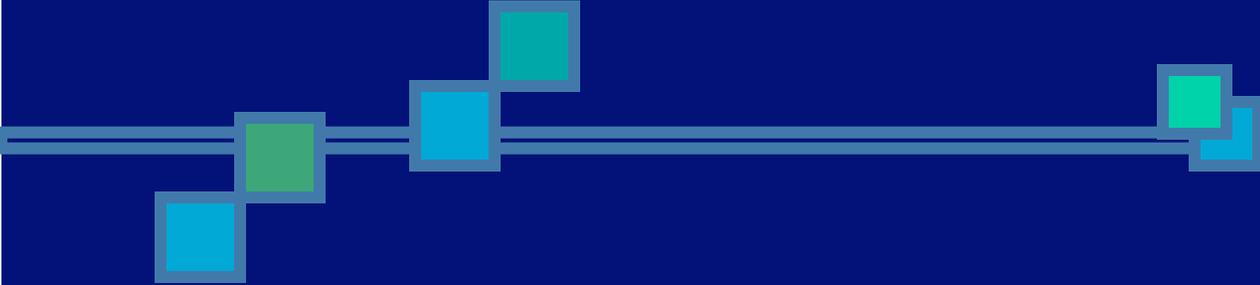


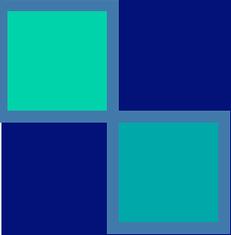
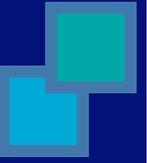
# Simula

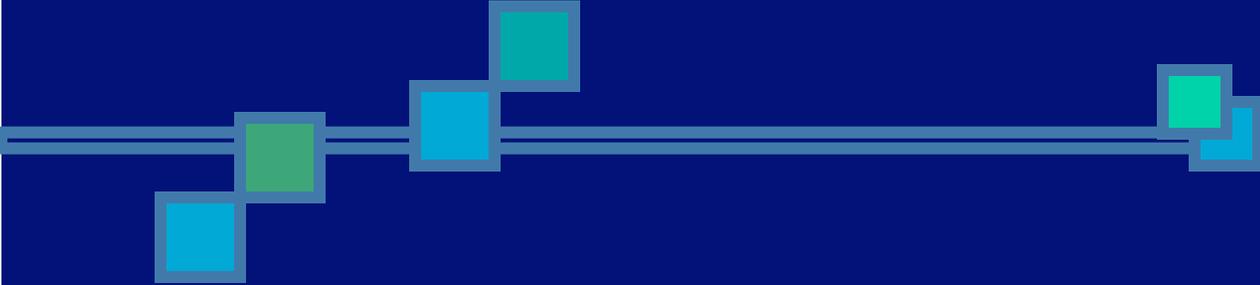


Where would we be without it?

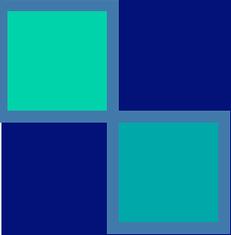
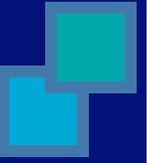


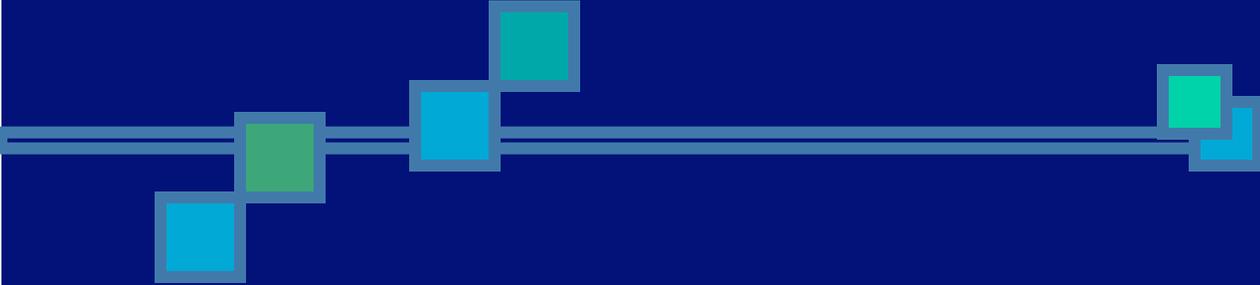
# Historic Fun-facts

- 
- Ole-Johan Dahl and Kristen Nygaard
  - SIMULA I (released 1965)
  - Simula 67 (released 1967)
  - Origins of Object-Oriented Programming
- 

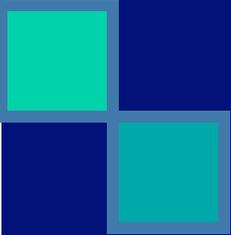
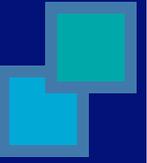


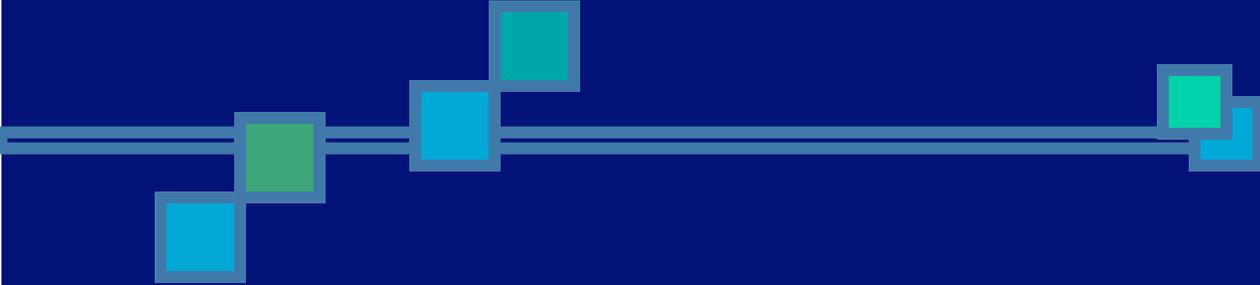
# Simu-what-now?

- 
- No tool to simulate and describe complex systems
  - Stack mechanism ☹ in Algol etc.
  - Queue system more suited for simulation
  - SIMULA I was written as an independent Algol based language
- 

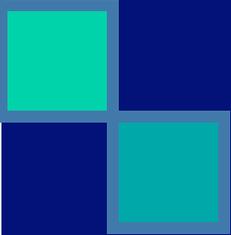
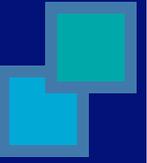


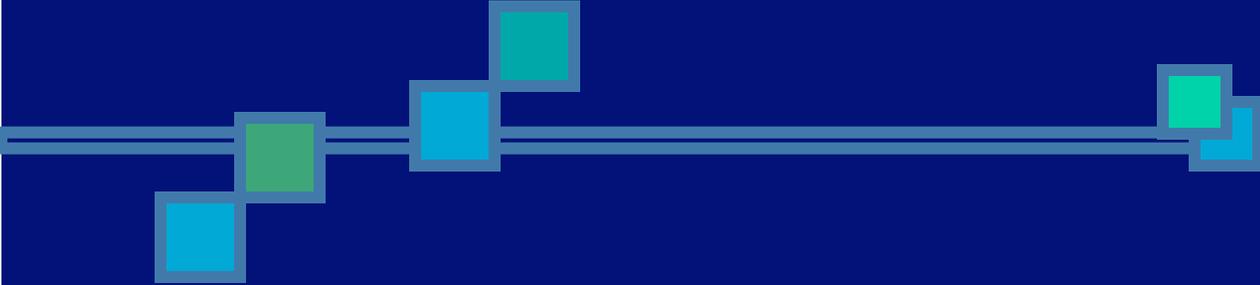
# Still not good enough

- 
- Feature extension, resulting in a general-purpose language
  - Redesigned traditional subprograms
  - Coroutines allow the subprogram to restart where it had previously stopped.
  - Class construct to do coroutines
- 

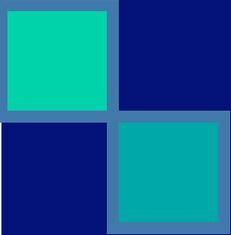


# Classes, good idea

- 
- Conceptualized and implemented for Simula 67
  - Inheritance
  - Encapsulation
  - Data abstraction
  - Virtual procedures
- 



Told you so!

- 
- Impact on the industry
  - Smalltalk (1970s)
  - C++ (1980s)
  - Java, Ada, Prolog, C#, any OOL
  - Text vs. String
- 