Blazing Accessibility Basics

12-04-2023 // Dennie Declercq // VA>LIVE●

Intro

Content

- Intro
- What is Accessibility & Inclusion?
- The POUR Principles
- Perceivable Blazor Apps
- Operable Blazor Apps
- Understandable Blazor Apps
- Robust Blazor Apps
- Thanks // Q&A

Who Am I?

- Dennie Declercq
- President, IT-Coach & Developer @ DDSoft
- Microsoft MVP
- #DreamingIsBelieving
- @DennieDeclercq

What is Accessibility & Inclusion?

What is Accessibility?

- People with all needs can access:
  - Internet
  - Daily life activities
  - All areas

Microsoft Inclusive Design

"

Inclusive Design is a methodology, born out of digital environments, that enables and draws on the full range of human diversity. Most importantly, this means including and learning from people with a range of perspectives. "

Recognize Exclusion

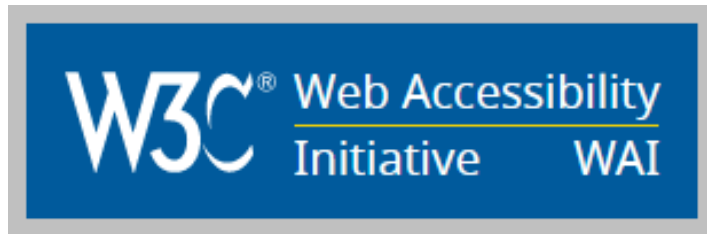Solve for one, extend to many

Learn from Diversity

https://www.microsoft.com/design/inclusive/

The Persona Spectrum

	Permanent	Temporary	Situational
Touch	One arm	Arm injury	New parent
See	Blind	Cataract	Distracted driver
Hear	Deaf	Ear infection	Bartender
Speak	Non-verbal	Laryngitis	Heavy Accent

WCAG

"Web Content Accessibility Guidelines (WCAG) is developed through the [W3C process](#) in cooperation with individuals and organizations around the world, with a goal of providing a single shared standard for web content accessibility that meets the needs of individuals, organizations, and governments internationally."

The POUR Principles

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

Testing tools

- Microsoft Accessibility Insights for web

DEMO: Accessibility Insights

The POUR Principles

Perceivable, Operable, Understandable & Robust

- **Perceivable**: Can everyone ACCESS the content on the website?

- **Operable**: Can everyone OPERATE the website?

- **Understandable**: Can everyone UNDERSTAND the content on the website?

- **Robust**: Is your website robust? Is everything working well and fluid?

"While perceivable means that everyone can access the content with different tools, understandable means that everyone should be able to understand the content."

Perceivable Blazor Apps

Text alternatives for non-text

- HTML:
  - Provide ALT text for Images
- Blazor:
  - Include ALT descriptions in models

Content can be presented in different ways

- HTML:
  - Use HTML 5 Standards
  - Use a Modern UI Framework

Fonts & Clear Fonts

- HTML:
    - Be sure that the text is big enough
    - Use the standards

Color is not the only way conveying information

1

Use a (*) for error Items

2

Show an exlamation mark when danger!

3

Use words as delete / confirm

- Not only red / green

Resizable Up to 400%

- PROBLEM: Menu becomes invisible (standard Bootstrap template)

- SOLUTION: Add 'Footer' menu
  - Blazor: FootNav component
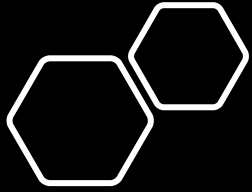 - HTML: Add 'Footer' in css file.

Images are Resizable

- HTML:
  - Use bigger images than CSS layout
  - Resize with CSS

DEMO: Perceivable Blazor Apps

Operable Blazor Apps

Functionality is available from a keybaord

HTML

- Use Headings
- Be aware of a good structure.

Blazor:

- Use <EditForm> .. </EditForm> for forms
- Be aware of the order of components!

Users have enough time to Read and Use the content

- Blazor
  - Avoid Timers
  - When really needed: provide extend time

Content does not cause seizures and physical reactions

- People with epillepsy can have damages whith strobe and light effects.

- People can have anxiety if content is moving too fast

- If you have flashy content:
  - Turn OFF by default
  - Provide a warning sentence before turning on

Users can easily navigate, find content and determine where they are

- Good basic HTML 5

Users can use different input modalities beyond keyboard

With HTML5 the web (& tools) does the most things for you

DEMO:
Operable
Blazor Apps

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Understandable
Blazor Apps

Text is Readable and Understandable

- Use easy language

- Avoid jargon

- Be descriptive in error messages

Content appears and operates in Predictable ways

- Make good usage of HTML5 headings
- Be aware of wrong headings in standard Blazor components!

Users are helped to avoid and correct mistakes

- Always use form validation

- Provide cancel button/ clear form

DEMO:
Understandable
Blazor Apps

Robust Blazor Apps

Content is compatible with current and future user's tools

- HTML 5

- Update often

- Update not too often

DEMO:
POUR Blazor
Apps
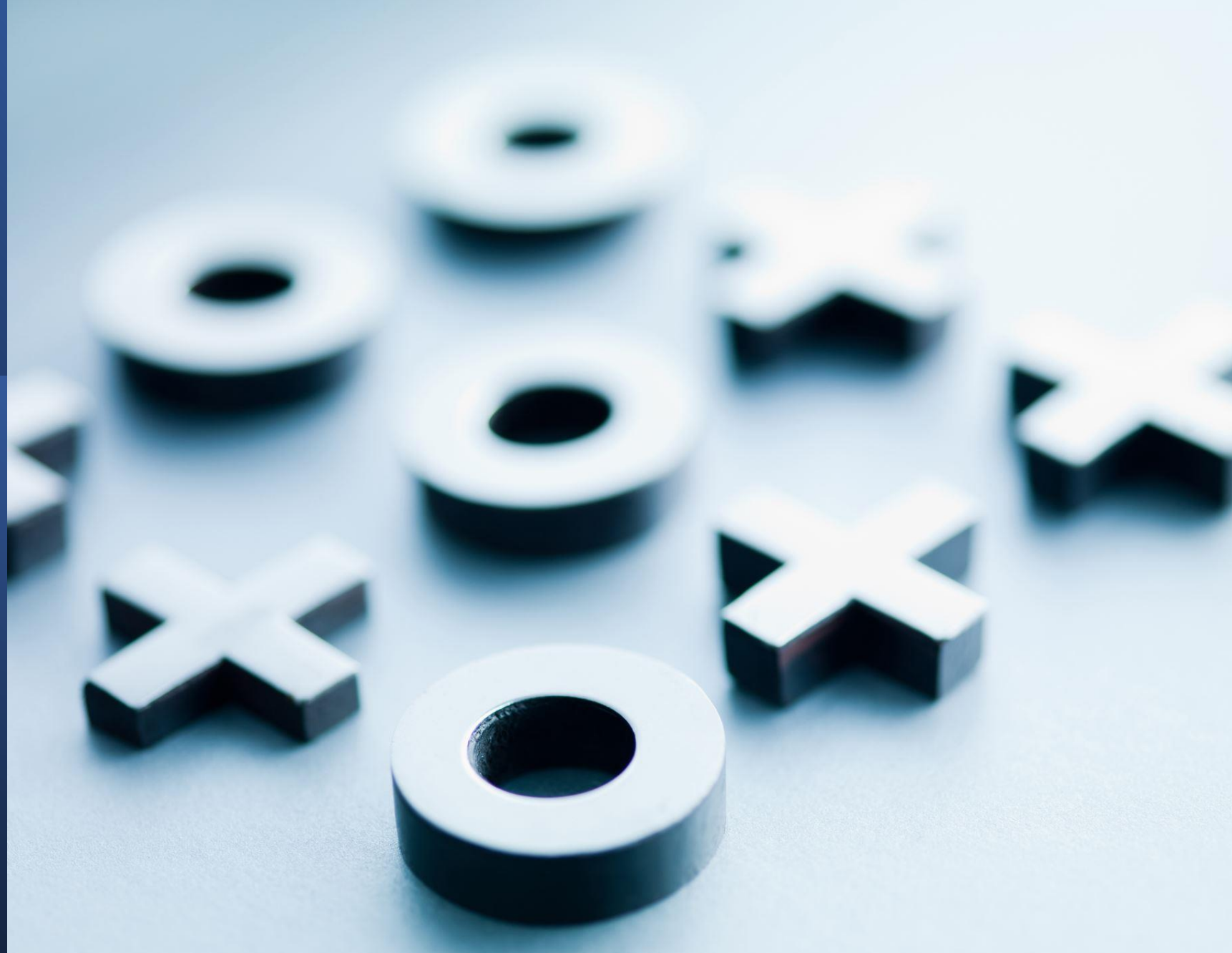
Wrap up

Thanks // Q&A

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