

ANGULAR
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Accessibility in Angular

Alexander Thalhammer | @LX_T

About me



About me ...





... my office



Hi, it's me → [@LX_T](https://twitter.com/@LX_T)



<https://alex.thalhammer.name/>

- **Alexander Thalhammer** from Graz, Austria (est. 1983)
 - **Angular Software Tree** GmbH (est. 2019)
- Web Dev for 25 years 🧑 (yes, I'm old)
- 2011 - 2017 WordPress Dev (Web, PHP & jQuery)
- Since 2017 **Angular Dev** (Web, TS, Rx - NG 4.0.0)
- Since 2020 **Angular Evangelist, Coach & Consultant**
 - Member of **Angular Architects** <https://www.angulararchitects.io/>



About me

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The background features a large, abstract architectural structure with a repeating grid of rectangular panels. A prominent feature is a central white circle with a textured, cloudy appearance, set against a dark purple gradient background.

About you



Tell us sth about yourself

- Hi, my name is ...
- I currently work on ...
- Good accessibility is ...
- My goal(s) for this workshop is (are) ...

About you



Let us know about your

- Which OS
- Which browser
- Which IDE (IntelliJ/WebStorm vs VS Code)
 - Make sure to update to latest version!!!
- How big is your display?

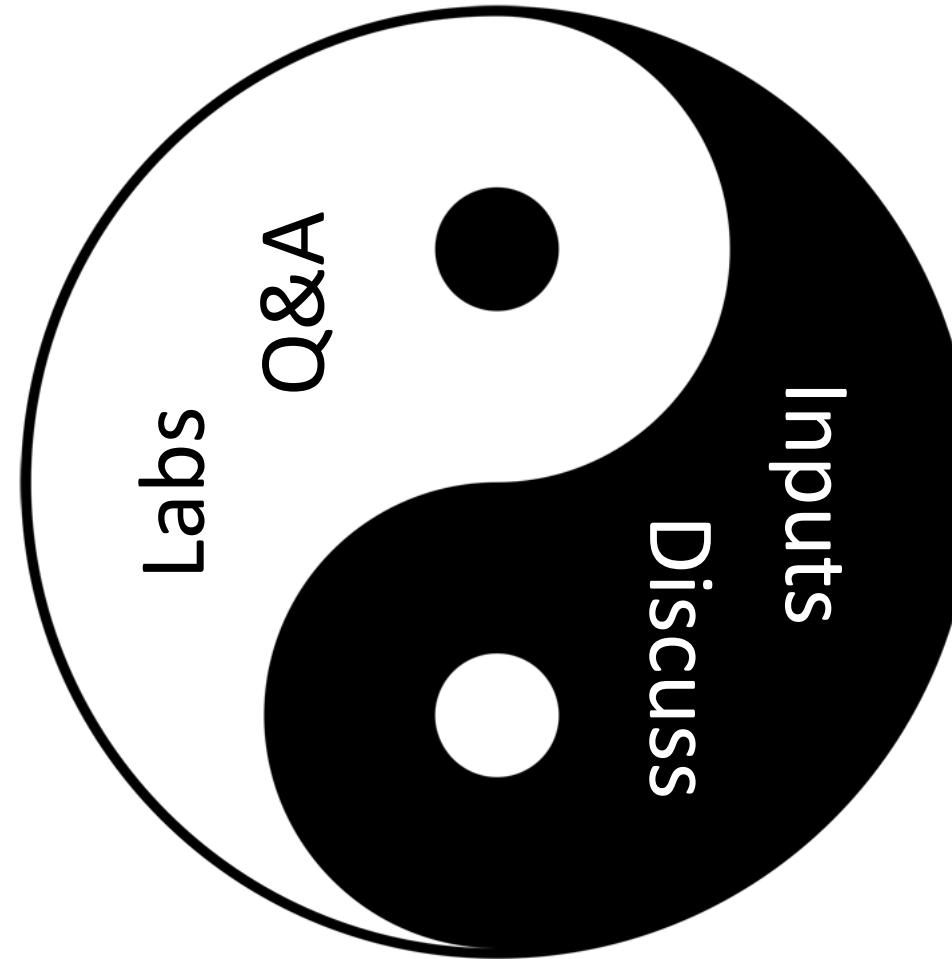
About this workshop



Every participant should

- understand the ***importance*** of accessibility
- know how to ***measure*** the accessibility
- know how to ***improve*** the accessibility
- become an **accessibility evangelist** in her/his project/team/company
- have ***fun*** along the way ☺

Didactics



We work together

- Don't hesitate to interrupt me at **ANY TIME**
 - Questions
 - Remarks or
 - Feedback 😊
- Somebody else might have the same **question**
 - Be a hero and ask it



Timetable (approx.)

- 08:30 – 11:50 (incl. 20m ☕ break)
- 50m 🍲 break
- 12:40 – 16:00 (incl. 20m ☕ break)
- optional Q&A (today) / feedback (tomoro)
- Incl. delay we will end at 16:30 🏁

What does accessibility (A11y) mean?

- What did you say?

What does accessibility (A11y) mean?

- What does **Wikipedia** say?
- "**Accessibility** is the design of products, devices, services, vehicles, or environments so as to be usable by people with disabilities. The concept of accessible design and practice of accessible development ensures both "direct access" (i.e. unassisted) and "indirect access" meaning compatibility with a person's assistive technology (for example, computer screen readers)."
-- <https://en.wikipedia.org/wiki/Accessibility>

What does web accessibility (A11y) mean?

- What does **Google** say?
- "An accessible site is one whose content can be accessed regardless of any user's impairments and whose functionality can also be operated by the most diverse range of users possible."
-- <https://web.dev/articles/what-is-accessibility>

What does web accessibility (A11y) mean?

- What does **ChatGPT** say?
- "Web accessibility means designing and developing websites and applications so they can be used by everyone, including people with disabilities."
-- ChatGPT



Why A11y?

- What would you say?

Why?



Why A11y?

- "As developers, it's easy to assume that all users can see and use a **keyboard, mouse, or touch screen** to interact with your page. This can lead to an experience that works well for some people but creates issues for others that range **from simple annoyances to complete blockers.**"
-- <https://web.dev/articles/what-is-accessibility>

Why?



Why A11y?

- "Web accessibility is important because it **ensures that everyone, including people with disabilities, can access, navigate, and interact with websites and applications**, promoting inclusivity, equal opportunity, compliance with legal standards, and improved user experience for all"
-- ChatGPT

Why?

Why A11y?

	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

Why?

Inclusive
A Microsoft Design Toolkit

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Agenda & Labs

Agenda

21: A11y
Tools

23: A11y
Standards

25: A11y
Best Practices

22: A11y
Foundations

24: WAI
ARIA

26: A11y in
Angular

Labs (not in the same order ☺)

21: Setup A11y
Testing Tools

23: Semantic
HTML & Structure

25: Forms
& LiveAnnouncer

22: Angular
Router

24: Keyboard
Nav & Tab Focus

26: Color &
Contrast

Setup for Labs

- NodeJS version **^20.19.0 or ^22.12.0 or ^24**
 - <https://angular.dev/reference/versions#actively-supported-versions>

Actively supported versions

This table covers [Angular versions under active support](#).

Angular	Node.js	TypeScript	RxJS
20.2.x 20.3.x	<code>^20.19.0 ^22.12.0 ^24.0.0</code>	<code>>=5.9.0 <6.0.0</code>	<code>^6.5.3 ^7.4.0</code>
20.0.x 20.1.x	<code>^20.19.0 ^22.12.0 ^24.0.0</code>	<code>>=5.8.0 <5.9.0</code>	<code>^6.5.3 ^7.4.0</code>
19.2.x	<code>^18.19.1 ^20.11.1 ^22.0.0</code>	<code>>=5.5.0 <5.9.0</code>	<code>^6.5.3 ^7.4.0</code>
19.1.x	<code>^18.19.1 ^20.11.1 ^22.0.0</code>	<code>>=5.5.0 <5.8.0</code>	<code>^6.5.3 ^7.4.0</code>
19.0.x	<code>^18.19.1 ^20.11.1 ^22.0.0</code>	<code>>=5.5.0 <5.7.0</code>	<code>^6.5.3 ^7.4.0</code>
18.1.x 18.2.x	<code>^18.19.1 ^20.11.1 ^22.0.0</code>	<code>>=5.4.0 <5.6.0</code>	<code>^6.5.3 ^7.4.0</code>
18.0.x	<code>^18.19.1 ^20.11.1 ^22.0.0</code>	<code>>=5.4.0 <5.5.0</code>	<code>^6.5.3 ^7.4.0</code>

Try "node -v"

Use NVM ☺



Mac Alternative: Use Homebrew

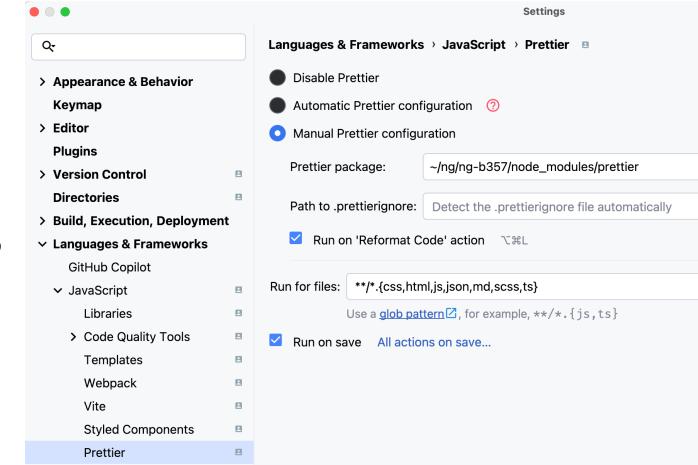


Setup for Labs

- Git
 - Personally, I used to use Sourcetree
 - but currently migrating to Tower | Fork
- VS Code (free) | IntelliJ/WebStorm
 - Personally, I still prefer JetBrains WebStorm
- Chrome (or Chromium based alternative)
 - Other browsers are okay for private matters

Recommendations

- Use prettier
 - especially for .ts & .html files
- Use ESLint
 - in your IDE of choice and/or from terminal
- Use Git
 - we recommend to at least commit after every lab
 - easier switching back and forth with my solution



Starter Kit

- Incl. Slides
- Incl. Labs (exercises)
- Clone <https://github.com/L-X-T/ng-b357>

The background of the slide features a modern architectural design with a repeating grid of rectangular panels. The panels transition from a deep red color at the bottom left to a bright white at the top right. The perspective creates a sense of depth, resembling a tunnel or a series of nested rooms.

Ready for takeoff