

## Focus people, focus!

Karen Hawkins September 20, 2023



## Meet Karen Hawkins



**Karen Hawkins, CPACC**Principal of Accessible Design,
Level Access



Connect with me
Email
LinkedIn



Get today's slides

Deck on notist

https://noti.st/khawk27



## Today's learning objectives

- 1. Understand the importance of focus states, who they are designed for and why.
- 2. Learn the accessibility requirements of focus states for some common components, including buttons, links, and other actionable elements.
- 3. Connect the focus state designs to the Web Content Accessibility Guideline Success Criteria.



# What is a focus state?



## Hover state

Clearly indicates upon which page element the mouse hovers

# Focus state

Clearly indicates
which page element
has keyboard focus

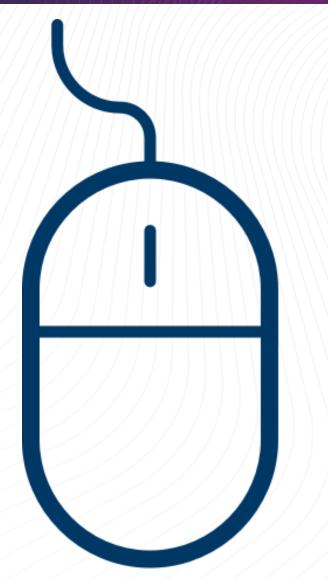


# Why focus on focus states?

# Design teams traditionally only design pointer experiences



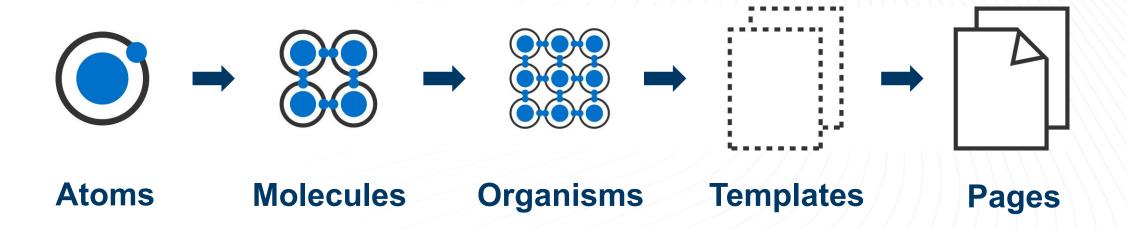




### **Atomic Design**



Atomic design is a methodology for creating design systems. It is a framework to break interfaces down into fundamental reusable building blocks and build them back up in potentially infinite variations.



## **Atomic Design Example**



### **Molecules Atoms Postal Code Postal Code Dropdown Label** Select an option ~ Select an option **Radio Buttons Group Label** First choice V

### **Organism First Name Last Name** City Select an option ~ **Email Address Phone Number** How would you like to be contacted? Email Phone

# Holistically design all states of molecules and atoms



### Molecule

Postal Code	

### **Molecular Variations and States**

Default / Unpopulated	Focused / Typing		
Postal Code	Postal Code		
	A1A		
Optional Field	Focused / Typing / Formatted		
Postal Code (Optional)	Phone Number		
A1A 2B2	(55Ĺ)		
	// <del>7//////////////////////////////////</del>		
Instructional Text / Unpopulated	Error		
Date	Postal Code		
DD / MM / YYY	A1A		
	Postal code is too short		



# Focus on

Design

Interactivity



# Design

# The focus indicator is obvious "you are here" feedback



**Submit** 

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

### **Postal Code**

A1A



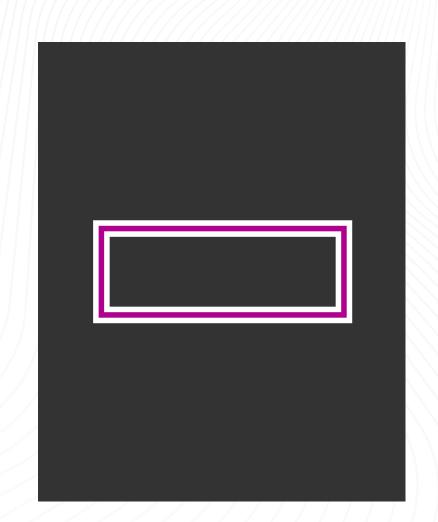
# Focus indicators should contrast well with adjacent colors



White (#FFFFF)

Fushia (#B00083)

White (#FFFFF)



# Focus indicators should have sufficient size



## Focus indicator inverse principle



High Contrast + Small Size	Low Contrast + Large Size

## Don't rely solely on the focus indicator



Focus Indicator

Colour: #B0008E Weight: 3px Primary Button Default

Submit

Text: Helvetica / white / 19px

Box: #003865 fill

Primary Button Hover

**Submit** 

Text: Helvetica / white / 19px / bold

Box: #007599 fill

Primary Button Focus Option 1

Submit

Text: Helvetica / white / 19px

Box: #003865 fill with focus indicator

Primary Button Focus Option 2

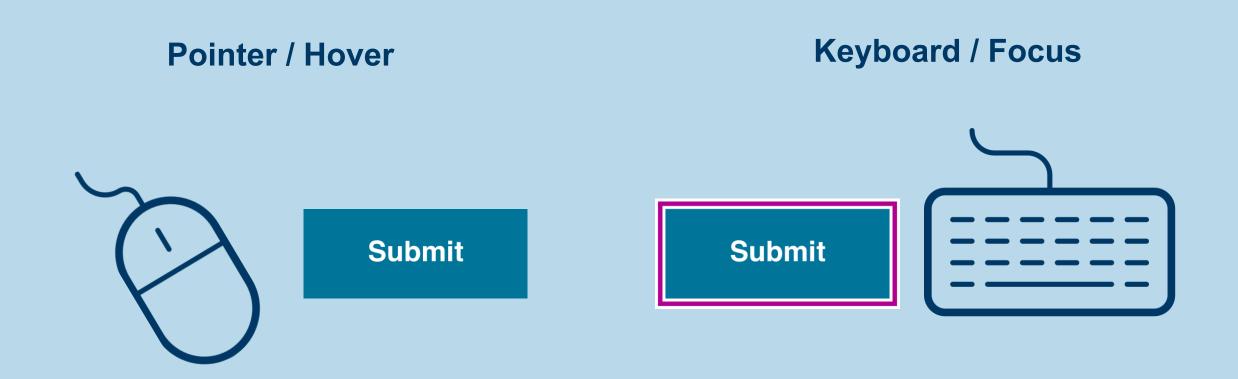
**Submit** 

Text: Helvetica / white / 19px / bold Box: #007599 fill with focus indicator



# Think "obviousness"

### Sidebar: Design Consistency Across Device Usage





# Focus on consistency.

# Consistency is key to a usable experience



### **Usability definition**

- Learnability
- Memorability
- Efficiency
- Errors
- Satisfaction

### Consistent experiences are

- Easy to learn
- Easy to remember
- Efficient
- Error tolerant
- Pleasant to use

# Holistically design important button states



### **Button design considerations**

- Text size
- Text color
- Button color
- Background color
- Borders / Shadows
- Target size
- Secondary indicator not reliant on color

Primary Button Default

#### Submit

Text: Helvetica / white / 19px

Box: #003865 fill

Primary Button Hover

#### **Submit**

Text: Helvetica / white / 19px / bold

Box: #007599 fill

Primary Button Focus

#### **Submit**

Text: Helvetica / white / 19px / bold Box: #007599 fill with focus indicator

Secondary Button Default

#### Clear

Text: Helvetica / #003865 / 19px Box: White fill / #003865 border 3px

Secondary Button Hover

#### Clear

Text: Helvetica / #007599 / 19px / bold Box: White fill / #007599 border 3px

Secondary Button Focus

#### Clear

Text: Helvetica / #007599 / 19px / bold Box: White fill / #007599 border 3px with focus indicator

# Holistically design important link states



### Link design considerations

- Text size
- Text color
- Background color
- Target size
- Secondary indicator not reliant on color

Link Default

Links should be unique, concise, and descriptive

Background: White

Link Text: Helvetica / #003865 / 16px / underlined

Link on Hover

Links should be unique, concise, and descriptive

Background: White

Link Text: Helvetica / #007599 / 16px / bold

Link on Focus

Links should be unique, concise, and descriptive

Background: White

Link Text: Helvetica / #007599 / 16px / bold with focus indicator

### Consider links in a paragraph



## Additional design considerations for links contained in a paragraph

- Link text color to background color: 4.5 to 1
- Paragraph text color to background color: 4.5 to 1
- Link text to paragraph text: 3 to 1

Inline Link Default

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do <u>eiusmod tempor</u> incididunt ut labore et dolore magna aliqua.

Background: White

Paragraph Text: Helvetica / black / 16px

Link Text: Helvetica / #003865 / 16px / underlined

Inline Link on Hover

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do **eiusmod tempor** incididunt ut labore et dolore magna aliqua.

Background: White

Paragraph Text: Helvetica / black / 16px Link Text: Helvetica / #007599 / 16px / bold

Inline Link on Focus

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Background: White

Paragraph Text: Helvetica / black / 16px

Link Text: Helvetica / #007599 / 16px / bold with focus indicator

## Aim for consistent styling

**Submit** 

Text: Helvetica / white / 19px / bold

Box: #007599 fill with focus indicator



Secondary Button Default Primary Button Default Link Default Links should be unique, concise, and descriptive Submit Clear Background: White Text: Helvetica / white / 19px Text: Helvetica / #003865 / 19px Box: #003865 fill Link Text: Helvetica / #003865 / 16px / underlined Box: White fill / #003865 border 3px Primary Button Hover Secondary Button Hover Link on Hover Links should be unique, concise, and descriptive Submit Clear Text: Helvetica / white / 19px / bold Text: Helvetica / #007599 / 19px / bold Background: White Box: #007599 fill Box: White fill / #007599 border 3px Link Text: Helvetica / #007599 / 16px / bold Primary Button Focus Secondary Button Focus Link on Focus

Clear

focus indicator

Text: Helvetica / #007599 / 19px / bold

Box: White fill / #007599 border 3px with

Links should be unique, concise, and descriptive

Link Text: Helvetica / #007599 / 16px / bold with focus indicator

Background: White

Inline Link Default Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Background: White Paragraph Text: Helvetica / black / 16px Link Text: Helvetica / #003865 / 16px / underlined Inline Link on Hover Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Background: White Paragraph Text: Helvetica / black / 16px Link Text: Helvetica / #007599 / 16px / bold Inline Link on Focus Lorem ipsum dolor sit amet, consectetur

Inline Link on Focus

Lorem ipsum dolor sit amet, consectetur
adipiscing elit, sed do eiusmod tempor
incididunt ut labore et dolore magna aliqua.

Background: White
Paragraph Text: Helvetica / black / 16px
Link Text: Helvetica / #007599 / 16px / bold with focus indicator

# Holistically design important control states



### **Control design considerations**

- Text size (if applicable)
- Text color (if applicable)
- Border color (if applicable)
- Control color
- Background color
- Target size
- Secondary indicator not reliant on color

Panel Indicator Unselected



Border: #003865 2px Fill: White Target Size: 44px X 44px

////////

Tooltip Default



Icon: #003865 Text: #003865 / 10pt Target Size: 44px X 44px

Close Default



Icon: #003865 Text: #003865 / 10pt Target Size: 44px X 44px

Profile Default



Icon: #003865 Text: #003865 / 10pt Target Size: 44px X 44px Panel Indicator on Hover



Border: #007599 4px Fill: White Target Size: 44px X 44px

Tooltip on Hover



Icon: #007599 Text: #007599 / 10pt / bold Target Size: 44px X 44px

Close on Hover



Icon: #007599 Text: #007599 / 10pt / bold Target Size: 44px X 44px

Profile on Hover



Icon: #007599 Text: #007599 / 10pt / bold Target Size: 44px X 44px Panel Indicator on Focus



Border: #007599 4px with focus indicator Fill: White Target Size: 44px X 44px

Tooltip on Focus



Icon: #007599 with focus indicator Text: #007599 / 10pt / bold Target Size: 44px X 44px

Close on Focus



Icon: #007599 with focus indicator Text: #007599 / 10pt / bold Target Size: 44px X 44px

Profile on Focus



Icon: #007599 with focus indicator Text: #007599 / 10pt / bold Target Size: 44px X 44px

### Continue to aim for consistent styling



Primary Button Default

Submit

Text: Helvetica / white / 19px

Box: #003865 fill

Primary Button Hover

Submit

Text: Helvetica / white / 19px / bold

Box: #007599 fill

Primary Button Focus

Submit

Text: Helvetica / white / 19px / bold Box: #007599 fill with focus indicator Secondary Button Default

Clear

Text: Helvetica / #003865 / 19px Box: White fill / #003865 border 3px

Secondary Button Hover

Clear

Text: Helvetica / #007599 / 19px / bold Box: White fill / #007599 border 3px

Secondary Button Focus

Clear

Text: Helvetica / #007599 / 19px / bold Box: White fill / #007599 border 3px with focus indicator Link Default

Links should be unique, concise, and descriptive

Background: White

Link Text: Helvetica / #003865 / 16px / underlined

Link on Hover

Links should be unique, concise, and descriptive

Background: White

Link Text: Helvetica / #007599 / 16px / bold

Link on Focus

Links should be unique, concise, and descriptive

Background: White

Link Text: Helvetica / #007599 / 16px / bold with focus indicator

Inline Link Default

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do <u>eiusmod tempor</u> incididunt ut labore et dolore magna aliqua.

Background: White

Paragraph Text: Helvetica / black / 16px

Link Text: Helvetica / #003865 / 16px / underlined

Inline Link on Hover

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Background: White

Paragraph Text: Helvetica / black / 16px Link Text: Helvetica / #007599 / 16px / bold

Inline Link on Focus

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Background: White Paragraph Text: Helvetica / black / 16px

Link Text: Helvetica / #007599 / 16px / bold with focus indicator

//////

Panel Indicator Unselected

 $\supset$ 

Border: #003865 2px

Fill: White

Target Size: 44px X 44px

Panel Indicator on Hover



Border: #007599 4px

Fill: White

Target Size: 44px X 44px

Panel Indicator on Focus



Border: #007599 4px with focus indicator Fill: White

Target Size: 44px X 44px

### Know when to extend the styling



Panel Indicator Unselected



Border: #003865 2px

Fill: White

Target Size: 44px X 44px

Radio Button Unselected



Lable: Helvetica / 14pt Border: Black 2px

Fill: White

Target Size: 44px X 44px

Checkbox Unselected

Lorem ipsum

Lable: Helvetica / 14pt Border: Black 2px

Fill: White

Target Size: 44px X 44px

Panel Indicator on Hover



Border: #007599 4px

Fill: White

Target Size: 44px X 44px

Radio Button on Hover



Lorem ipsum

Lable: Helvetica / 14pt Border: Black 6px

Fill: White

Target Size: 44px X 44px

Checkbox on Hover



Lorem ipsum

Lable: Helvetica / 14pt Border: Black 6px

Fill: White

Target Size: 44px X 44px

Panel Indicator on Focus



Border: #007599 4px with focus indicator

Fill: White

Target Size: 44px X 44px

Radio Button on Focus



Lorem ipsum

Lable: Helvetica / 14pt Border: Black 6px with focus

indicator Fill: White

Target Size: 44px X 44px

Checkbox on Focus



Lorem ipsum

Lable: Helvetica / 14pt Border: Black 6px with focus

indicator Fill: White

Target Size: 44px X 44px

Panel Indicator Selected



Fill: #003865

Target Size: 44px X 44px

Radio Button Selected



Lorem ipsum

Lable: Helvetica / 14pt

Fill: Black

Target Size: 44px X 44px

Checkbox Selected



Lorem ipsum

Lable: Helvetica / 14pt

Fill: Black

Target Size: 44px X 44px

### Design all states



#### Possible states

- Selected / Activated
- Inactive / Disabled
- Clicked / Pressed
- Dragged
- Loading / Processing
- Expanded / Collapsed
- Open / Closed
- Etc.

Primary Button Default

Submit

Text: Helvetica / white / 19px

Box: #003865 fill

Primary Button Hover

**Submit** 

Text: Helvetica / white / 19px / bold

Box: #007599 fill

Primary Button Focus

Submit

Text: Helvetica / white / 19px / bold Box: #007599 fill with focus indicator

Primary Button Inactive

Submit

Text: Helvetica / #59595B / 19px Box: #D9D9D6 fill / #59595B border 3px

Primary Button Clicked / Pressed / Dragged

Submit

Text: Helvetica / white / 19px / bold

Box: Black fill

Secondary Button Default

Clear

Text: Helvetica / #003865 / 19px Box: White fill / #003865 border 3px

Secondary Button Hover

Clear

Text: Helvetica / #007599 / 19px / bold Box: White fill / #007599 border 3px

Secondary Button Focus

Clear

Text: Helvetica / #007599 / 19px / bold

Box: White fill / #007599 border 3px with focus indicator

Secondary Button Inactive

Clear

Text: Helvetica / #59595B / 19px Box: #D9D9D6 fill / #59595B border 3px

Secondry Button Clicked / Pressed / Dragged

Clear

Text: Helvetica / black / 19px / bold Box: White fill / black border 3px

## Design for additional accessibility use cases



#### Additional use cases

- Text at 200%
- Lengthy text
- Lengthy text at 200%
- With icons
- Linking offsite
- Skip link
- Error states
- Mobile version (responsive / 1 column / zoomed at 400%)
- Etc.

Primary Button with Text Resized to 200%

### Submit

Text: Helvetica / white / 38px

Box: #003865 fill

Box Dimensions: 1.5(defaut size)

Primary Button with Long Text Resized to 200%

### Review and complete my order

Text: Helvetica / white / 38px

Box: #003865 fill

Box Dimensions: 1.5(default size)

Primary Button Mobile

#### Submit

Text: Helvetica / white / 19px

Box: #003865 fill Box Width: 300px Position: Centred Large Link Default

#### Lorem ipsum

Background: White

Link Text: Helvetica / #003865 / 24px / underlined

Linking Offsite Default

#### Lorem ipsum

Background: White

Link Text: Helvetica / #003865 / 16px / underlined

Icon: #003865

Skip Link Default

#### Skip to main content

Background: White

Link Text: Helvetica / #003865 / 16px / underlined

Error

#### **Postal Code**

A1A



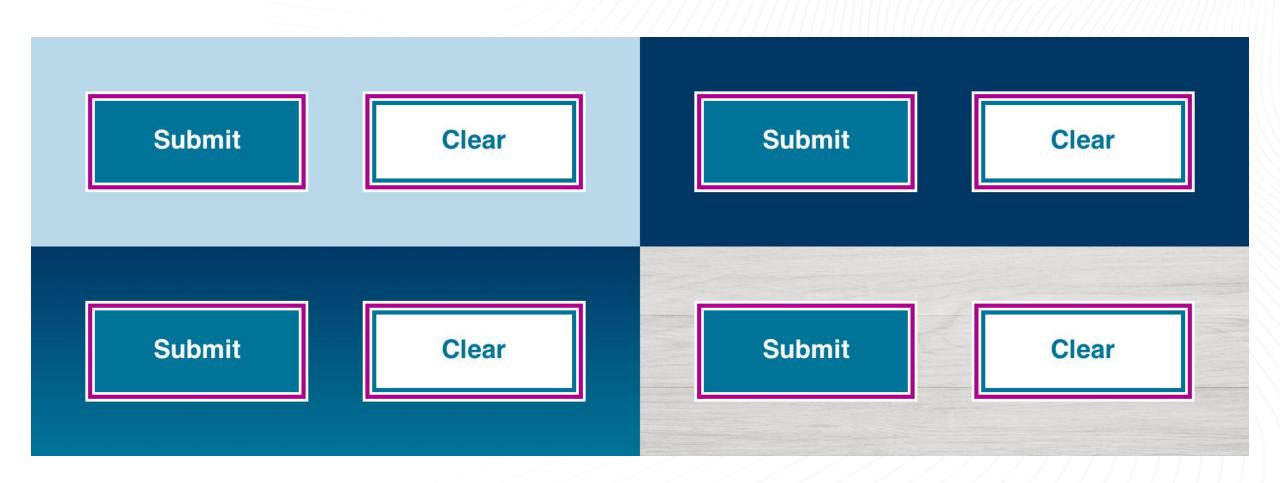
Postal code is too short

Lable: Helvetica / 14pt / bold Inserted Text: Helvetica / 14pt Error Message: Helvetica / 14pt / error icon

Text Field: #E12C2C border 3px / white fill Expected Screen Reader Experience: "Text box, postal code, postal code is too short, A1A"

# Ensure they work on all your backgrounds







# Interactivity

## Design focus interactivity



- Think through and document the interactivity and resultant behavior when an element receives focus, for example:
  - o How is content exposed using a keyboard?
  - How does focus move from the trigger to the revealed content using a keyboard?
  - How is the revealed content dismissed using a keyboard?
- Ensure context remains when an element receives focus

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do <u>eiusmod tempor</u> incididunt ut labore et dolore magna.





# Summary



# Focus on focus states.

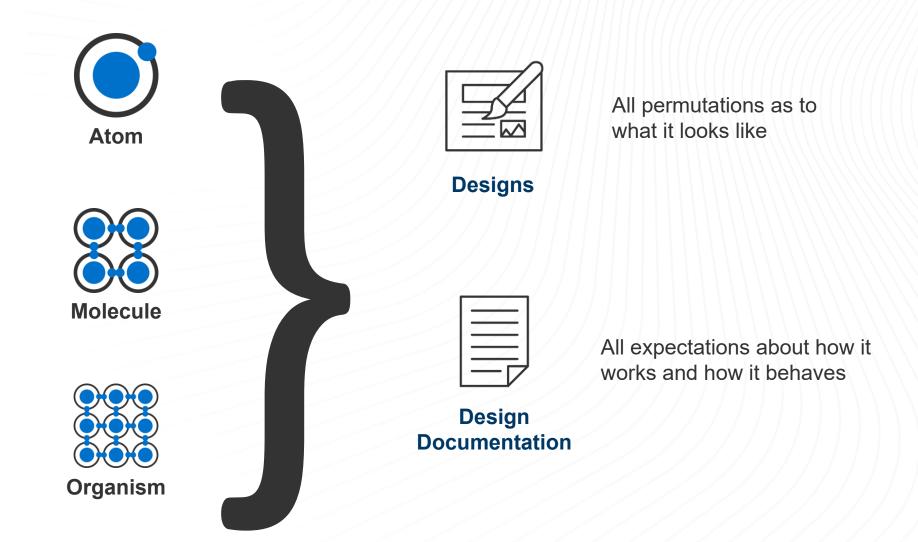
### **Takeaways**



- Design focus indicators to have sufficient contrast and size
- Design focus states to be obvious
- Design focus states to be consistent
- Design focus states for as many atoms, molecules, and organisms as required by your design system
- It's ok if your hover states and focus states are similar it is actually encouraged!

### **Designer Accessibility Foci**





### Related success criteria



### **Design of focus state**

- 1.4.1 (links in paragraph)
- 1.4.3 (contrast minimum)
- 1.4.11 (non-text contrast)
- 2.4.1 (bypass blocks)
- 2.4.7 (focus visible)
- 4.1.2 (name, role, value)

### Interactivity on focus

- 1.4.2 (audio control)
- 1.4.13 (content on hover or focus)
- 2.1.2 (no keyboard trap)
- 2.2.1 (timing adjustable)
- 2.2.2 (pause, stop, hide)
- 2.5.1 (pointer gestures)
- 2.5.4 (motion actuation)
- 3.2.1 (on focus)
- 3.2.2 (on input)
- 4.1.3 (status messages)



# Questions?



## Slides, Contact Details, and a Guide



#### Connect with me

Email and LinkedIn
Karen Hawkins, CPACC



### Get today's slides

Deck on notist https://noti.st/khawk27



### Get agile design guide

Downloadable document

Accessibility in the design process



# Thank you

Karen Hawkins

karen.hawkins@levelaccess.com

levelaccess.com