

Scaling a11y

How to achieve sustainable digital accessibility



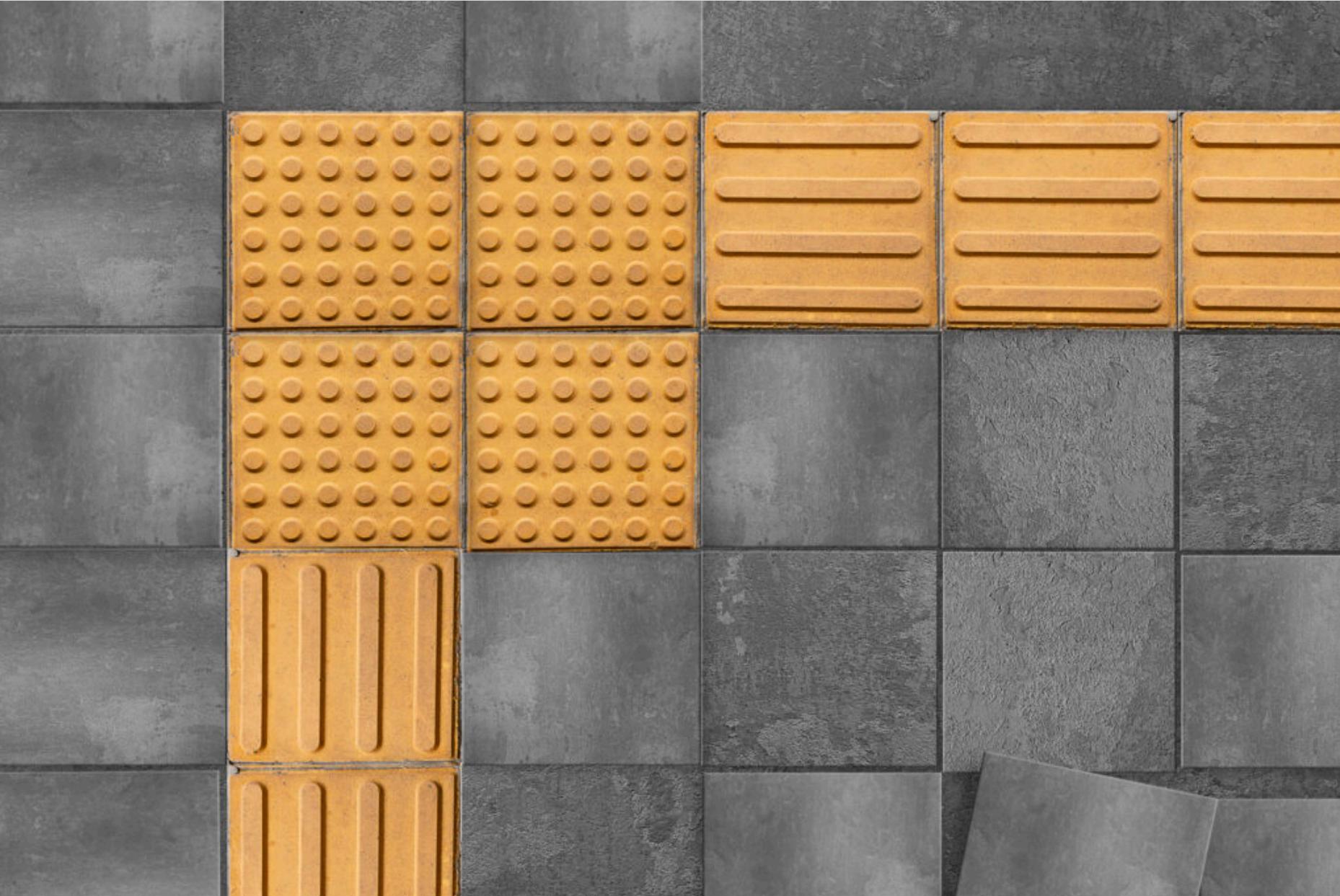
Tim Damen
21 Nov 2024
JSnation

Hello, I'm Tim Damen

```
{  
  "Front-end dev",  
  "Accessibility lead",  
  "www.timdamen.io",  
}
```



Introduction to a11y



<https://pineco.de/accessibility-in-real-life/>



<https://bigbuild.vic.gov.au/projects/metro-tunnel/stations/accessibility>



<https://bicycledutch.wordpress.com/2016/06/21/traffic-lights-in-s-hertogenbosch-an-interview/>

Accessibility is built
into the web

“The Power of the Web is in its universality.
Access by everyone regardless of disability
is an essential aspect.”

Tim Berners-Lee
Creator of the World Wide Web

Digital accessibility (a11y) is
about creating applications that
are accessible for everyone
regardless of disability

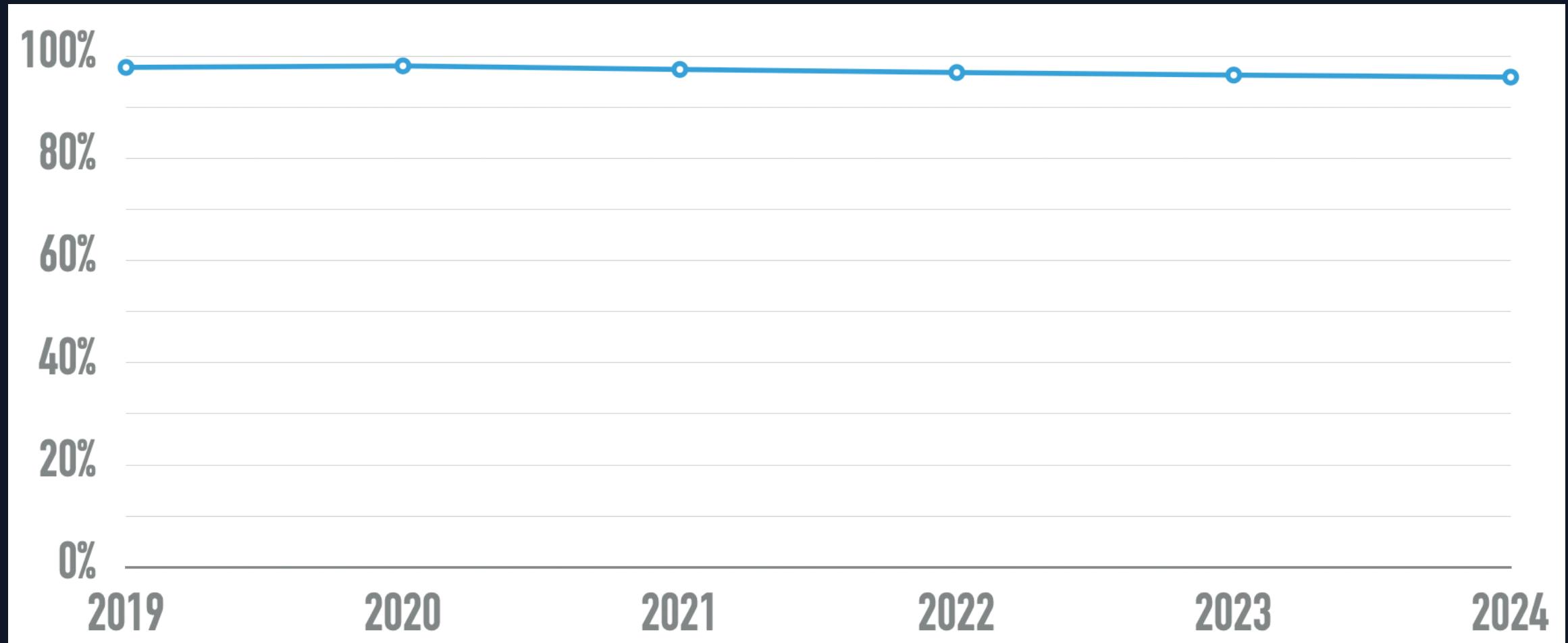
People using your App

1.3 billion

People worldwide experience significant disability

www.who.int

95.9% of Home Pages have WCAG Failures



Web Content Accessibility Guidelines

WCAG 2.2

Internationally defined guidelines that provide a baseline for web accessibility

Specification

The screenshot shows a web browser displaying the WCAG 2.2 specification page. The page has a dark blue header with the W3C logo and the title "Web Content Accessibility Guidelines (WCAG) 2.2". Below the title, it says "W3C Recommendation 05 October 2023". On the left, there's a sidebar titled "W3C Recommendation" with a "TABLE OF CONTENTS" section. The main content area contains links to various parts of the specification, such as "More details about this document", "This version", "Latest published version", "Latest editor's draft", "History", "Implementation report", "Previous Recommendation", "Editors", "Feedback", "Errata", and "See also translations". At the bottom, there's a copyright notice: "Copyright © 2020-2023 World Wide Web Consortium. W3C® liability, trademark and document use rules apply."

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Abstract

Status of This Document

Introduction

- Background on WCAG 2
- WCAG 2 Layers of Guidance
- WCAG 2.2 Supporting Documents
- Requirements for WCAG 2.2
- Comparison with WCAG 2.1
 - New Features in WCAG 2.2
 - Numbering in WCAG 2.2
 - Conformance to WCAG 2.2
- Later Versions of Accessibility Guidelines

1. Perceivable

- Text Alternatives
 - Non-text Content
- Time-based Media
 - Audio-only and Video-only (Prerecorded)
 - Captions (Prerecorded)
 - Audio Description or Media Alternative (Prerecorded)
 - Captions (Live)
 - Audio Description (Prerecorded)
 - Sign Language (Prerecorded)
 - Extended Audio Description (Prerecorded)
 - Media Alternative (Prerecorded)
 - Audio-only (Live)
- Adaptable
 - Info and Relationships
 - Meaningful Sequence
 - Sensory Characteristics

W3C

Web Content Accessibility Guidelines (WCAG) 2.2

W3C Recommendation 05 October 2023

▼ More details about this document

This version: <https://www.w3.org/TR/2023/REC-WCAG22-20231005/>

Latest published version: <https://www.w3.org/TR/WCAG22/>

Latest editor's draft: <https://w3c.github.io/wcag/guidelines/22/>

History: <https://www.w3.org/standards/history/WCAG22/>
[Commit history](#)

Implementation report: <https://www.w3.org/WAI/WCAG22/implementation-report/>

Previous Recommendation: <https://www.w3.org/TR/WCAG21/>

Editors:
[Alastair Campbell](#) (Nomensa)
[Chuck Adams](#) (Oracle)
[Rachael Bradley Montgomery](#) (Library of Congress)
[Michael Cooper](#) (W3C)
[Andrew Kirkpatrick](#) (Adobe)

Feedback: [GitHub w3c/wcag \(pull requests, new issue, open issues\)](#)

Errata: [Errata exists.](#)

See also [translations](#).

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<https://www.w3.org/TR/WCAG22/>

Roles and Responsibilities

Organisation-wide approach

1. Accessibility has management support
2. There is a person who has final responsibility for digital accessibility.
3. Accessibility is included in processes and permanent budget and capacity are allocated.

If not, start advocating

The screenshot displays four distinct versions of a contact management interface, each with a different color scheme and layout, overlaid on a base navigation bar.

Base Navigation Bar:

- ABN AMRO logo
- Products
- Self service
- Tasklist
- Search icon
- GI QAQ
- GQ
- Log out

Version A (Red Box):

Manage contacts

New contact

All address books > GI QAQ > A

Search name or accou [Search icon]

Contacts Accounts

- A Apewfmq Xitynrlk MbjG NL52 DEUT 0265 1751 43
- B B. Qaq - Qkbo NL33 INGB 0004 0872 97
- D D. RZMXUWU NL04 RABO 0337 8115 04
- E Egi Paef

0.221 € 2,857.29

T(s)
information? [Read more here](#)

Gmpqix Jhjveoc
BHJ3HX0Y7

Investing Basic Change

Version B (Green Box):

Manage contacts

New contact

All address books > GI QAQ > A

Search name or accou [Search icon]

Contacts Accounts

- A Apewfmq Xitynrlk MbjG NL52 DEUT 0265 1751 43
- B B. Qaq - Qkbo NL33 INGB 0004 0872 97
- D D. RZMXUWU NL04 RABO 0337 8115 04
- E Egi Paef

0.221 € 2,857.29

T(s)
information? [Read more here](#)

Gmpqix Jhjveoc
BHJ3HX0Y7

Investing Basic Change

Version C (Blue Box):

Manage contacts

New contact

All address books > GI QAQ > A

Search name or accou [Search icon]

Contacts Accounts

- A Apewfmq Xitynrlk MbjG NL52 DEUT 0265 1751 43
- B B. Qaq - Qkbo NL33 INGB 0004 0872 97
- D D. RZMXUWU NL04 RABO 0337 8115 04
- E Egi Paef

0.221 € 2,857.29

T(s)
information? [Read more here](#)

Gmpqix Jhjveoc
BHJ3HX0Y7

Investing Basic Change

Version D (Black Box):

Manage contacts

New contact

All address books > GI QAQ > A

Search name or accou [Search icon]

Contacts Accounts

- A Apewfmq Xitynrlk MbjG NL52 DEUT 0265 1751 43
- B B. Qaq - Qkbo NL33 INGB 0004 0872 97
- D D. RZMXUWU NL04 RABO 0337 8115 04
- E Egi Paef

0.221 € 2,857.29

T(s)
information? [Read more here](#)

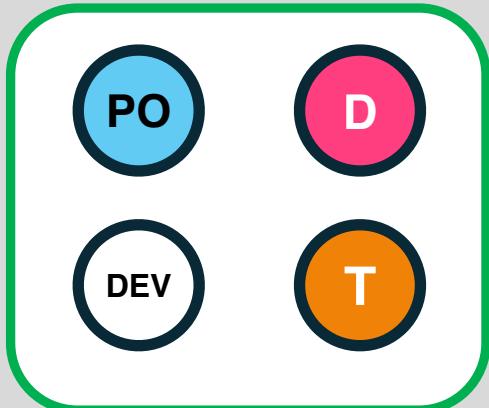
Gmpqix Jhjveoc
BHJ3HX0Y7

Investing Basic Change

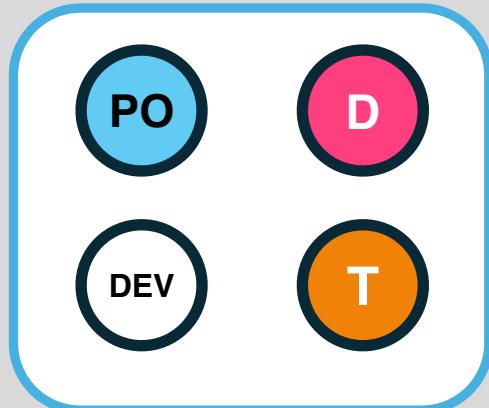
Dev Team A



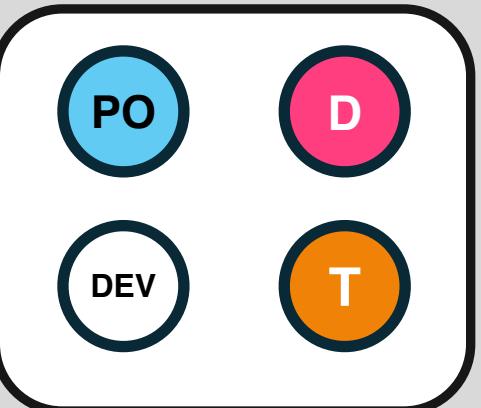
Dev Team B



Dev Team C



Dev Team D



Managing digital accessibility: a joint effort of various departments and roles

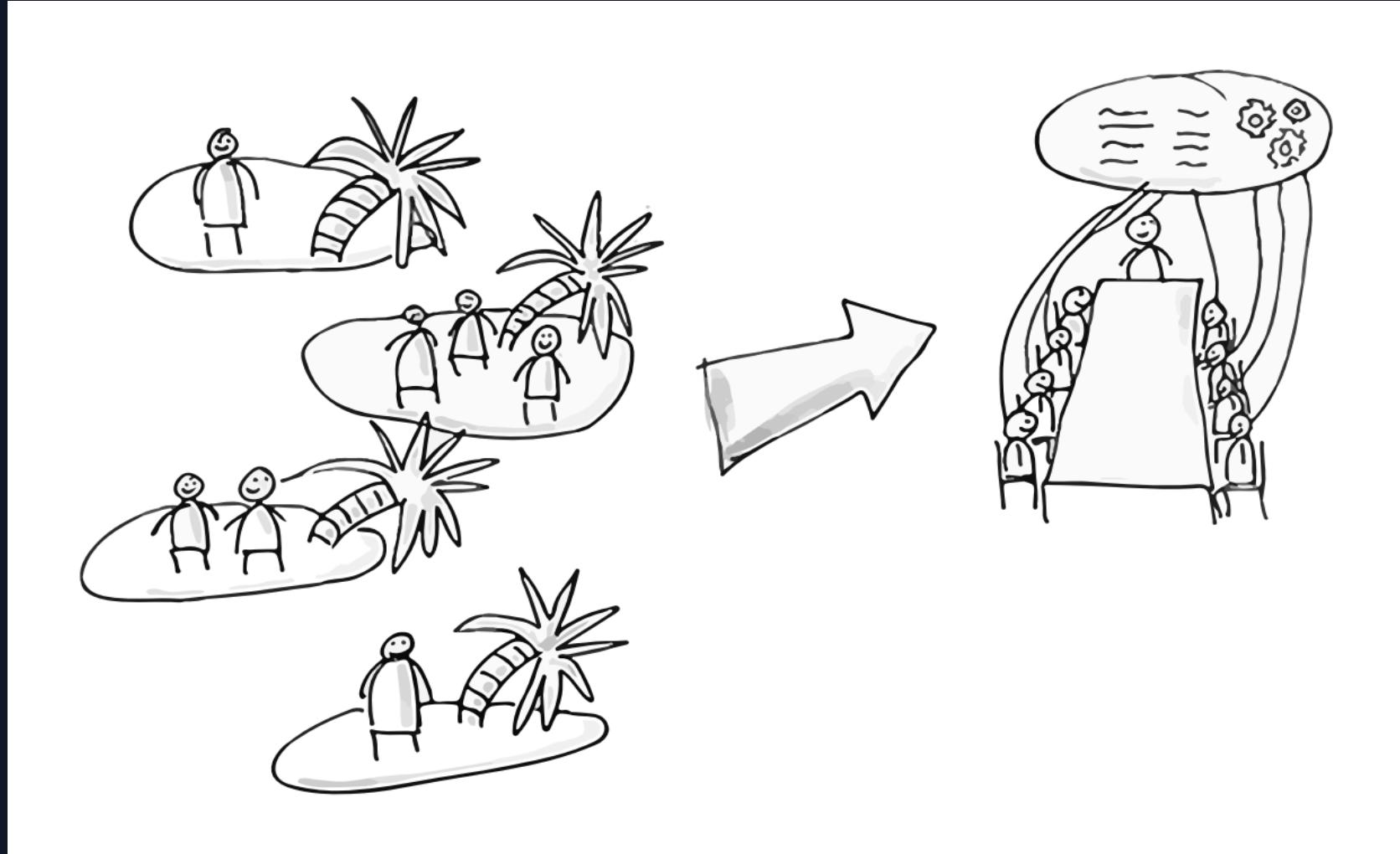


Illustration: Jacobien Riezebosch, Firm Ground

How to stop releasing inaccessible features

How?

Building knowledge

Intro a11y training for every role.

Specialist training for Devs, Designers and testers.

Online training certifications.

Internal researching and knowledge sharing sessions.

Testing

Automated

Manual

User Testing

Monitoring

AZURE TICKETS AND ISSUES DASHBOARD

IB - Accessibility issues

Refresh date
23/09/2024

personal banking BI & Analytics CoE

Documentation
Total issues over time
Tickets done details
IB - Accessibility issues
AA App - Accessibility issues
AA App - Security issues
PBI - Accessibility issues
PBI - Security issues
DCC - Accessibility issues

GRID
All

Team
All

Source
All

Assistive Technology
All

State
All

Prio
All

Title
All

App
All

Number of issues
303

Number of open issues
184

Number of issues Done
108

Number of open issues by prio

Prio	Count
Urgent	134
High	2
Medium	151
Low	1

Number of open issues by team and state

Team	Done	In Progress	New	Ready
Payments Merce...	29	36	9	
Investibles	36			
Jetfire	26	11		
Insurances	22			
Turbo	8	13		
Falcons	24			
Ninjas	8			
Multipliers	16			
Iron Wolves	11			
SID	7			

Number of open issues by assistive technology

Technology	Yes	No
other	63	104
screen-reader	34	30
keyboard		
visual design		
screen-readervisual...		
screen-sizing		
screen-readerkeyb...		
screen-readerscre...		

Number of open issues by state

State	Count
Done	108
New	89
Ready	66
Refinement	16
In Progress	10
Review	3

Number of open issues by date

Work Item Id **Link** **Title** **Team** **Tags**

Work Item Id	Link	Title	Team	Tags
1375140	🔗	Improve Accessibility Lock on Savings	Ninjas	accessibility-w...
2202409	🔗	IB Transfer Accessibility Recipient Name Column is compliant with Accessibility	Ninjas	Accessibility; ac...
2339216	🔗	IB Transfer Fix recipient name dropdown re-appearing after shifting focus	Ninjas	accessibility-w...
2339257	🔗	IB Transfer Address book modal doesn't trap focus	Ninjas	accessibility-w...
245420F	🔗	IB Transfer Account select not working properly with screen reader	Document Management	accessibility-w...

Total

Accessibility Auditing

“Audits and automated tools don’t fix accessibility issues”

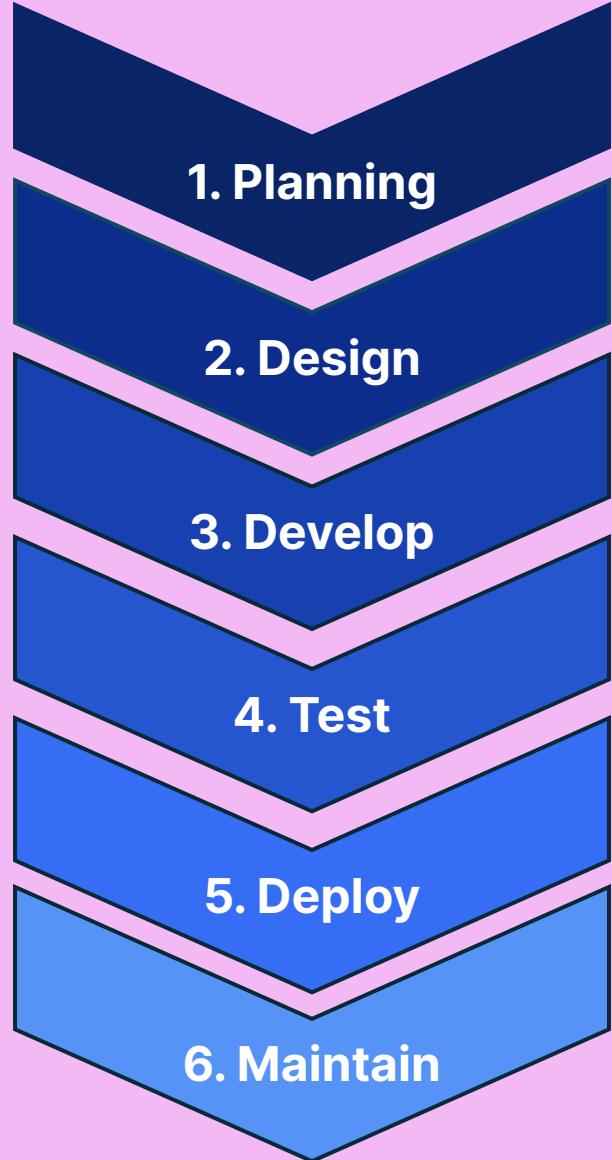
- Karl Groves
A11y specialist

WCAG-EM (Evaluation method)

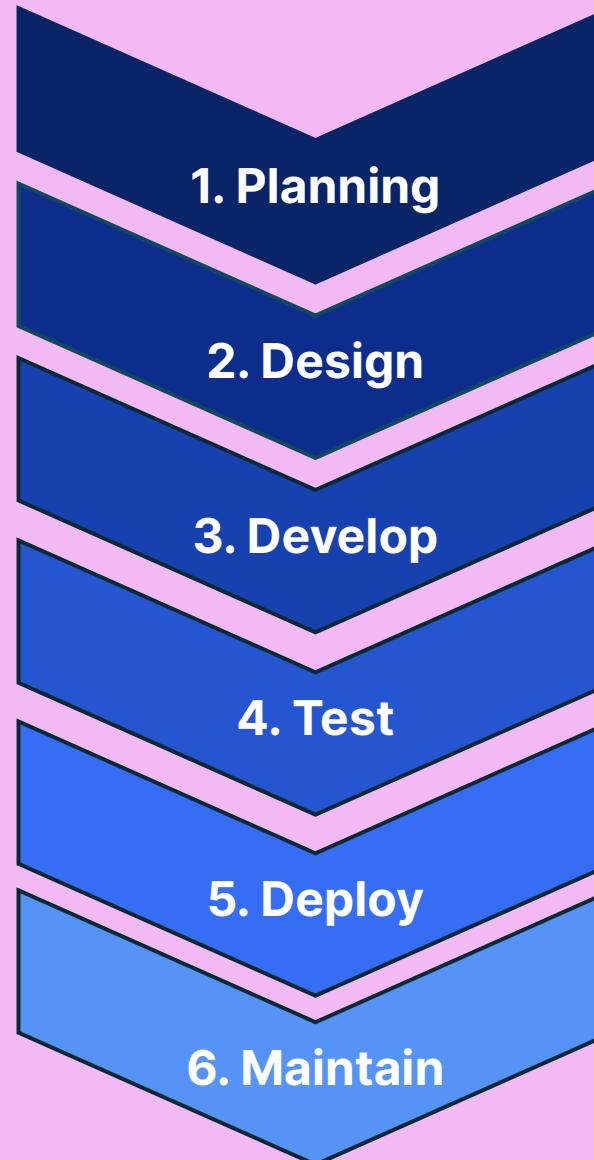
Large sample size (different page) → could be a lot of different teams

Not mandatory to show all issues per WCAG requirement
→ Potential to miss a lot of issues

Current situation a11y auditing

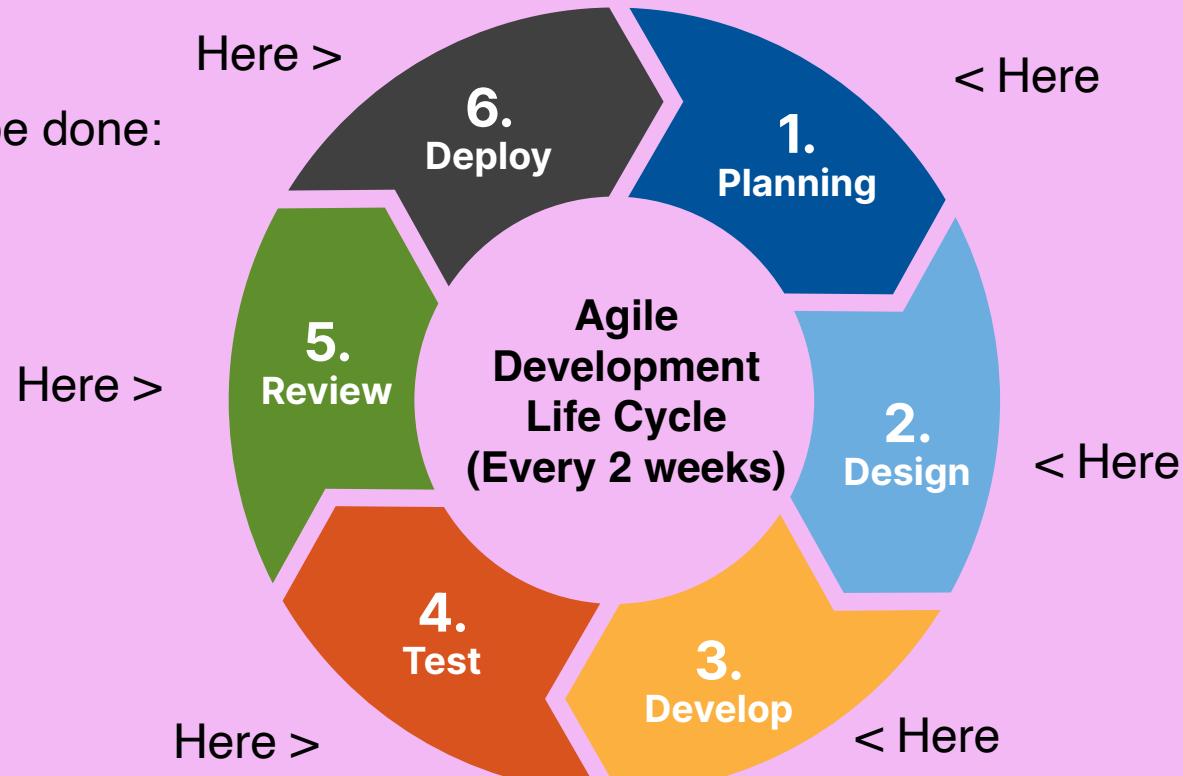


< WCAG audit
“Months go by”

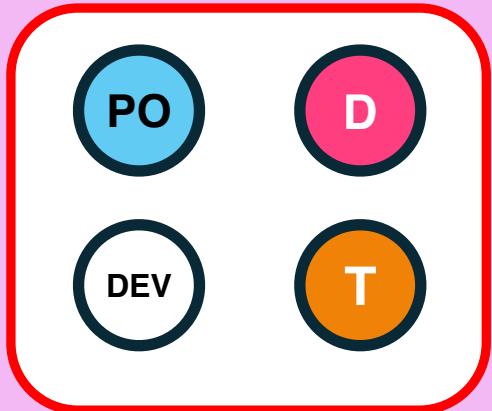


< Audit is done

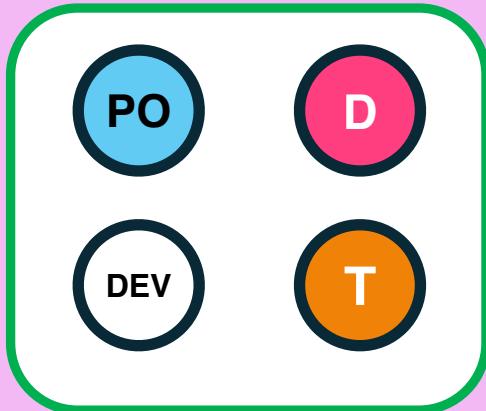
Accessibility checks should be done:



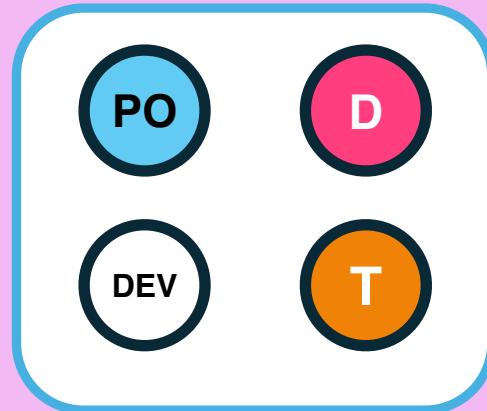
Dev Team A



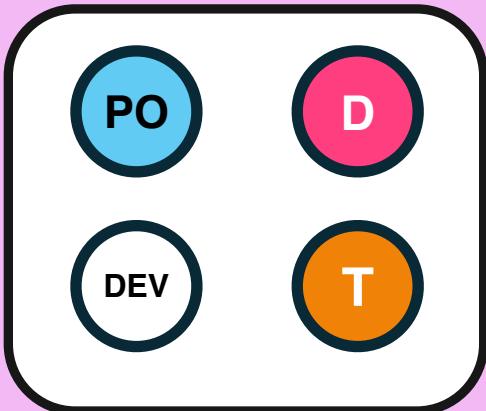
Dev Team B



Dev Team C

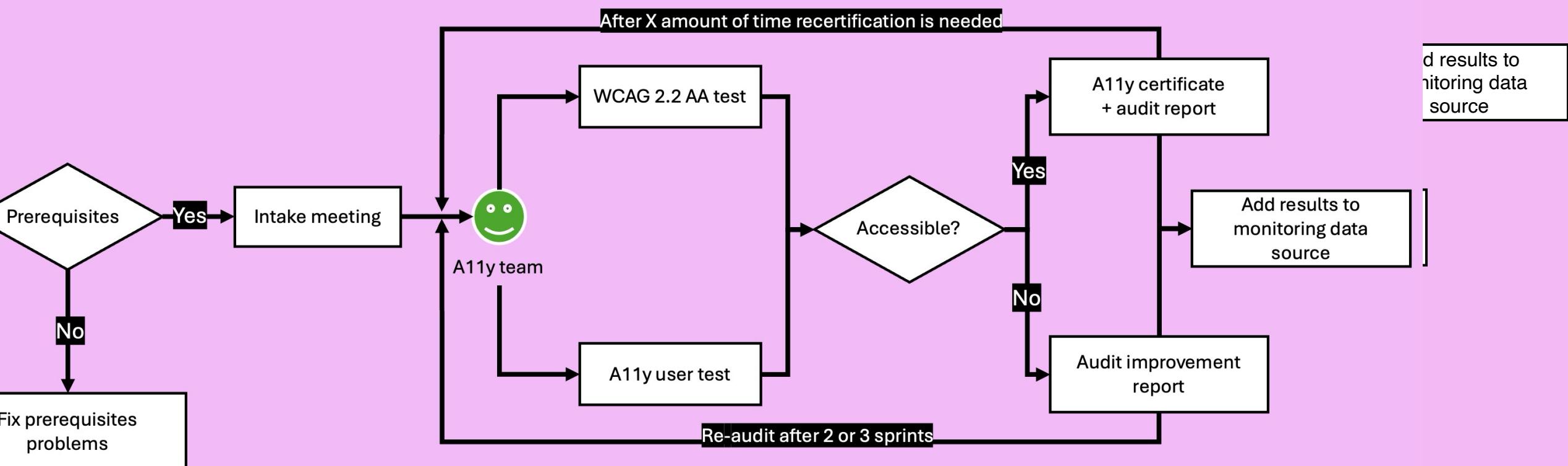


Dev Team D



The accessibility feedback loop

The accessibility feedback loop



Dev teams need something like this!

Issues

1. [Main menu does not work with keyboard](#) (2.1.1)
2. [Focus style missing](#) (2.4.7)

Issue 1

Main menu does not work with keyboard

Problem

The main menu does not work with just a keyboard. The links are marked up like this:

```
<div class="link 202034rsfd oiarjgeoi" onclick="woo()">About us</div>
```

Solution

Use `<a>` tags for the links, and use the `href` attribute for the location to link to, like this:

```
<a href="/about-us">About us</a>
```

The `<a>`-tag works with keyboard out of the box, does not rely on JavaScript and makes it easier for search engines to understand what is going on.

WCAG criterion:

2.1.1: Keyboard ↴

Difficulty:

High

Severity:

High

Sample:

[blog-post](#)

Summary

- Intro
- WCAG
- Roles and responsibilities
- How to stop releasing inaccessible features
- Accessibility Audits
- The accessibility feedback loop