



Introduction to **Software Architecture**

Sébastien Mosser

Lecture #1.1, 09.02.2018

Architecture?



The **art** or **science** of building; esp. the art or practice of **designing** and **building** edifices for **human use**, taking both **aesthetic** and **practical factors** into account.

“

We speak of the

"architecture" of a symphony,
and call architecture, in turn,
"frozen music".

Architect?



Edna Mode [The incredibles]

“

Beautiful

architectures

do **more** with **less**.



Organization

ISA & DevOps as a Single Module

Week	Friday Morning			Friday Afternoon			
	08:00 - 09:00	09:15 - 12:15		13:30 - 14:30	14:45 - 17:45		
6	Introduction to Software Architecture			DevOps Overview	Mutation Testing Lab		Kick-off
7	Poly'Event Architecture definition (unsupervised)			Arch. for Testing	Mutation Testing Lab		
8	Mutation Testing Lab (unsupervised until further notice)			Func. & Int. Tests	Poly'Event Architecture definition		
9	Soft. Components	Poly'Event Project		Arch Dojo #1	Poly'Event Project		Poly'Event Project Implementation
10	Winter break						
11	Interoperability & WS	Poly'Event Project		Cont. Integration	Poly'Event Project		
12	Cont. Integration	Poly'Event Project		Build plan & Pipeline	Poly'Event Project		
13	Technical interview (Minimal & Viable Product)			Poly'Event Project (unsupervised)			
14	Persistence	Poly'Event Project		Deployment	Poly'Event Project		
15	Arch Dojo #2	Poly'Event Project		Soft. Containers	Poly'Event Project		
16	Q&A, Stepback	Poly'Event Project		Scaling	Poly'Event Project		
17	Easter Break						
18	Poly'Event Project (unsupervised)			Technical Interview (Almost-final Product)			
19							
20		Architecture Exam (3 hours)			DevOps Exam (3 hours)		

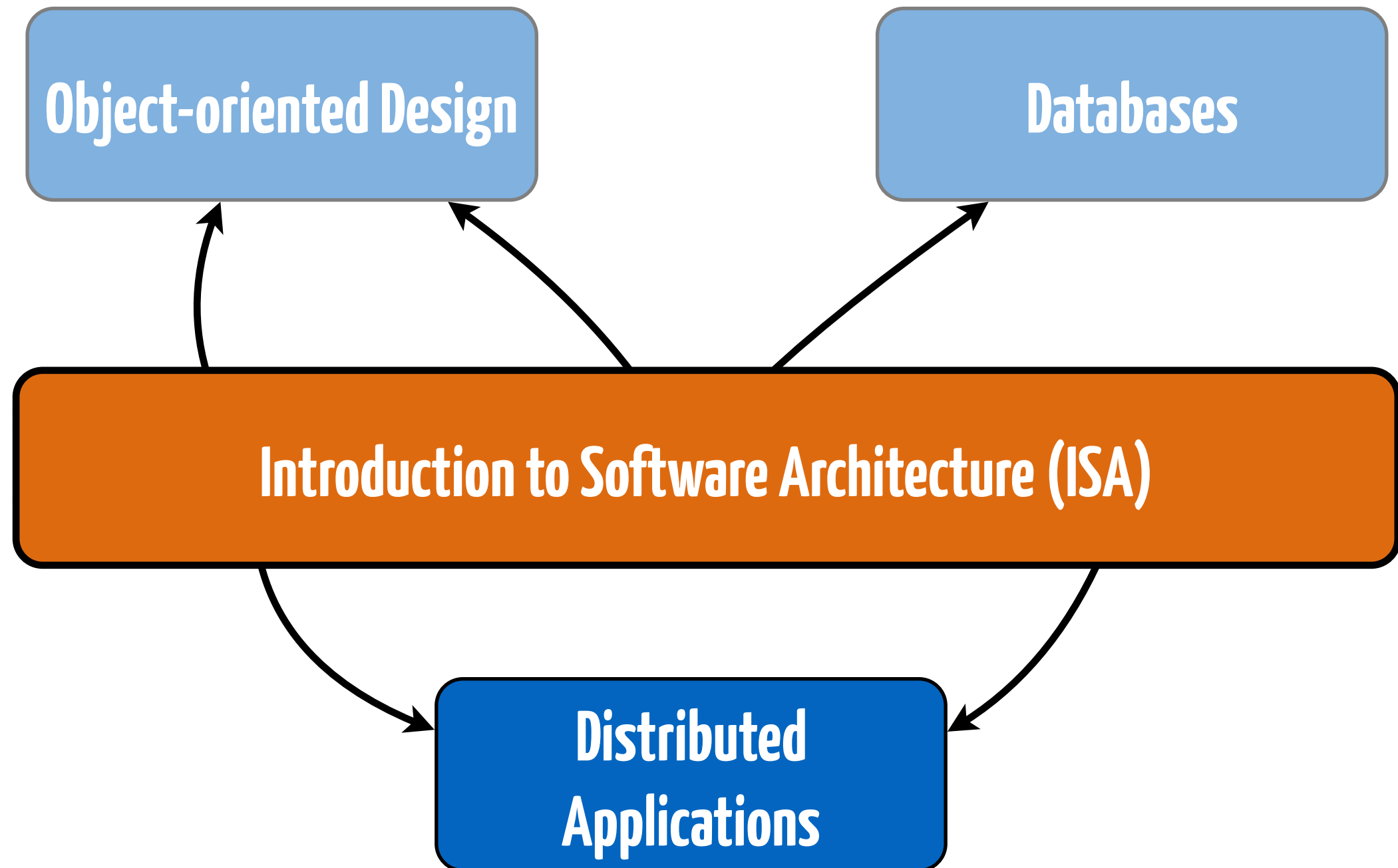
Shared Case study & Technological Stack

Contract

- Students:
 - **No computer** during lectures
 - **Be on time** (lectures, labs)
 - **Project involvement**
 - **Prepare** when asked for
- Staff:
 - **One-week latency feedback**
 - **Availability** (email, meeting)



Intro. to Soft. Arch.: Dependencies



The team



Sébastien
Mosser

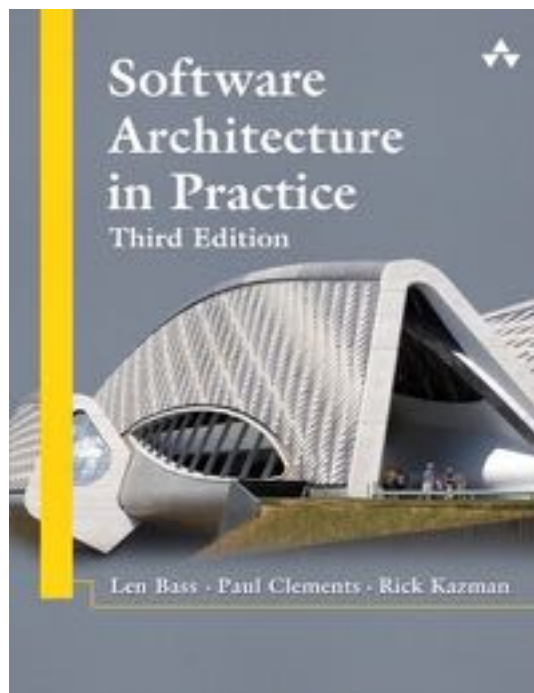


Anne-Marie
Déry

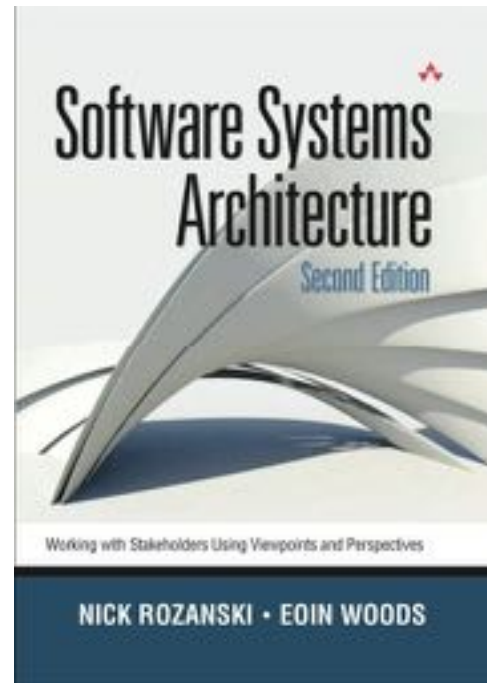
Coordinator: mosser@i3s.unice.fr

<https://github.com/mosser/isa-devops>

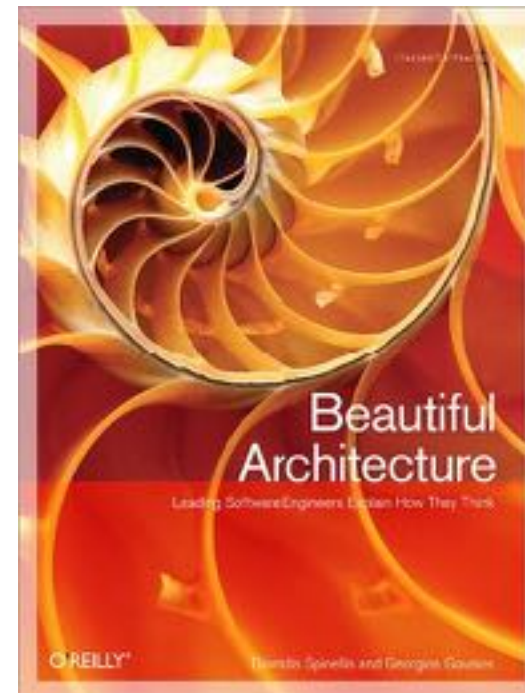
Bibliography (technologically independent)



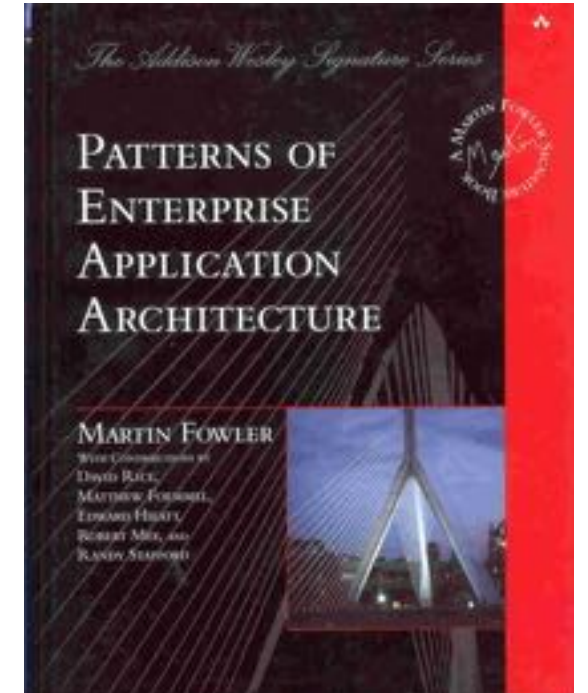
[SAiP, 2012]



[SSA, 2011]



[BA, 2009]



[PoEAA, 2002]

Evaluation (dependency graph)

