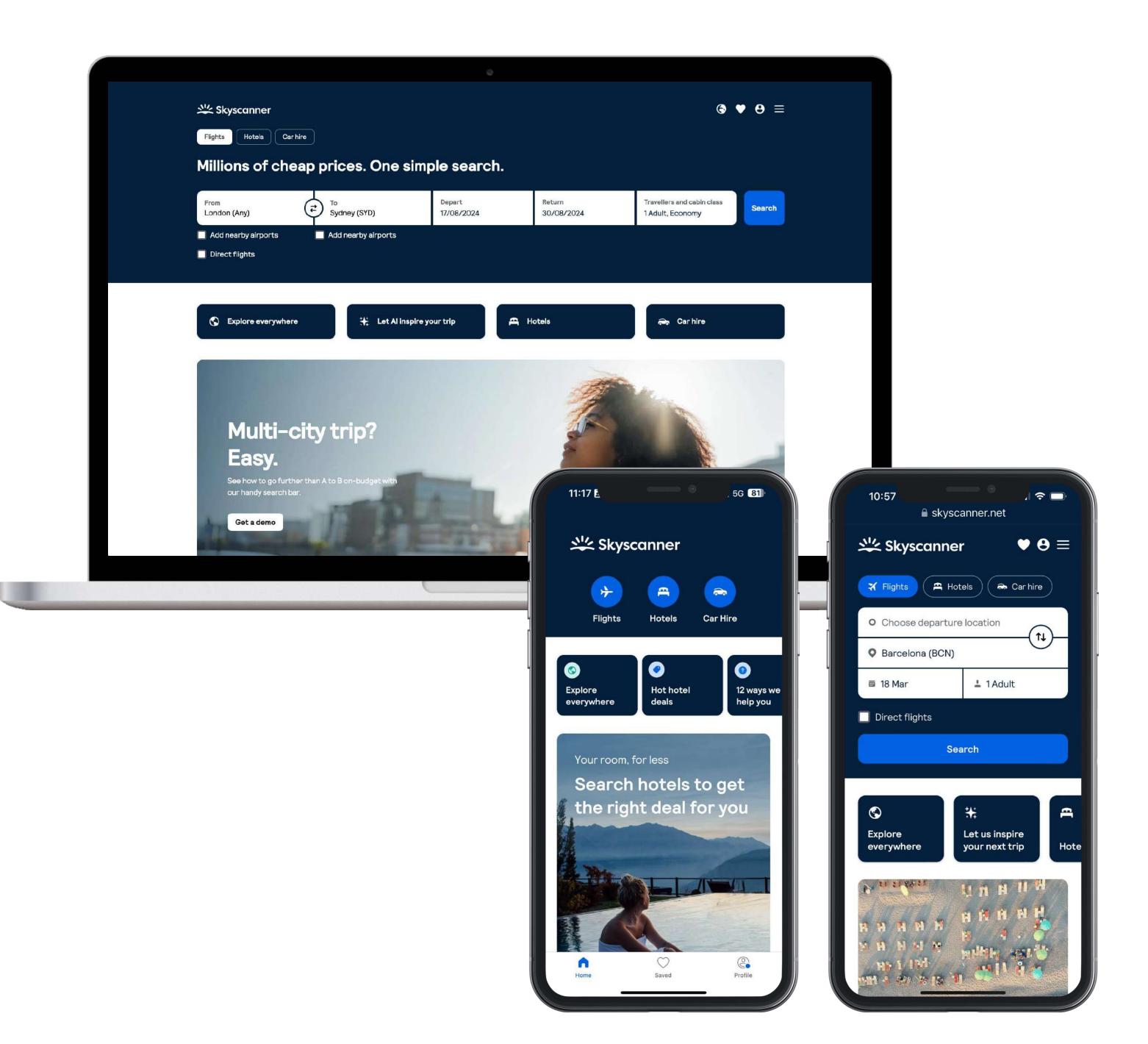


About us

Skyscanner

- Global online travel marketplace
- Flights, hotels & car hire
- 1,400 staff
- 9 offices worldwide
- 33 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

Good to know

Accessibility

- Often shortened to "a11y"
- Global set of standards:
 - Web Content Accessibility Guidelines (WCAG)
 - Just launched Version 2.2
 - We're aiming for Level AA

Definition

Accessible products

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



people have a disability

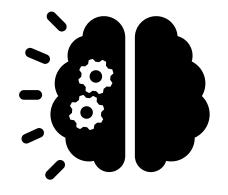
of disabilities are hidden

Accessibility – who









Physical

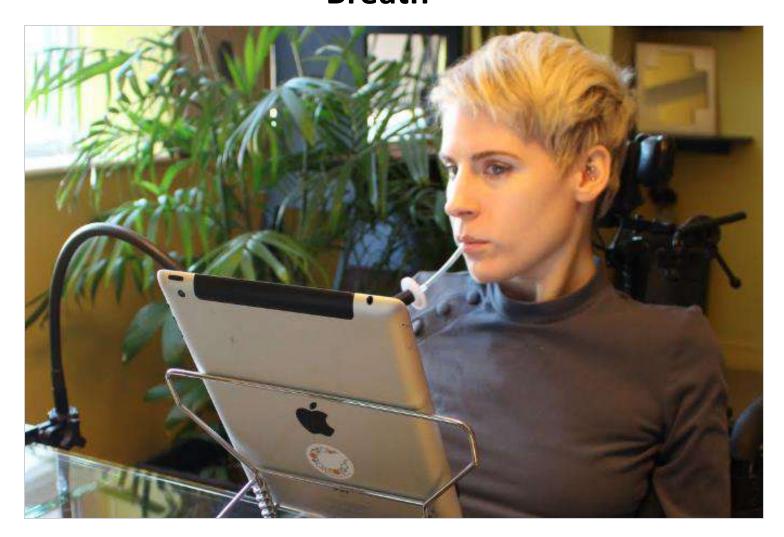
Vision

Hearing

Cognitive

Assistive technology

Breath



Xbox Adaptive Controller

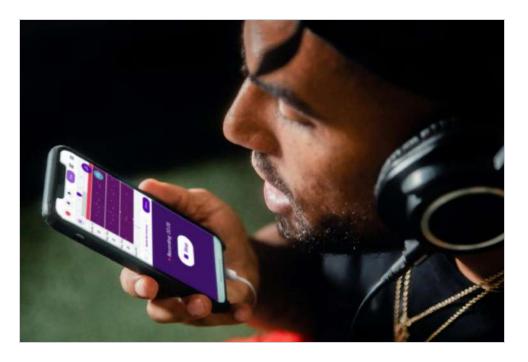




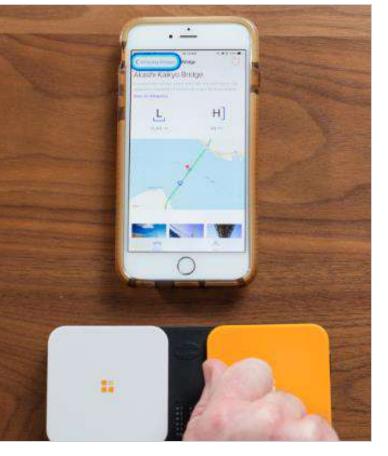
Magnification



Braille keyboard

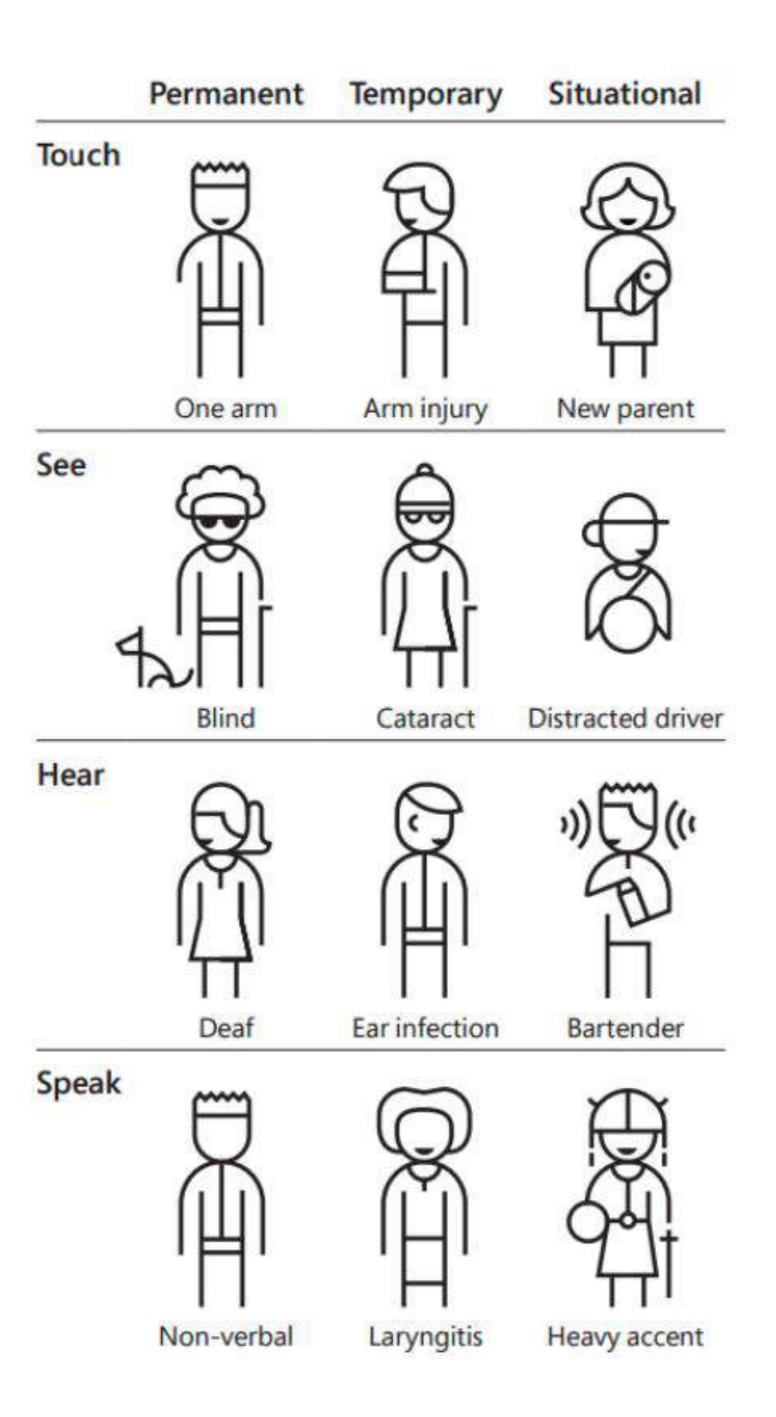


Voice recognition



Switch device

Disabilities can affect us all





"The results of inclusive design for accessibility always leads to a better product for everyone."





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
- Advocate for diversity, equity
 & inclusion



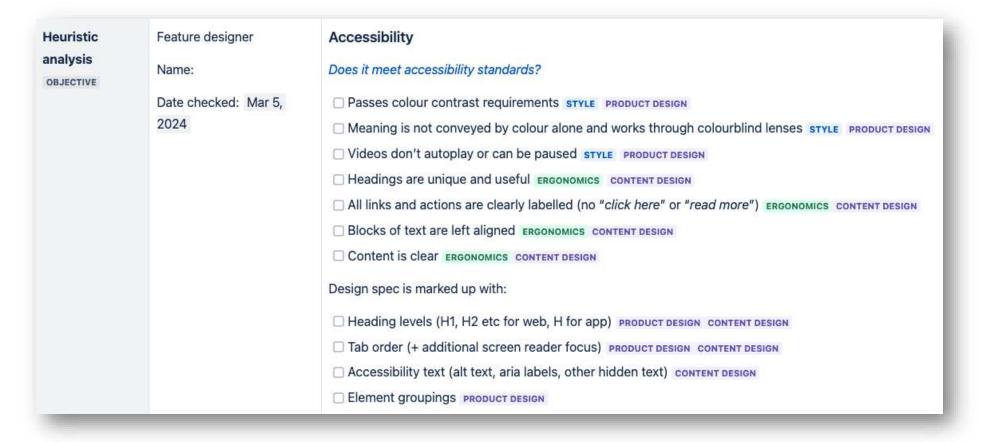


Design processes

Brief

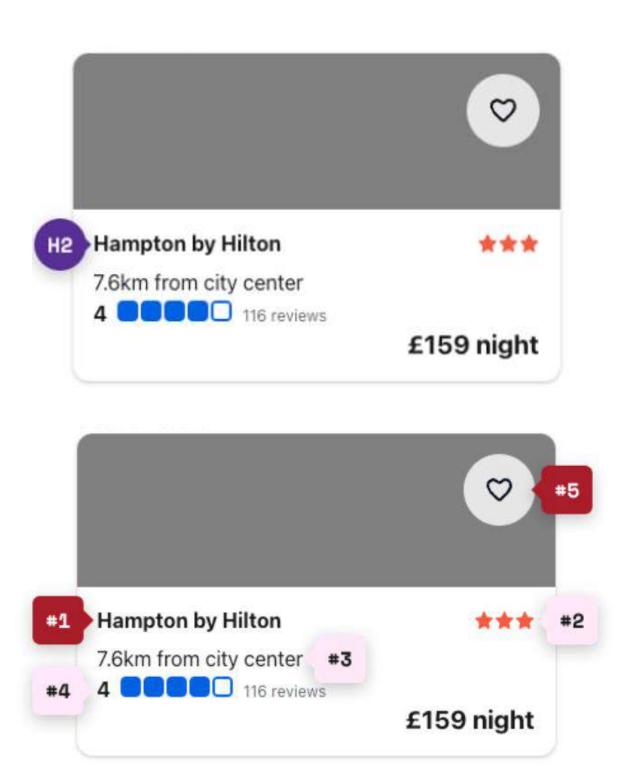
Considerations Accessibility considerations 1. How might we make this work for a blind person who can't see the screen? 2. How might we make this work for a physically impaired person who can't use a mouse or touch a screen? 3. For more detailed considerations, visit our Backpack Product Designer Accessibility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

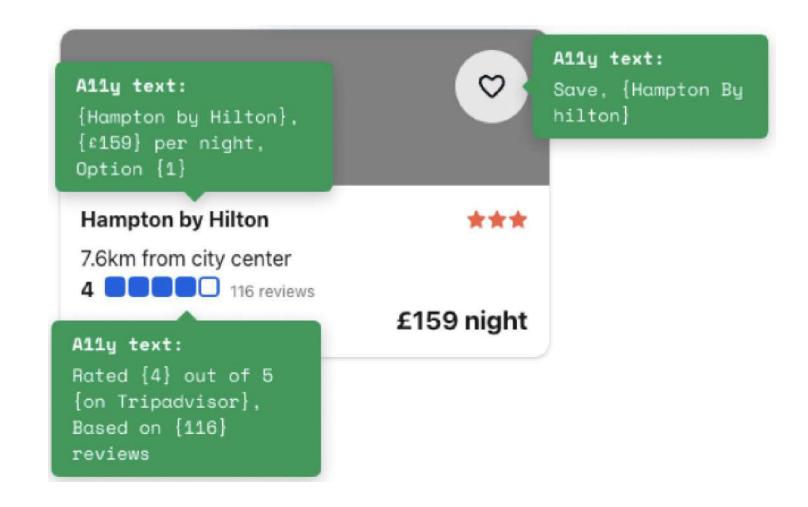
Checklists





Design markup





Engineering processes

Backpack design system

Take a look 😡



Build

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

User testing



Testing

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

Production

- New incidents process
- Auditing AQA

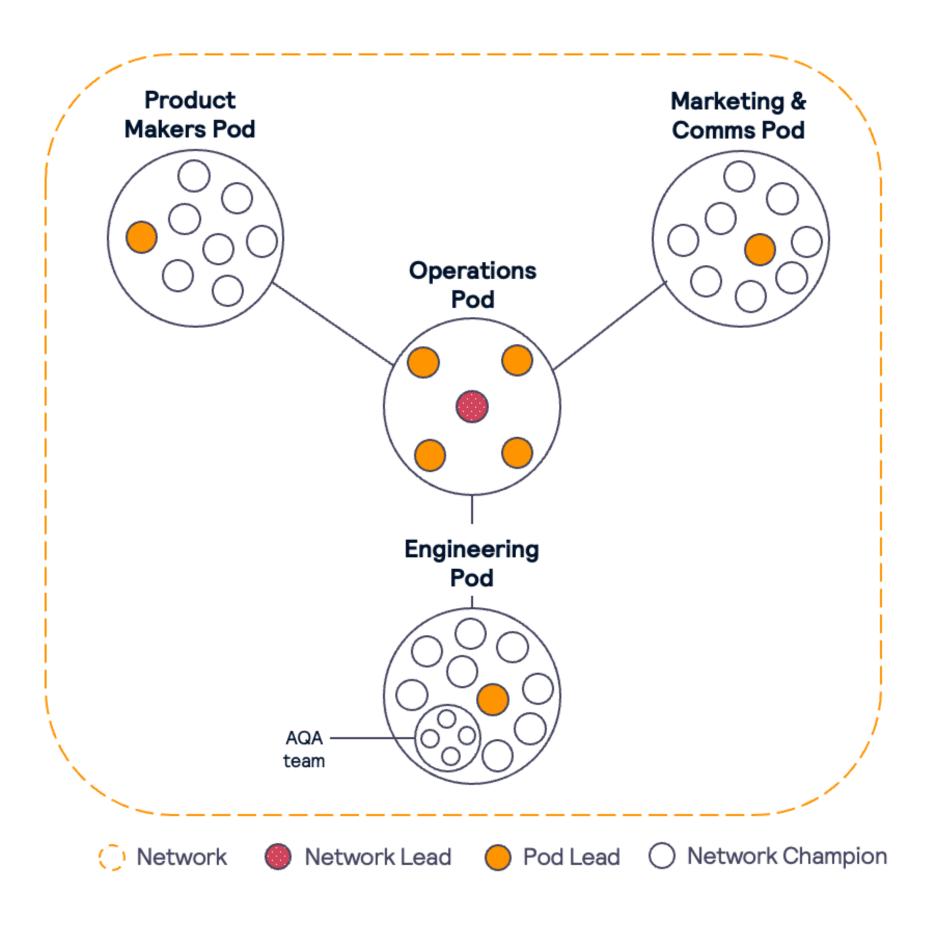




Capability

Champions Network





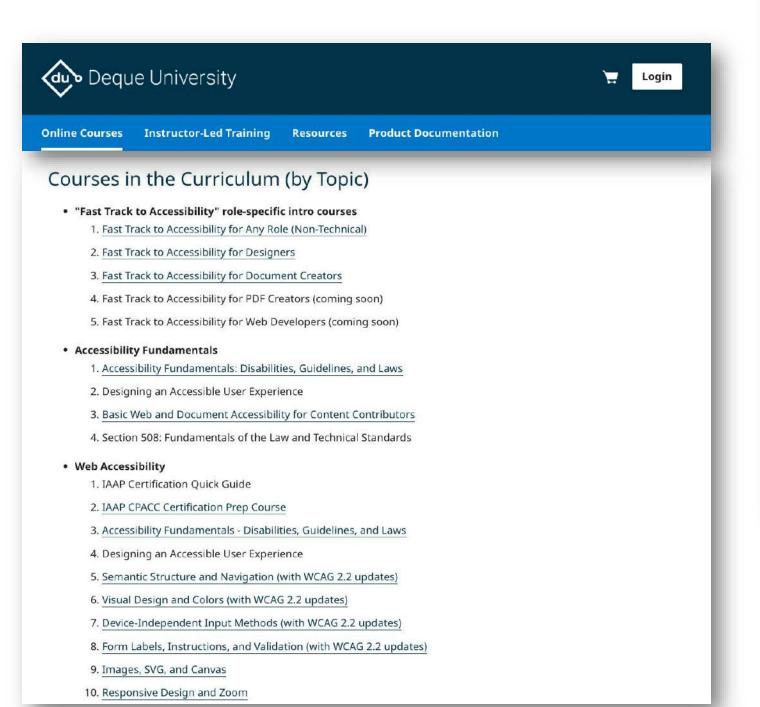
Capability

Global Induction & Empathy Lab

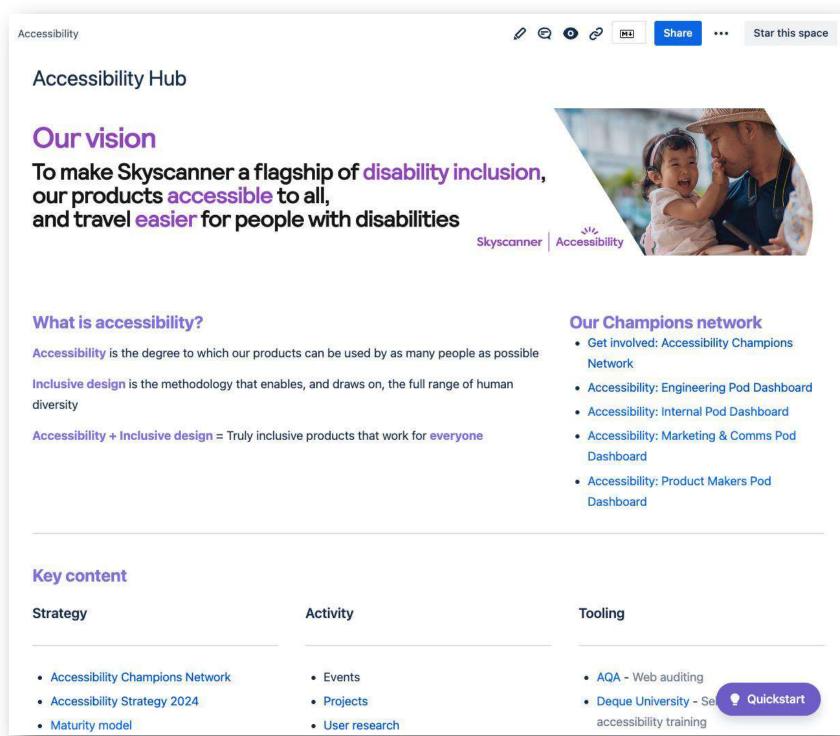


Training

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



Resources



Digital Empathy Lab

What's an Empathy Lab?



These experiences are simulations only. Everyone experiences disability differently, and some simulations are more accurate than others.



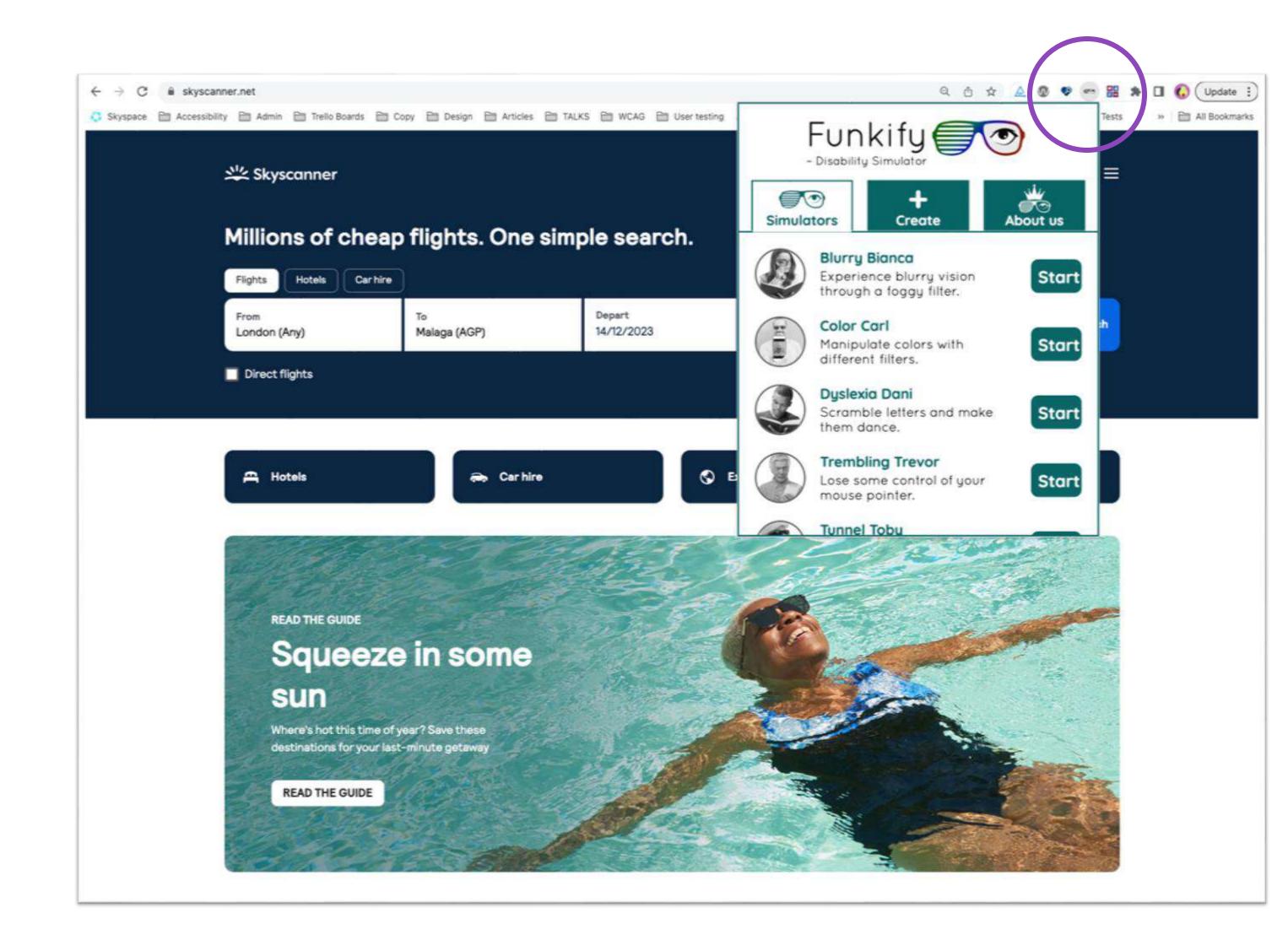
Digital Empathy Lab

Task!

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

Steps:

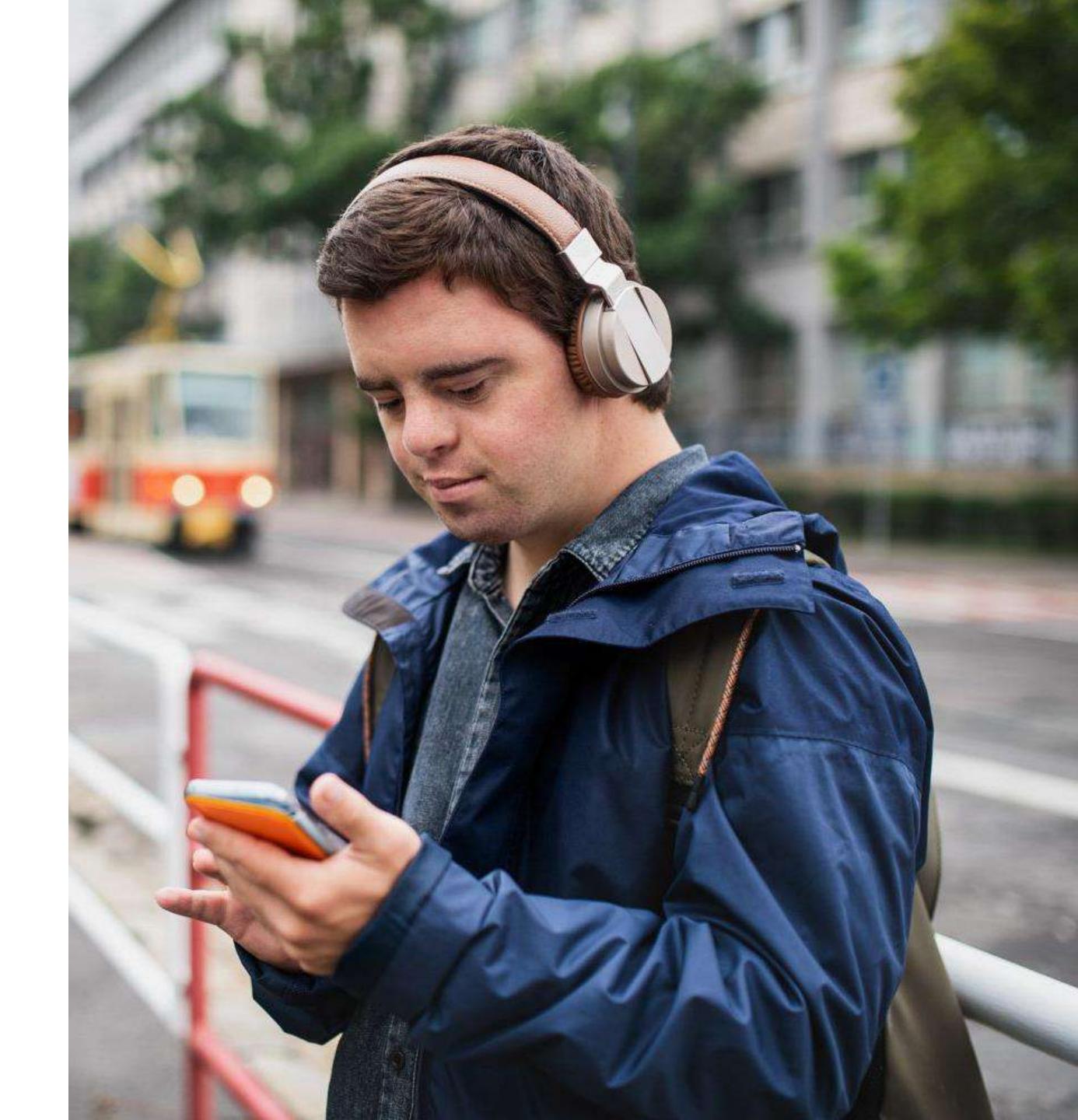
- 1. Go to Funkify.org
- 2. Hit the "Try it" button for "Funkify Free"
- 3. Open a website in Chrome, then open the extension by clicking on the glasses icon
- 4. Try out the different disability personas by hitting "start"



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.



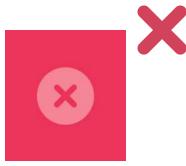


Design

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.

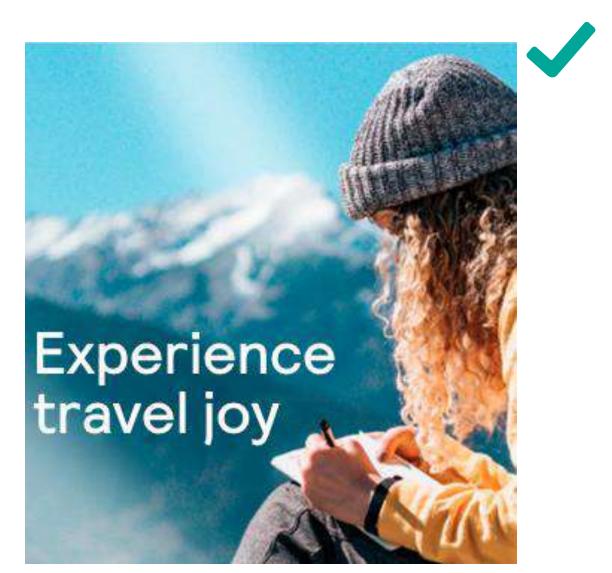




Can you read this heading?

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



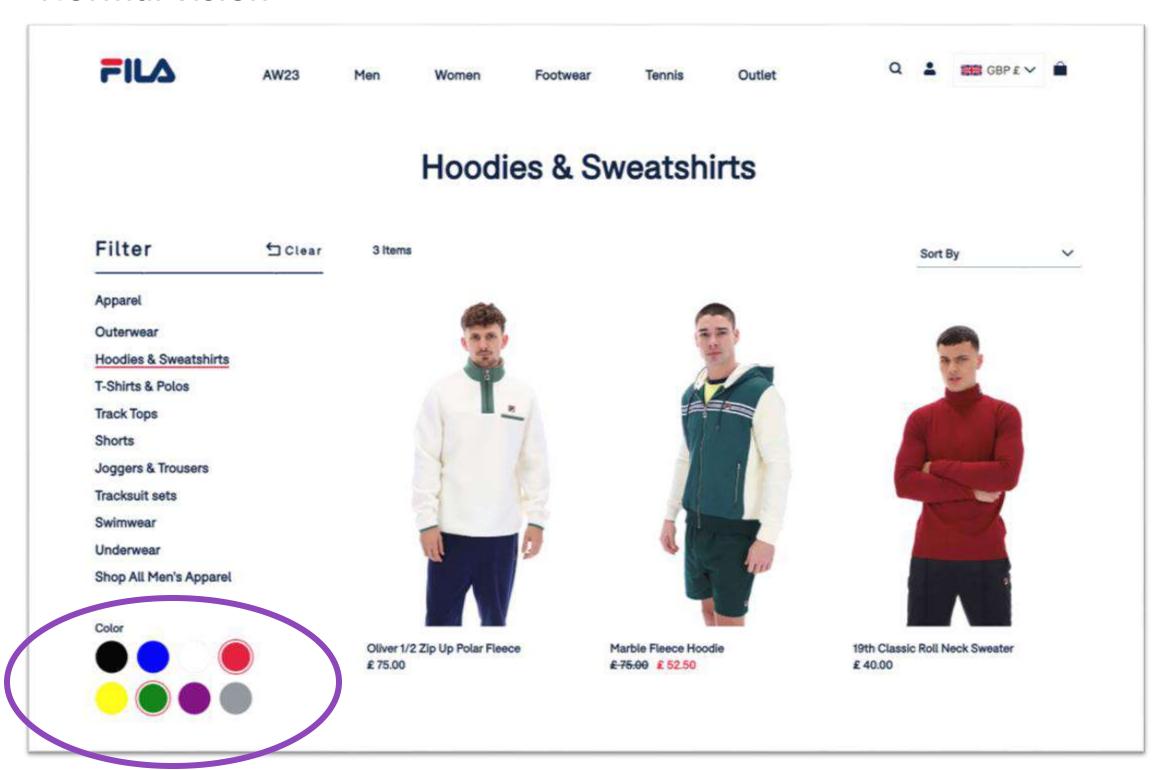




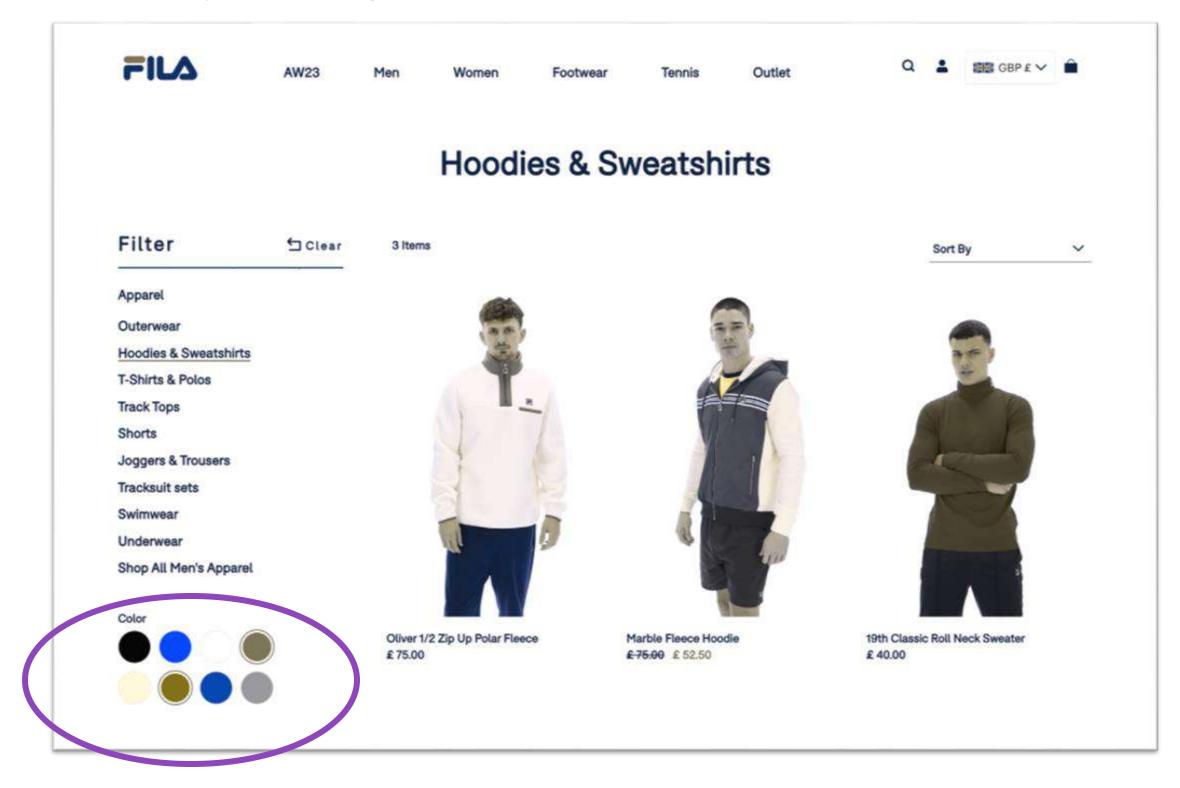


AIM #2: Design works for colour blind people

Normal vision



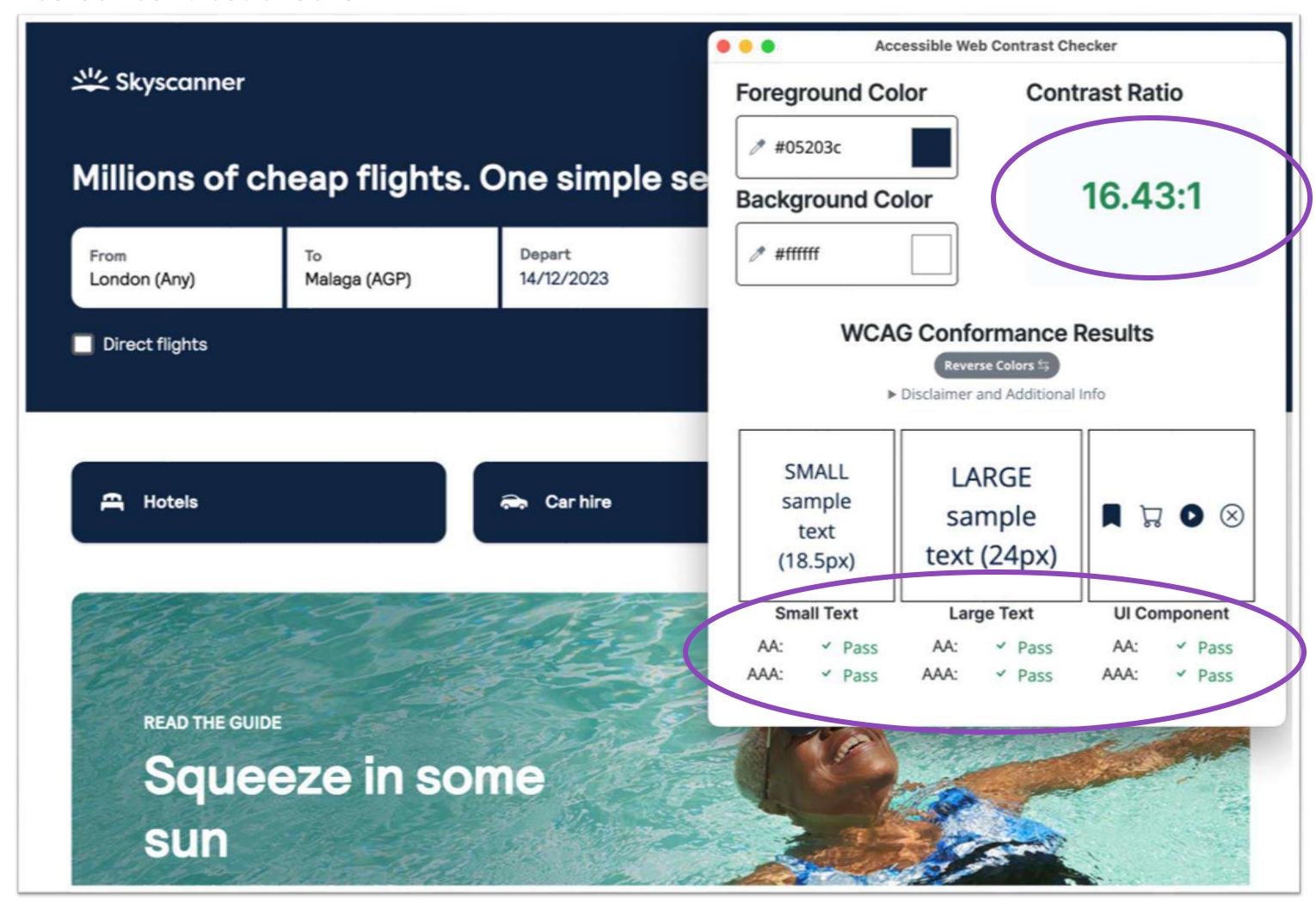
Protanopia – red/green colour blindness



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**

Colour contrast checker



Old palette





AA

#E0E3E5

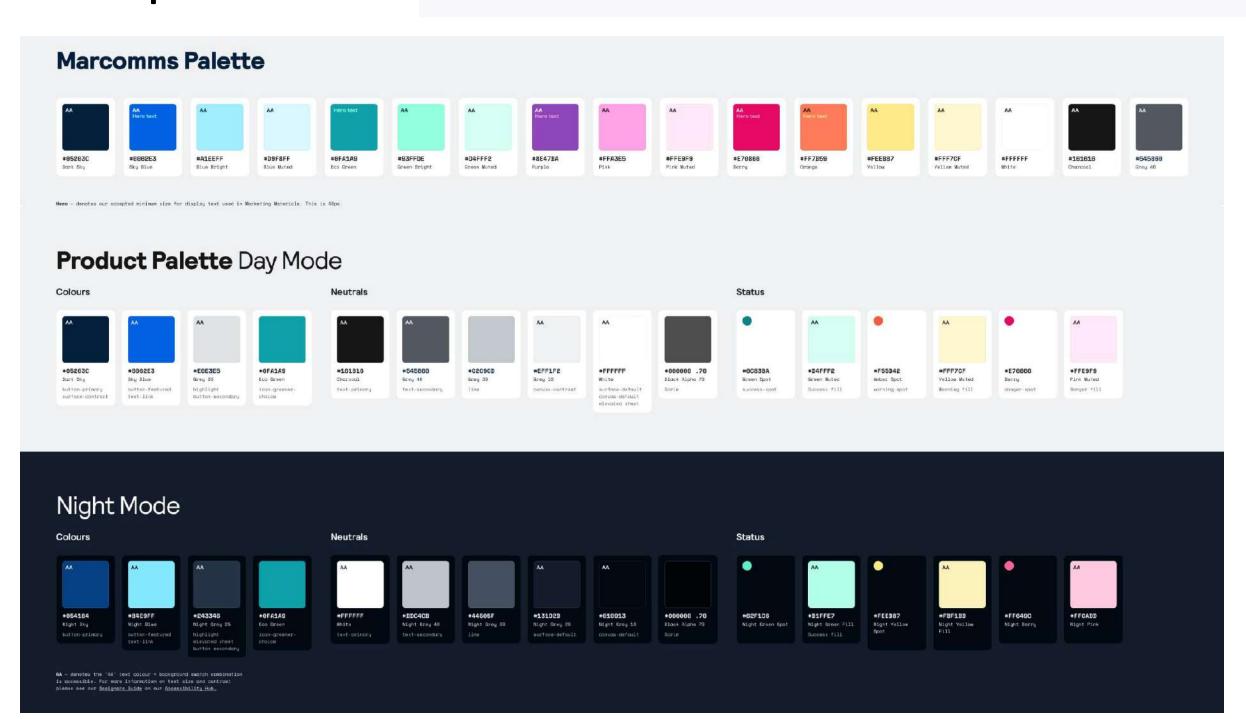
Grey 20

highlight

button-se

text-link

New palette



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.

"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

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

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

Design

Layout

AIM: Make content inviting to read

- Minimum font size = 16px or 14px bold
- Max line length 80 characters
- Use short sentences and paragraphs
- Use headings and subheadings
- Use bullet points
- Create lots of white space
- Align text left
- Don't <u>underline</u> unless it's a link
- Don't overuse ALL CAPS or italics

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

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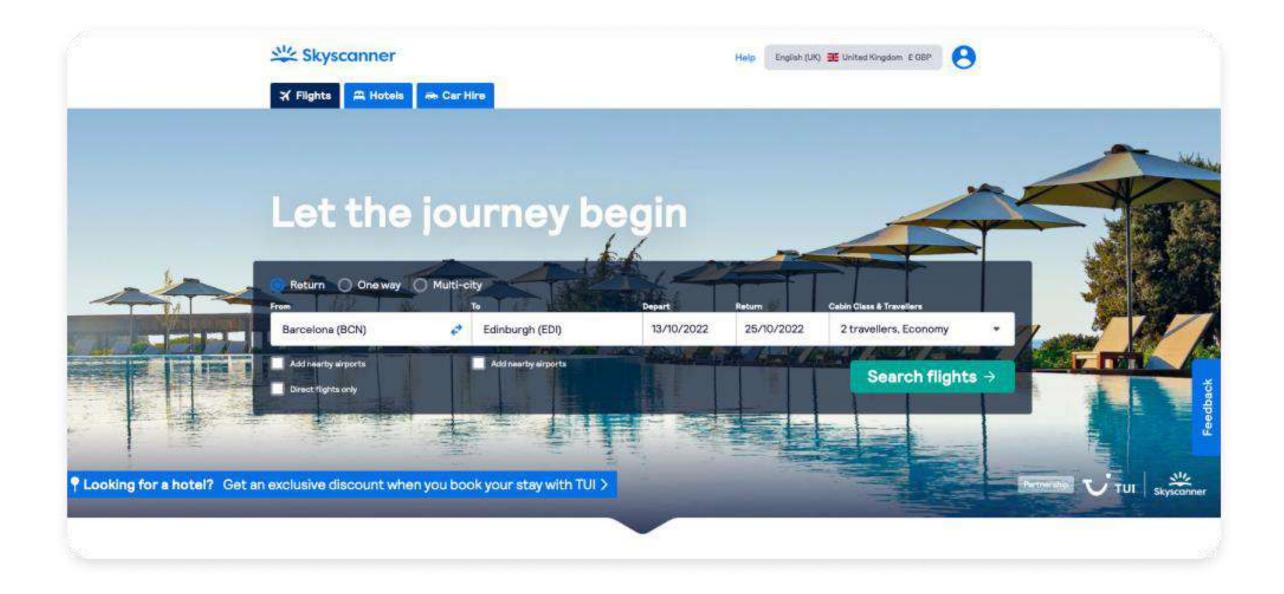
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8 offices

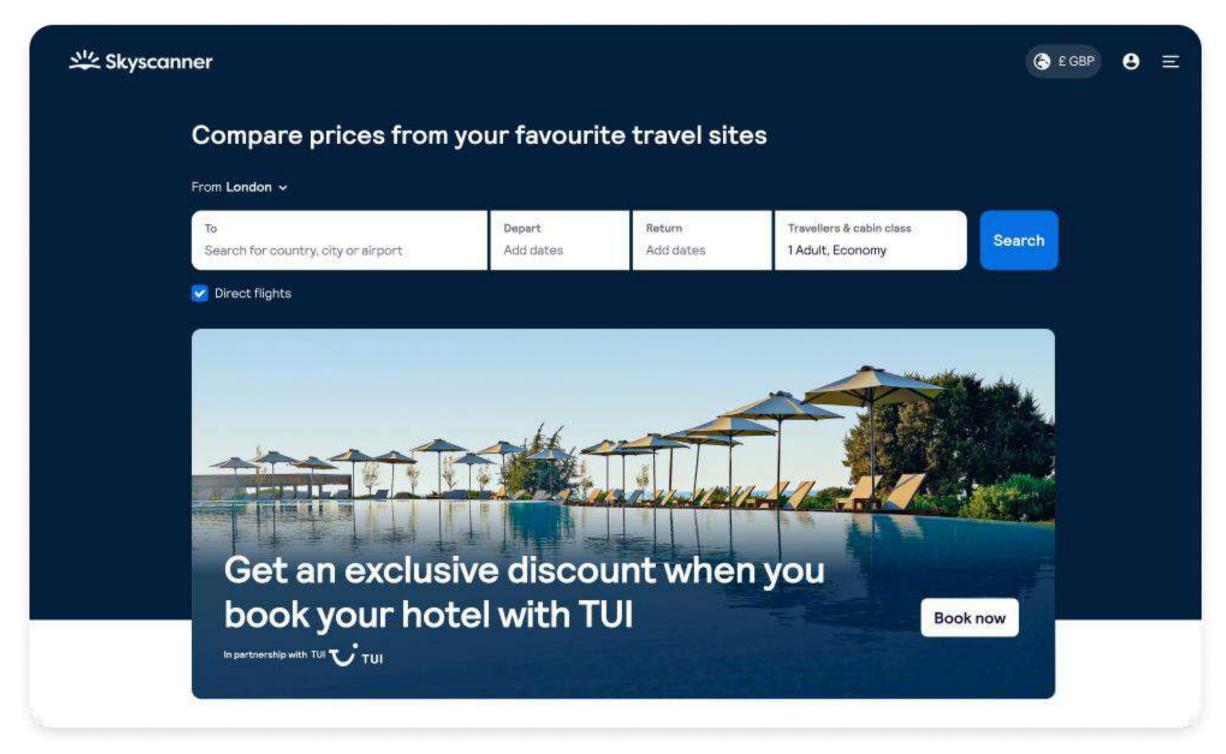
worldwide

Case study – Search controls

Old home page



New home page





Content

Content

Copy

AIM: Make content easy to read

- Check the readability of your copy, aiming for a reading age of 9 years (USA Grade 4)
- Use common words and phrases
- Write in short sentences

hemingwayapp.com

Use an "active" voice (not passive)



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).



H2 H3 Quote Bullets Numbers

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 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

3 of 14 sentences are very hard to read.

H2 H3 Quote Bullets Numbers Link

Hemingway App makes your writing bold and clear.

University of Edinburgh Admissions **Policy**

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Hemingway

Write Edit

Readability

OK. Aim for 9.

Grade 12

Words: 203 Show More ▼

adverb, meeting the goal of 2

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

3 phrases have simpler alternatives.

0 of 14 sentences are hard to

5 of 14 sentences are very hard

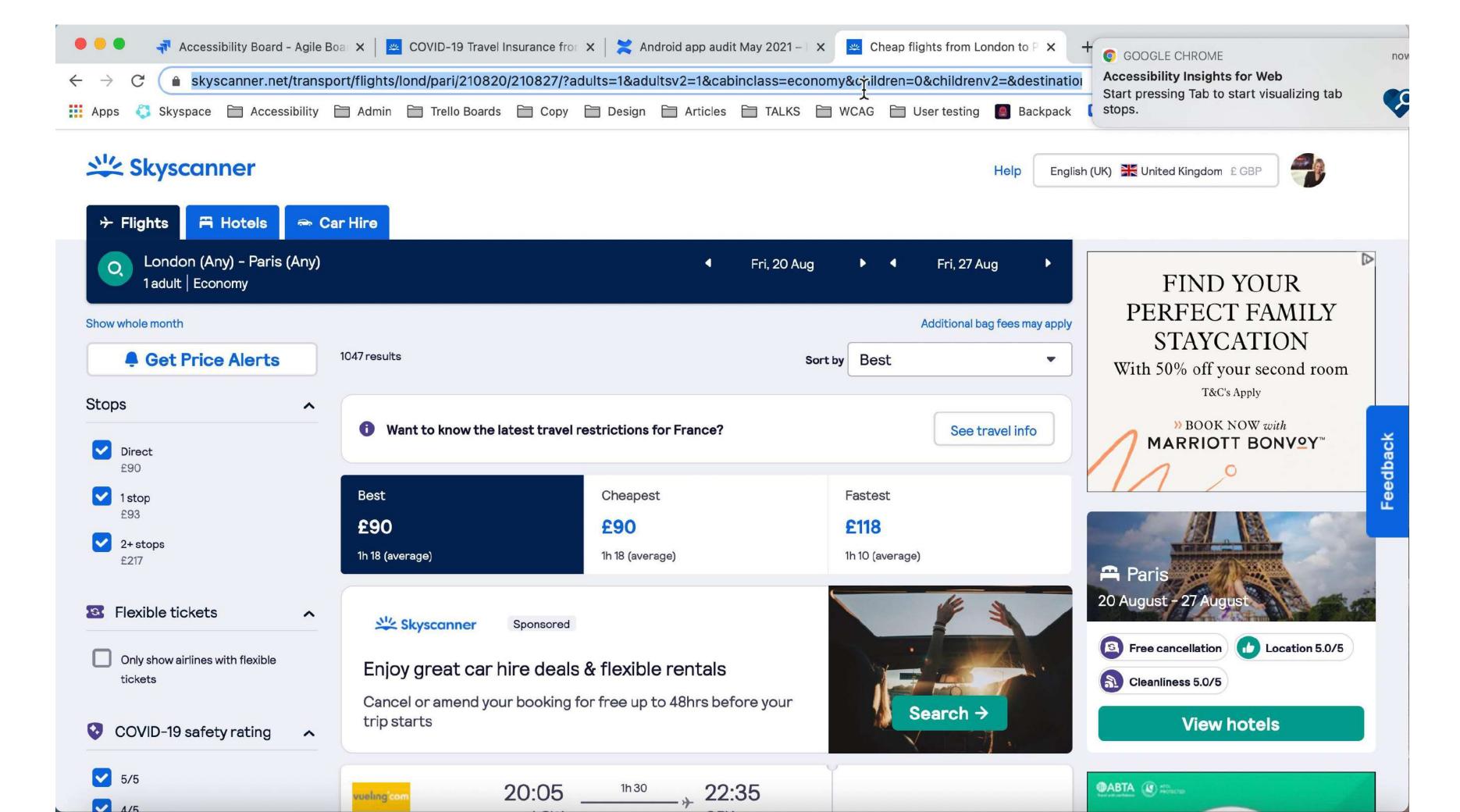


Keyboard only

Keyboard only navigation

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

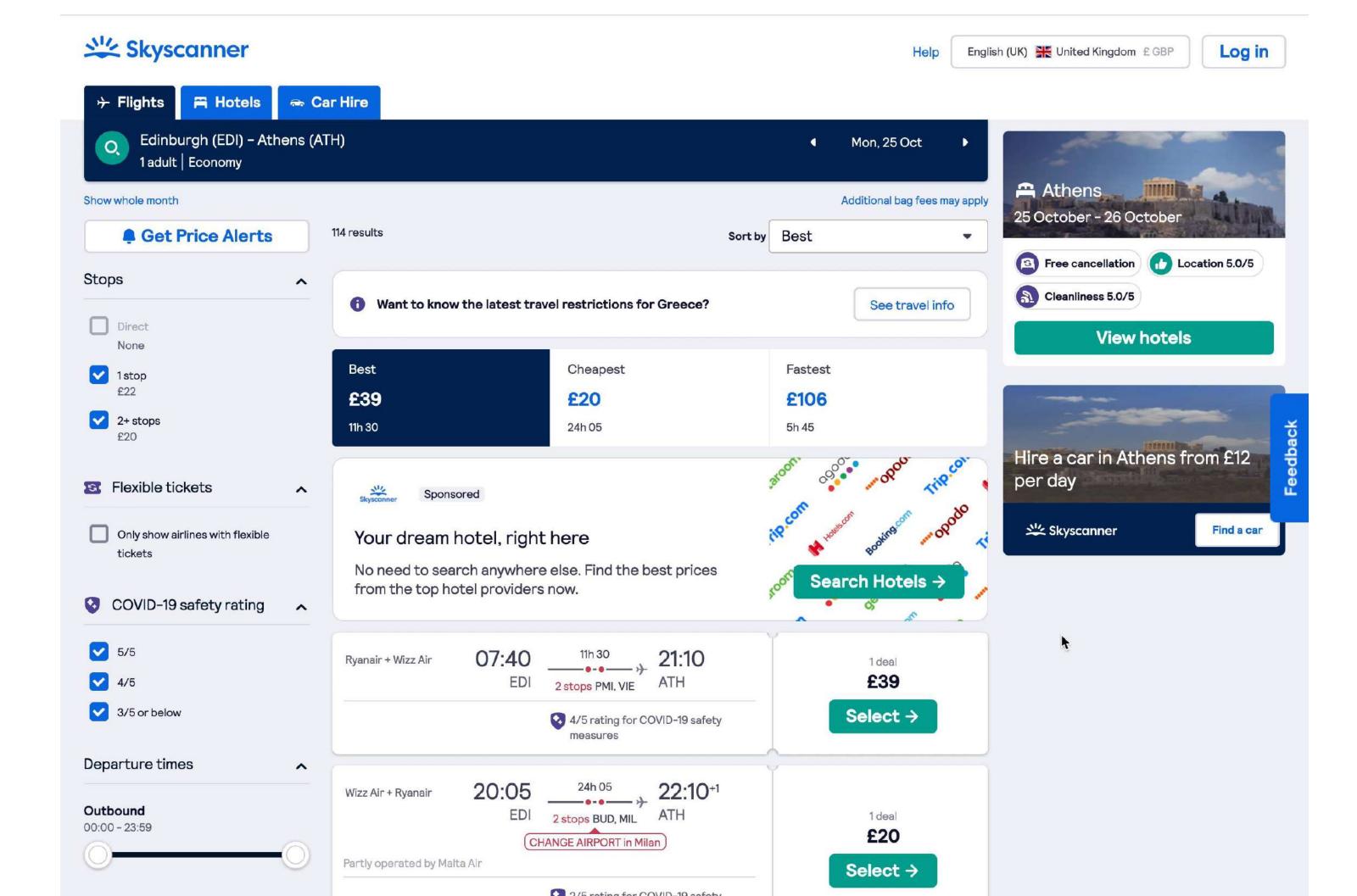
Before



Keyboard only navigation

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

After



- Use skip links
- Have a clear focus indicator
- Tab through in correct order
- Reach all interactive elements
- Avoid keyboard traps!



Screen readers

Screen readers

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



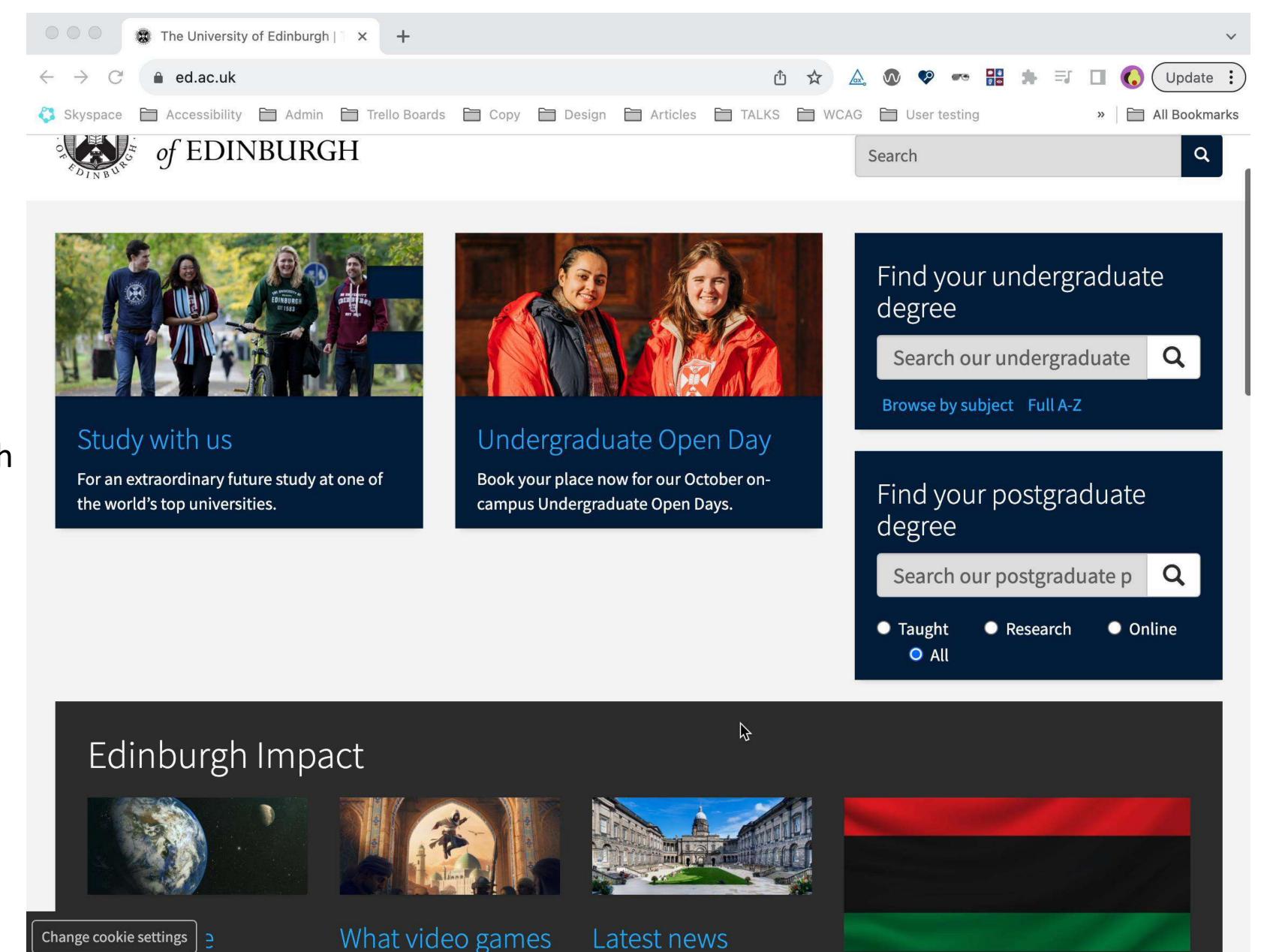


Magnification

Zooming in

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

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



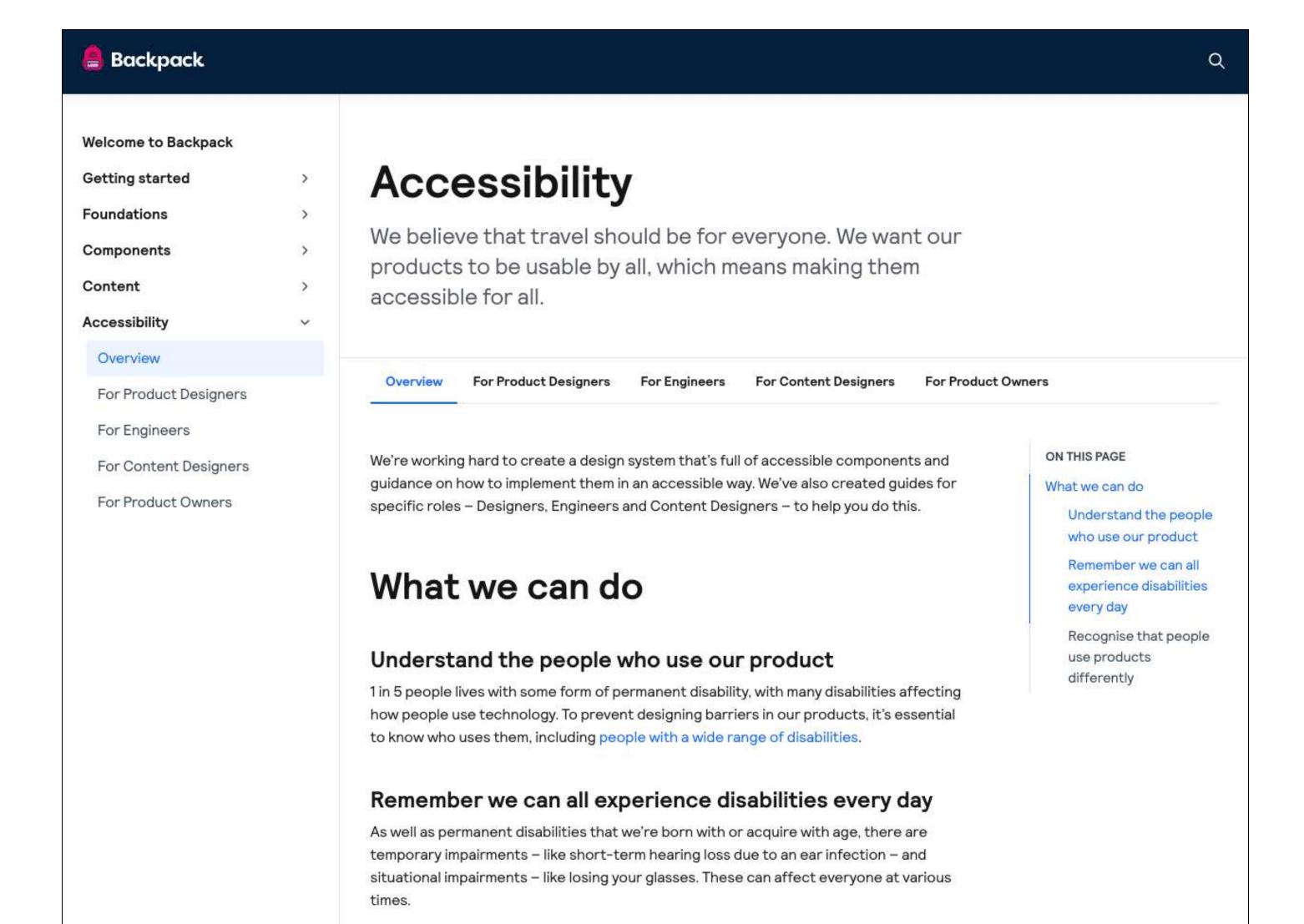


Resources

Our guidelines

Please scan!







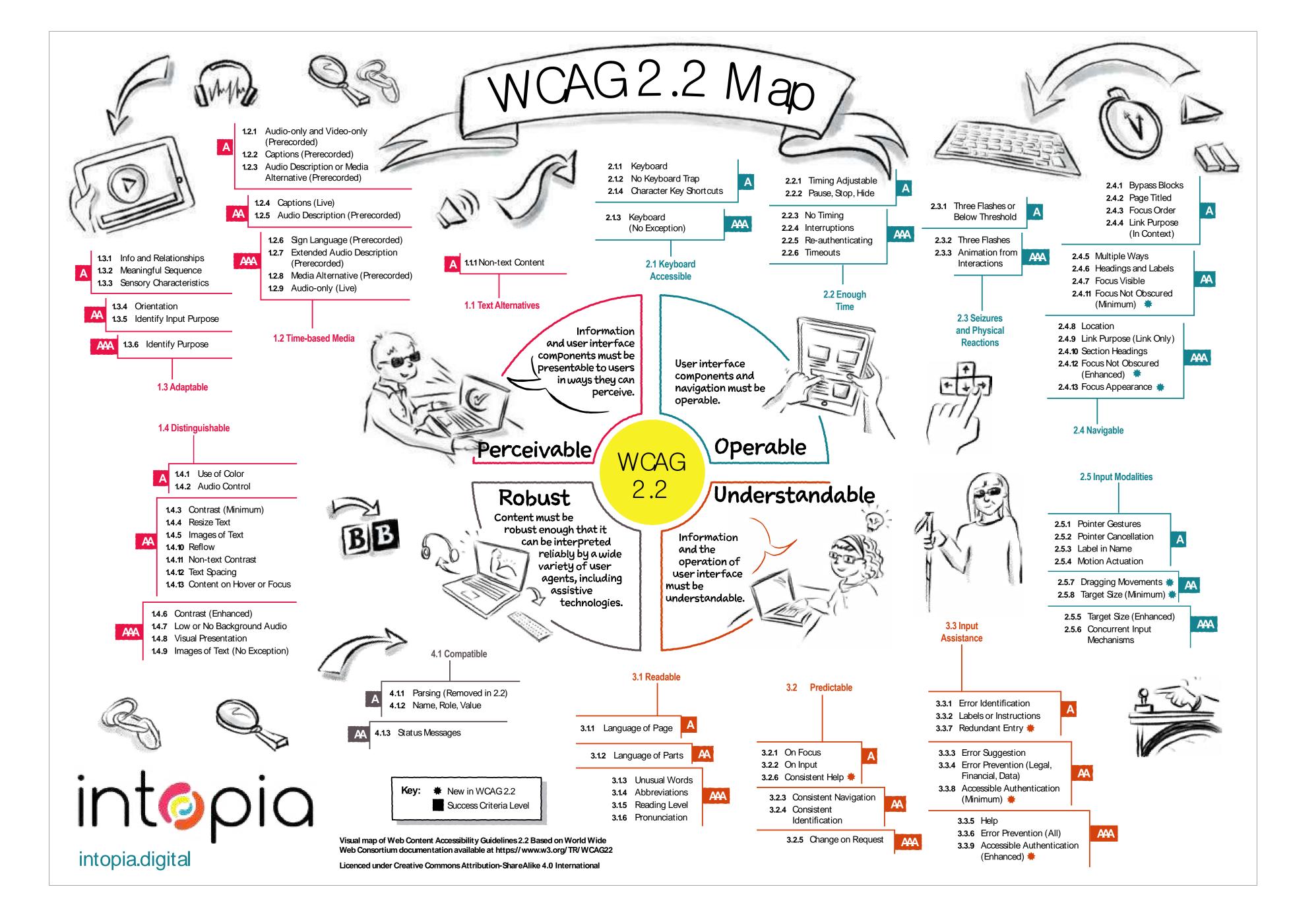
Resources

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/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:

allyproject.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/

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