

# Accessibility + .NET MAUI

Rachel Kang (she/her)

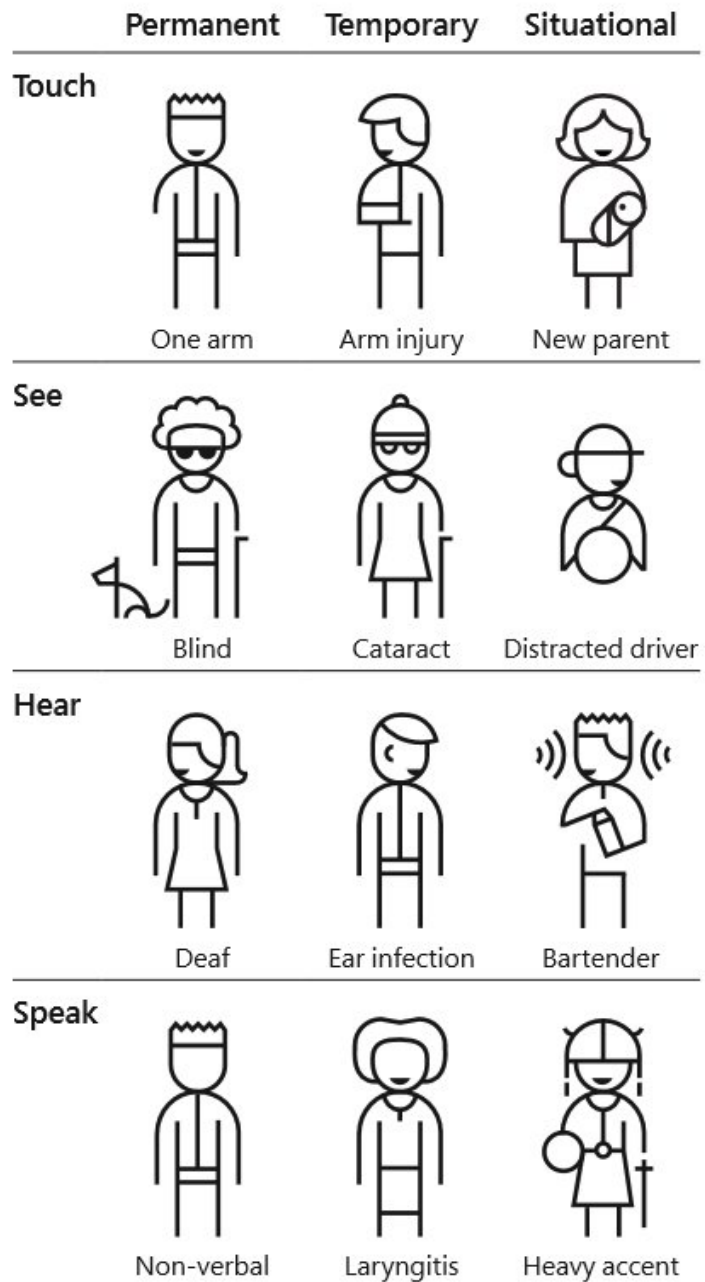
Software Engineer, Xamarin.Forms --> .NET MAUI

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Over 1 billion people  
currently experience  
some form of disability



## The Persona Spectrum

We use the Persona Spectrum to understand related mismatches and motivations across a spectrum of permanent, temporary, and situational scenarios. It's a quick tool to help foster empathy and to show how a solution scales to a broader audience.

<https://www.microsoft.com/design>

# The Case for Accessibility

- Over 1 billion people currently experience some form of disability
- Designing for accessibility is not limited to people experiencing disabilities – **the best solutions benefit everyone**
  - Closed captioning on videos
  - Raise hand feature on Microsoft Teams
  - Dark mode on devices
  - Dropped curbs on sidewalks and driveways

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- Growing number of legal consequences

# Approaching Accessible Apps

- Web Content Accessibility Guidelines (WCAG)

- Global accessibility standard and legal benchmark for both web and mobile
- 4 principles

## Perceivable

*Information and user interface components must be presentable to users in ways they can perceive.*

- Text alternatives
- Time-based media
- Adaptable
- Distinguishable

## Operable

*User interface components and navigation must be operable.*

- Keyboard accessible
- Time limits
- Seizures and physical reactions
- Navigable
- Input modalities

## Understandable

*Information and the operation of user interface must be understandable.*

- Readable
- Predictable
- Input assistance

## Robust

*Content must be robust enough that it can be interpreted by ...assistive technologies.*

- Compatible

<https://www.w3.org/WAI/standards-guidelines/wcag/>




























# Approaching Accessible Apps

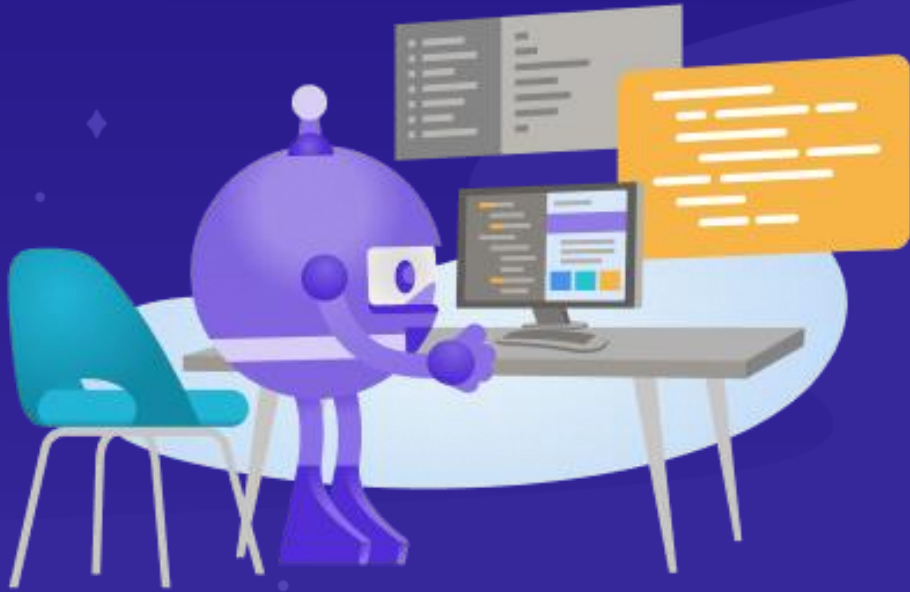
- **Empathy** is the name of the game
- Explore accessibility settings and features
  - Screen readers
    - TalkBack on Android
    - VoiceOver on iOS
    - Narrator on UWP
- Research accessibility models and APIs
- Test and leverage available tools/resources





With .NET MAUI,  
you'll be able to  
create accessible  
apps more  
seamlessly than  
ever before

<input type="checkbox"/>	 Fix heading semantics 	area/a11y
	#2069 by rachelkang was merged 16 days ago • Approved	
<input type="checkbox"/>	 Apply Accessibility traits to controls that have TapGestureRecognizers 	area/a11y
	#1886 by PureWeen was merged on Aug 2 • Approved 1 of 18 tasks 6.0.100-preview.7	
<input type="checkbox"/>	 Fix traits on Checkbox so they are settable 	area/a11y
	#1836 by PureWeen was merged on Jul 28 • Approved 1 of 18 tasks	
<input type="checkbox"/>	 Add traits to iOS Checkbox so it reads as Switch 	area/a11y
	#1832 by PureWeen was merged on Jul 27 • Approved 1 of 18 tasks	
<input type="checkbox"/>	 Introduce SetSemanticFocus API via SemanticExtensions 	area/a11y
	#1829 by PureWeen was merged on Jul 28 • Approved 6.0.100-preview.7	
<input type="checkbox"/>	 Introduce AutomationProperties.ExcludedWithChildren 	area/a11y
	#1815 by rachelkang was merged on Jul 27 • Approved 6.0.100-preview.7	
<input type="checkbox"/>	 Delete all the TabIndex, TabStop, Focusable things! 	area/a11y
	#1777 by rachelkang was merged on Jul 23 • Approved 6.0.100-preview.7	
<input type="checkbox"/>	 Font AutoScalingEnabled  	area/a11y
	#1774 by PureWeen was merged on Jul 24 • Approved	
<input type="checkbox"/>	 Introduce Announce method in Essentials 	area/a11y
	#1760 by rachelkang was merged on Jul 23 • Approved 6.0.100-preview.7	
<input type="checkbox"/>	 Update semantics 	area/a11y
	#1039 by rachelkang was merged on Jun 10 • Approved 18 tasks	
<input type="checkbox"/>	 Create semantics page 	area/a11y
	#679 by rachelkang was merged on Apr 8 • Approved 2 of 7 tasks	
<input type="checkbox"/>	 Semantics and some structure changes 	area/a11y
	#635 by PureWeen was merged on Apr 6 • Approved 17 tasks	
<input type="checkbox"/>	 Add AutomationId to IView 	area/a11y
	#491 by PureWeen was merged on Mar 12 • Approved 10 of 12 tasks	



Demo time!

# Accessibility blog post series

- <https://devblogs.microsoft.com/xamarin/the-journey-to-accessible-apps>
- <https://devblogs.microsoft.com/xamarin/the-journey-to-accessible-apps-screen-readers>
- <https://devblogs.microsoft.com/xamarin/the-journey-to-accessible-apps-making-visual-text-accessible>

## The Journey to Accessible Apps



April 14th, 2021

No matter what stage of the app development process you're at, and no matter your level of familiarity with developing inclusive apps, it is always the right time to make your apps more inclusive. Get started on your journey to developing inclusive apps today.

# Thank you!



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@rachelkang



<https://aka.ms/discord-maui> > #maui-accessibility

