

An Introduction to Digital Accessibility

Melanie Sumner

Senior Software Engineer, Design Systems

May 2, 2022



Hello there!

- Senior Software Engineer, Design Systems
- Framework Core Team, Ember.js
- Invited Expert, W3C WAI-ARIA
- Board Member, VetsWhoCode

<https://noti.st/melsumner>

Today's Agenda

1. Intro to WCAG
2. The Meta of Accessibility
3. State of Accessibility
4. Roles & Responsibilities
5. What's Next?

The image features a dark blue background with decorative elements. In the top-left corner, there are several white, parallel, V-shaped lines that create a sense of depth and movement. In the bottom-right corner, there is a grid of small white dots, creating a textured effect. The central text is white and bold, standing out against the dark background.

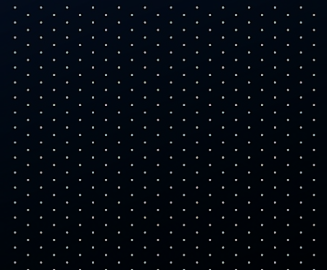
Accessibility is a Journey

The image features a dark blue background with decorative elements. In the top-left corner, there are several white, parallel, V-shaped lines that create a sense of depth and movement. In the bottom-right corner, there is a grid of small white dots, creating a textured effect. The central text is white and bold, standing out against the dark background.

Passion, Patience, & Persistence

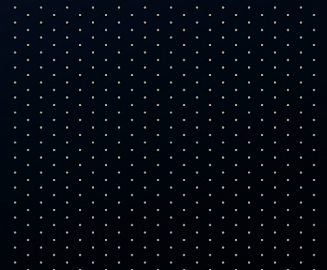
01 Intro to WCAG

What is WCAG?



01 Intro to WCAG

**Web
Content
Accessibility
Guidelines**



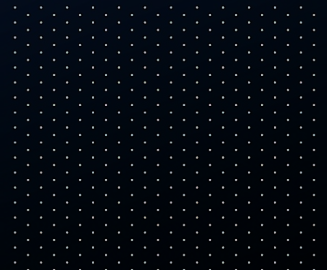
01 Intro to WCAG

3 levels

4 categories

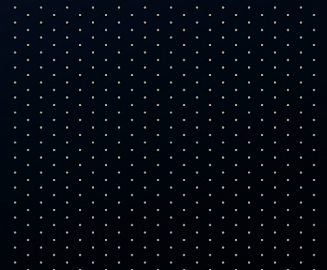
13 guidelines

78 success criteria



01 Intro to WCAG

3 levels

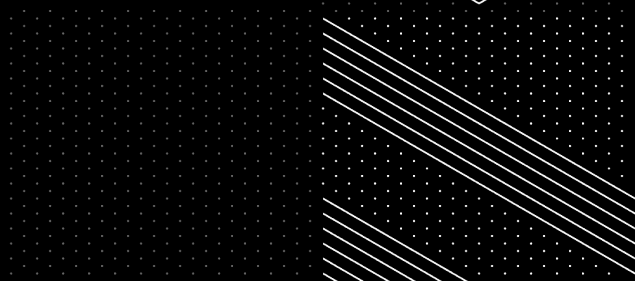
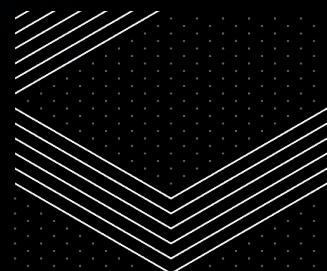


01 Intro to WCAG

A

AA

AAA



01 Intro to WCAG

A

AA

AAA



01 Intro to WCAG

4 categories

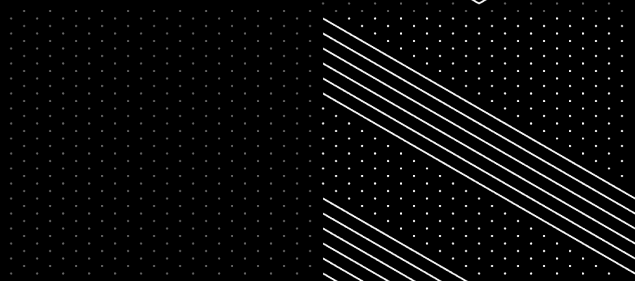
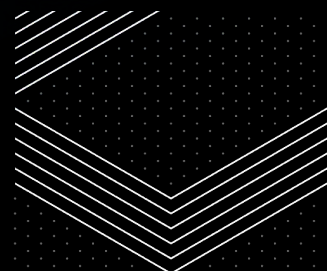
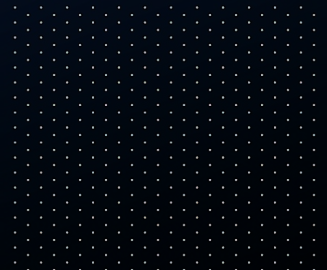


01

Intro to WCAG



Perceivable

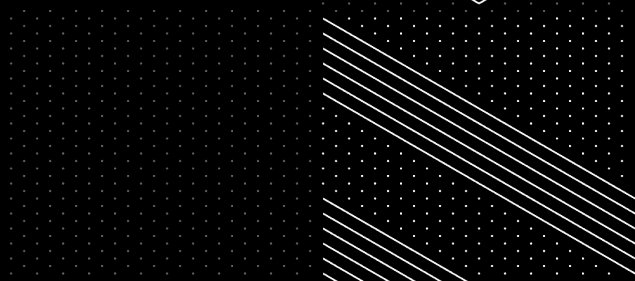
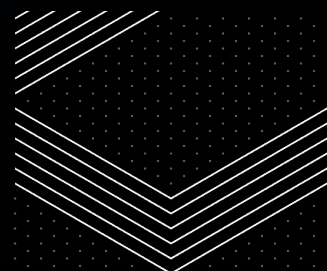
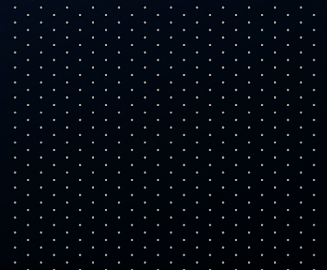


01

Intro to WCAG



Operable

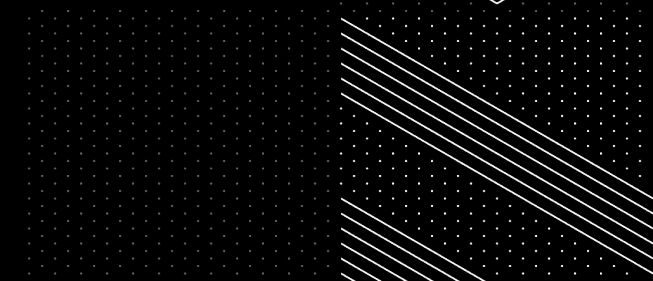
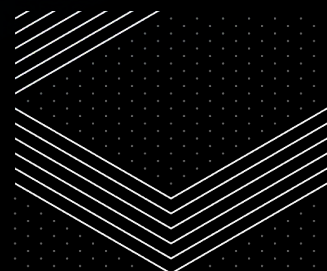
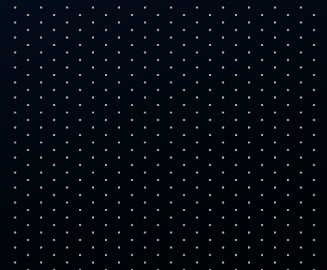


01

Intro to WCAG



Understandable

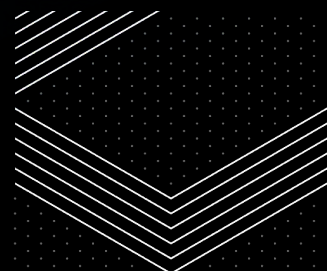
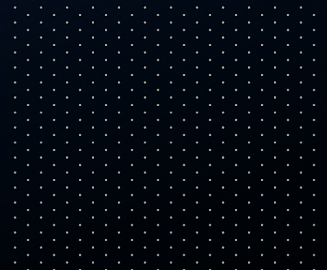


01

Intro to WCAG



Robust



01 Intro to WCAG

13 guidelines
78 success criteria



“Accessible”

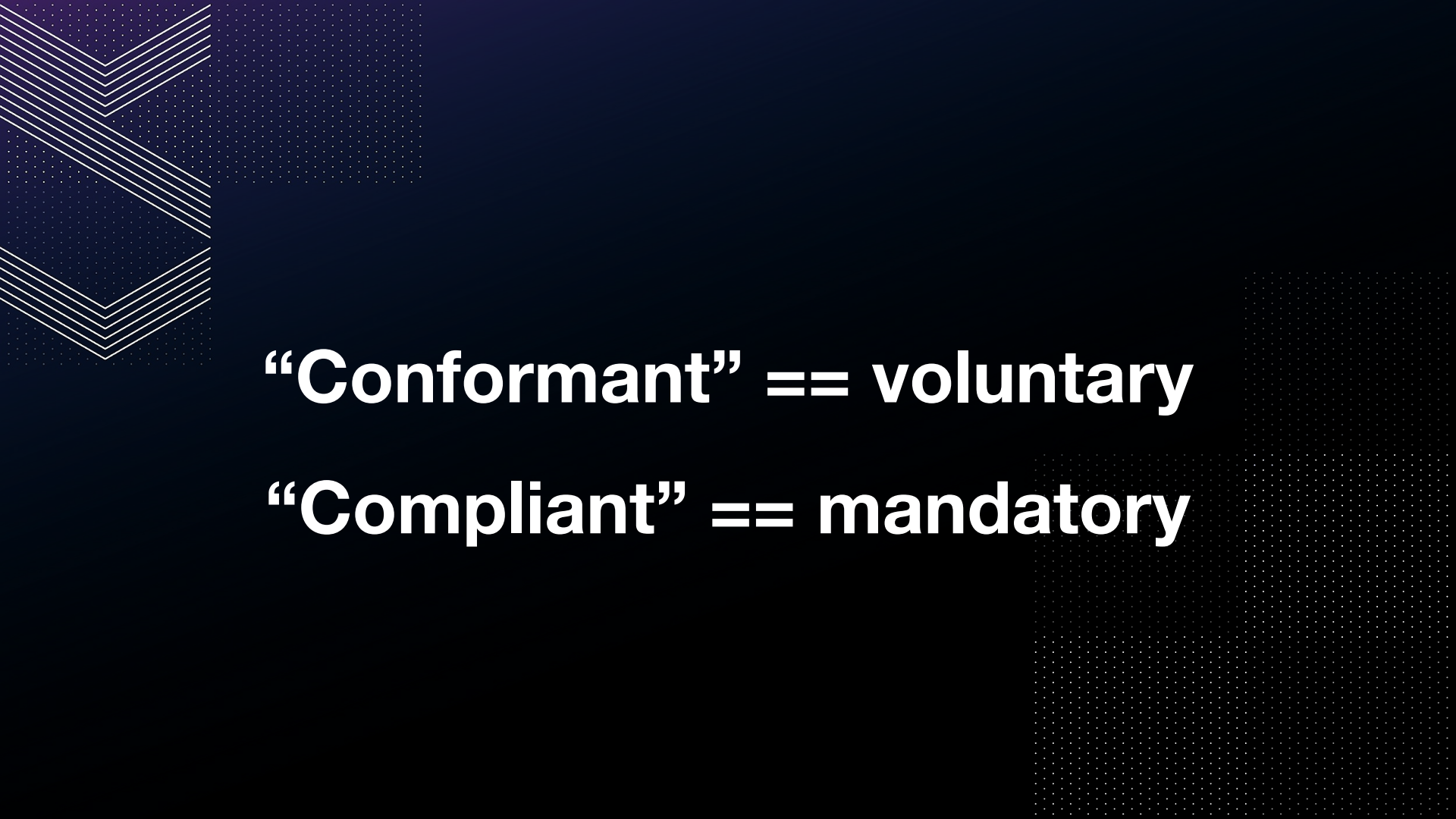
“Best Practice”

“Compliant”

“Conformant”

The image features a dark blue background with decorative elements. In the top-left corner, there are several white, parallel, V-shaped lines pointing downwards, set against a grid of small white dots. In the bottom-right corner, there is a larger, solid grid of small white dots. The word "Accessible" is centered in the middle of the page in a bold, white, sans-serif font, enclosed in quotation marks.

“Accessible”

The image features a dark blue background with decorative elements. In the top-left corner, there are several white, parallel, V-shaped lines pointing downwards. In the bottom-right corner, there is a grid of small white dots. The text is centered in the middle of the slide.

“Conformant” == voluntary

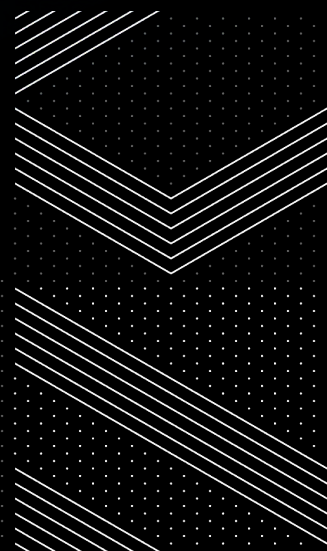
“Compliant” == mandatory

The image features a dark blue background with decorative elements. In the top-left corner, there are several white, parallel, V-shaped lines pointing downwards. In the bottom-right corner, there is a grid of small white dots. The text "Best Practice" is centered in the middle of the image in a white, bold, sans-serif font, enclosed in quotation marks.

“Best Practice”

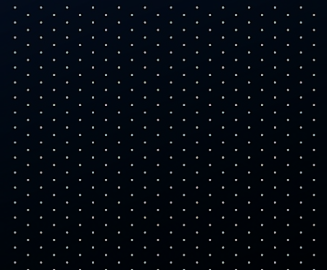
02 The Meta of Accessibility

Updating our mental model



02 The Meta of Accessibility

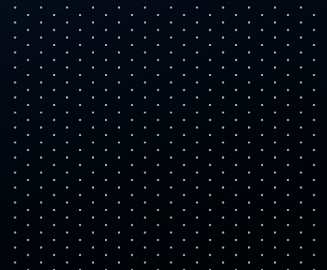
You have a disability
You don't have a disability



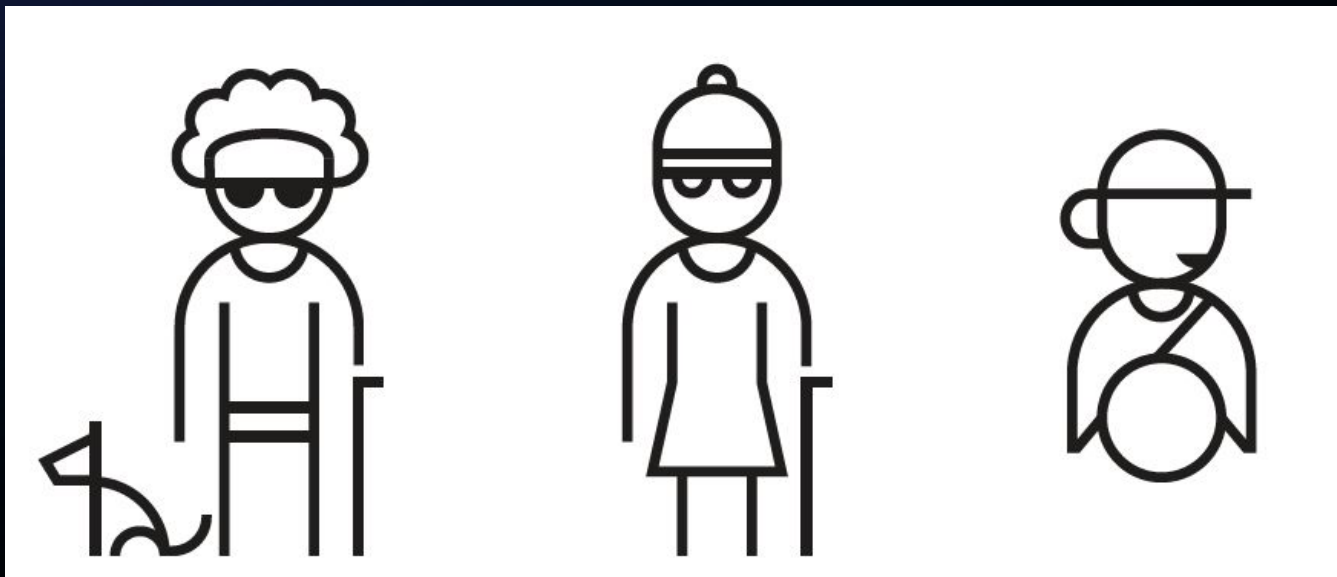
02

The Meta of Accessibility

“I can’t see the screen”



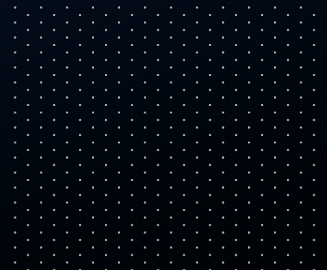
02 The Meta of Accessibility



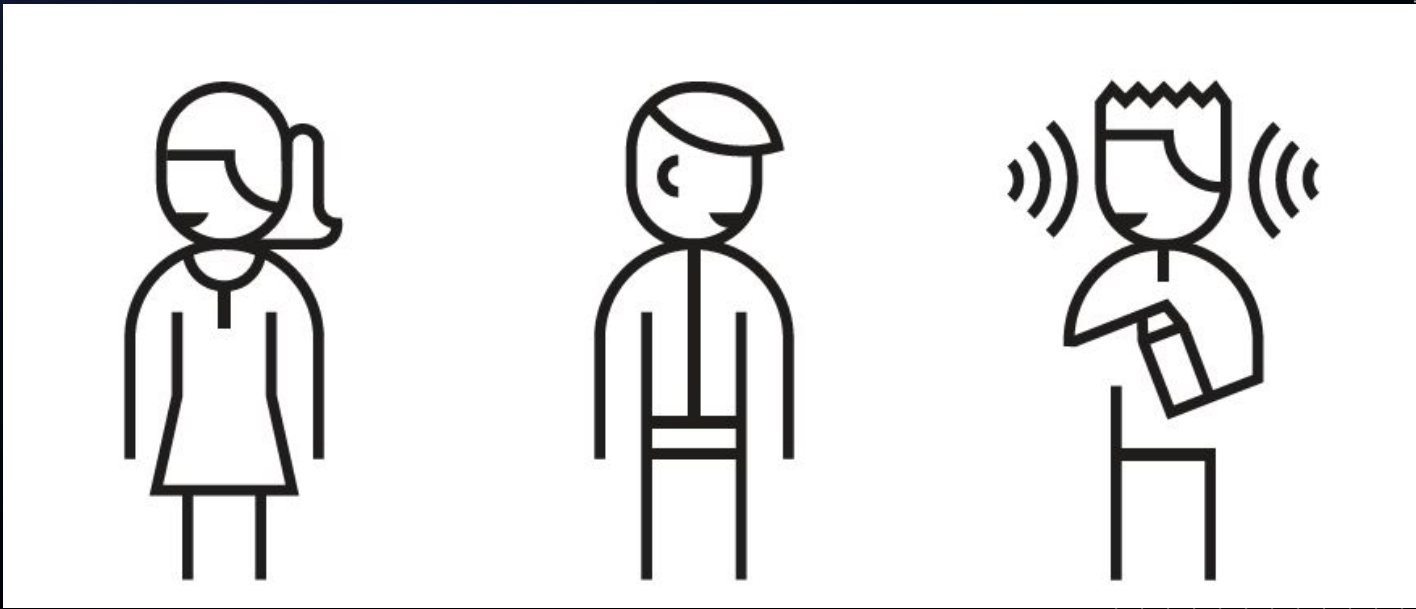
— 02

The Meta of Accessibility

“I need captions”



02 The Meta of Accessibility



02

The Meta of Accessibility

“I need keyboard shortcuts”

02 The Meta of Accessibility

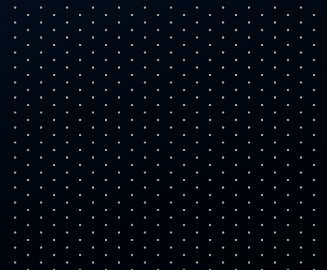


02 The Meta of Accessibility

Outdated thinking:

You have a disability

You don't have a disability

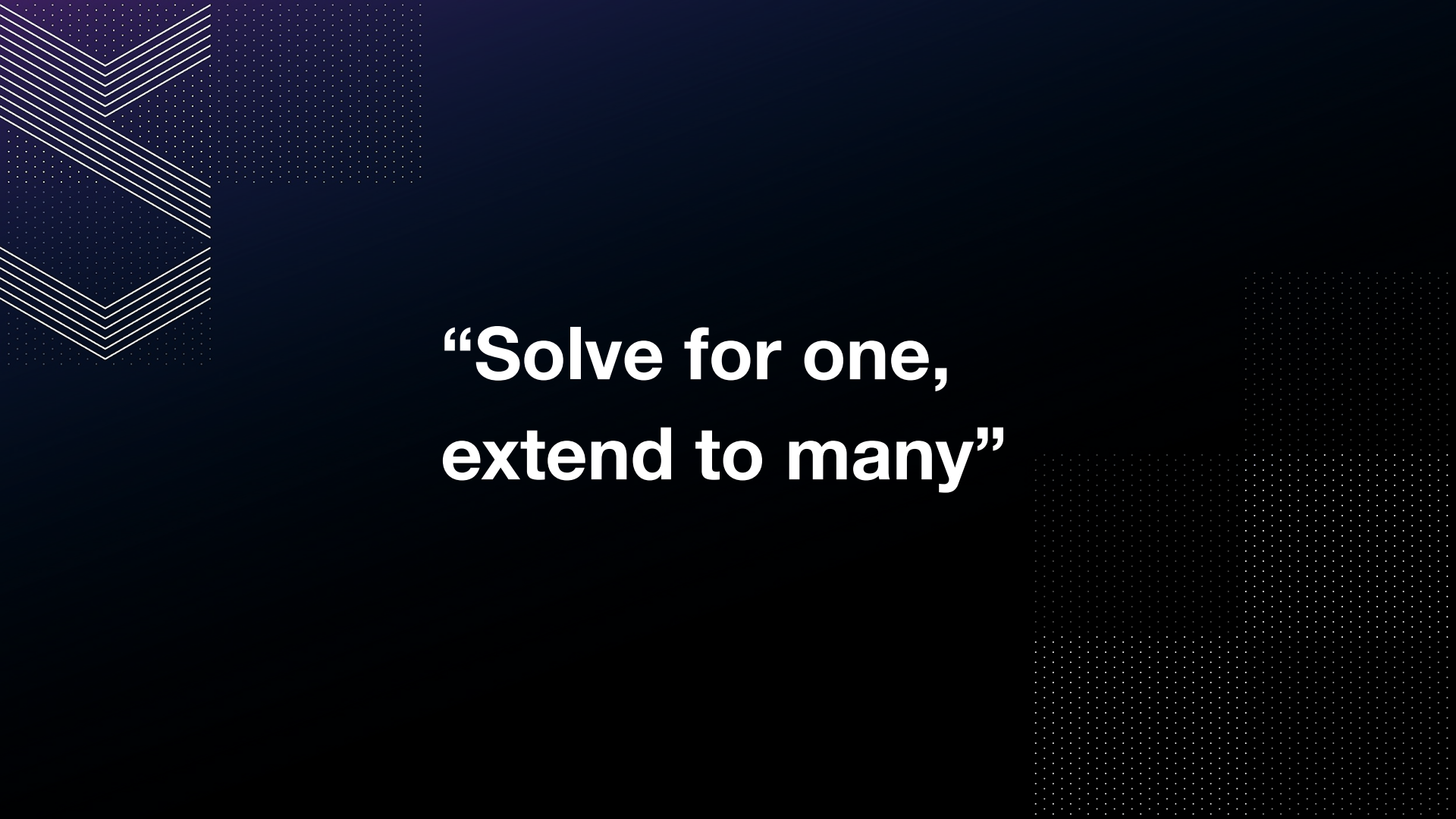


02 The Meta of Accessibility

Updated thinking:

Mismatched interaction; may be permanent or situational.

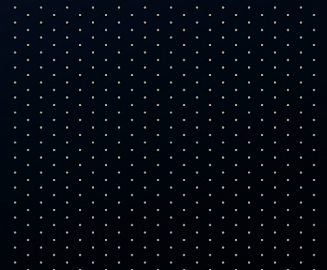


The image features a dark blue background with decorative elements. In the top-left corner, there are several white, parallel, V-shaped lines that create a sense of depth and movement. In the bottom-right corner, there is a pattern of small, white, evenly spaced dots. The central text is white and stands out against the dark background.

**“Solve for one,
extend to many”**

03 State of Accessibility

State of Accessibility



The WebAim Million

- 50,829,406 distinct accessibility errors
- Average of 50.8 errors per page
- 7.7% Increase in DOM elements
- 96.8% of home pages had detectable errors

Preventable Accessibility Issues

- Low contrast text
- Missing alt attributes on images
- Empty links
- Missing form input labels
- Empty buttons
- Missing lang attribute on html element

03 State of Accessibility

We have a long road ahead of us.

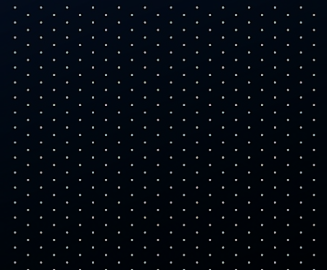
04 Roles & Responsibilities

Roles & Responsibilities



04 Roles & Responsibilities

**“You didn’t ask
for accessibility.”**



04 Roles & Responsibilities

**“You didn’t ask
for sugar in your
cookie.”**

04 Roles & Responsibilities

Leadership

- Vocalize accessibility as a priority
- Ensure it is included in budgets

04 Roles & Responsibilities

Technical Writers

- Use clear language
- Use consistent phrasing

04 Roles & Responsibilities

UX Designers

- Simplify the user experience
- Make context and purpose clear

04 Roles & Responsibilities

Visual Designers

- Think beyond minimum color contrast requirements
- Plan for zoom (browser zoom, text size zoom)
- Make sure interactive elements are large enough
- Try to think in proportions, not pixels

04 Roles & Responsibilities

QA Testers

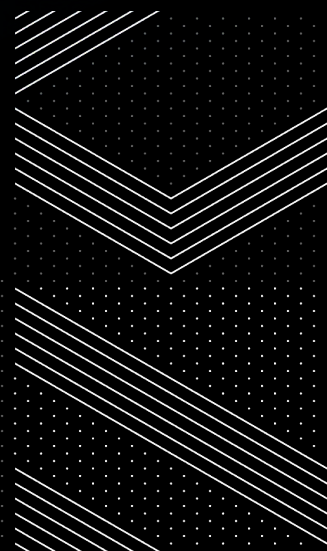
- Navigate with the keyboard only
- Use tools to test for color-blindness
- Differentiate between visible focus and screen-reader focus
- Test zoom up to 200%

Engineers

- Use semantic HTML as much as possible
- Have conversations if you receive designs that aren't accessible
- Explore the automated tools you have at your disposal
- Identify the differences - app-level a11y concerns, ds-level a11y concerns

05 What's Next?

What's Next?



Handy Browser Extensions

- Microsoft's Accessibility Insights
- Colorblindness Emulator
- aXe DevTools

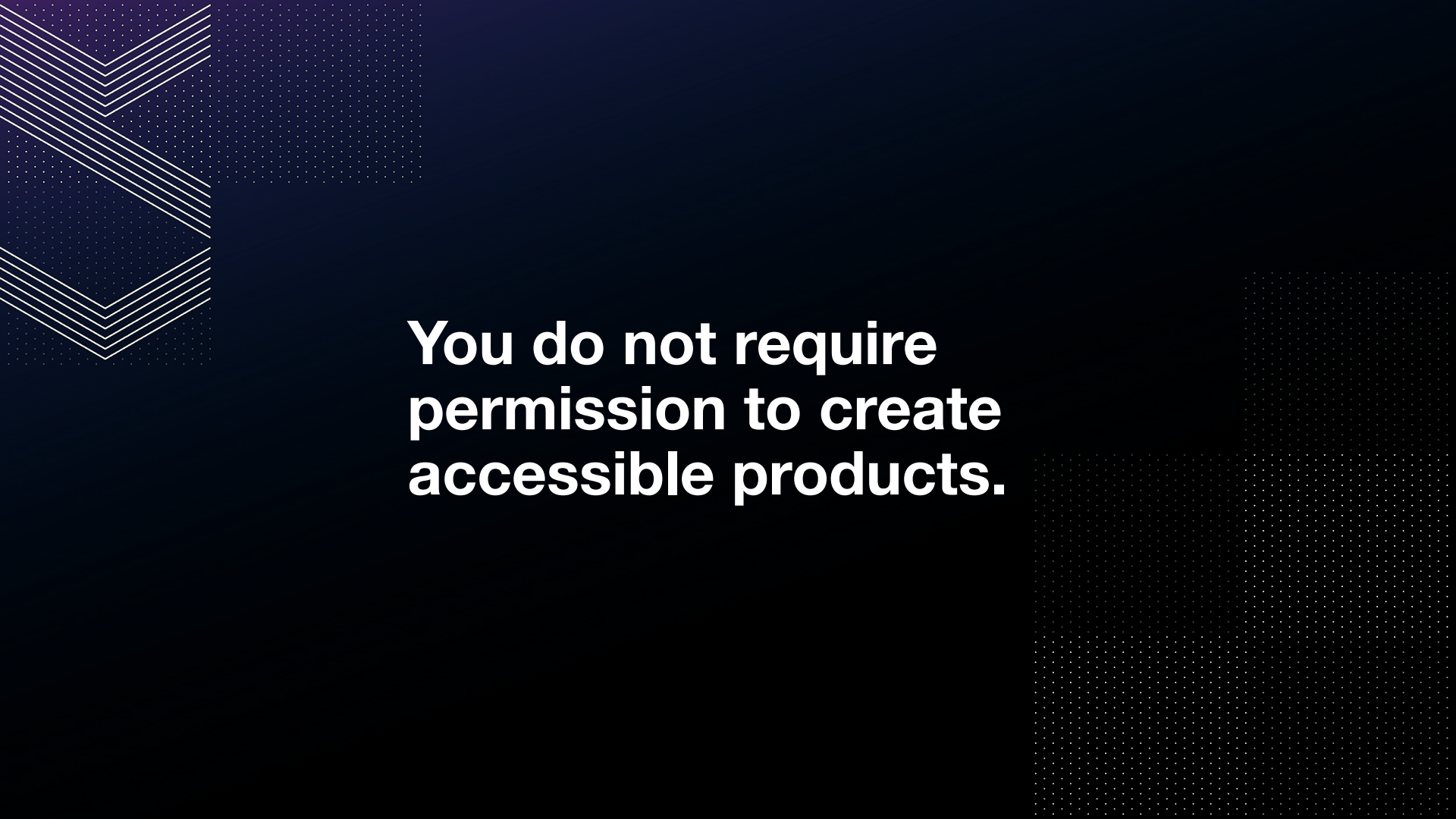
05 What's Next?

HashiCorp Design System

<https://go.hashi.co/design-system>

05 What's Next?

1. Intro to WCAG
2. The Meta of Accessibility
- 3. State of Accessibility**
4. Roles & Responsibilities
5. What's Next?

The image features a dark blue background with decorative elements. In the top-left corner, there are several white, parallel, V-shaped lines pointing downwards. In the bottom-right corner, there is a grid of small white dots. The main text is centered in the middle of the page.

**You do not require
permission to create
accessible products.**



Thank You

melanie@hashicorp.com