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INSIDE KNOWLEDGE

# Advanced TypeScript

## Introduction



# About Me...



- Rainer Hahnekamp  
**ANGULAR**architects.io
- Trainings and Consulting



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



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



@RainerHahnekamp



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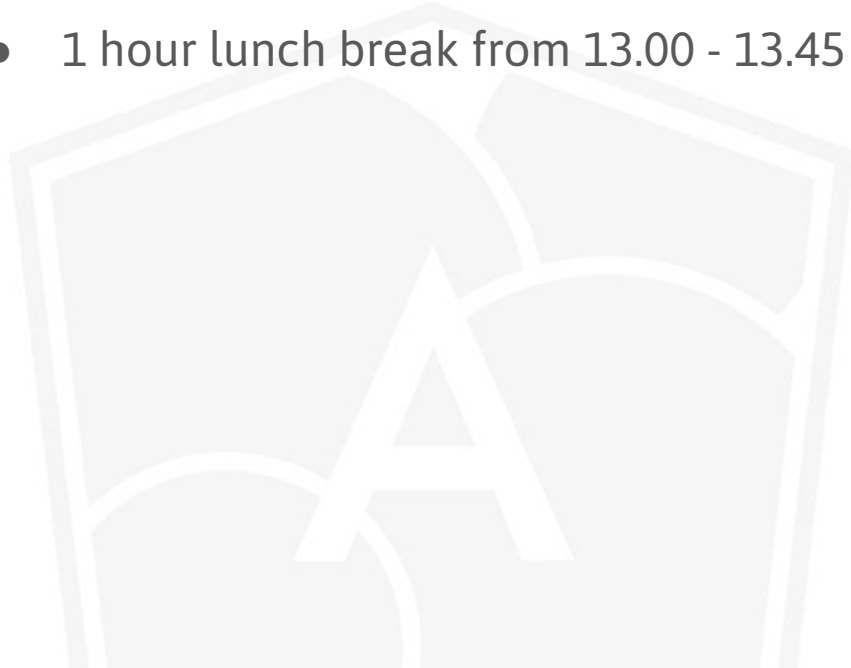
# Goals

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



# Organisational

- 3 Units
- 15 minutes breaks
- 1 hour lunch break from 13.00 - 13.45



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# Exercise-intensive workshop

Theory (Slides) &  
Live Coding

Exercise Time  
~ 40 minutes

Discussion of the  
Solution



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# Engage!



**I don't know everything,  
but I'll try to look it up**



# Agenda

## Unit 1

- Types
- Type narrowing

## Unit 2

- Overloaded functions
- Object vs. object
- Index access types
- typeof (TS-specific)
- keyof
- Generics
- 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

