Designing Software Driven by the Domain

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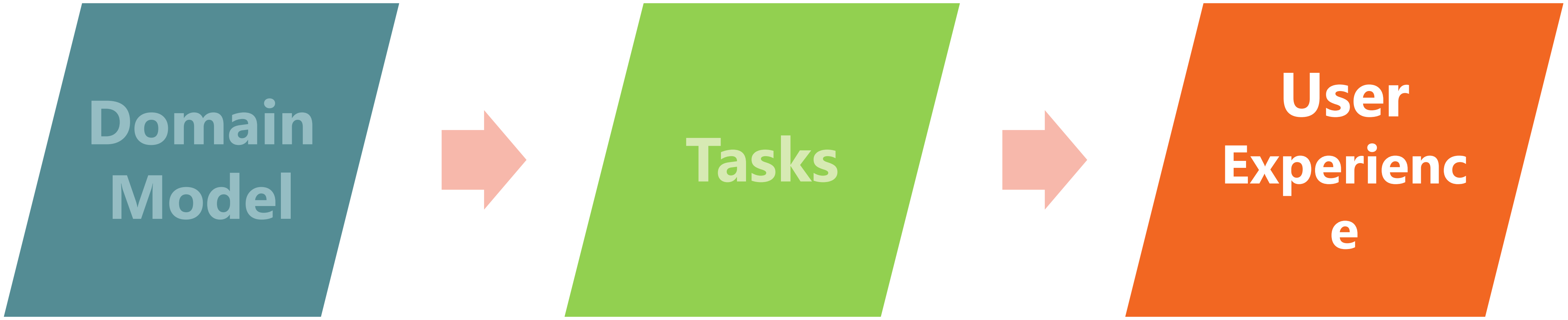
Mirror the Business Domain



Key Points

DDD and Legacy Code

Task-based design

User Experience Architecture Briefs

Legacy Code

Code that works

Code you don't like to have around

Code you can hardly get rid of

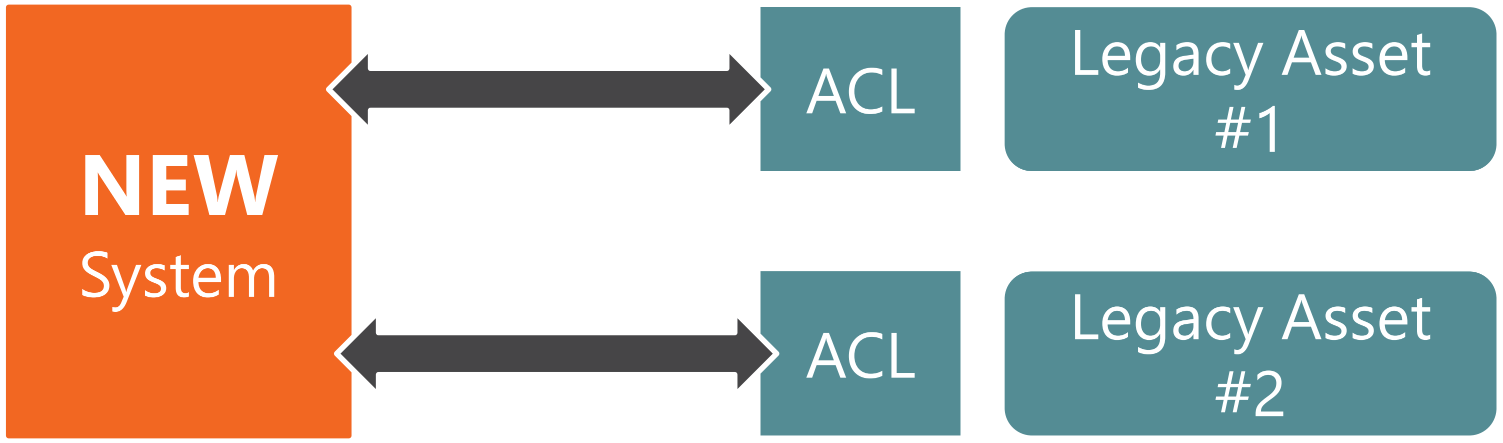
Not necessarily badly and poorly written code!

Common Aspects of Legacy Code

- Has an established and implicit model
- Doesn’t typically have a public programmable API
- Written to have some work done, not to be reused
- Written years ago according to practices now obsolete

Legacy Code as a Service

- Rewrite from scratch with all the abstractions you need
- While rewriting consider, incorporating existing assets as services
- Put legacy assets behind a façade and connect it to the core application



LEGACY CODE

Not all assets are equal

- Some can be reused as services, some not
- Some are just old and obsolete

Before integrating

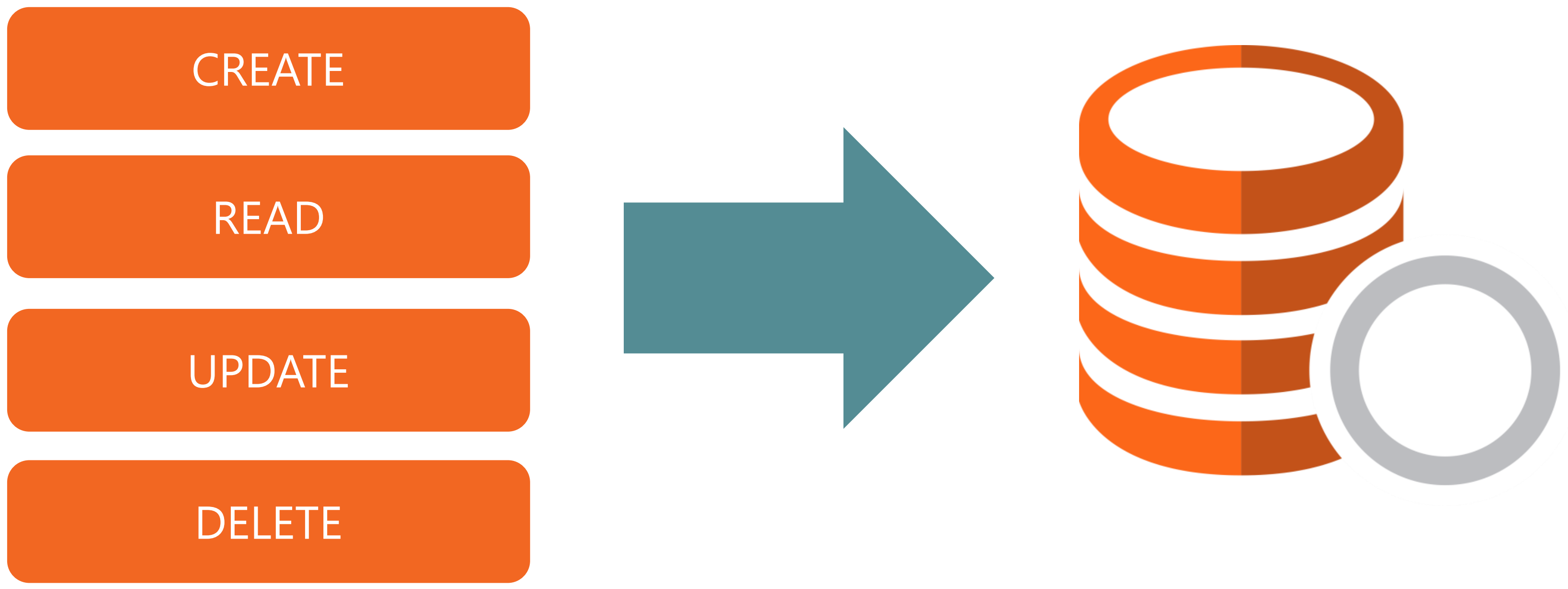
- Evaluate costs of not rewriting from scratch
- Evaluate costs of integration

If it can become a service

- Just let it go
- Focus on other things to do!

to some extent

All systems are CRUD systems.



Database-centric

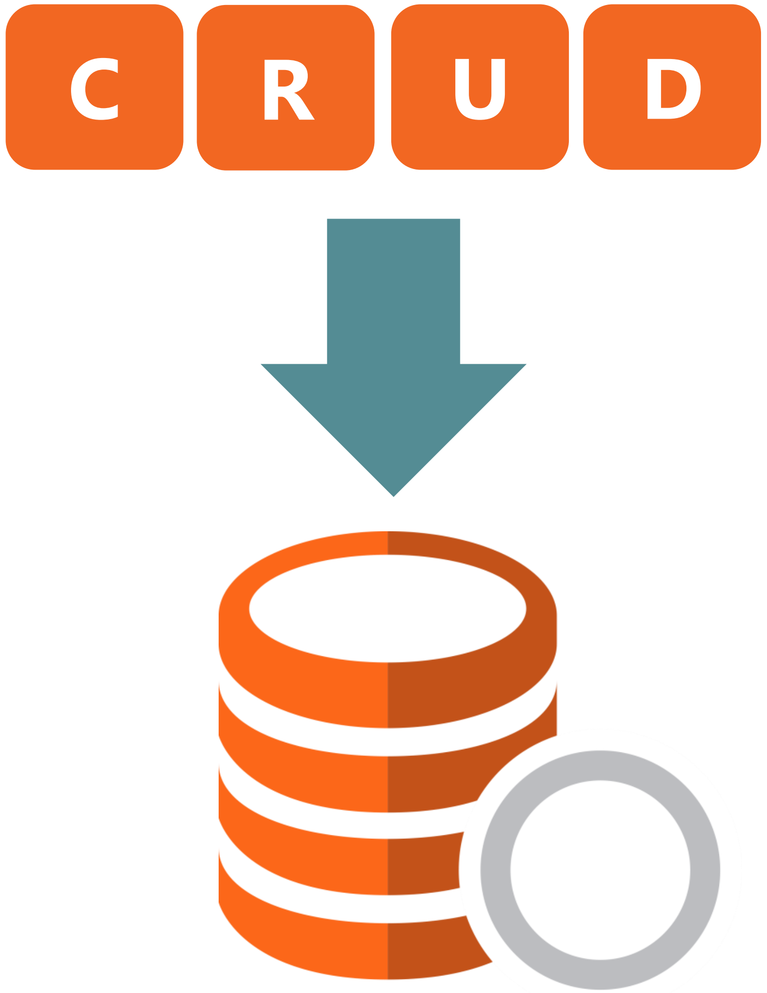
Not tracking actions

Limited features

- Amount of business logic
- Concurrency
- Dependencies

Quick and easy to write

Unrealistic



What’s **CRUD** today?

Database-centric

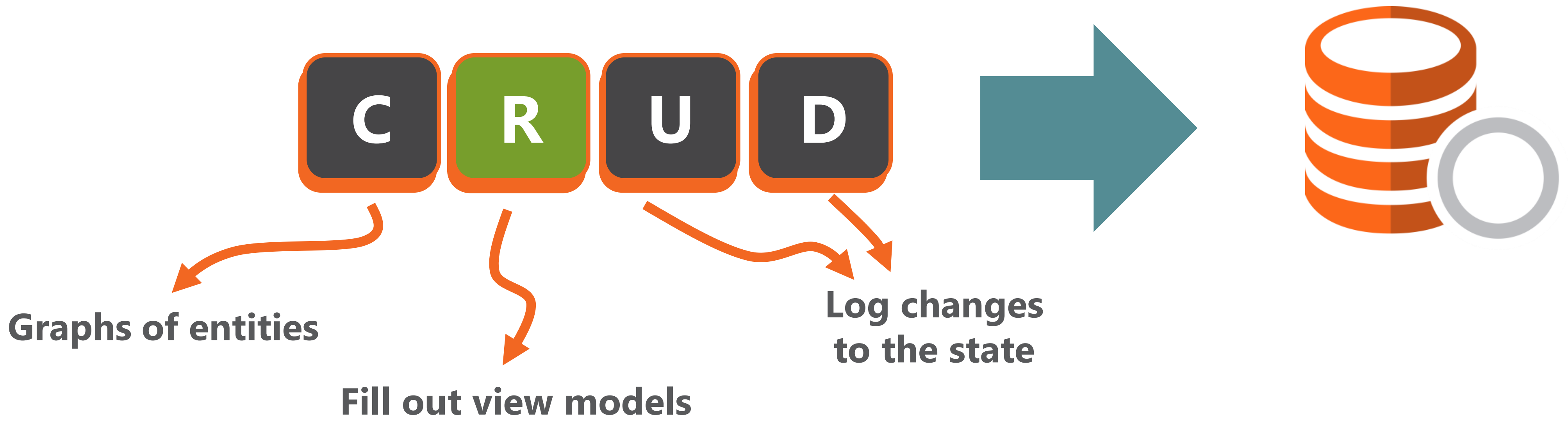
Persistence model is just one model to think about

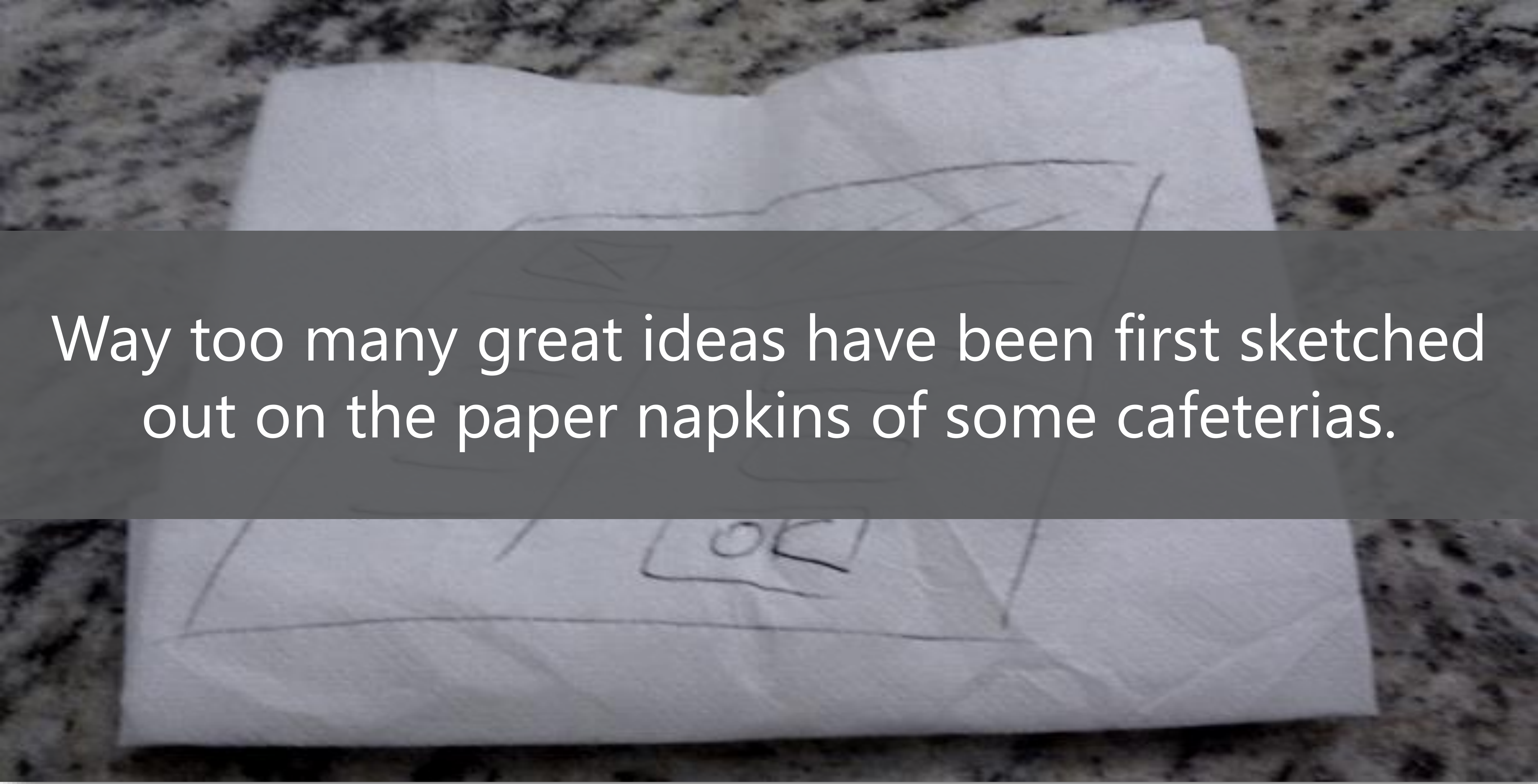
Not tracking actions

Context of change must be tracked. An update can't simply update overriding the current state

Limited features

Plenty of business logic, concurrency issues, interconnected entities





Way too many great ideas have been first sketched out on the paper napkins of some cafeterias.

What You **See** Is What You **Get**

What users perceive of each application is what they **see** and what they **get** while interacting with it.

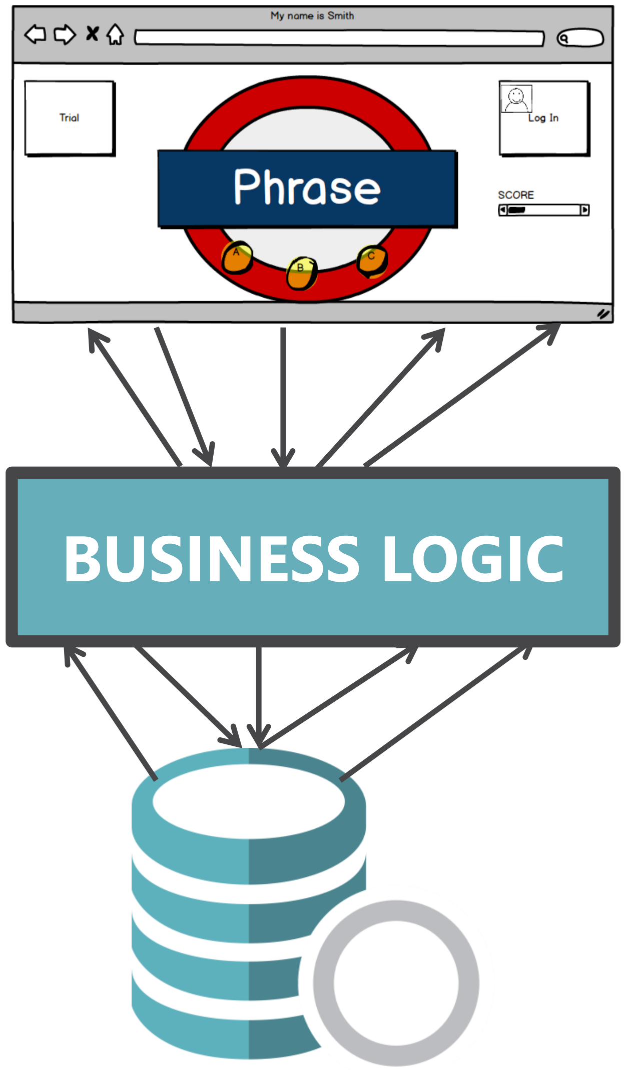
User Interface

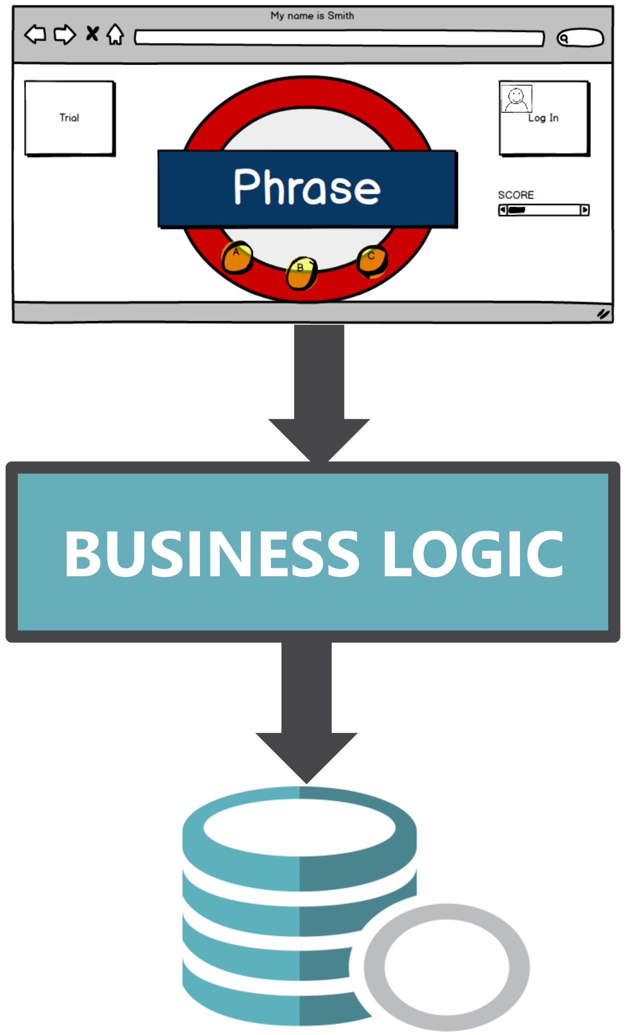
User Experience

User Experience

The **experience** that users go through when they **interact** with the application.

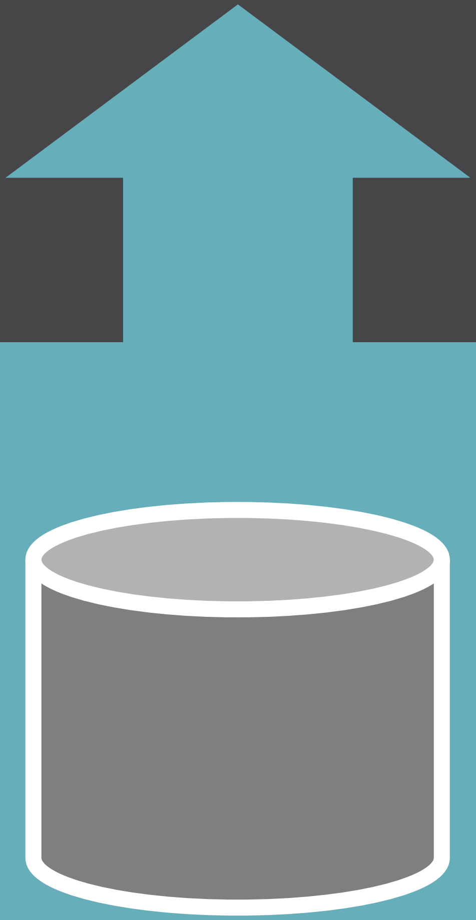
The Fine Art of Architecting Software

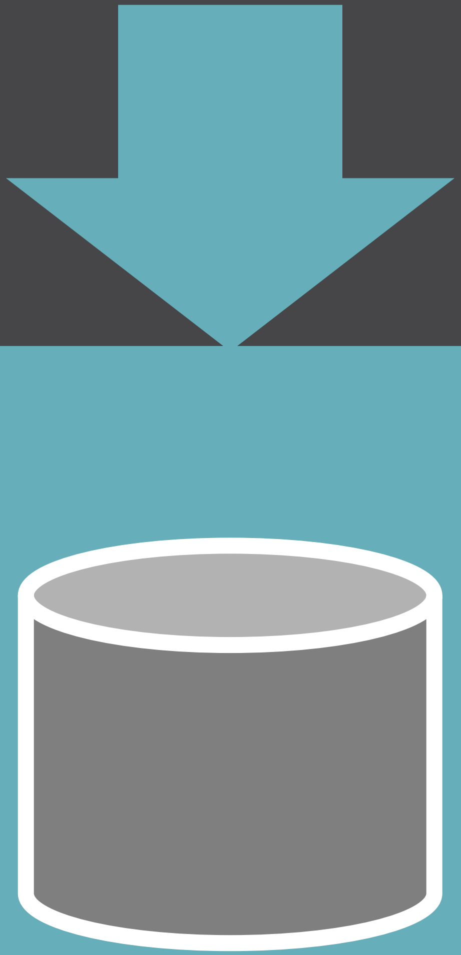




Bottom up

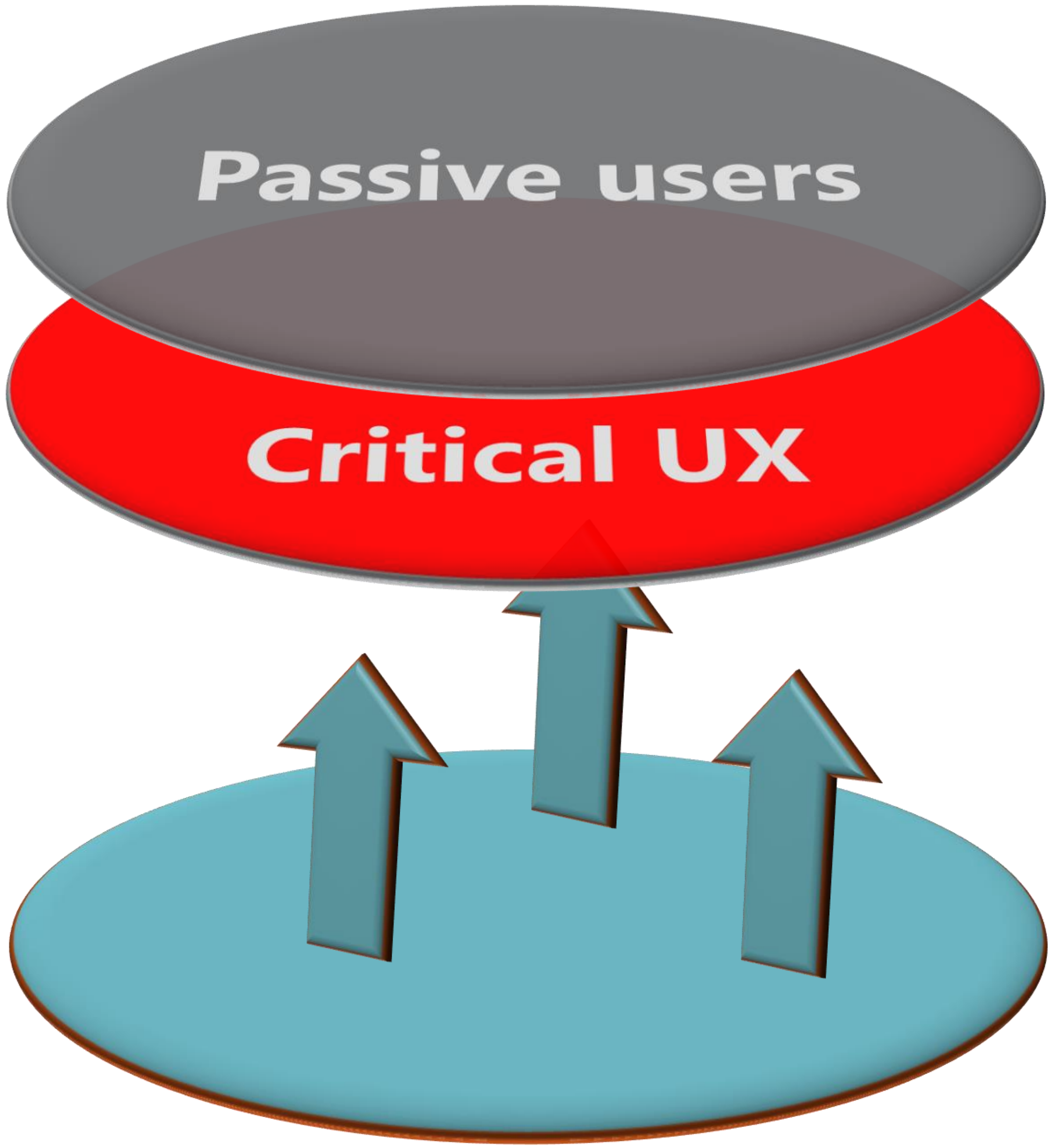
Top-down

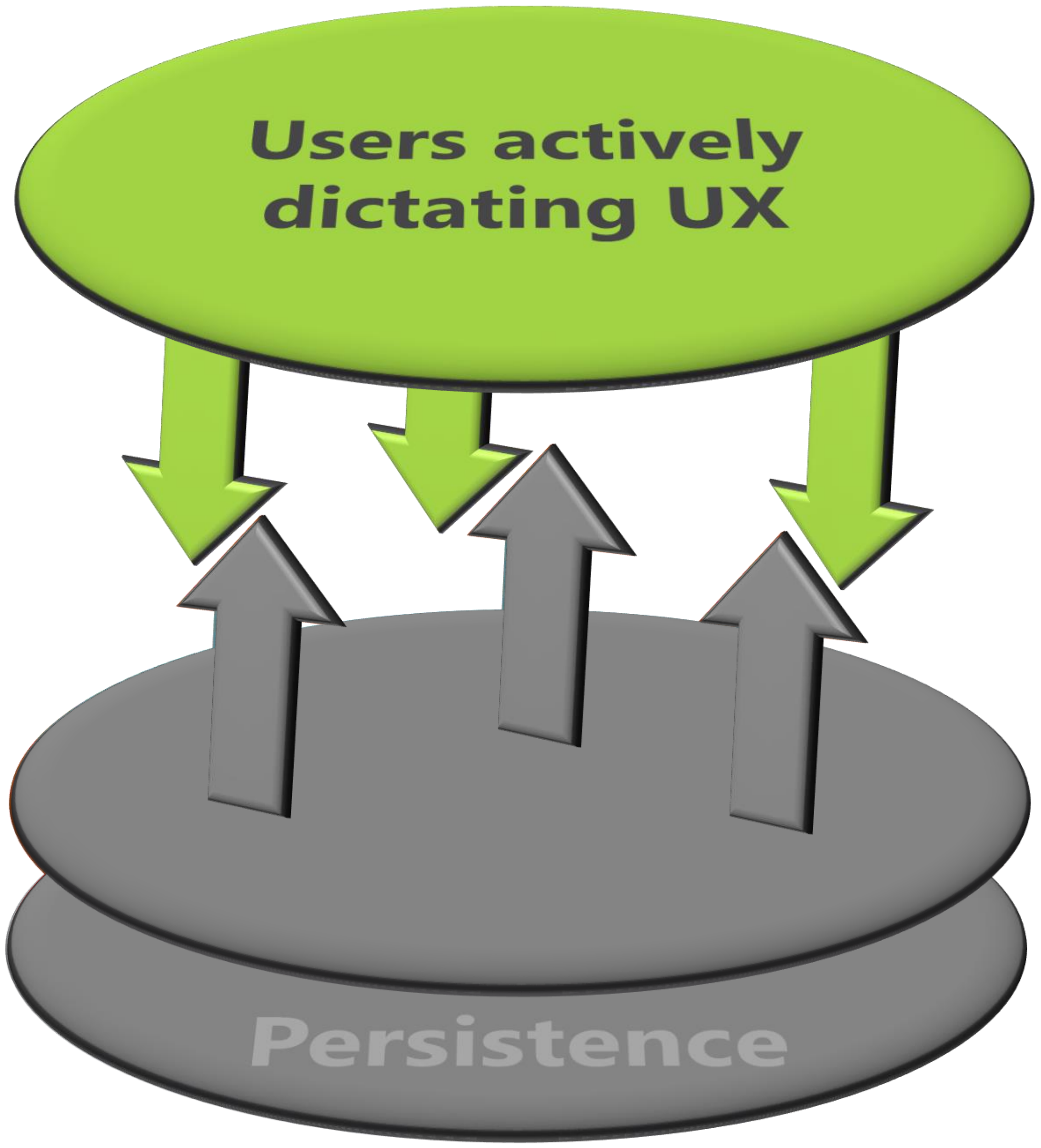




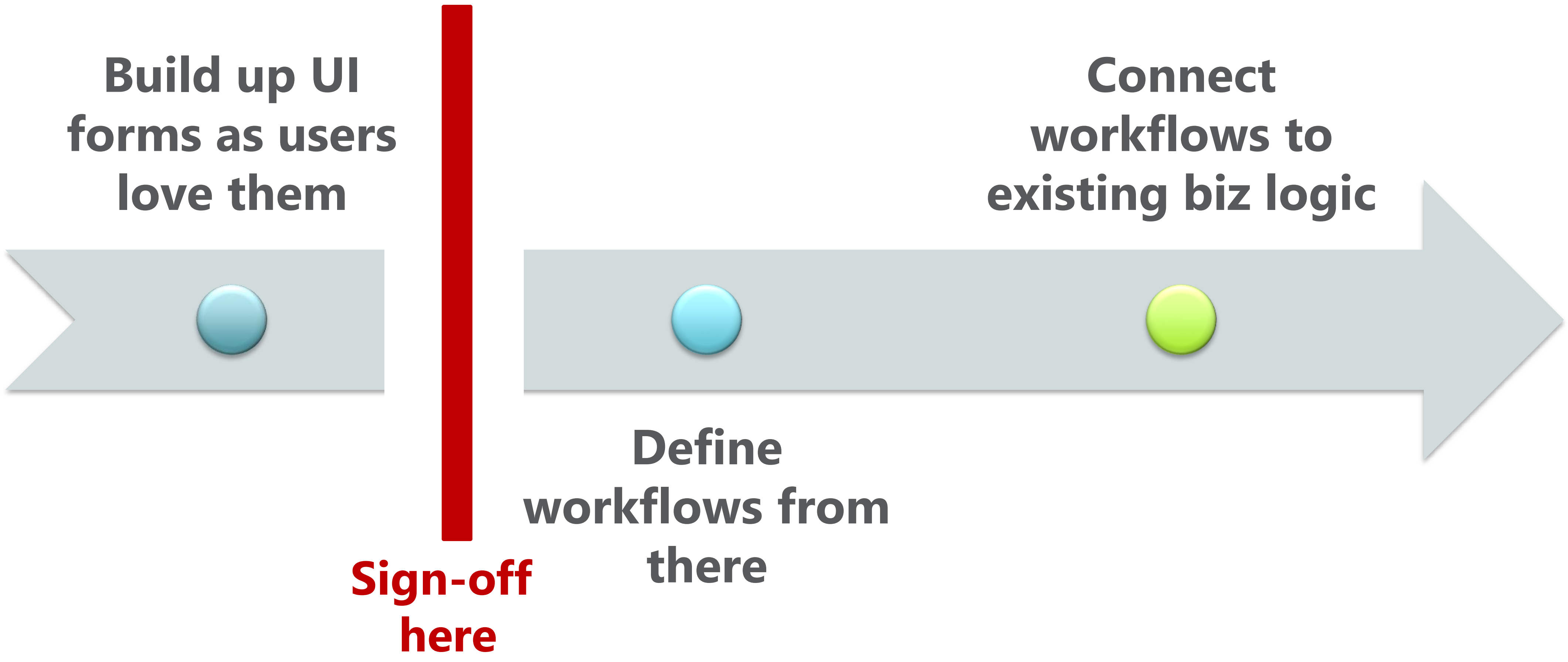
Passive users
accepting any UI enforcements

Bottom-up
Design




Users actively dictating UX
Persistence

UX-driven Design in 3 Steps


Build up UI forms as users love them
Sign-off here
Define workflows from there
Connect workflows to existing biz logic

In Summary

Sign off on what users really want

- Sketches/wireframes
- In some cases, mockups

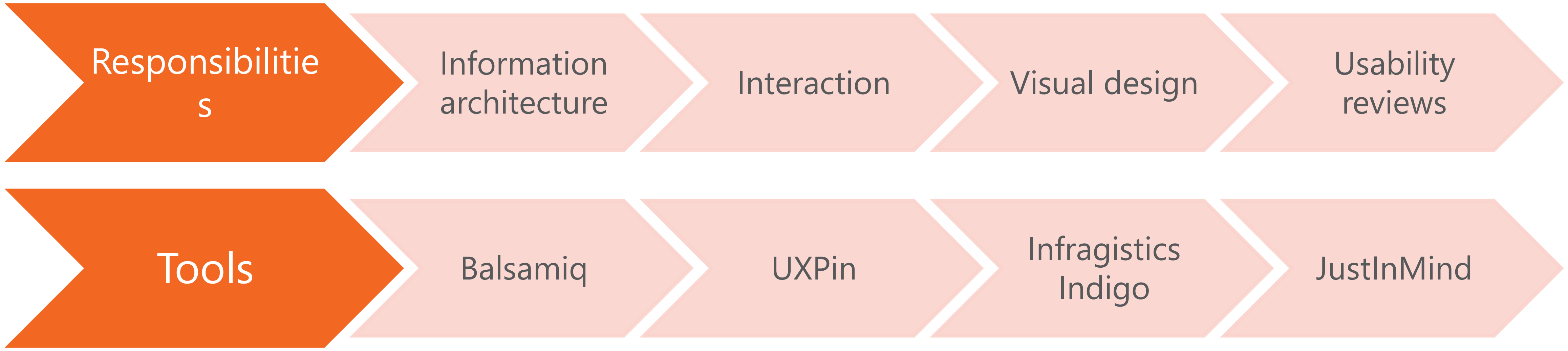
Build prototypes from requirements

- Do not start on billable hours until signed off

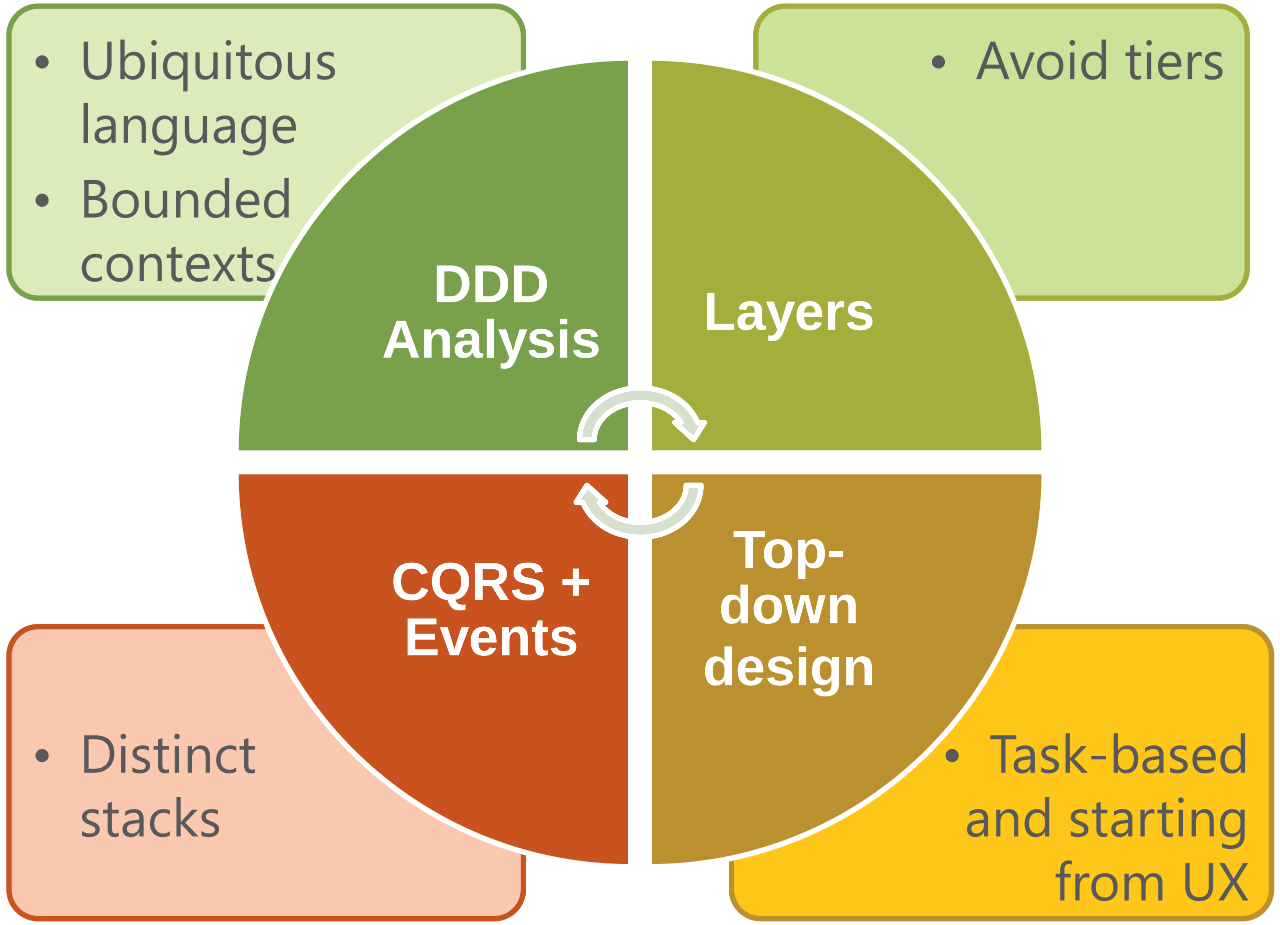
For each screen have a basic flowchart

- Determine what comes in and out and create **view model** classes
- Make application layer endpoints **receive/return** such DTO classes
- Make application layer **orchestrate** tasks on layers down the stack

The **UX** Architect



Pillars of **Modern Software**



- Ubiquitous language
- Bounded contexts

- Avoid tiers

- Distinct stacks

- Task-based and starting from UX