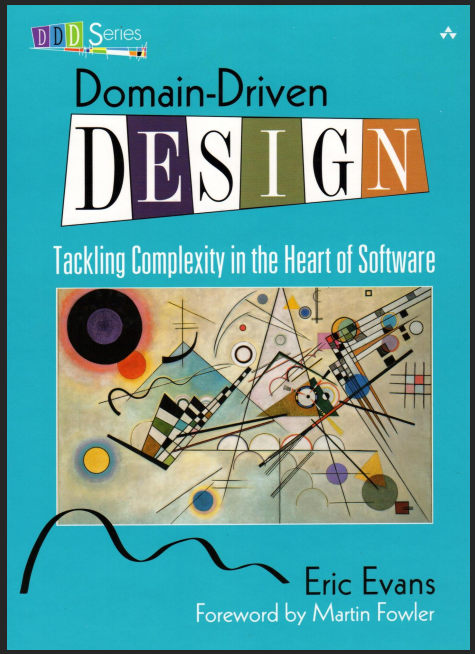
An introduction to
Domain Driven Design

Rob Allen, February 2024

It started with a book



Tackling Complexity in the Heart of Software

Rob Allen | @akrabat | social.akrabat.com/@rob

DDD provides for the

Strategic and Tactical

Strategic Design

Domains & Models

London's Rail & Tube services
tfl.gov.uk
nationalrail.co.uk
Towards Aylesbury
Towards High Wycombe
Towards Newbury and Didcot Parkway
Towards Henley-on-Thames
Towards Marlow
Towards Windsor & Eton Central
Towards Hemel Hempstead
Towards Luton
Towards Stevenage
Towards Heathrow Airport 4
Key to lines and symbols
Find your station
Holborn station
Piccadilly line journey times
For timetable information, including first and last train times:
Download the TfL Go app
Visit tfl.gov.uk/timetables
Scan the QR code below
Trains run every 3–5 minutes in central areas and 5–10 minutes in outer areas for most of the day*
*Uxbridge branch trains run at up to 30 minute intervals.
Early morning and late night trains may run less frequently.
Night Tube Service
Operates on Friday and Saturday nights between Cockfosters and Heathrow (except Heathrow Terminal 4).
Trains run approximately every 10 minutes.

A Domain is

something in the real-world

A Domain is

the subject of our project

A Domain is

understood by experts in the space

A Domain Model is

a representation of the Domain

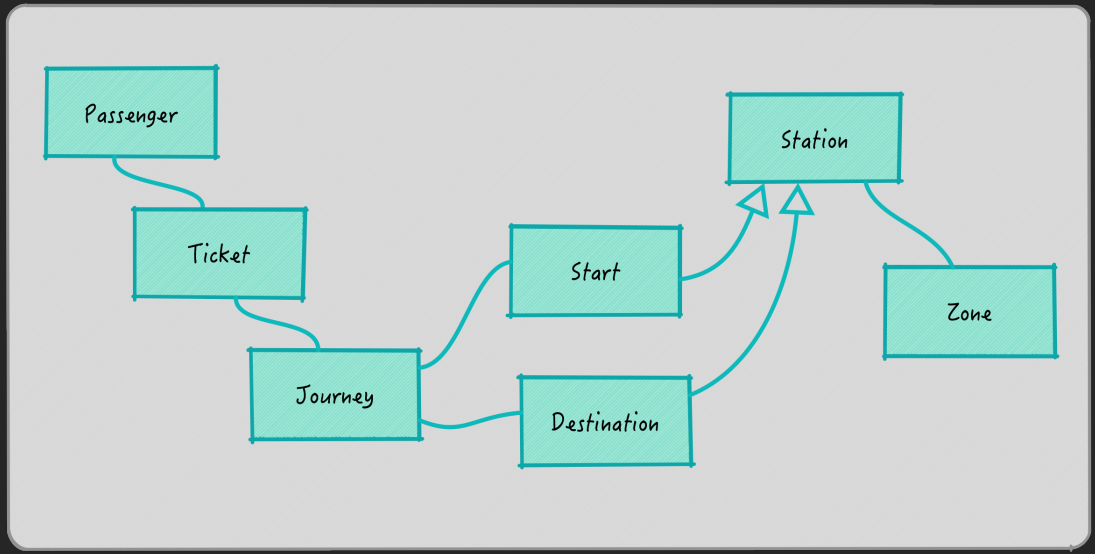
A Domain Model is

an abstraction of reality

A Domain Model is

expressed as diagrams, words, code

Expressed as a diagram



Building domain knowledge

"We have really everything in common with America nowadays except, of course, language"

Oscar Wilde

Ubiquitous Language

Ubiquitous Language is

The agreed concepts, meanings and terms for the project

You have to talk!

Ubiquitous Language is

Foundational to implementing Domain Driven Design

In Domain-Driven Design

Everything revolves around Ubiquitous Language

Observations about creating a domain model

Focus effort where it matters

Knowledge Crunching

Knowledge Crunching

Event Storming

By Henning Schwentner - CC BY-SA 4.0

Knowledge Crunching

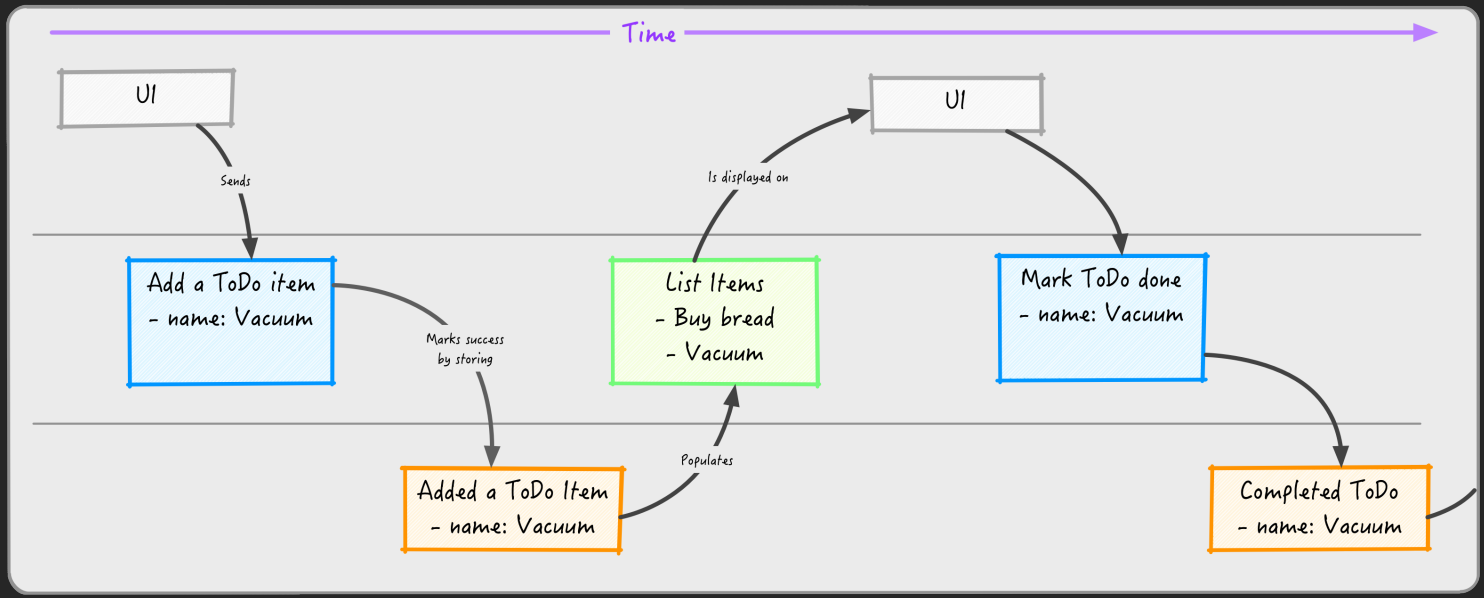
User Story Mapping

By Dai Fujihara - CC BY-SA 2.0

Knowledge Crunching

Event Modelling

Model change over time



Managing Domain Complexity

Bounded Contexts

define the boundary for a model

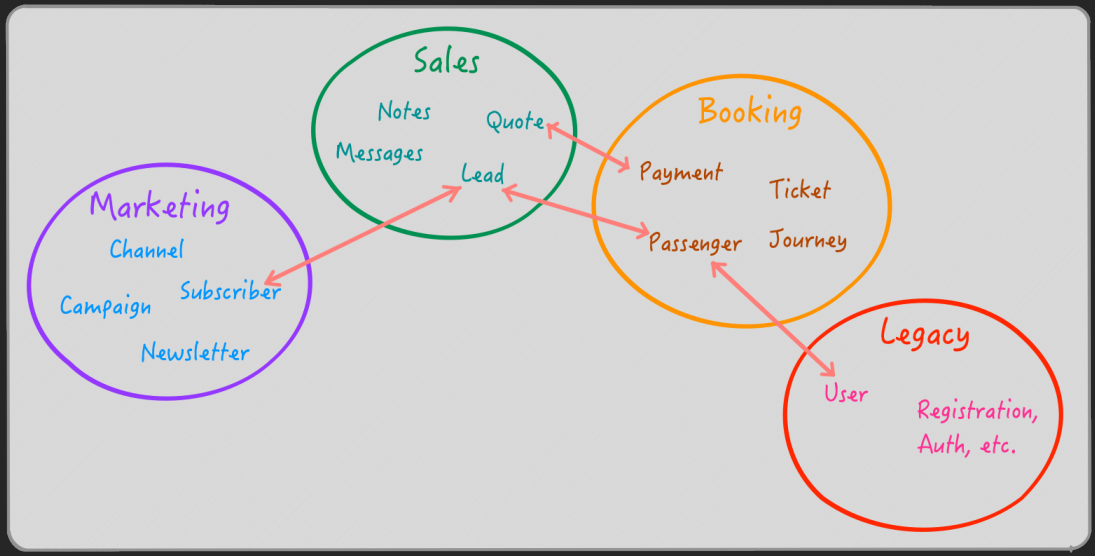
Bounded Contexts

protect the domain model from dilution

Bounded Contexts

are composed into an application

Context maps

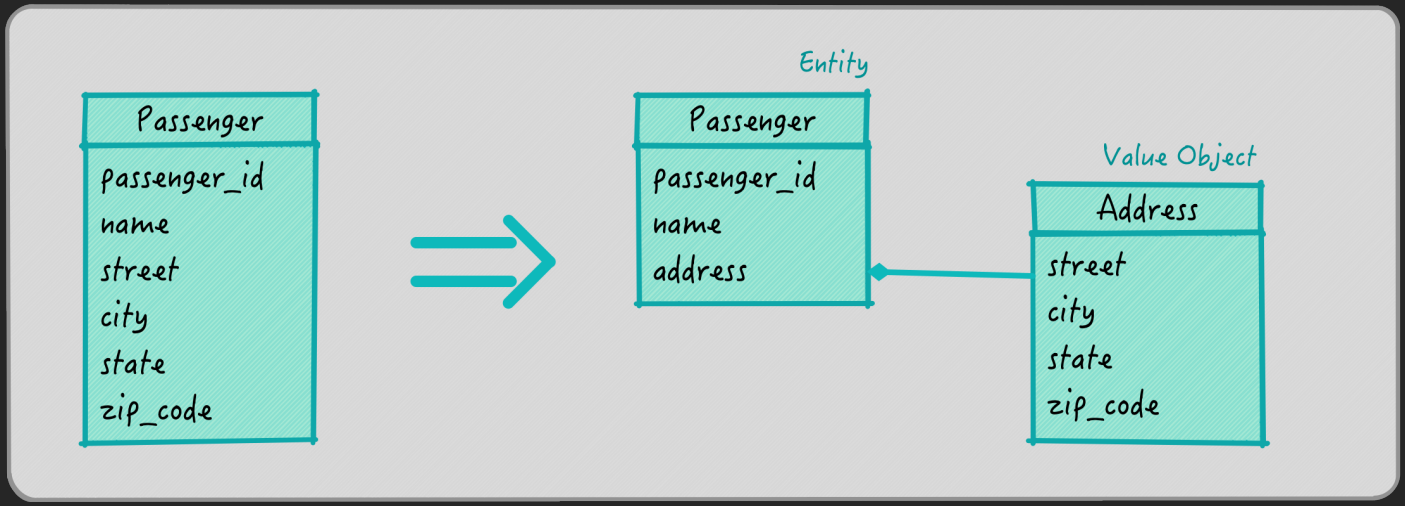


Tactical Design

Tactical Design

Entities, Value Objects & Aggregates

Entities & Value Objects

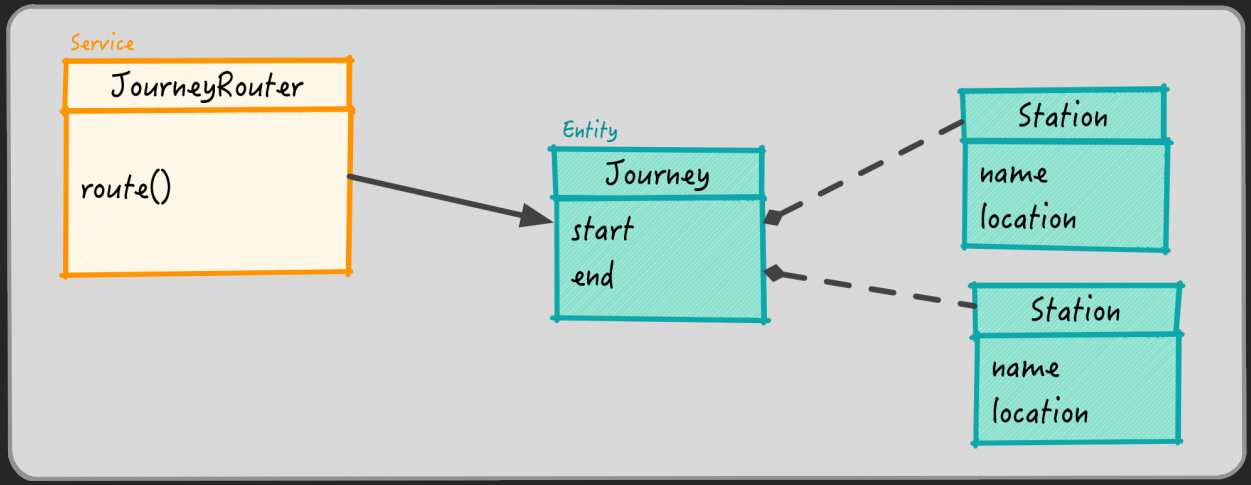


Storing State

Tactical Design

Services

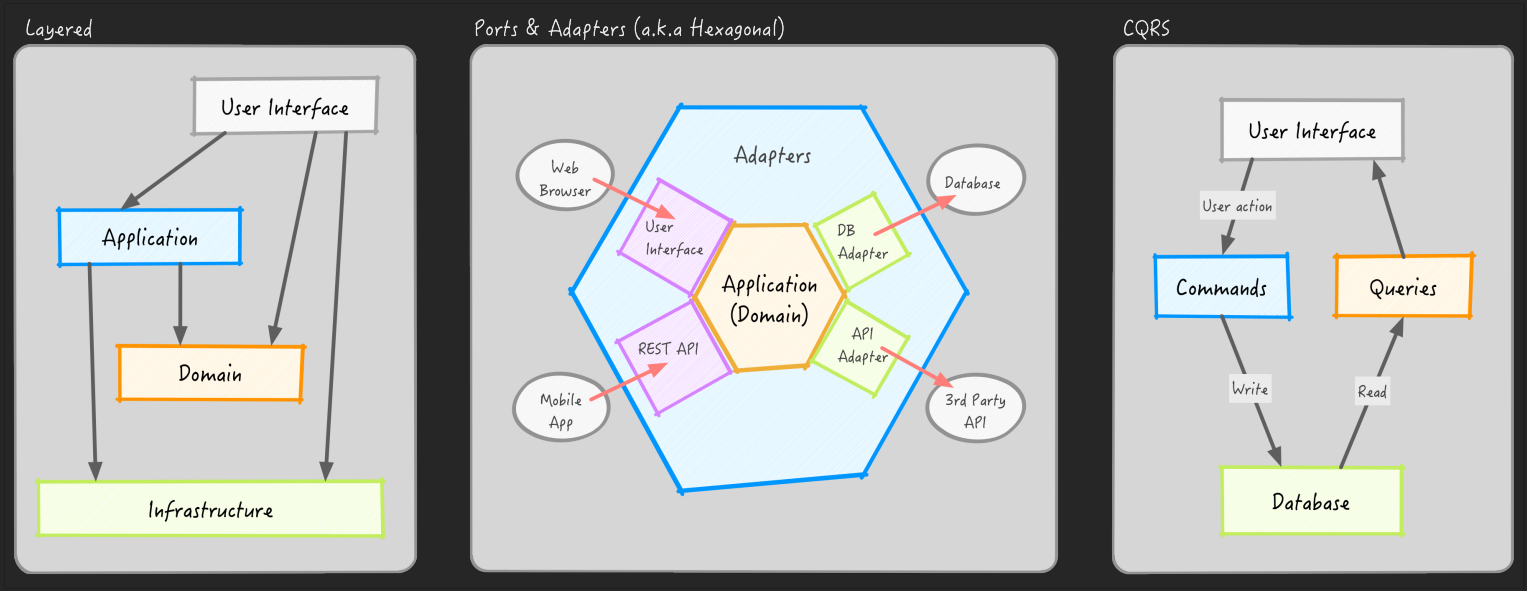
Services


Service
JourneyRouter
route()
Entity
Journey
start
end
Station
name
location
Station
name
location

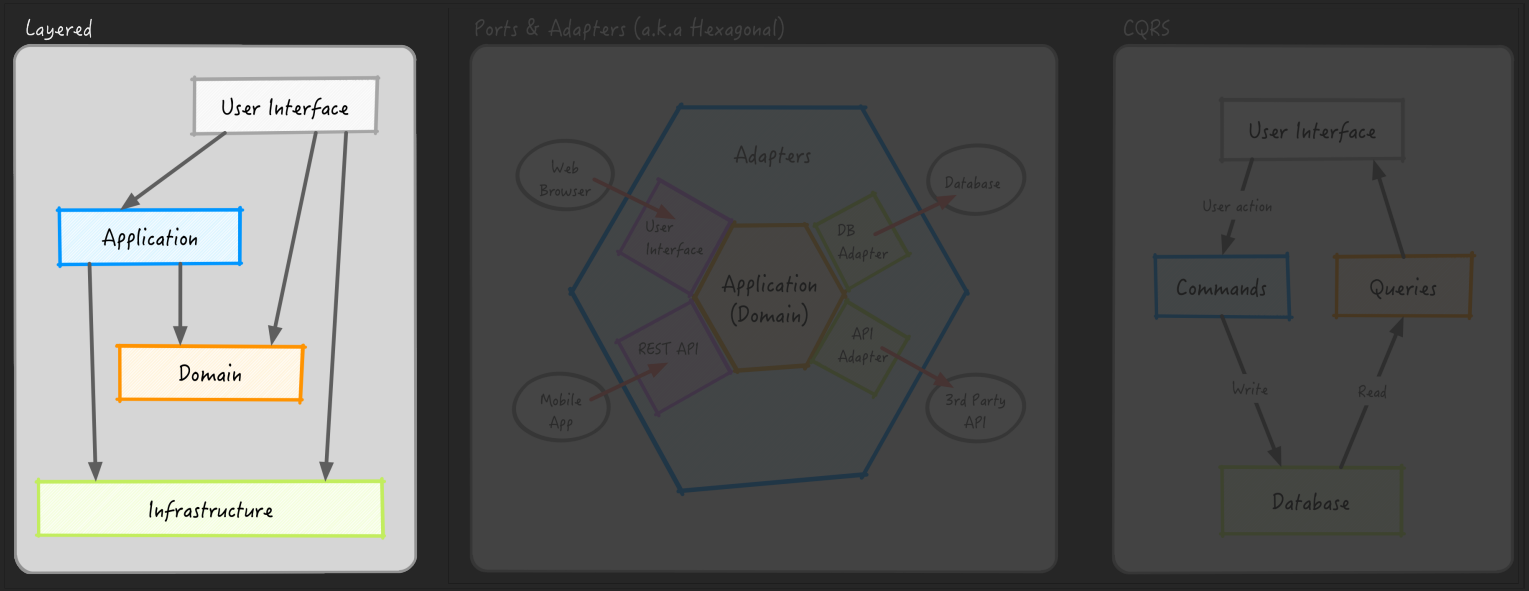
Tactical Design

Architecture

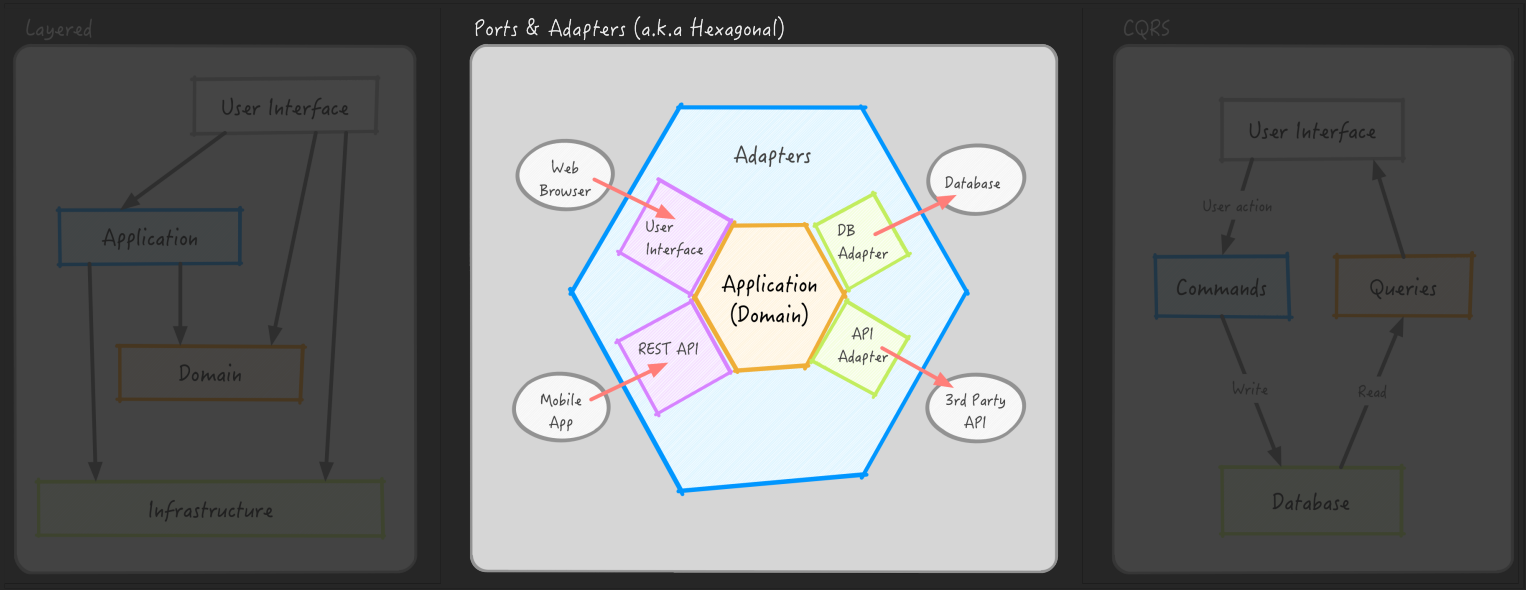
Architecture



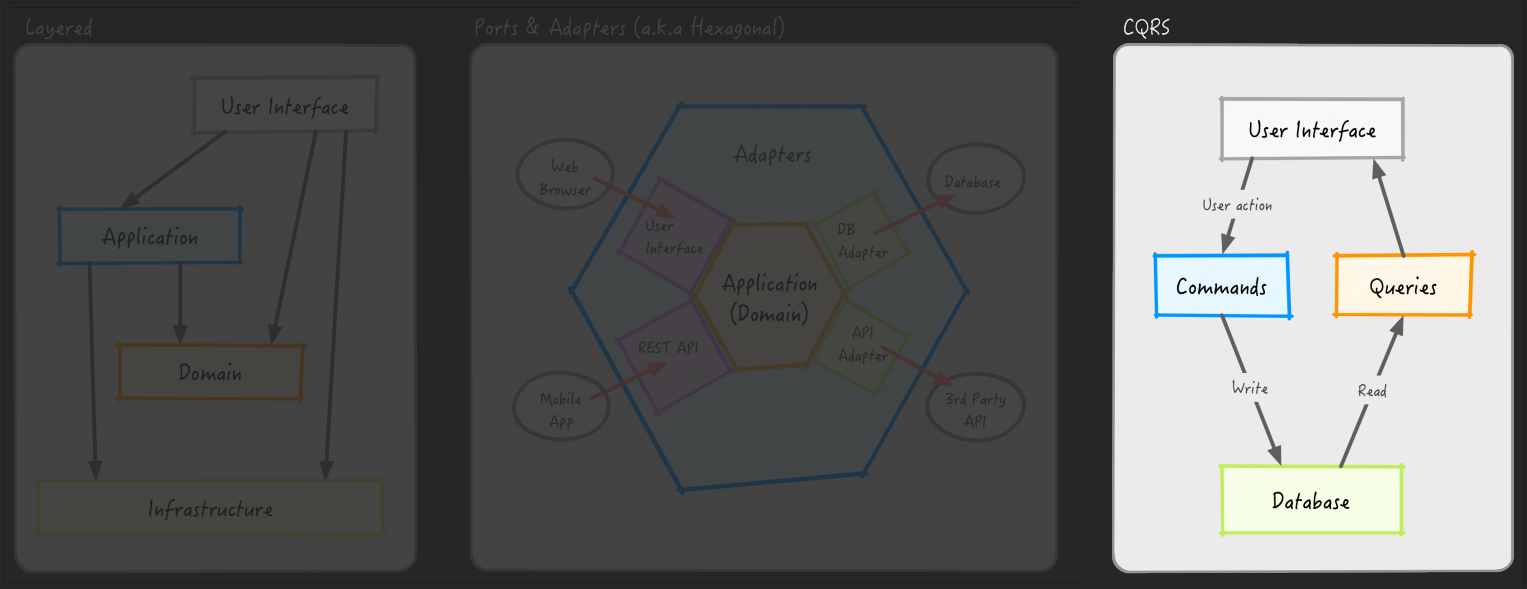
Architecture



Architecture



Architecture



To sum up

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"Domain-Driven Design is about creating shared understanding of the problem space that is reinforced ubiquitously via conversations, code and diagrams."

Nick Tune

Thank you!
Rob Allen | @akrabat | social.akrabat.com/@rob

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