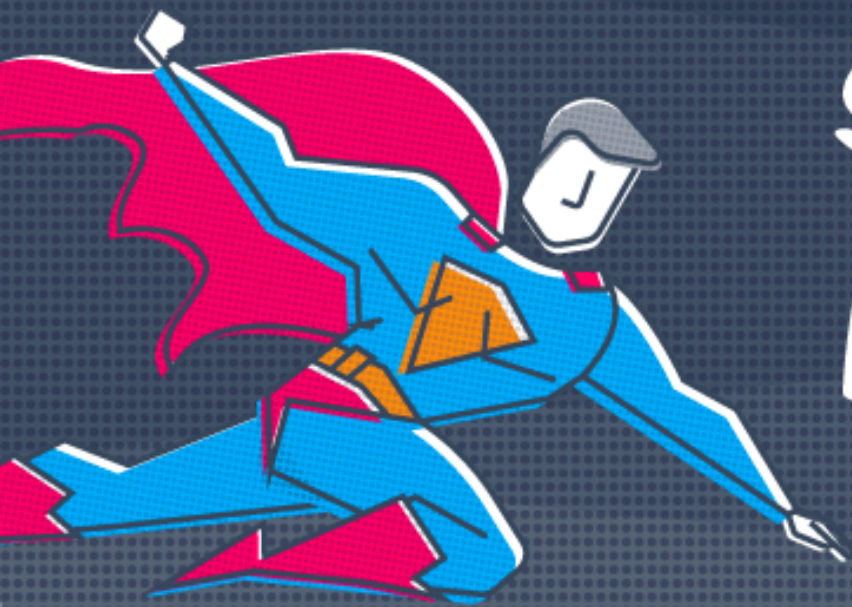




Peeling the Onion - Microservices, one Layer at a Time

@AndreasKoestler



SUPER SOFTWARE **DEFEATS** **MANUAL MAYHEM**

**STREAMLINED TECHNOLOGY ENSURES
MOBILE WORKFORCE SUCCESS**



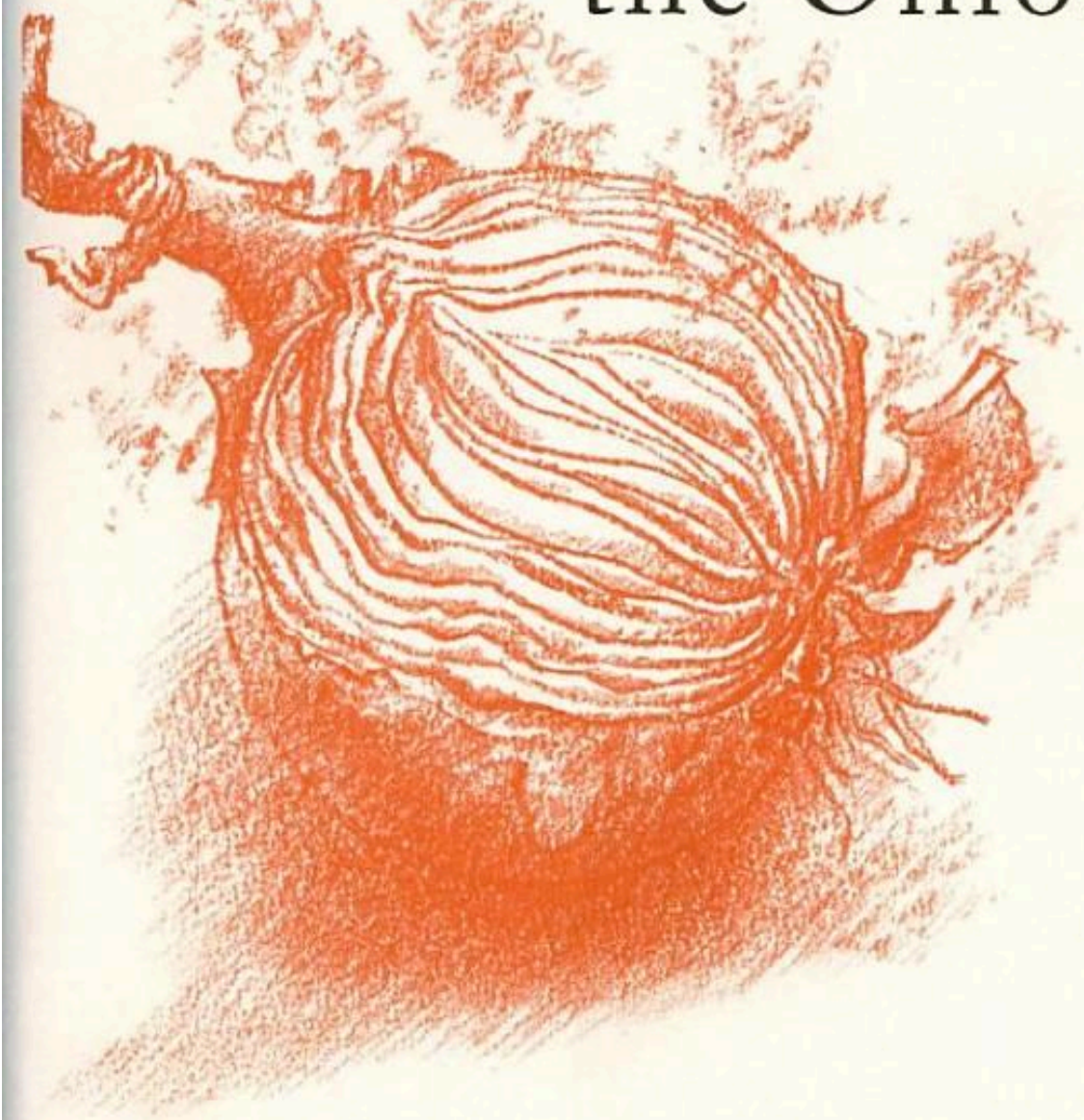
What's in a Name?

- Onions
- Buzzwords (Microservices)

GÜNTER GRASS

'A memoir of rare literary beauty' *New Yorker*

Peeling
the Onion



What's in a Name?

* 1927 (Gdańsk)
† 2015 (Lübeck)

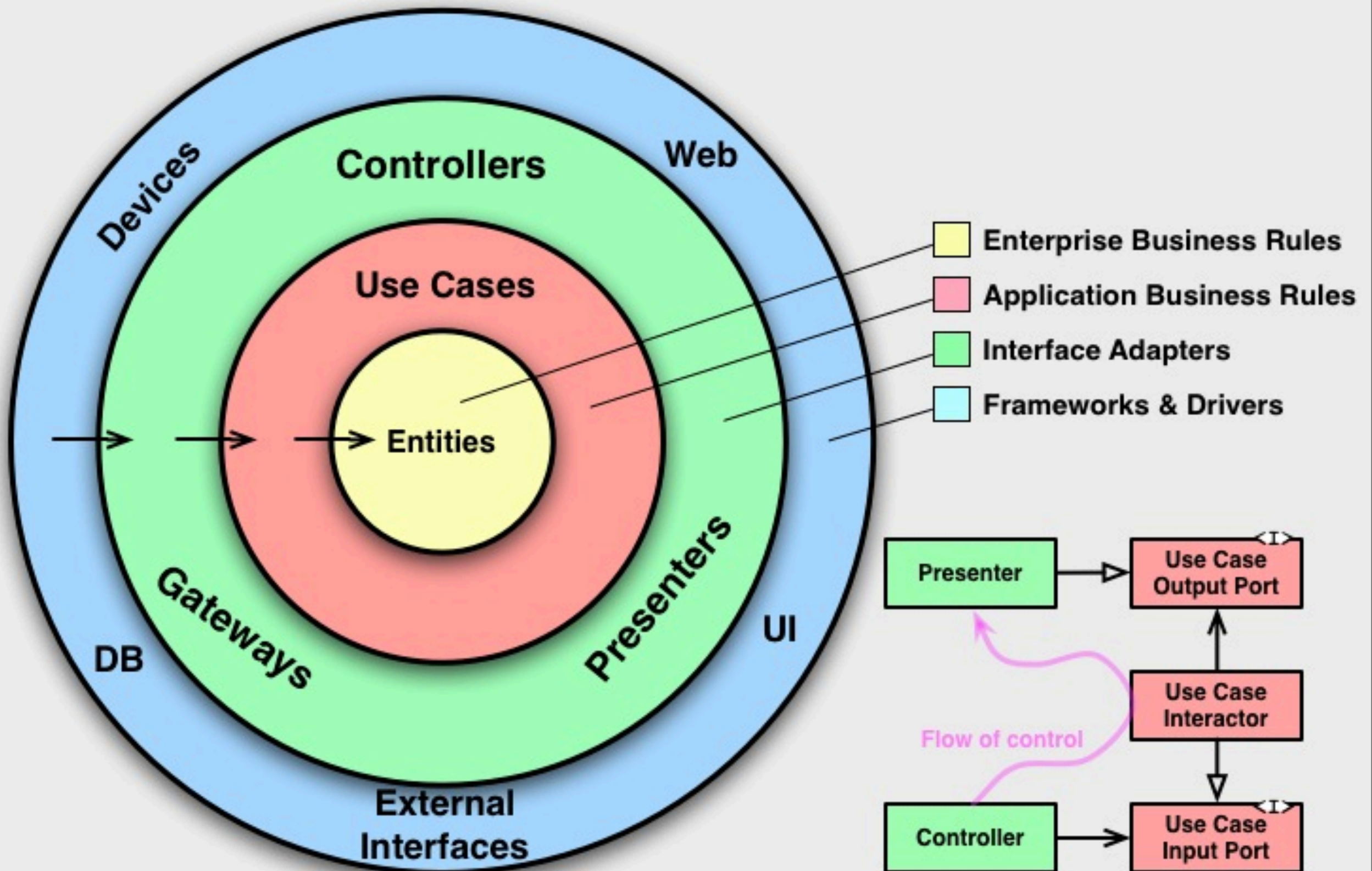
How do we Build Software?

- Hexagonal Architecture/Ports and Adapters (Alistair Cockburn 2005)
- The Onion Architecture (Jeffrey Palermo 2008)
- Screaming Architecture (Robert Cecil Martin 2011)
- Data, Contexts, Integration: DCI Architecture (Reenskaug, Coplien 2009)
- Boundary/Control/Entity (Ivar Jacobson, 80s)

Many Names, Similar Goals

- Independent of Frameworks
- Testable
- Independent of presentation layer/UI
- Independent of DB/Storage
- Independent of external agency

The Clean Architecture



What's in a Name?

[**http://degoes.net/articles/modern-fp**](http://degoes.net/articles/modern-fp)

[**http://degoes.net/articles/modern-fp-part-2**](http://degoes.net/articles/modern-fp-part-2)



John De Goes Onion

- At the centre, semantics encoded in language of the domain
- Beginning at the centre, each layer is translated to a language with lower level semantics
- The outermost layer is the final language

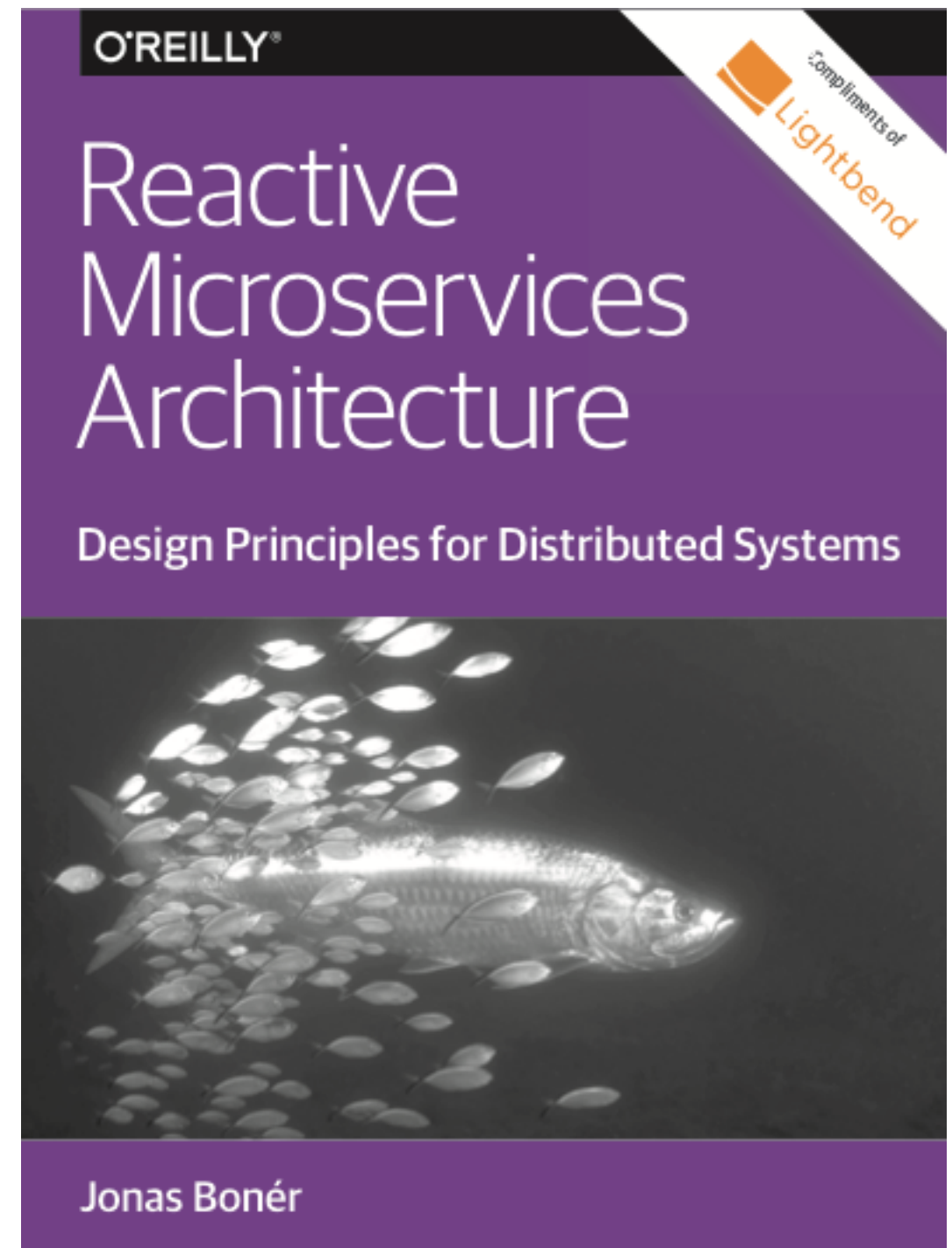


Micro Services

- “Loosely-coupled service oriented architecture with bounded contexts” - Adrian Cockcroft

Micro Services

- Asynchronous Communication
- Isolation
- Autonomous
- Single Responsibility
- Exclusive State
- Mobility



How Big is a Microservice?



Get this :)

<https://github.com/AndreasKostler/scalawave/tree/master>