



## Chapter 7

# Boundary conditions: the Correct way

# [C]ORRECT: Conformance

- Many data elements must conform to a specific format.
  - Example: e-mail (always name@domain).
- Test when your input is not in conformance with what is expected.

# C[O]RRECT: Ordering

- The order of the data might influence the output.
- What happens if the list is ordered? Unordered?

# CO[R]RECT: Range

- Inputs should usually be within a certain range.
  - Example: Age should always be greater than 0 and smaller than 120.
- In most programming languages, basic types give you more than you need.

# COR[R]ECT: Reference

- When testing a method, consider:
  - What it references
  - External dependencies
  - It depends on the object being in a certain state
  - Any other conditions that must exist

# CORR[E]CT: Existence

- Does something really exist?  
What if it doesn't?

# CORRE[C]T: Cardinality

- Off-by-one errors
- Loops:
  - Zero
  - One
  - Many

# CORREC[T]: Time

- Ordering in time
  - What happens if I forget to invoke a() before b()?
- Timeouts
- Date/Time operations
  - Should we use UTC? GMT?
- Concurrency