

# Data types

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# Rules

Feel free to interrupt me for:

- questions
- relevant comments

# Agenda

- dynamic typing
- primitive values / types
- reference values / types

# Dynamic typing

- you don't need to specify the type of the variable
- the same variable can store different types of data
- it offers great freedom, but at the same time introduces many problems
- TypeScript is a superset of JavaScript that offers static typing and compiles to JavaScript

# What is a type and what is a value?

- type
- value

# JavaScript offers 2 kinds of types / values

- **primitive:** types store the actual value directly
- **reference:** types store memory addresses, enabling them to reference complex objects and share data across different parts of a program

# Primitive types / values

- string
- number
- boolean
- null
- undefined
- symbol (es6)

# Reference types / values

- arrays
- objects
- functions
- dates
- regex
- (weak) maps, (weak) sets (es6)
- anything that isn't primitive



# Primitive vs reference values

- immutability of primitive types / values
- mutability of reference types / values

# Workshop

- demo

**Happy coding!**