



CLEAN ARCHITECTURE

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Introductie



Connecting Innovation in Agri & Food

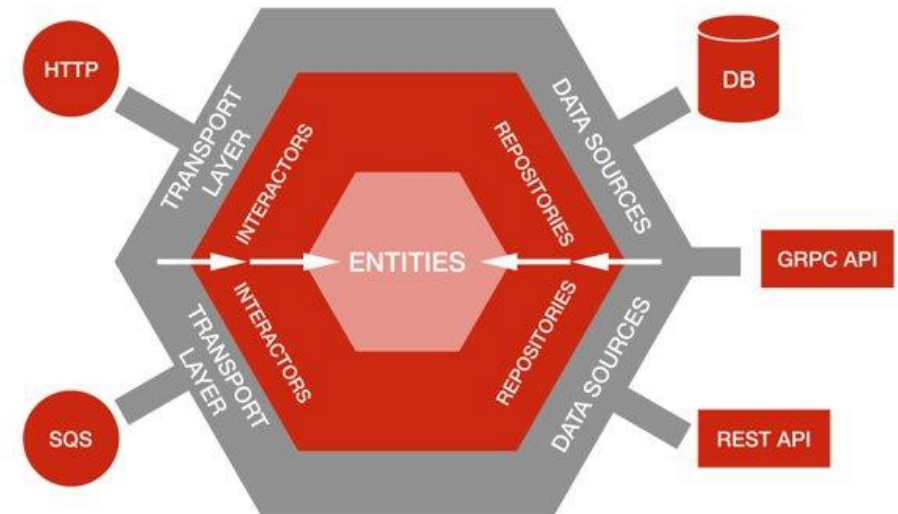
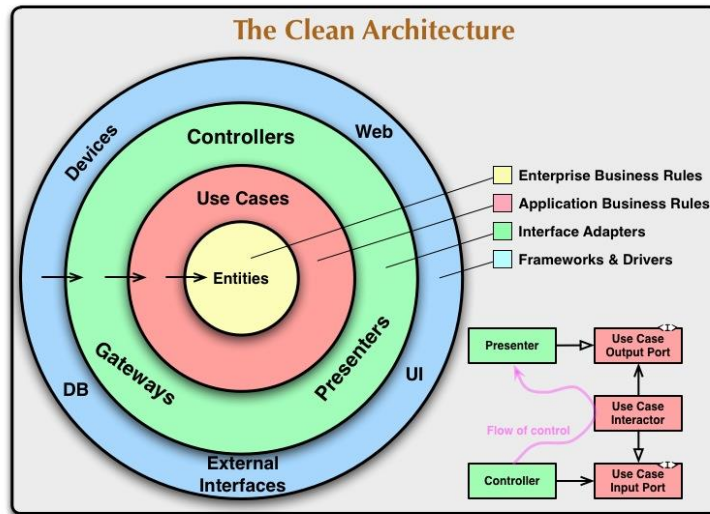
"We ontwikkelen ICT en Datascience oplossingen voor Agri & Food bedrijven die verder kijken dan morgen"

Inleiding

- "Domain-centric" architectuur
- Simpele architectuur (subjectief!)
- Focus op use-cases: elk probleem heeft zijn eigen oplossing
- Modulair: onderlinge modules d.m.v. interfaces
- Snel uitbreidbaar en aanpasbaar ("*We managed to transfer reads from a JSON API to a GraphQL data source within 2 hours*" - netflix)
- Uitermate geschikt om snel (als in agile, niet performance) werkende software op te leveren
- Clean, snel te doorgronden

Verschillende architecturen

- Union Architecture
- Hexagonal Architecture
- Ports and adapters



Domain-centric architecture

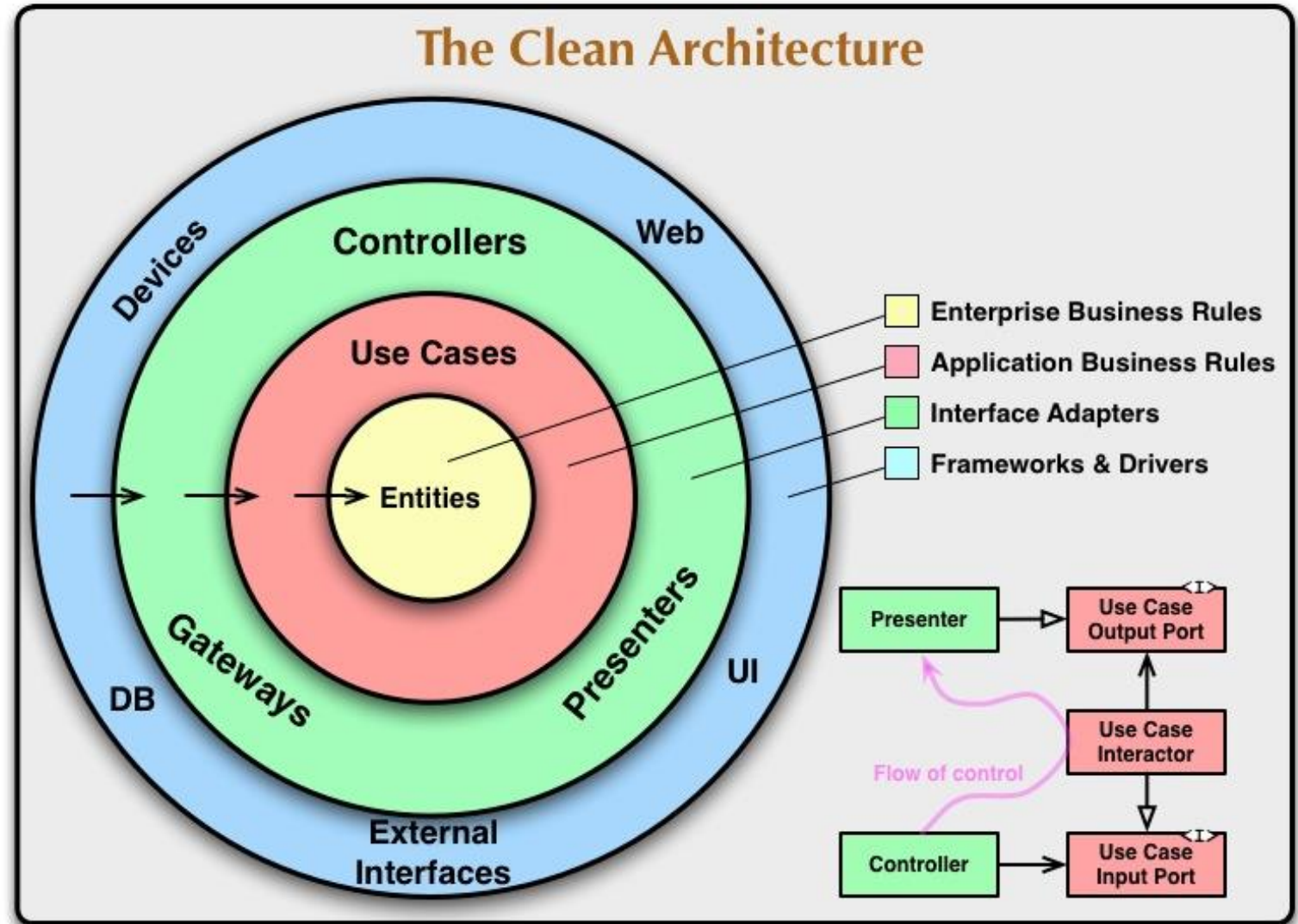
Entities: Entities encapsulate enterprise-wide business rules. An entity can be an object with methods, or it can be a set of data structures and functions.

Use cases: Use cases orchestrate the flow of data to and from the entities, and direct those entities to use their enterprise-wide business rules to achieve the goals of the use cases.

Interface adapters: Adapters that convert data from the format most convenient for the use cases and entities, to the format most convenient for some external agency such as a database or the

Web. **Frameworks and drivers:** Glue code to connect UI, databases, devices etc. to the inner circles.

Program Flow: Starts on the outside and ends on the outside, but can go through several layers (user clicks a button, use case loads some entities from DB, entities decide something that is presented on the UI)



Bronnen

- [Clean Code by Uncle Bob](#)
- [Clean Architecture Cheat Sheet \(PDF\)](#)
- [Netflix blog about Clean Architecture](#)
- [Clean Architecture: Patterns, Practices, and Principles \(pluralsight\)](#)
- [Nuget Package: JacobsApps.CleanArchitectureProjectTemplate.CSharp](#)
- <https://github.com/vaa-rosmalen/CleanArchitectureSamples>



SHOWTIME

[https://github.com/vaa-rosmalen
/CleanArchitectureSamples](https://github.com/vaa-rosmalen/CleanArchitectureSamples)



THINK



POSSIBLE