

Pizza party



27th September 2024

Accessibility workshop

#gotcha

Clean up

The 🍕 challenge

« break »

About accessibility

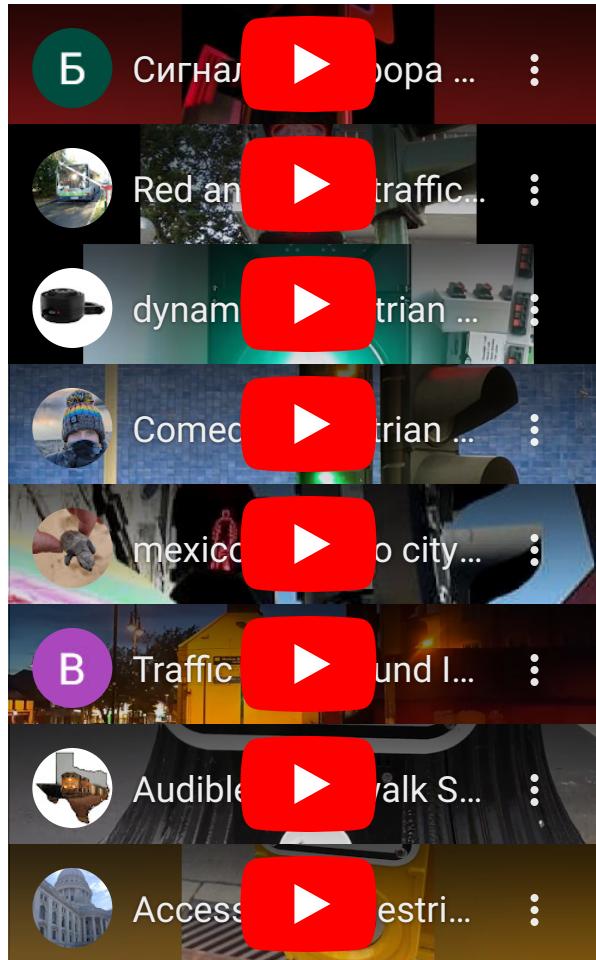


Clean up



CLOSE YOUR EYES

What do you **hear**



ACCESSIBLE INFRASTRUCTURE

What are **your** experiences



ACCESSIBLE INFRASTRUCTURE

In our digital infrastructure

Source

The screenshot shows the WAVE accessibility evaluation tool interface. At the top, it says "powered by WebAIM". Below that is a toggle switch labeled "Styles: OFF" and "ON". The main area displays a summary of findings:

Category	Count
Errors	1
Contrast Errors	17
Alerts	13
Features	10
Decorative Elements	9
ARIA	21

Below the summary is a "View details >" button. To the right of the WAVE interface is a screenshot of a website for "Amsterdam University of Applied Sciences". The website has a dark header with the university's logo and navigation links for "About us", "Partners", "Contact", and "Apply". The main content area features a large image of a diverse group of people cheering, with text overlaying it: "Meet our class of 2024!". There are also smaller images at the bottom illustrating various digital concepts like code and data.

THE  CHALLENGE

Split into groups of 6 and learn the VoiceOver essentials

make sure every team has someone with a Macbook

find a relatively quiet space for your group and *be back in 15 minutes*

THE 🔊 CHALLENGE

With your group of 6
order some pizzas

pizzabeppe.nl

slick design

pizzadonna.nl

seems shady

newyorkpizza.nl

big company

The rules of the 🍕 challenge

The first group who makes it to the payment page wins

You are **only** allowed to use

- A screen reader
- A keyboard

In your cart, put **at least** the following

- Pizza margherita
- Pizza Hawaii
- Any vegetarian pizza



1 Hour Timer



Delen

1:00:00



REFLECTION

What did you observe

« break »

Guillermo Robles, who has a vision impairment, sued Domino's in 2016 claiming he was unable to order pizza on his desktop or mobile device, despite using screen reading technology.

Why

He won

Source

SUED FOR

Accessibility barriers

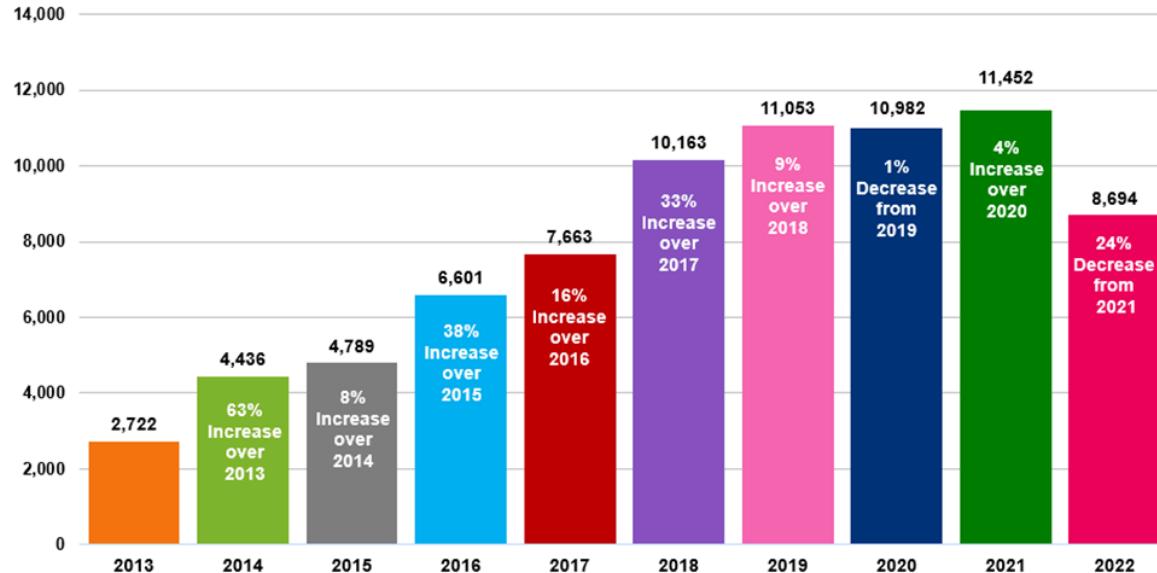
Lack of [alternative texts](#) for graphics

[Empty hyperlinks](#) with no text to identify their purpose

[Redundant links](#) that point to the same URL

on the rise

Total Number of ADA Title III Federal Lawsuits Filed Each Year
January 1, 2013 - December 31, 2022



Source



MAKE EUROPE ACCESSIBLE AGAIN

The European Accessibility Act (EAA)

Source



THE EUROPEAN ACCESSIBILITY ACT

Passed in 2019

Businesses have until June 28 2025 to implement the EAA's accessibility measures.

THE EUROPEAN ACCESSIBILITY ACT

**Does not only cover
websites**

ATMs, Ticketing- and check-in machines, E-readers, etc.

THE EUROPEAN ACCESSIBILITY ACT

**It will not be
retroactive***

* Is not fully defined just yet

THE EUROPEAN ACCESSIBILITY ACT

**It will follow the
WCAG guidelines**

WEB CONTENT ACCESSIBILITY GUIDELINES

WCAG

A set of guidelines to make apps, websites and digital platforms more accessible

For each guideline, there are testable success criteria.

The success criteria are at three levels: [A](#), [AA](#), and [AAA](#).

Source

A

Designed to be met with **little effort** on the design or structure of a digital product.

Not reaching level A? There are **serious barriers that cannot be overcome** by assistive technology.

Achieving this level is **essential**.

AA

Requires adjustments to several components (design, text structure, code).

Most sites do not reach this level without effort.

The European Accessibility Act is about level AA, most target groups can work with your site using assistive technology.

AAA

Most strict set of guidelines, has a serious impact on design, copy and tech.

Colors can hardly be used because of contrast requirements, for video content a textual version must be available, etc.

Level AAA is the golden standard.

WCAG

Many of the technology challenges faced by disabled people/people with disabilities can be described using one of the [POUR](#) principles

Perceivable

Operable

Understandable

Robust

WCAG

Many of the technology challenges faced by disabled people/people with disabilities can be described using one of the **POUR** principles

Perceivable

The user can identify content and interface elements by means of the senses

Operable

- Are **text sizes** large enough?
- Enough **color contrast** for text and interactive elements?
- **Another element** used than color for conveying information?
- Are **text alternatives** used for non textual content like images?

Understandable

Robust

WCAG

Many of the technology challenges faced by disabled people/people with disabilities can be described using one of the **POUR** principles

Perceivable

A user can successfully use controls, buttons, navigation, and other interactive elements

Operable

- Are **interactive elements** on a page big enough?
- Can all element within a page be **controlled by the keyboard**? And is it clear where you are (focus state)?
- Are **headers/labels** defined and do they describe the content below in a proper way?

Understandable

Robust

WCAG

Many of the technology challenges faced by disabled people/people with disabilities can be described using one of the **POUR** principles

Perceivable

Users should be able to comprehend the content, and learn and remember how to use your site

Operable

- When you use a page, does the context not change unexpectedly ([animations](#))?
- Does the page use [understandable language](#)?
- Are input fields labelled and/or [properly instructed](#)?
- [No unnecessary elements](#) on the page read out by screen readers?

Understandable

Robust

WCAG

Many of the technology challenges faced by disabled people/people with disabilities can be described using one of the [POUR](#) principles

Perceivable

Users should be allowed to choose their own technologies to access your content.

Operable

- Make use of [Semantic Markup](#)
- Proper use of [ARIA tags](#) and logical ordering of (DOM) elements makes content friendly for keyboard navigation and screen readers

Understandable

- Site should provide an usable interface [even if JS/CSS fails to load](#)
- [Responsive Design](#): designing for phone, tablets, large screens etc.

Robust

THINK OUTSIDE OF THE BOX

Which forms of user inputs exist?





Input devices & screen readers



**Accessible Rich Internet Applications
(ARIA)**

Source

Source

a11y stands for
A C C E S S I B I L I T Y

— 11 characters —

The A11Y Project is a community-driven effort
to make digital accessibility easier.



a11y

a – ccessibilit – y

i18n

i – nternationalizatio – n

l10n

l – ocalizatio – n

TIM BERNERS-LEE

The power of the Web is in its universality.
Access by everyone *regardless of disability* is an *essential* aspect.

motherfuckingwebsite.com

[...] What I'm saying is that all the **problems** we have with websites are ones **we create ourselves.**

Websites aren't broken by default, they are functional, high-performing, and accessible.

You break them.

You son-of-a-bitch.

People, digital abilities, *patterns*
and behaviour all evolve over
time.

Understand your users by
building with your users, not just
as an afterthought.

« mini break »

IMPAIRMENTS IN THE NETHERLANDS

Blind



78.000

Visually impaired



238.000

Color blind



700.000

Deaf / hearing
impairment



1.300.000

Physically impaired

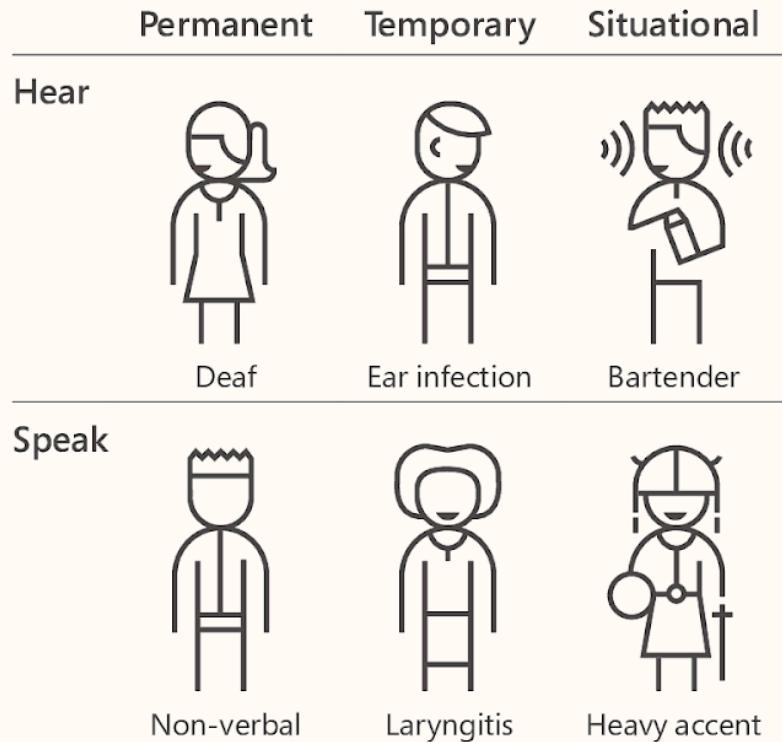
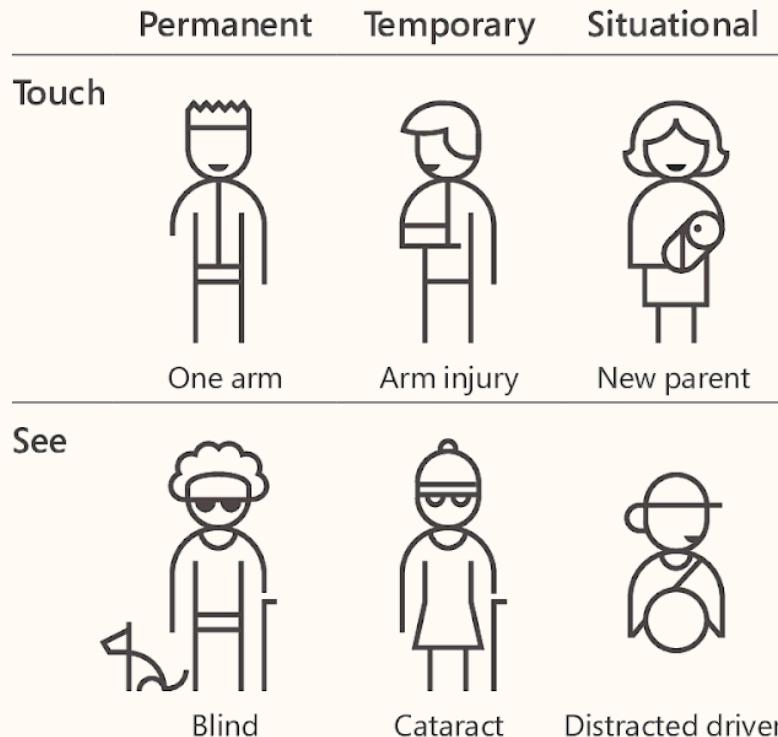


1.500.000

At some point in their life
everyone will experience a
(temporary) disability

The Persona Spectrum

[Source](#)



Necessary for some,
beneficial to all.



THE NUMBER OF DETECTED ERRORS INCREASED NOTABLY (13.6%) SINCE THE 2023

Practical tips

Across the one million home pages, 56,791,260 distinct accessibility errors were detected – an average of 56.8 errors per page.

Source

FIX YOUR CONTRAST

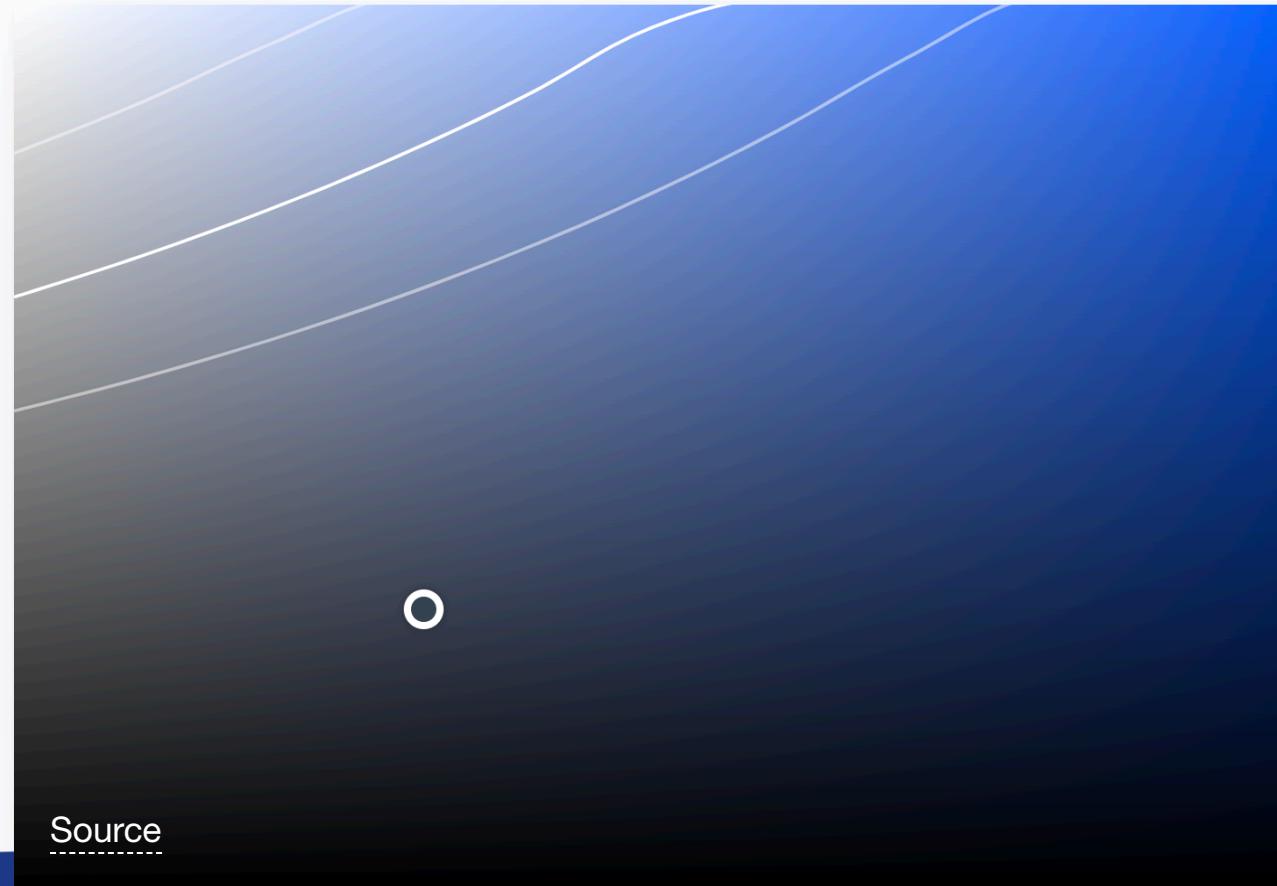
81.0%

The **contrast** between foreground and background is **1**

Text **FAIL**

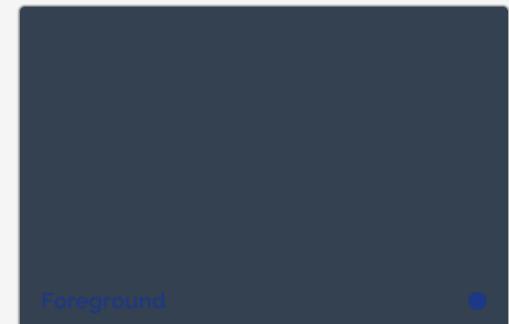
Headlines **FAIL**

🔗 color.review/check/374151-1E3A8A



Flip ↕

RGB HSL CMYK CSS



SERVE ALTERNATIVES

54.5%

SERVE ALTERNATIVES

54.5%

Without context

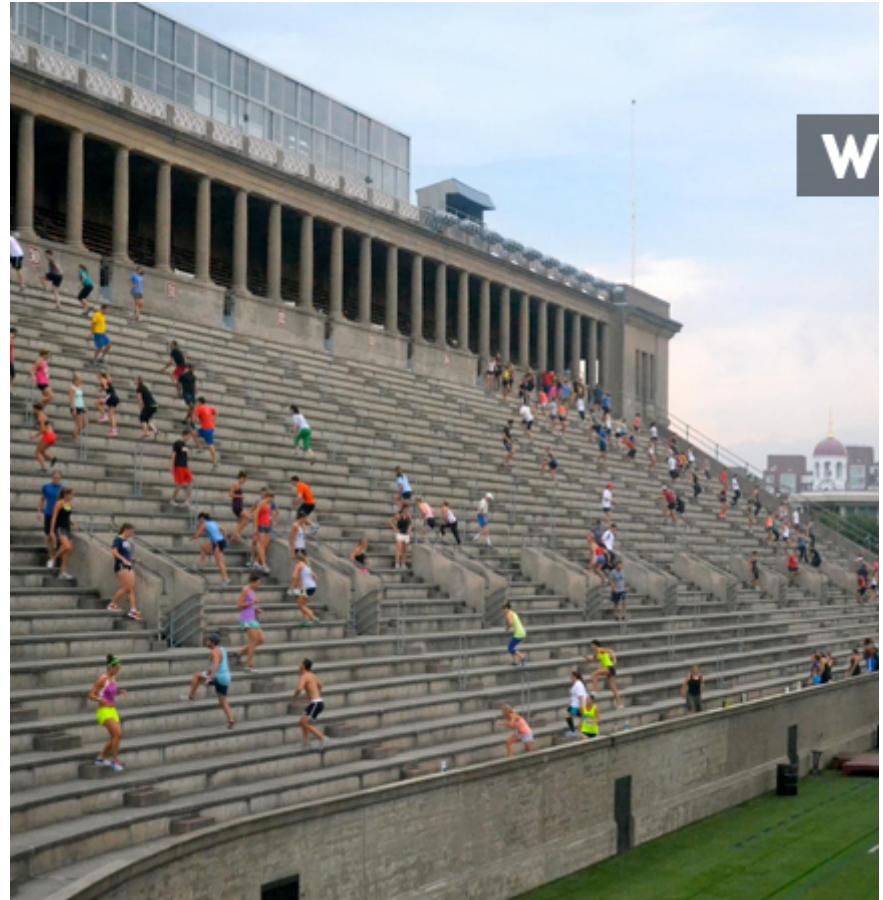
```
<img alt="A mostly empty stadium"/>
```

On a students activites page

```
<img alt="Harvard stadium workout  
routine of students running the  
stairs"/>
```

On a page about renovations in the city

```
<img alt="Harvard stadium with visible  
crackes in the stone pillars"/>
```



placeholder youtube subtitles

placeholder spotify transcript

LABEL YOUR INPUTS

48.6%

LABEL YOUR INPUTS

48.6%

Username

Username

your username here

Username

Xiduzo

Username

Xiduzo

Username already exists

Username

Username already exists

EMPTY LINKS / BUTTONS

44.6% / 28.2%

Filter 1

app design bottom navigation

X

Sort Recommended

EMPTY LINKS / BUTTON

10,000+ Results

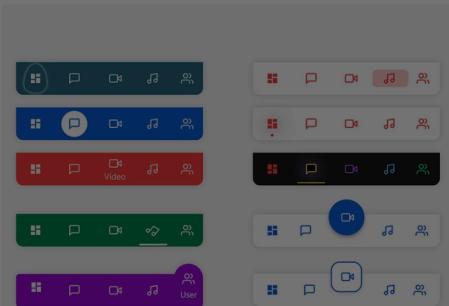
48.6%

Clear All Filters

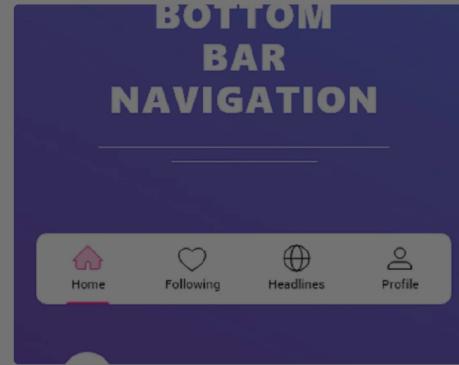
UI/UX



GPS Tracker App/Web | UI/UX Case Study
Multiple Owners ▾



Bottom Navigation
Bao NT



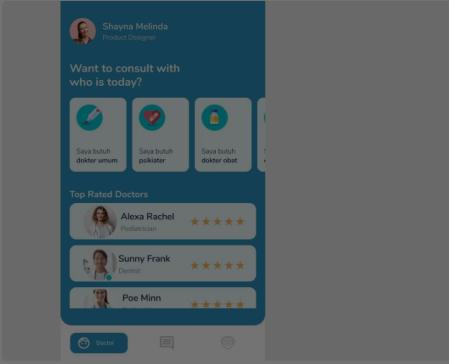
Bottom bar navigation
Bhoomi Vaja



Navigation Map - Insti App Map redesign
Adith M Sajeev



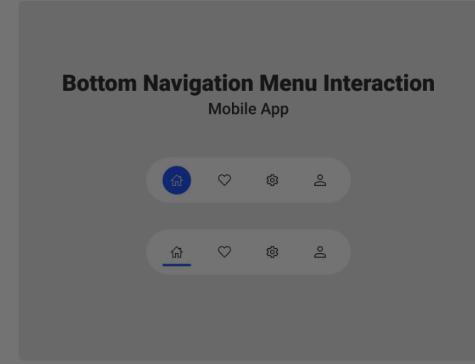
Bottom navigation bar



Home UI Design Hi! Doctor App



UI/UX Design for Navigation



Bottom Navigation Menu Interaction -

SANDERS' TIPS

What I have observed in the wild

Make interactive elements descriptive



Are you sure you want to cancel?

This action can not be reverted

Cancel

Yes

Make interactive elements descriptive



Are you sure you want to cancel?

This action can not be reverted

Go back without cancelling

Cancel reservation

Make interactive elements descriptive



Are you sure you want to cancel your reservation?

By cancelling your reservation you will not be elegiable anymore for your spot on our glamping

Go back without cancelling

Cancel reservation

SANDER'S TIPS

Listen to your users

Prefers color
scheme

SANDER'S TIPS

Listen to your users

Prefers
contrast

SANDER'S TIPS

Listen to your users

Prefers
reduced
motion



SANDER'S TIPS

Use skip links

a11y stands for
A C C E S S I B I L I T Y

11 characters

The AL1Y Project is a community-driven effort
to make digital accessibility easier.



HOW DO I GET STARTED?

TAKEAWAYS

With great power comes great
responsibility

TAKEAWAYS

**It will be a
requirement for your
future job**

Be the leader, not the follower

TAKEAWAYS

**Every single person
here will play a role
in accessibility**

No matter how small

This **really** matters
and it makes a huge
difference for so
many people

