# Why we need more accessibility designers.

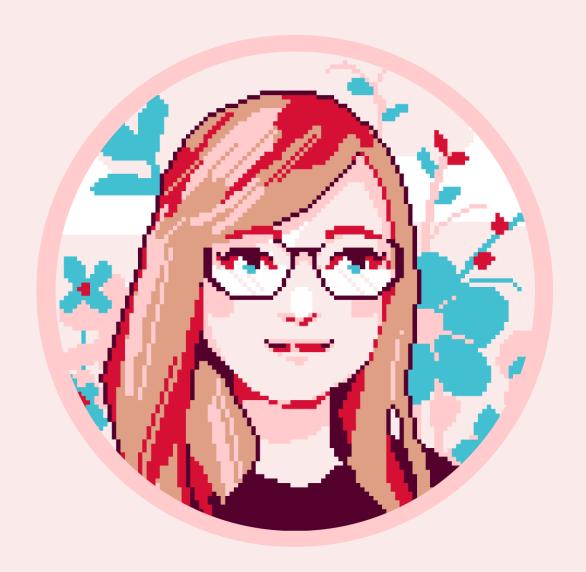
Anna E. Cook

03 // 2022

## Hi, I'm Anna!

Pronouns are She/They

- Senior Accessibility Designer at Northwestern Mutual
- Master's student studying inclusive design at the ATLAS Institute of CU-Boulder
- Writing a book about accessibility for digital designers



#### What we will discuss

- Why we don't have more accessibility designers
- Why we need more accessibility designers
- What an accessibility designer does
- Becoming an accessibility designer



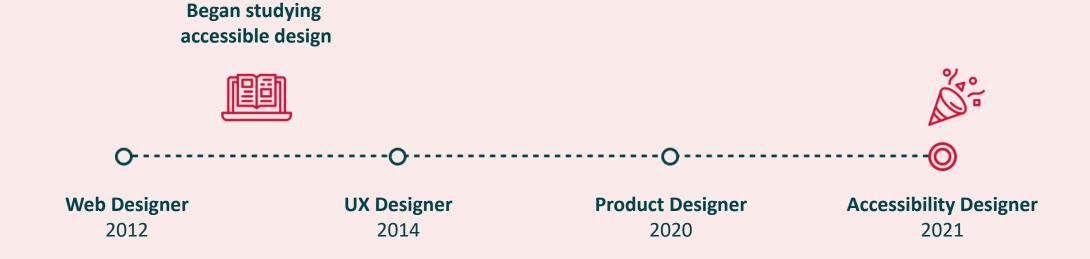
"Accessibility is the right thing to do. And not just the right thing; it's profoundly the right thing to do..."

Steve Krug, author of Don't Make Me Think

# 01

# Why don't we have more accessibility designers?

## My design experience

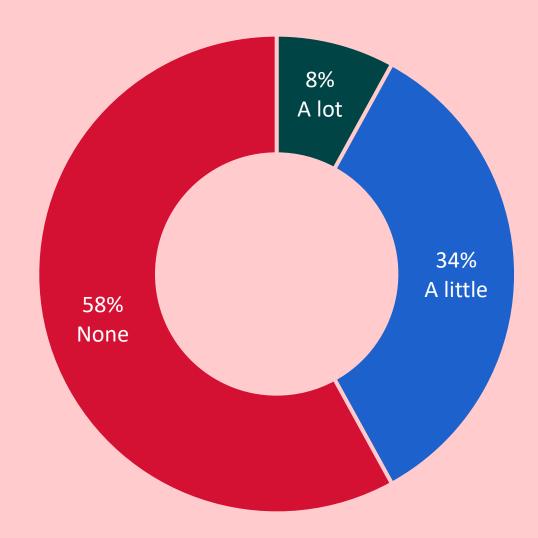


Few designers are taught about accessibility by default.

## **Education gaps**

1,311 designers share how much they were taught about accessibility through their education (university, boot camp, self-taught, etc.)

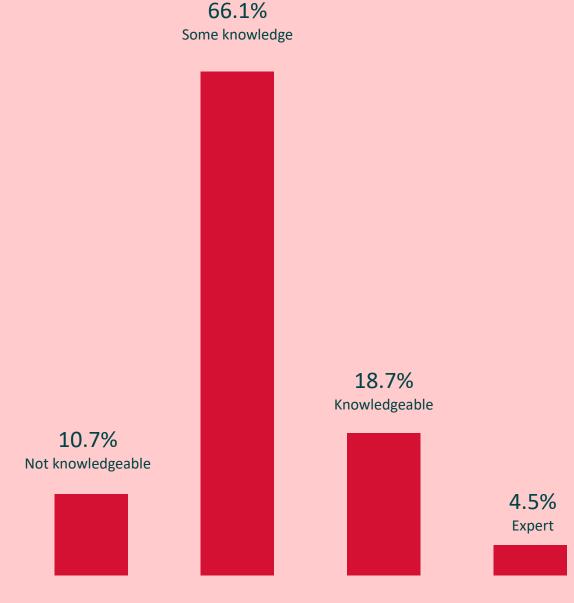
- 8% said they had "a lot"
- 34% said they had "a little"
- 58% said they had "none"



# Teaching gaps

In higher ed, 50% of institutions said they had faculty teaching accessibility. Those faculty shared how knowledgeable they felt:

- 10.7% "Not knowledgeable"
- 66.1% "Some knowledge"
- 18.7% "Knowledgeable"
- 4.5% "Expert"



Few organizations have prioritized accessibility as a skill for designers.

### Lack of organizational prioritization

#### Action/Inaction

- Lack of organizational digital accessibility practices.
- Testing and development accessibility over design.

#### Consequence

- Employees without digital accessibility skills
- Few accessibility related job skills/titles until recently, especially for design.

# 93%

of industry leaders say that industry demand for accessibility skills is going to increase.

Accessibility advocates started by prioritizing testing and development.

## **Evolving accessibility**

- In the beginning, accessibility was mostly seen as a need in our testing.
- Then developers were asked to work towards a more accessible output, rather than remediating.
- Now we're looking shift left into design and product requirements.



Every area of practice, technical or not, evolves over time. That's no different for accessibility.

Derek Featherstone, Chief Experience
Officer at Level Access

# 67%

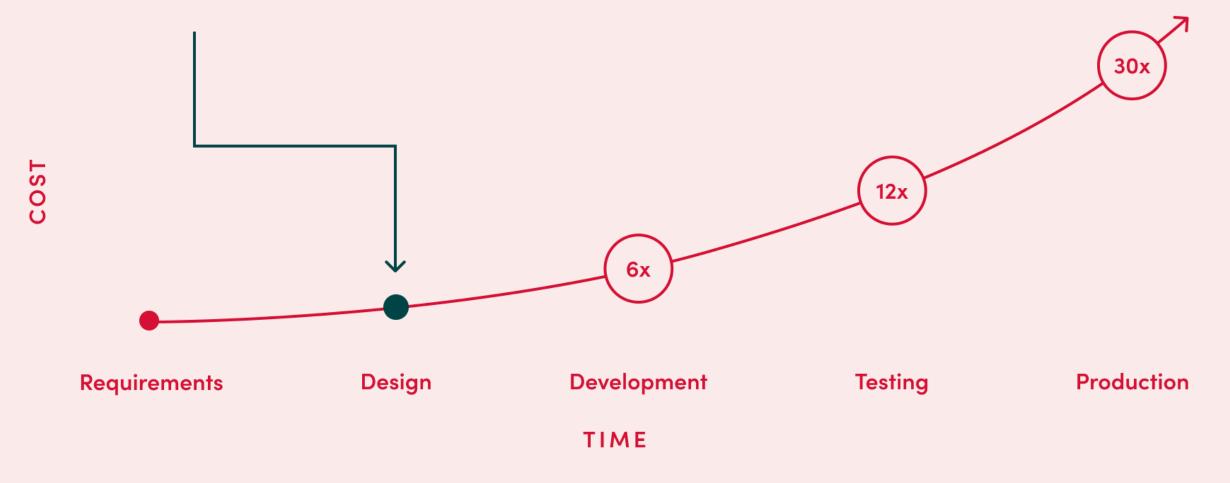
of accessibility issues can originate in design

## Shift left



# Why we need more accessibility designers.

#### 67% of accessibility issues can originate in design



We need to make accessibility more about users, and not just about technical requirements.

### The Web Content Accessibility Guidelines

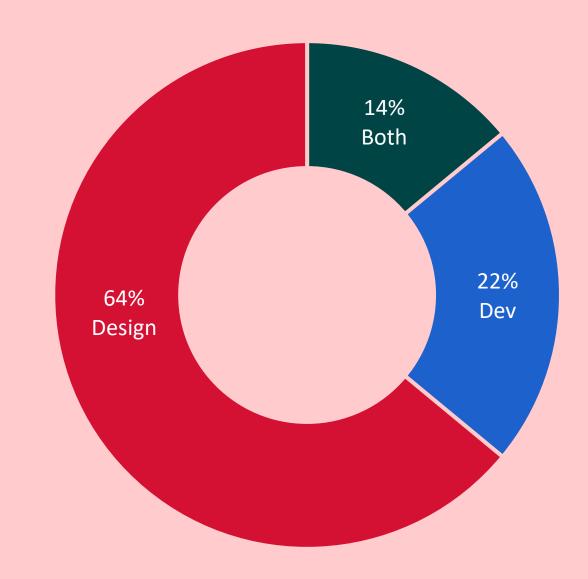
The Web Content Accessibility Guidelines (WCAG) are universally accepted standards describing how to make online and digital materials more accessible to disabled people.

But how many of these guidelines relate to design?

#### Role breakdown

How many WCAG criteria come up in design?

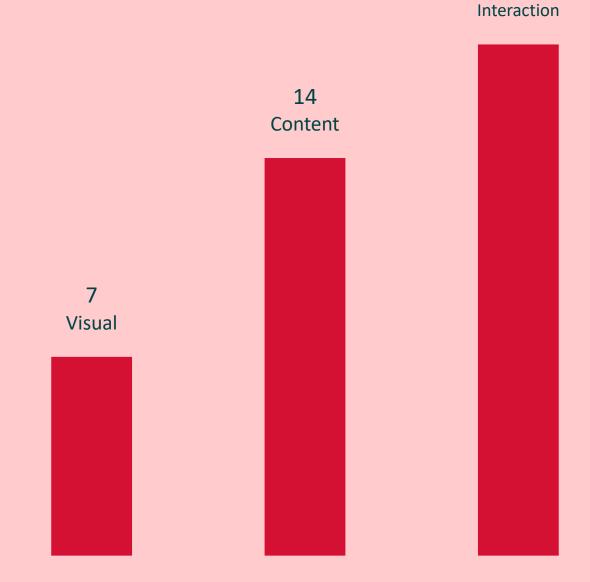
- 64% of guidelines are design-related,
   translating to development
- 22% of guidelines are specifically developer-related
- 14% of guidelines are both design and developer-related



## Design roles

Of 39 criteria in WCAG assessed:

- 18 related to interaction design
- 14 related to content design
- 7 related to visual design



18

#### Interaction design

- Animation and reduced motion
- Bypass blocks and skip navigation
- Focus and hover interactions
- Layout (consistency, responsiveness, adaptability)

- Navigation and navigability
- Pointer gestures (pinch, zoom, and alternative methods)
- Tab order and reading order
- Timing and timeouts

## Content design

- Alt text
- Captioning and transcripts
- Error identification/suggestion
- Heading structure

- Labels and instructions
- Page titles
- Purposeful link and button text

## Visual design

- Color contrast
- Color usage
- Consistent visual identification

- Iconography
- Typographical legibility
- Visual interface design

# 

# What does an accessibility designer do?

# Accessibility designers are always advocating.

## Enterprise adoption and advocacy

Advocating for accessibility practices in:

- Digital products
- Across the organization
- For employees
- For partners and vendors

Accessibility designers partner with product teams.

## Product partnership

#### Working with individual product teams:

- Audit existing experiences
- Review design work before handoffs
- Find answers to more complex questions and situations
- Influence inclusive research strategies



"What we have are a few people who know a lot about accessibility. What we need are a lot of people to know a little about it."

Matt May, Head of inclusive design at Adobe

Accessibility designers organize accessibility operations across design.

### Training and tools

- Preparing designers to have baseline accessibility knowledge
- Creating tools for designers to use to integrate accessibility into practice
  - Plugins and testing tools
  - Review frameworks
  - Annotation kits



"What we have are a few people who know a lot about accessibility. What we need are a lot of people to know a little about it."

Matt May, Head of inclusive design at Adobe

#### Design systems

#### **Ensuring design systems:**

- Have been audited with opportunities to to make fixes prioritized
- Have new components and patterns reviewed for accessibility in design and code before becoming available
- Have documentation to support the implementation of components and patterns with accessibility in mind

Accessibility designers tend to be more senior or principle, but they can be more mid and junior. 

# Tips for becoming an accessibility designer

You don't have to have the title of "accessibility designer" to make your designs more accessible.

# Listen to disabled people and learn

Accessibility design is about meeting our disabled users needs.

**Learn about users with disabilities** 





# Use WCAG to check your work

The Web Content Accessibility Guidelines are applicable for design.

**Check your work with WCAG** 

#### 2. Operable Guiding principle 2.1 Keyboard Accessible

- 2.1.1 Keyboard
- 2.1.2 No Keyboard Trap
- 2.1.3 Keyboard (No Exception)
- 2.1.4 Character Key Shortcuts
- 2.2 Enough Time
  - 2.2.1 Timing Adjustable
  - 2.2.2 Pause, Stop, Hide
  - 2.2.3 No Timing
  - 2.2.4 Interruptions
- 2.2.5 Re-authenticating
- 2.2.6 Timeouts
- 2.3 Seizures and Physical Reactions
- 2.3.1 Three Flashes or Below
- Threshold

  2.3.2 Three Flashes
- 2.3.3 Animation from Interactions
- 2.4 Navigable
- 2.4.1 Bypass Blocks
- 2.4.2 Page Titled
- 2.4.3 Focus Order
- 2.4.4 Link Purpose (In Context)
- 2.4.5 Multiple Ways
- 2.4.6 Headings and Labels
- 2.4.7 Focus Visible
- 2.4.8 Location
- 2.4.9 Link Purpose (Link Only)
- 2.4.10 Section Headings
- 2.5 Input Modalities

#### Guideline 2.1 - Keyboard Accessible

Make all functionality available from a keyboard.

#### Guideline

Acceptance level

2.1.1 Keyboard — Level A

All functionality of the content is operable through a keyboard interface without requiring specific timings for individual keystrokes, except where the underlying function requires input that depends on the path of the user's movement and not just the endpoints.

Note 1: This exception relates to the underlying function, not the input technique. For example, if using handwriting to enter text, the input technique (handwriting) requires path-dependent input but the underlying function (text input) does not.

Note 2: This does not forbid and should not discourage providing mouse input or other input methods in addition to keyboard operation.

Understanding 2.1.1

> Show techniques and failures for 2.1.1

#### 2.1.2 No Keyboard Trap — Level A

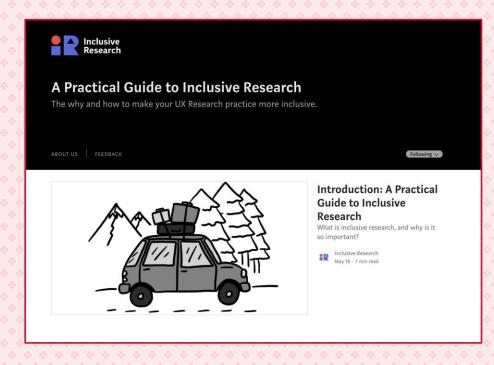
If keyboard focus can be moved to a component of the page using a keyboard interface, then focus can be moved away from that component using only a keyboard interface, and, if it requires more than unmodified arrow or tab keys or other standard exit methods, the user is advised of the method for moving focus away.

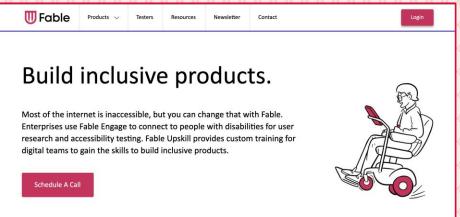
Note 1: Since any content that does not meet this success

# Look into inclusive research strategies

Gather direct feedback from disabled users about your product.

- Practice inclusive research
- Conduct inclusive testing

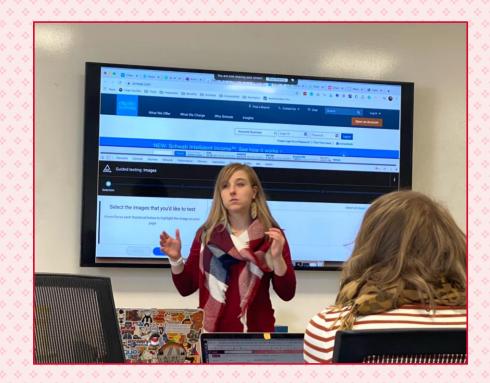






# Educate fellow designers

All designers should have a baseline understanding of accessibility. You can empower fellow designers to make their work more accessible too.





# Share your specialty in accessibility

If you want to move into accessibility design roles, make it known.

Work with your manager to make that a part of your practice

Share that on your portfolio with projects practicing accessibility.

#### Resources to get started

- Adobe's Inclusive Design
- Microsoft Inclusive Design
- BBC Global Experience Language
- The A11y Project
- Top people to follow in accessibility

#### Accessibility vs. Inclusivity Designer

#### Accessibility Designer

- Specializes in designing experiences that are accessible
- This can include other forms of inclusivity,
   but primarily focuses on accessibility for disabled people
- Seeks to focus on higher levels of accessibility standards in WCAG

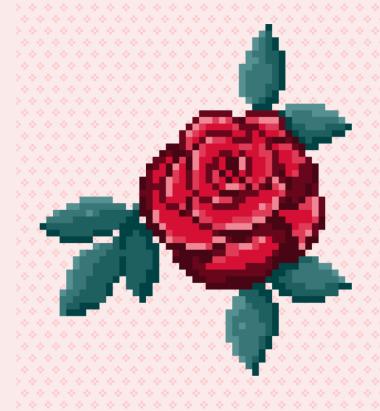
#### **Inclusivity Designer**

- Specializes in designing experiences that are inclusive and equitable
- This includes accessible experiences, but also includes gender, racial, and other forms of inclusivity
- Focuses on higher levels of accessibility, beyond compliance

# Thank you!

Questions? Let's Connect.

www.annaecook.com or @annaecook



#### Sources (1)

#### Slide 8

- <u>Designers: how much did you learn about accessibility when you went through your education (university, boot camp, self-taught, etc.)</u>, Anna E. Cook, Twitter, 2021
- <u>Initial Results from Survey Measuring the Value of Accessibility and Universal Design Topics in Course Curricula</u>, Universal Design into University Curriculum (UDUC), 2019.

#### Slide 9

• IGCSE '18: Proceedings of the 49th ACM Technical Symposium on Computer Science Education Pages 197–202 https://doi.org/10.1145/3159450.3159484, 2018.

#### Slide 10

• Why Teach Accessibility? Fact Sheet, Teach Access, written during or after 2018 without confirmed year.

#### Sources (2)

#### Slide 14

• The ongoing evolution of 'Shift left', Derek Featherstone, 2021.

Slides 15, 18

- Accessibility and Automation: Shift Left ROI, Deque, 2020.
- The exponential cost of fixing bugs, Deepsource, 2019.

Slides 21, 22

• The Fatal Flaw of Overlays, by Shell Little on A11yTalks, 2021.