

# Model-Based Testing

(DIT848 / DAT260)

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## Lecture 6

Notes on Koen's lecture on QuickCheck

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# Two exercises

- 1. Write a generator for the following recursive data type  
data Expr  
= Add Expr Expr  
| Mul Expr Expr  
| Num Int  
| Var Char
- 2. Write a generator for the following type  
type PersonNumber = [Int]
- NOTE: You can use the following generator  
choose :: (a,a) -> Gen a

# About the appended files

- Lec.hs
  - Contains the code of the running example during the lectures (testing the *merge* function)
- Gen.hs
  - Example of generator for lists and trees, and solution to the two exercises (Expr and PersonNumber)
- SpecQueue.hs
  - Specification of a queue
- Queue.hs
  - Properties and generators for the queue example