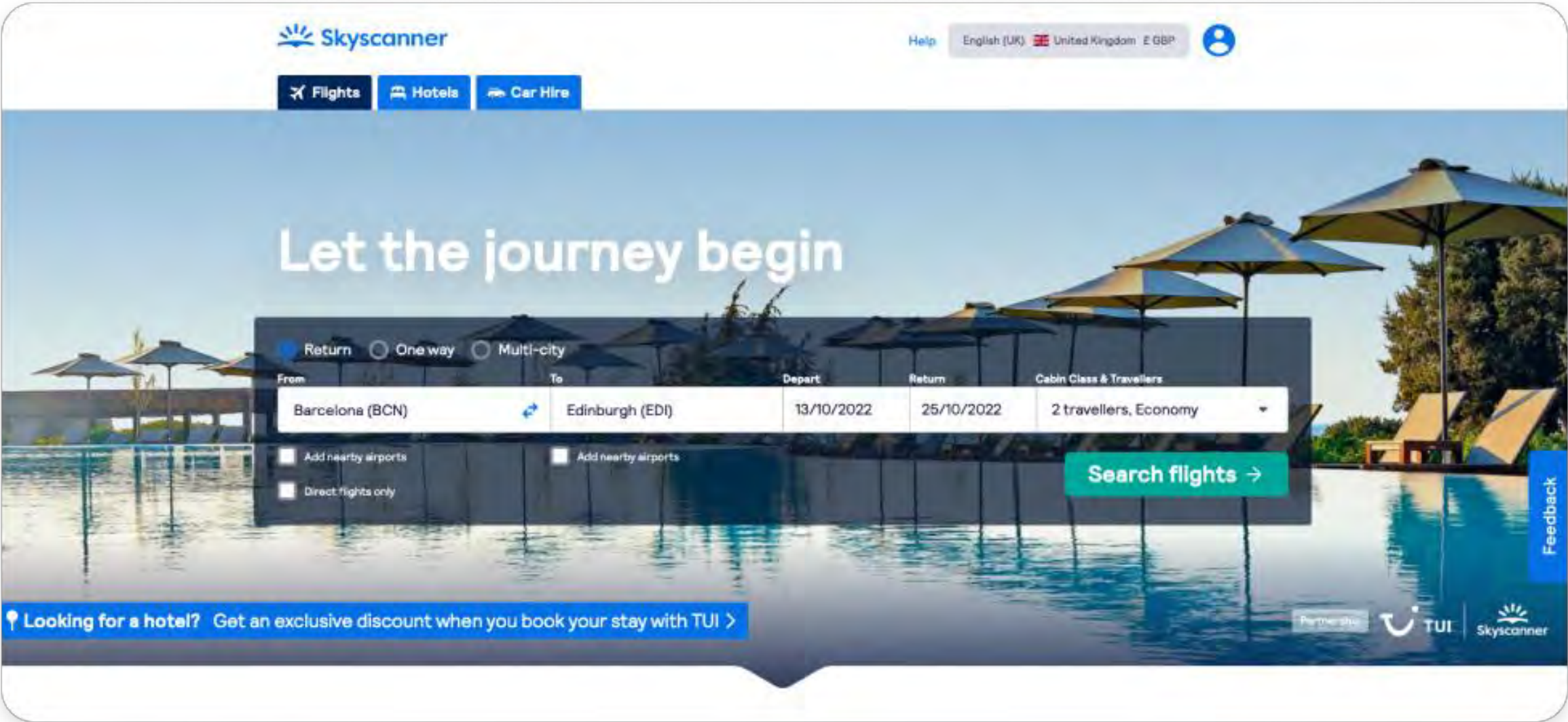
1,000+
employees

50
nationalities

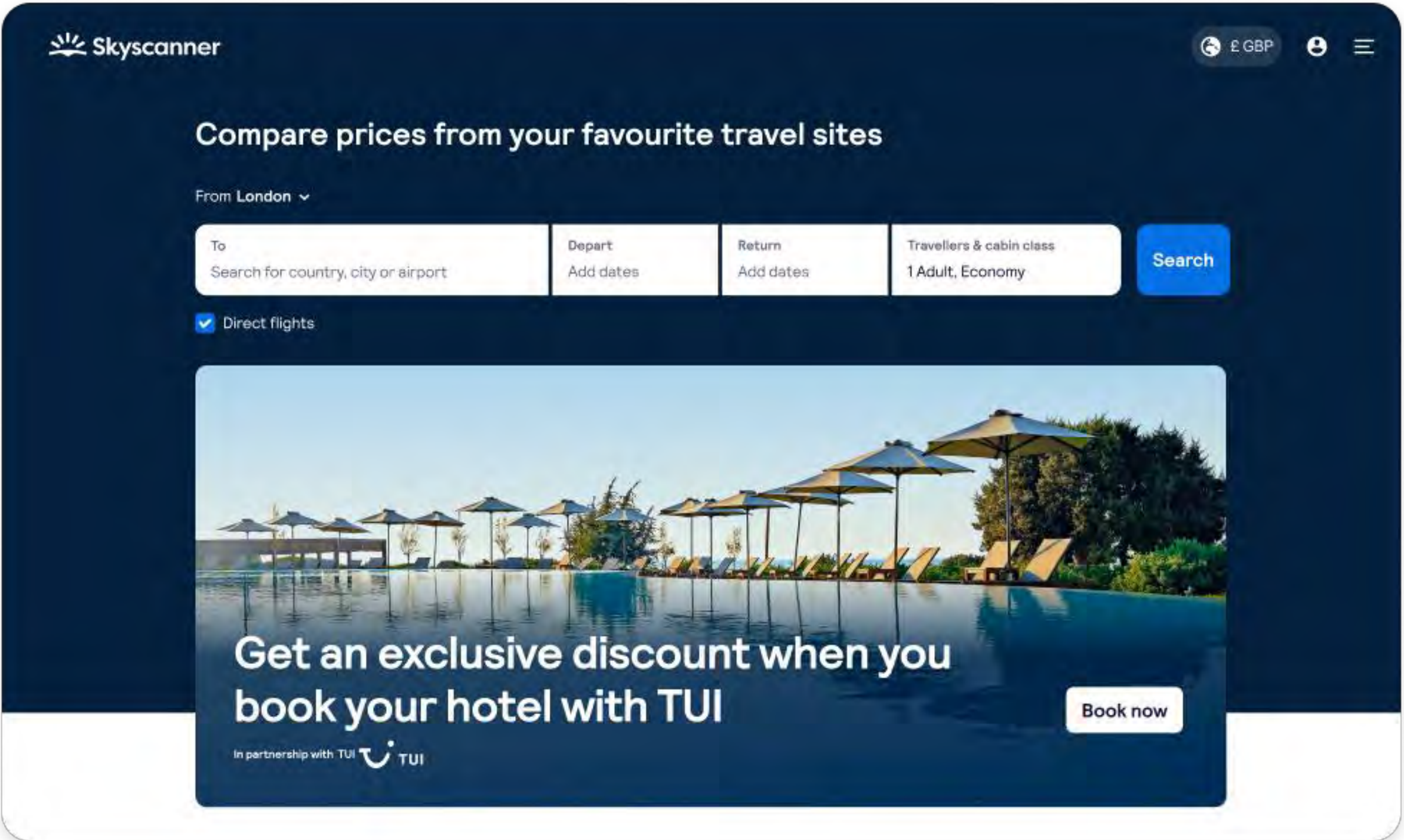
8 offices
worldwide

Case study – Search controls

Old home page



New home page



2

Content

Copy

AIM: Make content easy to read

Tips

- Check readability
- Use common words and phrases with no jargon or acronyms
- Write in short sentences
- Use an active voice

BoldItalicH1H2H3QuoteBulletsNumbersLink

WriteEdit

Hemingway App makes your writing bold and clear.

University of Edinburgh Admissions Policy

4. Defintions

4.1. Asylum seeker: someone whose request for sanctuary has yet to **be processed** (UNHCR).

4.2. Care-experienced: Anyone who has been or is currently in care or from a looked-after background at any stage of their life, no matter how short, including adopted children who were previously looked after. Care may have **been provided** in one of many different settings, such as residential care, foster care, kinship care, or looked after at home with a supervision requirement (Universities Scotland).

4.3. Widening participation: The process of creating opportunities for individuals who have been **traditionally** under-represented in higher education, including those from lower socio-economic backgrounds or other life disadvantage, such care experience (COWA).

4.4. Diversity The recognition and valuing of difference within society, **in terms of** factors such as age, disability, gender, gender identity, race, religion or belief, sexual orientation, marriage and civil partnership, and pregnancy and maternity. It encompasses the acceptance of these differences and the understanding that they contribute to the richness of society, and the belief that everyone should have the opportunity to reach their full potential, free from discrimination or prejudice (Scottish Government).

Hemingway Editor

Readability

Grade 12

OK. Aim for 9.

Words: **203**

Show More ▾

1 adverb, meeting the goal of 2 or fewer.

2 uses of passive voice, meeting the goal of 3 or fewer.

3 phrases have simpler alternatives.

0 of 14 sentences are hard to read.

5 of 14 sentences are very hard to read.

Bold Italic H1 H2 H3 Quote Bullets Numbers Link

Hemingway App makes your writing bold and clear.

University of Edinburgh Admissions Policy

4. Defintions

4.1. Asylum seeker: Someone who is asking for safety, but they are still waiting to know if they can stay in a new place.

4.2. Care-experienced: Anyone who has been taken care of or helped in their life, like living with foster families or in special homes. Even kids who were adopted after being taken care of are included.

4.3. Widening participation: Making sure that more people, especially those who didn't get many chances before, can go to college or university.

4.4. Diversity: This means understanding that people can be different in many ways, like how old they are, if they have a disability, their gender, race, religion, who they love, and more. We should accept these differences and believe that everyone should have the chance to do their best without being treated badly because they're different.

Write Edit

Hemingway
Editor

Readability

Grade 6

Good

Reading time: 00:00:37

Letters: 734

Characters: 914

Words: 156

Sentences: 14

Paragraphs: 7

Show Less ▲

1 adverb, meeting the goal of 2 or fewer.

5 uses of passive voice. Cut to 3 or fewer.

0 phrases have simpler alternatives.

1 of 14 sentences is hard to read.

3 of 14 sentences are very hard to read.

Bold Italic H1 H2 H3 Quote Bullets Numbers Link

Hemingway App makes your writing bold and clear.

University of Edinburgh Admissions Policy

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Hemingway
Editor

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Show More ▼

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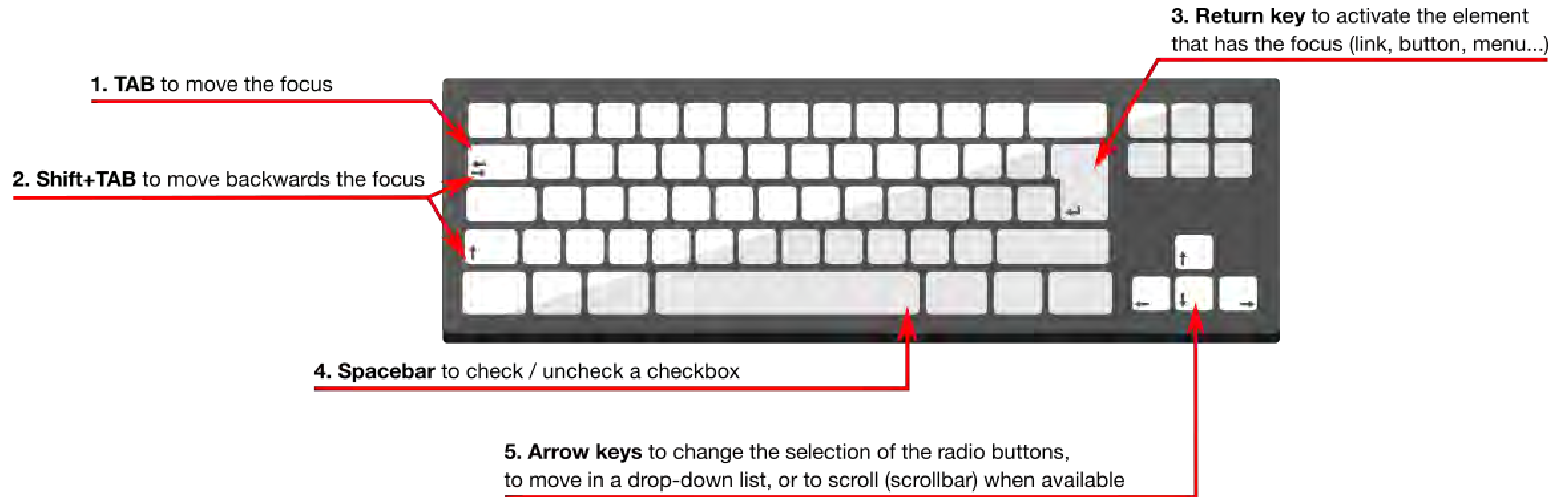
5 of 14 sentences are very hard to read.

3

**Keyboard
only**

Keyboard only nav

How to use it



Keyboard only

Keyboard only nav

AIM: Make it easy to navigate just using a keyboard (no mouse or trackpad)

Before

Accessibility Board - Agile Bo...COVID-19 Travel Insurance from...Android app audit May 2021 -...Cheap flights from London to F...

GOOGLE CHROME

skyscanner.net/transport/flights/lond/pari/210820/210827/?adults=1&adultsv2=1&cabinclass=economy&children=0&childrenv2=&destination=...

AppsSkyspaceAccessibilityAdminTrello BoardsCopyDesignArticlesTALKSWCAGUser testingBackpack

Skyscanner

HelpEnglish (UK)United Kingdom£ GBP

FlightsHotelsCar Hire

London (Any) - Paris (Any)

1 adult | Economy

Fri, 20 AugFri, 27 Aug

Show whole month

Additional bag fees may apply

Get Price Alerts

1047 results

Sort byBest

Stops

Direct£90

1 stop£93

2+ stops£217

Flexible tickets

Only show airlines with flexible tickets

COVID-19 safety rating

5/54/5

Want to know the latest travel restrictions for France?

See travel info

Best£901h 18 (average)

Cheapest£901h 18 (average)

Fastest£1181h 10 (average)

SkyscannerSponsored

Enjoy great car hire deals & flexible rentals

Cancel or amend your booking for free up to 48hrs before your trip starts

Search →

Paris20 August - 27 August

Free cancellationLocation 5.0/5Cleanliness 5.0/5

View hotels

ABTA

Keyboard only

Keyboard only nav

AIM: Make it easy to navigate just using a keyboard (no mouse or trackpad)

After

The screenshot shows the Skyscanner website interface for a flight search from Edinburgh (EDI) to Athens (ATH) on Monday, 25 October. The search bar at the top indicates 1 adult in Economy class. The results page shows 114 results, sorted by 'Best'. A sidebar on the left offers filters for stops (Direct, 1 stop, 2+ stops), flexible tickets, and COVID-19 safety ratings. The main content area displays flight options, including a sponsored hotel advertisement and a list of flights with prices and departure times.

Best	Cheapest	Fastest
£39 11h 30	£20 24h 05	£106 5h 45

Flight Details	Price
Ryanair + Wizz Air 07:40 EDI → 21:10 ATH 11h 30, 2 stops PMI, VIE 4/5 rating for COVID-19 safety measures	1 deal £39 Select →
Wizz Air + Ryanair 20:05 EDI → 22:10 ⁺¹ ATH 24h 05, 2 stops BUD, MIL CHANGE AIRPORT in Milan Partly operated by Malta Air 2/5 rating for COVID-19 safety measures	1 deal £20 Select →

Tips

- Use clear focus indicators
- Make tabbing order make sense
- Reach all interactive elements
eg. pop-ups
- Avoid keyboard traps
- Include skip links to jump to content

4

Screen readers

Screen readers

Tips

- Add labels to all buttons
- Write alt text for images
- Use heading tags
- Include "hidden text" if needed



5

Magnification

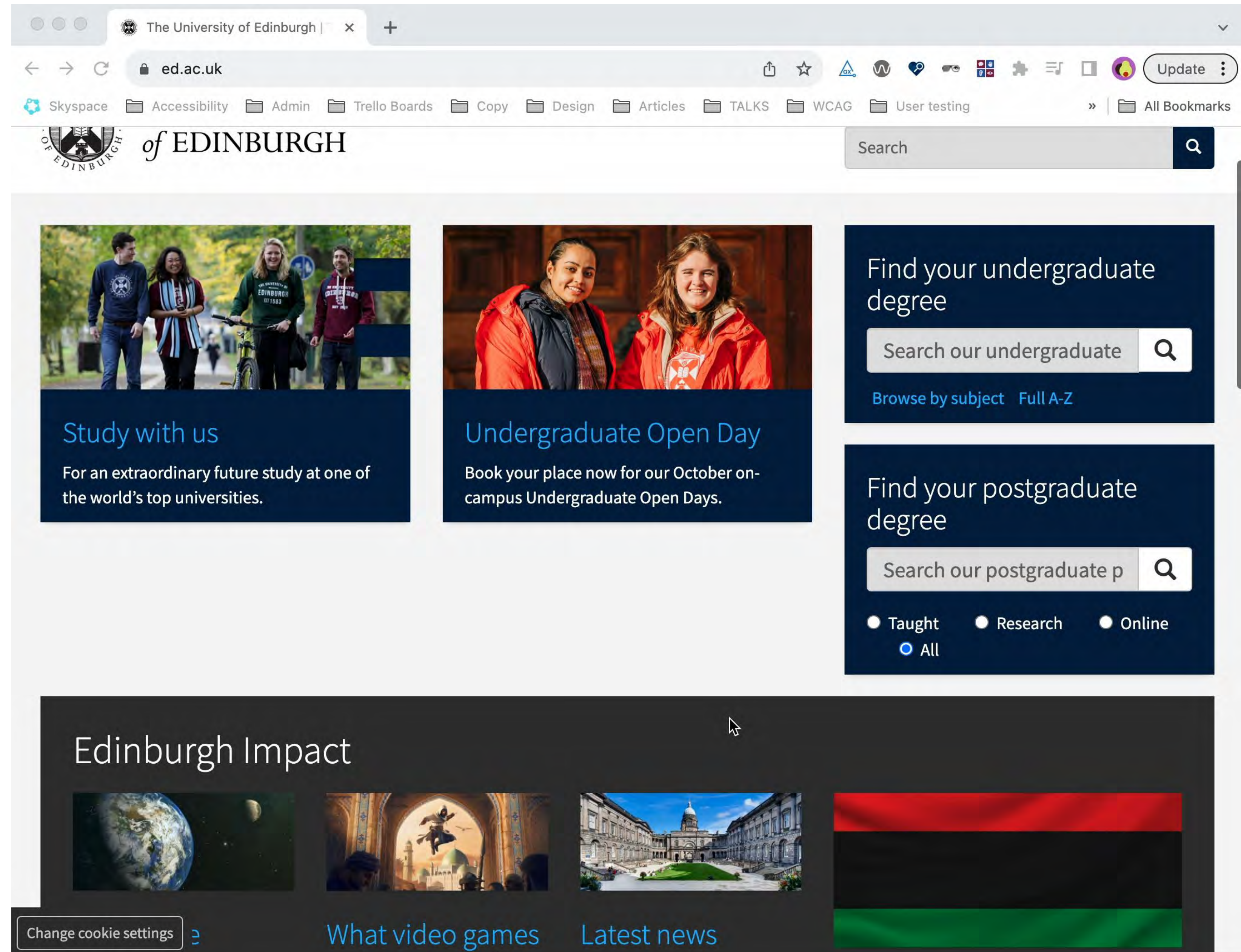
Magnification

Zooming in

AIM: Content is still readable and usable at 400% zoom

Tips

- Check all content is still there
- Make sure you can still interact with everything
- Rethink sticky elements that get in the way



Resources

Our guidelines

Please scan!



Backpack

Welcome to Backpack

Getting started

Foundations

Components

Content

Accessibility

Overview

For Product Designers

For Engineers

For Content Designers

For Product Owners

Accessibility

We believe that travel should be for everyone. We want our products to be usable by all, which means making them accessible for all.

Overview

For Product Designers

For Engineers

For Content Designers

For Product Owners

What we can do

Understand the people who use our product

Remember we can all experience disabilities every day

ON THIS PAGE

What we can do

Understand the people who use our product

Remember we can all experience disabilities every day

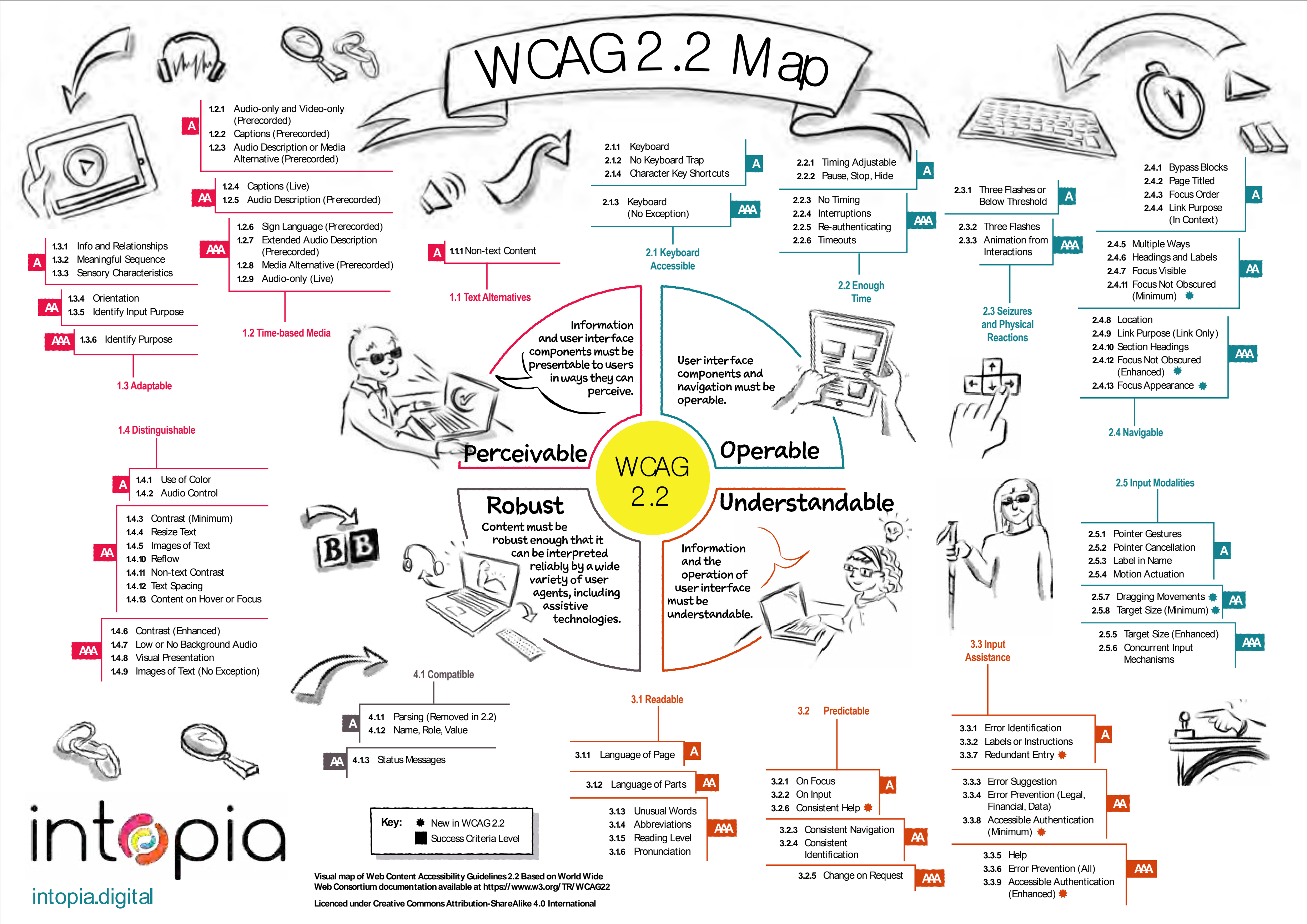
Recognise that people use products differently

WCAG

Web Content Accessibility Guidelines

w3.org/TR/WCAG22

w3.org/WAI/WCAG22/quickref



Useful links

- Accessibility Insights auditing tool (web): accessibilityinsights.io
- Adi Latif screen reader video: youtube.com/watch?v=QUZ091A73bk
- BBC Mobile Guidelines: bbc.co.uk/accessibility/forproducts/guides/mobile
- Brandwood tool (testing text on images): brandwood.com/a11y
- Colour Contrast Checker: <https://webaim.org/resources/contrastchecker/>
- Funkify disability simulator: funkify.org
- Home Office accessibility posters: ukhomeoffice.github.io/accessibility-posters/posters/posters/accessibility-posters.pdf
- Microsoft's inclusive design kit: microsoft.com/design/inclusive
- Readability test: hemingwayapp.com
- Sim Daltonism colour blindness simulator: michelf.ca/projects/sim-daltonism
- Stark accessibility plugin: getstark.co
- The A11Y Project resources: a11yproject.com/resources
- W3C tips: w3.org/WAI/gettingstarted/tips/index
- WAI-ARIA Authoring Practices: w3.org/TR/wai-aria-practices
- WCAG 2.2: <https://www.w3.org/TR/WCAG22/>

Information

Opportunity for YOU!!

“Skyscanner Accessibility and Inclusion Award”

Win £500 and a trophy!



2023/24 winner – Ben Norman

Opportunities at Skyscanner

Software Engineering Graduate Programme

Rotational programme across Frontend, Backend, Mobile, Data & Product.

Live in January!



Graduate Programme

Internship Opportunity

We partner with targetjobs on the “Undergraduate of the Year” competition in Software Engineering.

Win a 12-week paid internship in Edinburgh or Glasgow!



Internship

Q&A