



ANGULAR
ARCHITECTS
INSIDE KNOWLEDGE

Angular Essentials


Hosted by Alex Thalhammer

About me ...



My office 😊



Hi, it's me → @LX T 

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

- **Alex Thalhammer** from Graz, Austria (since 1983)
 - Angular Software Tree GmbH (since 2019)
- WebDev for 22+ years (I've come a long way baby)
- WordPress Dev (Web, PHP & jQuery, 2011 - 2017)
- **Angular Dev** (Web, TS, Rx since 2017 - NG 4.0.0 😊)
- **Angular Evangelist, Coach & Consultant** (since 2020)
 - Member of Angular Architects

<https://www.angulararchitects.io/>



About you ...



Tell us sth about yourself

- Hi, my name is ...
- I currently work on ...
- It's difficult for me to ...
- My goal(s) for the next 3 days is (are) ...

Pollings

- OS
 - Mobile OS?
- Browser
- IntelliJ/WebStorm vs VS Code
- npm vs yarn vs pnpm



Tell us sth about your team / projects

- Before I tell you sth about our workshop 😊

About this workshop ...

My Goals

- **Motivate** you for Angular
- Give **input** on essential Angular topics
- Get your **hands on** those topics (labs / exercises)
- **Discuss** open topics and **answer** your questions

Didactics

Inputs

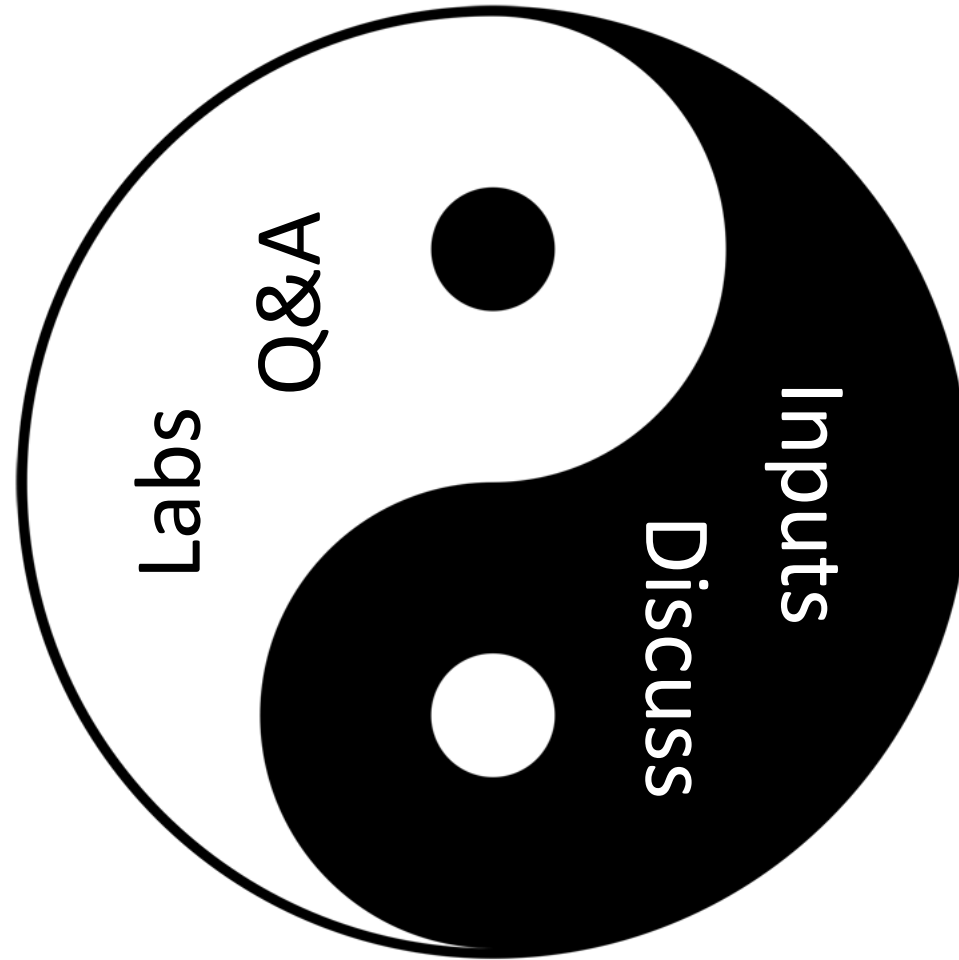
Discussion

Labs

Q&A



Didactics



We work together I

- 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
 - Seriously, it makes the workshop better for all of us 😊



Timetable (approx.)

- 08:30 – 12:00 (incl. 20m ☕ break)
- 1hr 🍲 break
- 13:00 – 17:00 (incl. 20m ☕ break)
 - 13:00 – 15:00 on Friday 😊
- Including expected delay we will try to end at 17:00 latest 🏁

Topics

Intro, IDE Intro,
TypeScript
Speedrun,
Angular Intro

RxJS, Signals,
Modules &
Standalone
Components

Template-driven &
Reactive Forms

State Management
mit Redux & NgRx

Components,
Directives,
Services,
Pipes

Components
Deep Dive

Routing,
Performance

NG17 & Recap



Setup for Labs I

- NodeJS version **16.14.x** (and higher 16) or **18.10.x** (and higher 18)
 - NodeJS version 14 dropped in NG 16

Actively supported versions

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

ANGULAR	NODE.JS	TYPESCRIPT	RXJS
16.0.x	^16.14.0 ^18.10.0	>=4.9.3 <5.1.0	^6.5.3 ^7.4.0
15.1.x 15.2.x	^14.20.0 ^16.13.0 ^18.10.0	>=4.8.2 <5.0.0	^6.5.3 ^7.4.0
15.0.x	^14.20.0 ^16.13.0 ^18.10.0	~4.8.2	^6.5.3 ^7.4.0
14.2.x 14.3.x	^14.15.0 ^16.10.0	>=4.6.2 <4.9.0	^6.5.3 ^7.4.0
14.0.x 14.1.x	^14.15.0 ^16.10.0	>=4.6.2 <4.8.0	^6.5.3 ^7.4.0
13.3.x	^12.20.0 ^14.15.0 ^16.10.0	>=4.4.3 <4.7.0	^6.5.3 ^7.4.0
13.1.x 13.2.x	^12.20.0 ^14.15.0 ^16.10.0	>=4.4.3 <4.6.0	^6.5.3 ^7.4.0
13.0.x	^12.20.0 ^14.15.0 ^16.10.0	~4.4.3	^6.5.3 ^7.4.0

Try "node -v"

Windows / Linux: Use NVM 😊

Mac Users: Use Homebrew 🍺



Setup for Labs II

- Git
 - Personally I like to use Sourcetree
- IDE: VS Code (free) or IntelliJ/WebStorm (not free, but better IMHO)
 - Personally I prefer IntelliJ/WebStorm
- Chrome (or Chromium based alternative)
 - Other browsers are okay for private matters

Recommendations

- Use prettier
 - especially for .ts files (if not for all)
- 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

- Slides
- Labs (exercises)
- & free book 😊



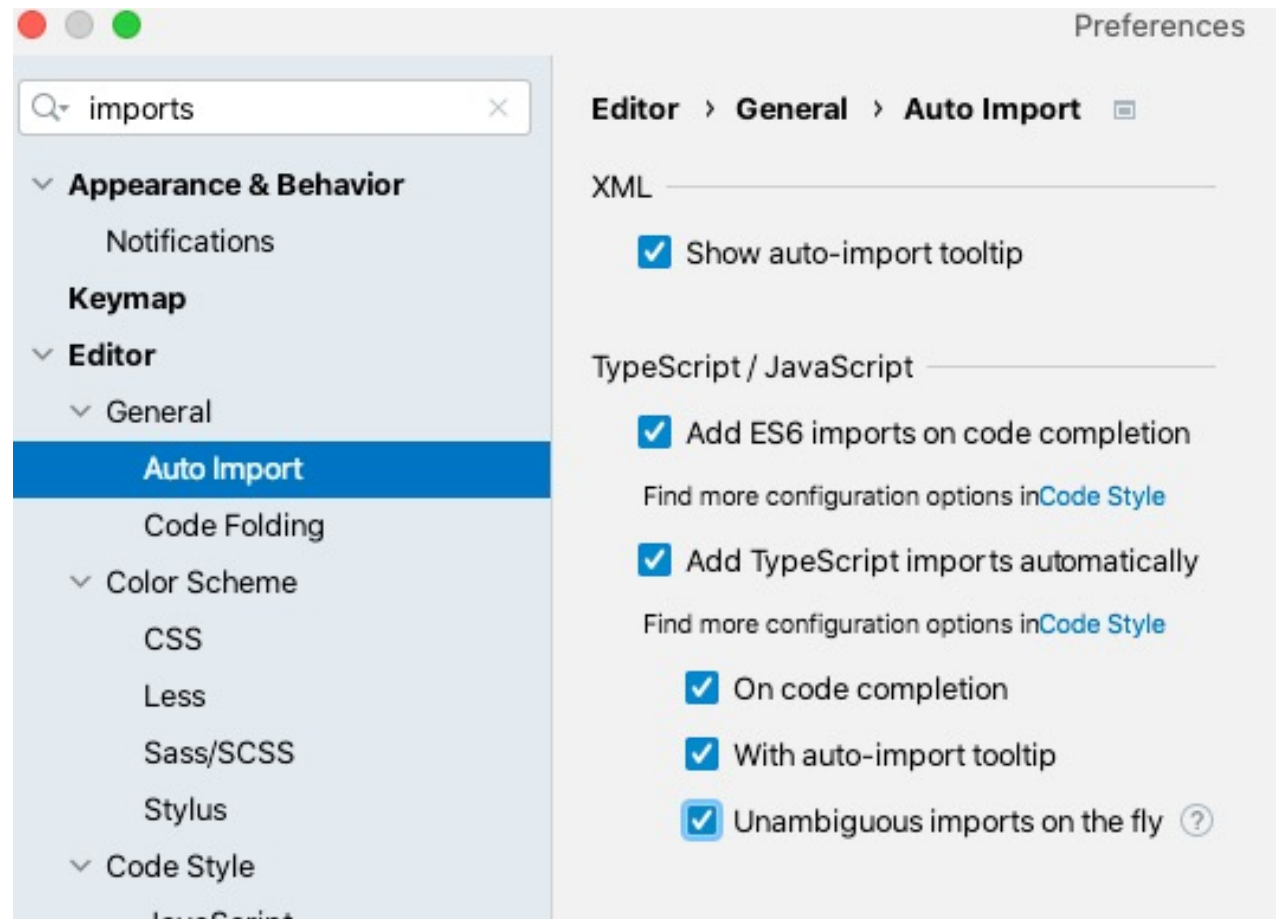
Ready for takeoff!

- What are your questions so far?

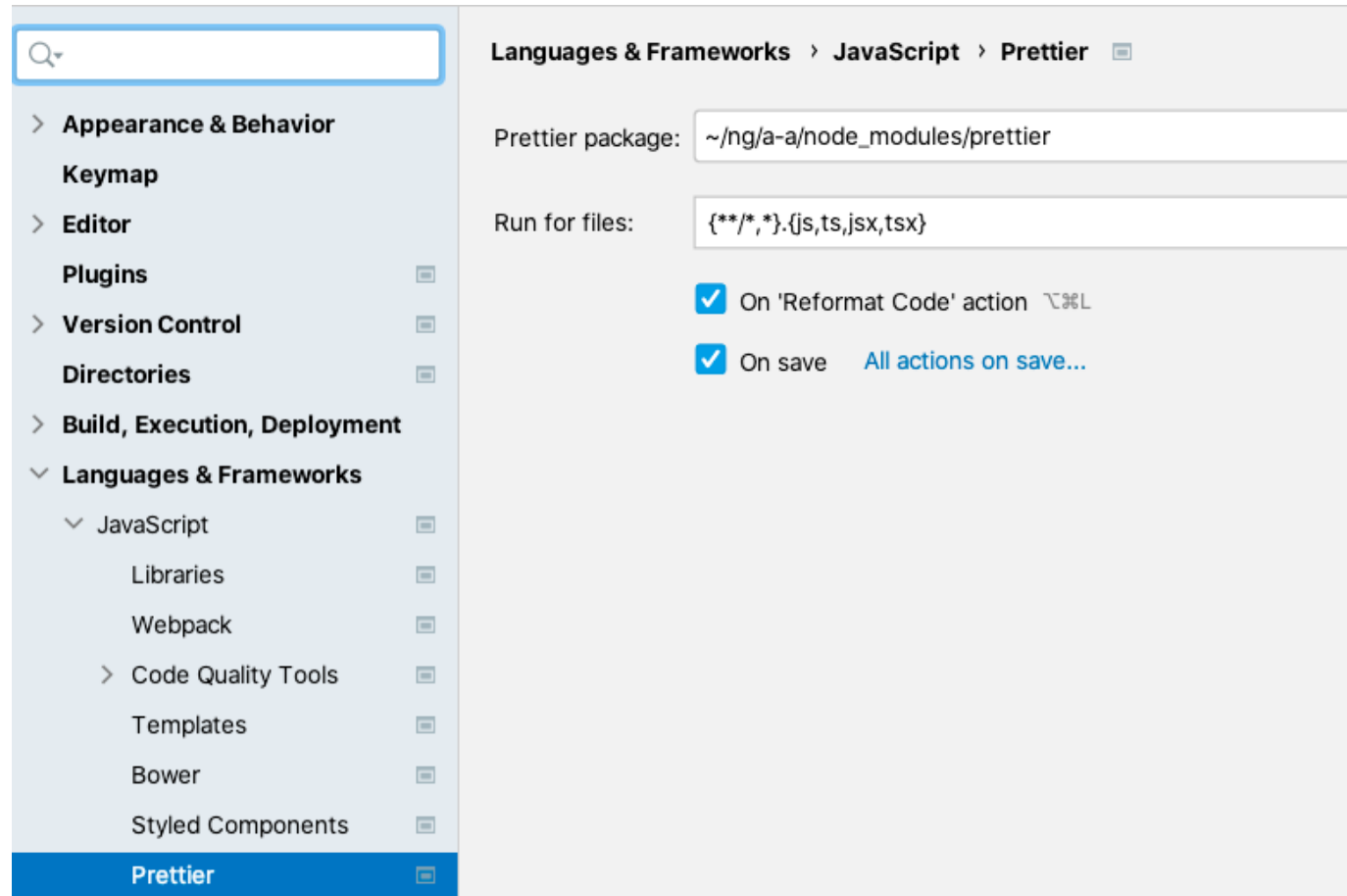
Lab

- Clone the repo [https://github.com/L-X-T/\[...\]](https://github.com/L-X-T/[...])
- Please get started with lab 00_getting_started
- yarn (or npm i) and then yarn start (or npm start)
- Take a closer look at the starter kit
- Optional: If you're using VSCode you may add the plugins mentioned

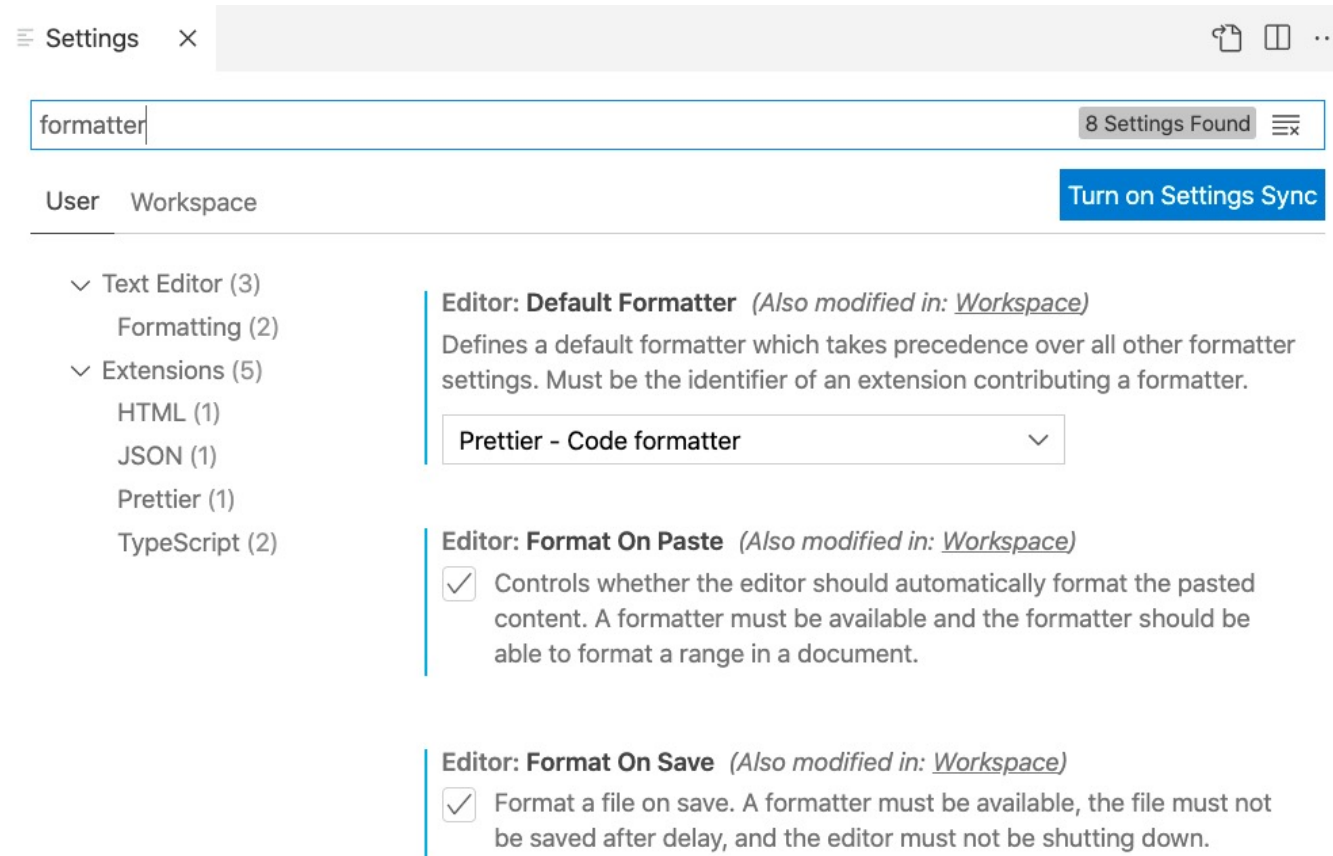
1 more thing: Web-/PhpStorm auto import



1 more thing: WebStorm prettier



1 more thing: VS Code Prettier



Disclaimer: This workshop is not about

- TypeScript / JavaScript
 - <https://www.udemy.com/course/understanding-typescript/>
 - By Maximilian Schwarzmüller who also offers *Angular*, *React* & *VueJS* (in English)
- HTML5 / CSS3 (SCSS)
 - <https://www.udemy.com/course/design-and-develop-a-killer-website-with-html5-and-css3/>
- Or all together premium course with mentor
 - <https://www.udacity.com/course/front-end-web-developer-nanodegree--nd0011>

Day 1 – Intro & Building Blocks

- Introduction
- Overview & Speedrun TypeScript
- Angular Introduction
- Angular Services
- Angular Pipes



Day 2 – Async & Components

- Recap building blocks
 - Components
 - Built-in Directives
 - Services
 - Pipes
- RxJS vs Signals
- Angular Modules vs Standalone Components
- Components Deep Dive
 - Databinding
 - Content Projection
 - Smart vs dumb components
 - Component - Life cycle hooks



Day 3 – Forms, Routing & Performance

- Forms & Validation
 - Template driven Forms
 - Reactive Forms
- Routing
- Performance
 - Lazy Loading
 - CD OnPush



Day 4 – Redux & NgRx

- Redux & NgRx
 - State
 - Actions
 - Reducers
 - Selectors
 - Effects
- Recap & Feedback