



ANGULAR
ARCHITECTS
INSIDE KNOWLEDGE

Advanced TypeScript

Introduction



About Me...



- Rainer Hahnekamp

ANGULARarchitects.io

- Trainings and Consulting



<https://www.youtube.com/@RainerHahnekamp>



<https://www.ng-news.com>



<https://github.com/softarc-consulting/sheriff>

**Professional
NgRx**



**Professional
Angular
Testing**



**Modern Spring
for Angular**



**ANGULAR
ARCHITECTS**
INSIDE KNOWLEDGE

Goals

- Advanced Typescript for
 - application developers
 - library developers
- Focus on practical topics
- "Don't just watch, do it!"



ANGULAR
ARCHITECTS
INSIDE KNOWLEDGE

Housekeeping

- 3 Units
- 15 minutes breaks
- 10.00 (CEST) - 17.00 (CEST)
- 1 hour lunch break from 12.30 - 13.15
- <https://github.com/rainerhahnekamp/2023-10-13-typescript.git>



3 Phases per Unit

Theory (Slides) &
Live Coding

Exercise Time
~ 40 minutes

Discussion of the
Solution



ANGULAR
ARCHITECTS
INSIDE KNOWLEDGE

Engage!



Agenda

Unit 1

- Types
- Miscellaneous
- Object vs. object
- Type Narrowing
- Function Overloading

Unit 2

- Index access types
- typeof (TS-specific)
- keyof
- Generics
- Variance
- Utility types

Unit 3

- Conditional types
- Mapped types
- Template literal types

Application developer

Library developer



Before we start...

- Mind the difference between type and value
- Rules are not always that obvious
 - JavaScript's rules are the basis
- TypeScript ends after the compilation
- Error messages might not always reveal the real reason
- Advanced features are still extended
- Future of TypeScript: <https://github.com/tc39/proposal-type-annotations>

