



Hexagonal Architecture

Ports & Adapters

Waarom architectuur?



Vanwege onderhoudbaarheid

Maintainability

From Wikipedia, the free encyclopedia

In engineering, **maintainability** is the ease with which a product can be maintained in order to:

- correct defects or their cause,
- repair or replace faulty or worn-out components without having to replace still working parts,
- prevent unexpected working condition,
- maximize a product's useful life,
- maximize efficiency, reliability, and safety,
- meet new requirements,
- make future maintenance easier, or
- cope with a changed environment.

Hexagonal architecture

“Allow an application to equally be driven by users, programs, automated test or batch scripts, and to be developed and tested in isolation from its eventual run-time devices and databases.”

- Alistair Cockburn

Hexagonal architecture

“Allow an application to equally be driven by users, programs, automated test or batch scripts”

- Business logica loskoppelen van de input context
- Bijv. CLI, Web, API

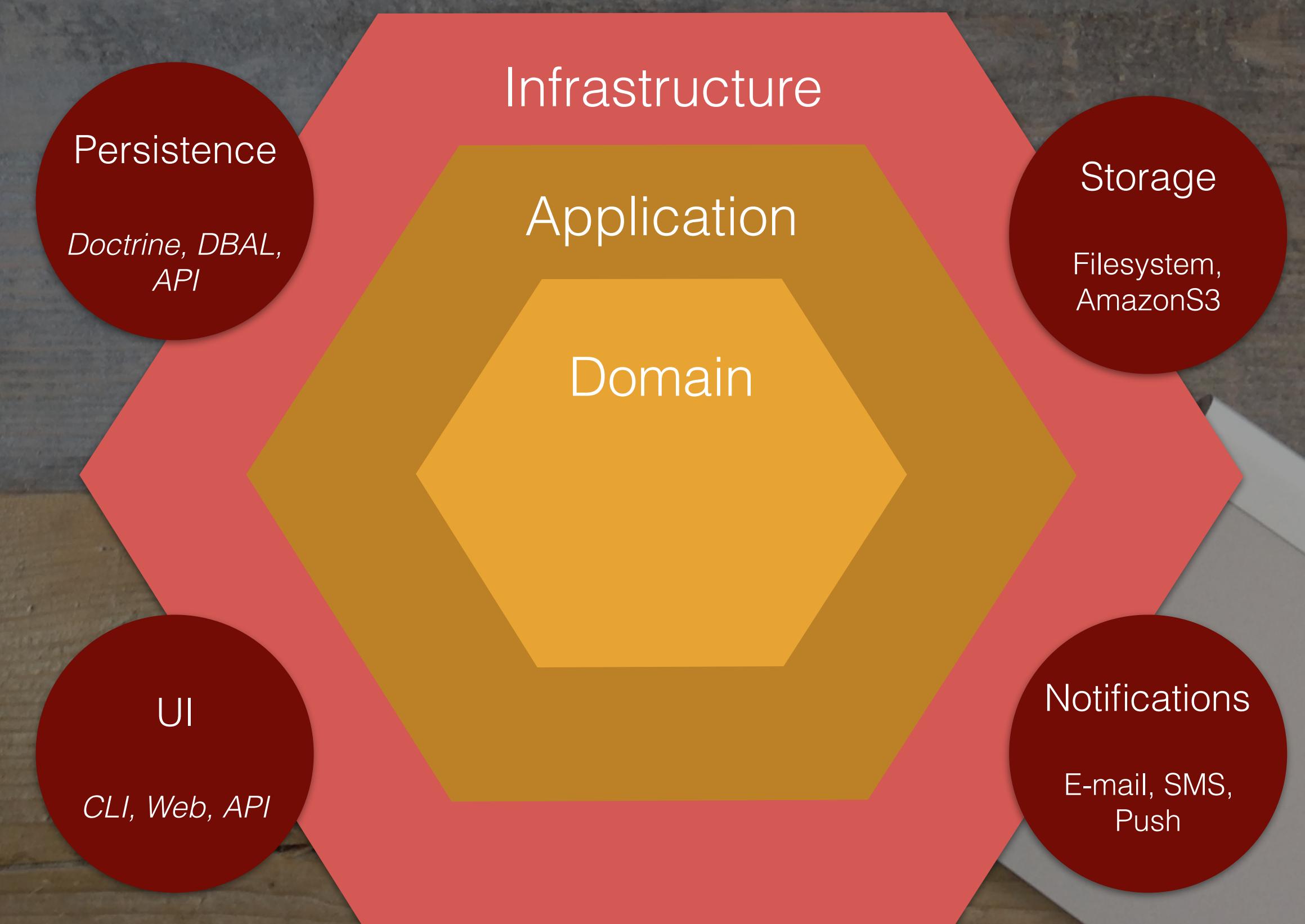
Hexagonal architecture

“and to be developed and tested in isolation from its eventual run-time devices and databases.”

- “Run-time devices” loskoppelen van de applicatie
 - Bijv. database-, storage- en notificatie mechanisms

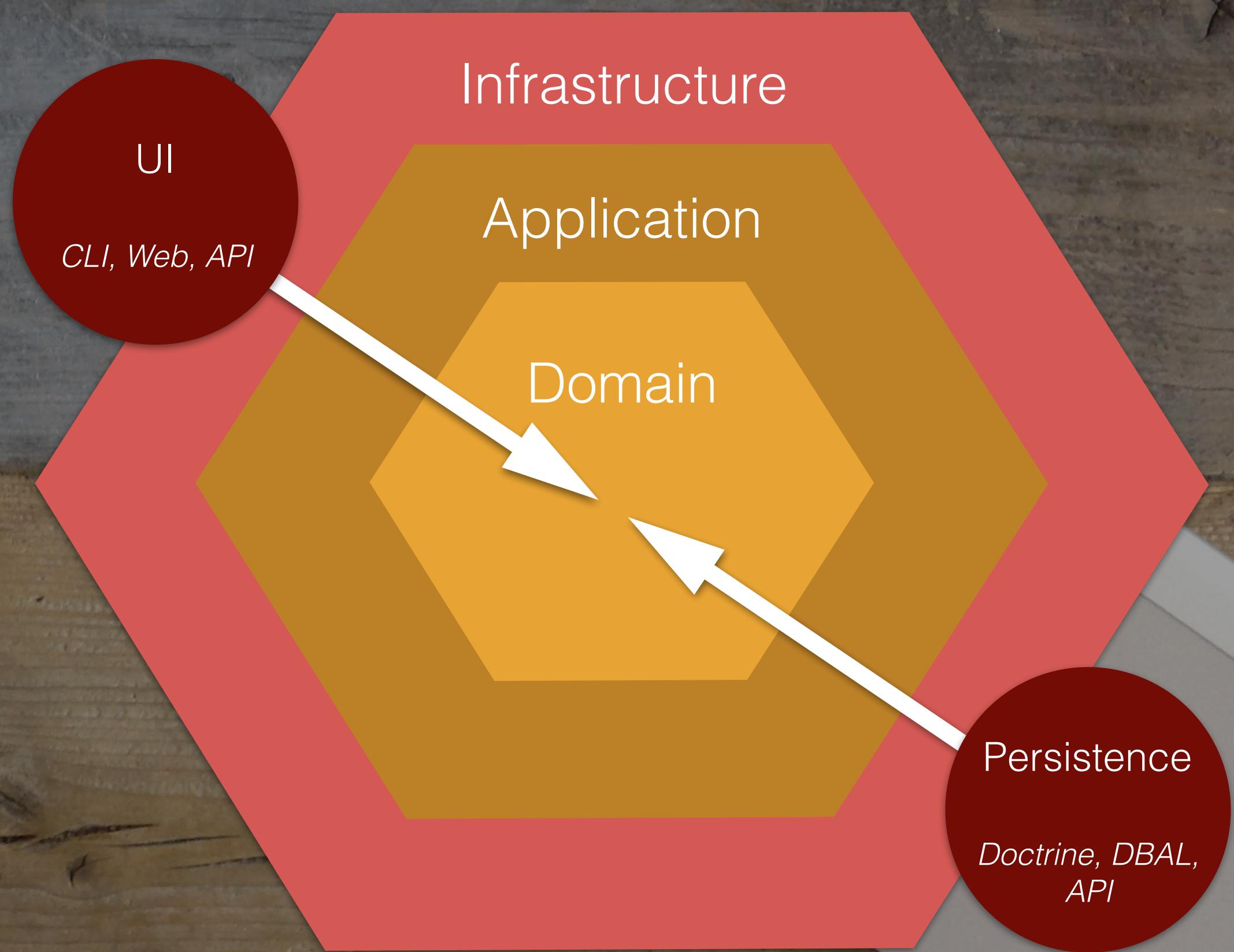
Lagen in Hexagonal architecture

- Domain
- Application
- Infrastructure



“Dependency” regel

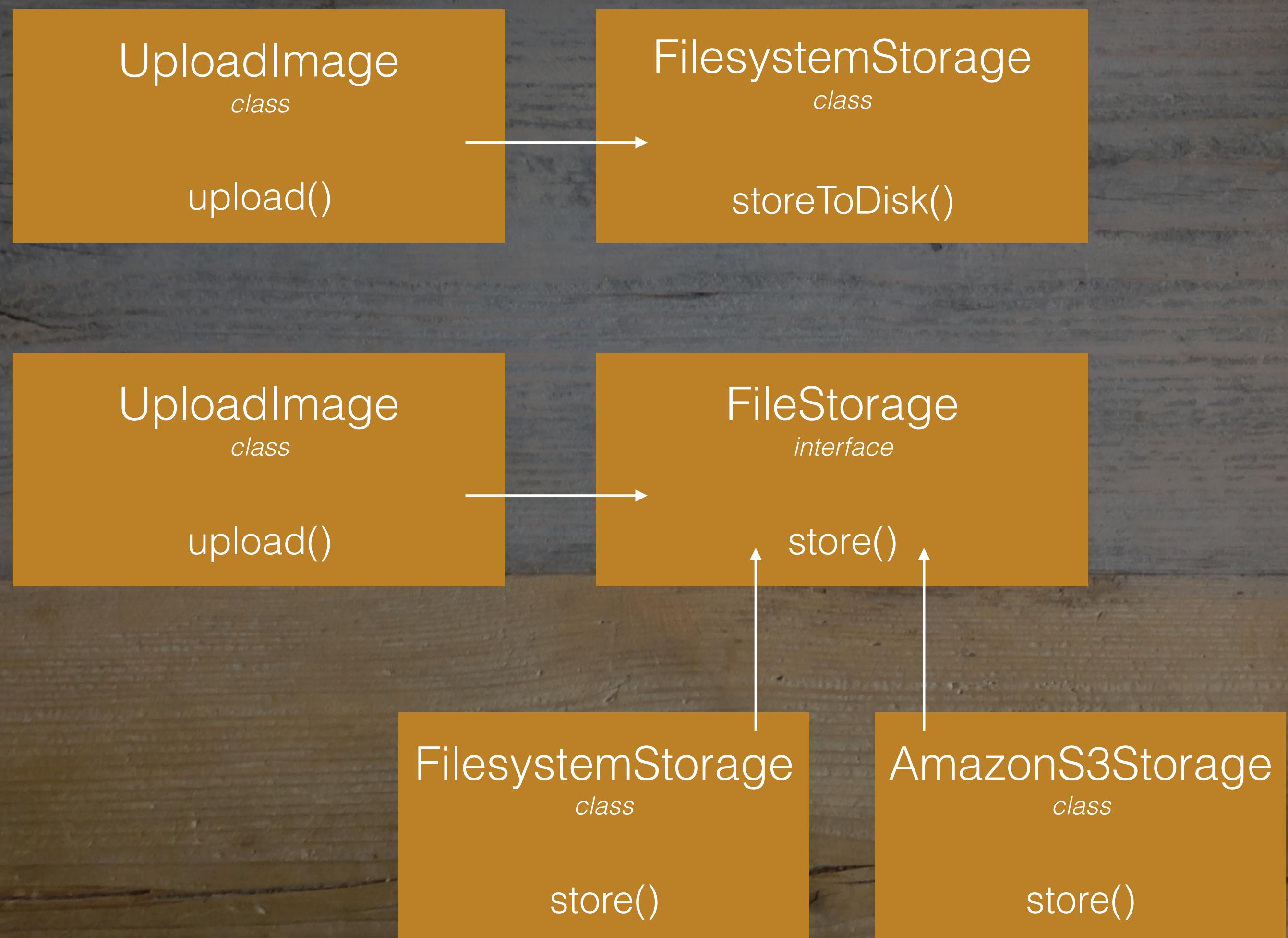
- Lagen mogen alleen met onderliggende lagen communiceren
- Infrastructure > Application & Domain
- Application > Domain
- Domain



Dependency inversion principle

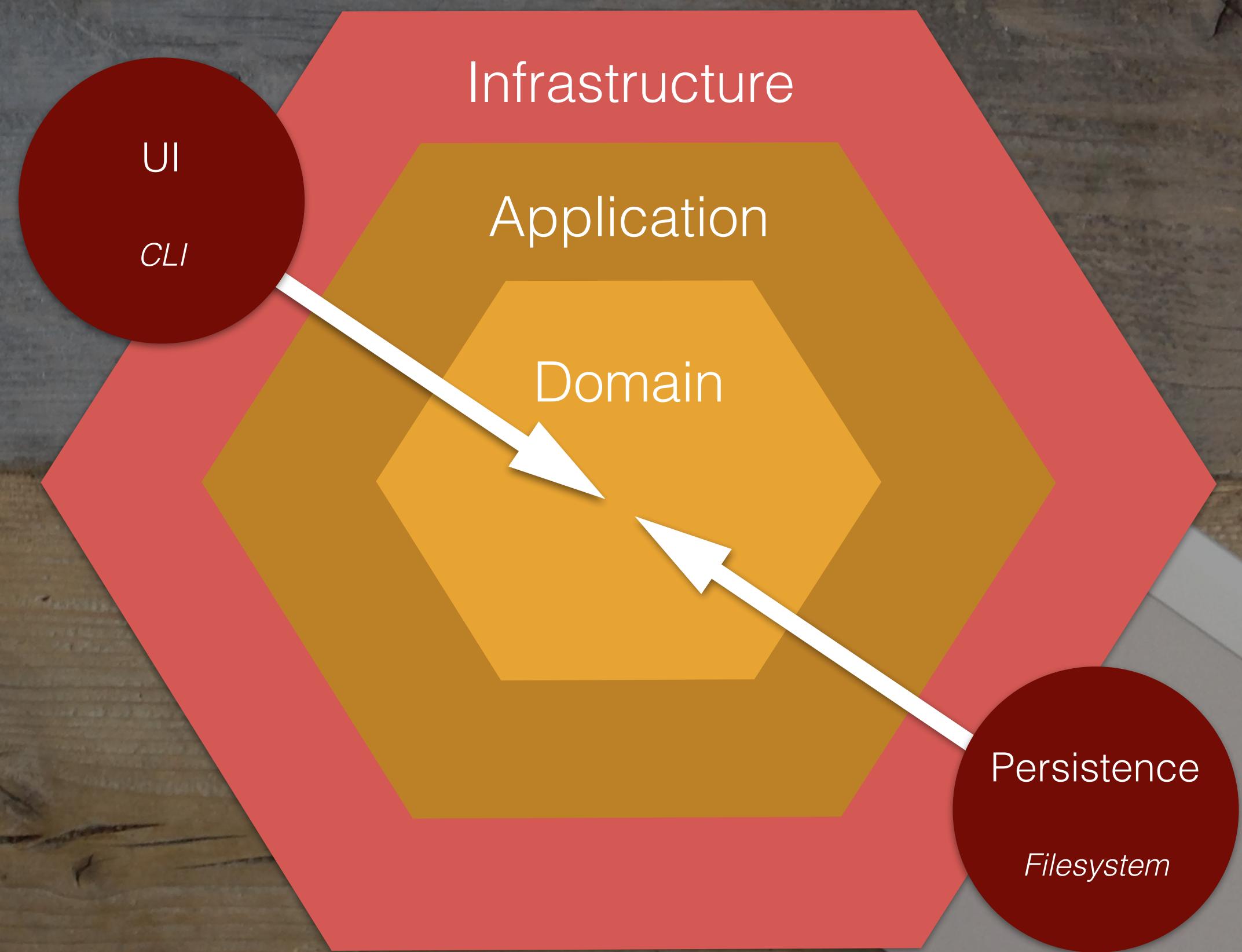
1. High-level modules mogen niet afhankelijk zijn van low-level modules, beiden zouden afhankelijk moeten zijn van abstracties
2. Abstracties mogen niet afhankelijk zijn van details, details moeten afhankelijk zijn van abstracties

Dependency inversion principle



Applicatie flow

- Infrastructure > CLI > ChangeStatus
- Application > ChangeStatusValidator & ChangeStatusHandler
- Domain > Status
- Domain > StatusRepositoryInterface
 - Infrastructure > Persistence > FilesystemStatusRepository



Demo

TIME FOR A LIVE
DEMO



WHAT COULD GO WRONG?
memegenerator.net



de
internet
jongens



linkedin.com/in/marcoveenendaal