Functional Organization

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Overview

Screaming Architecture

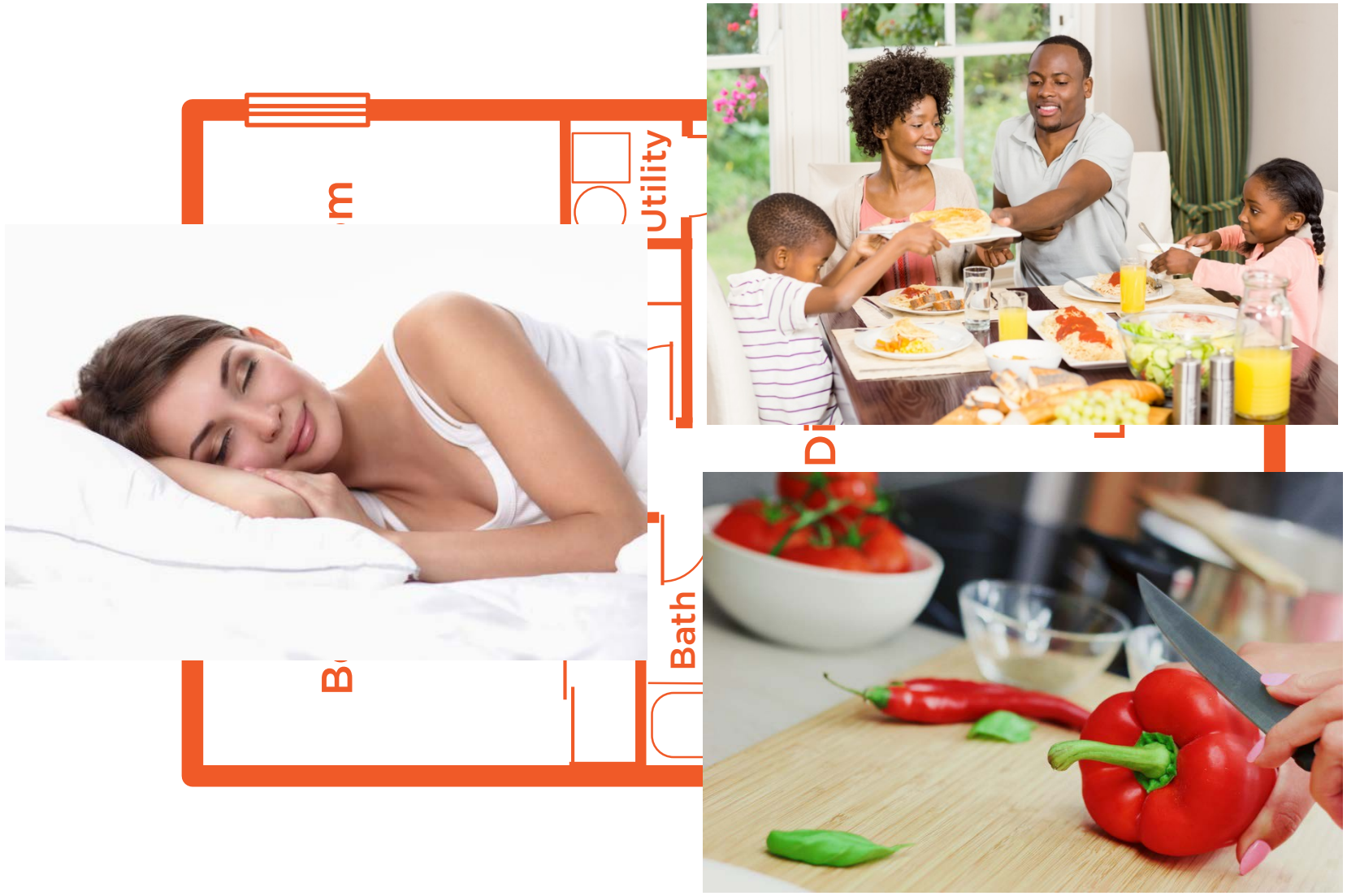
Functional vs. Categorical

Pros and Cons

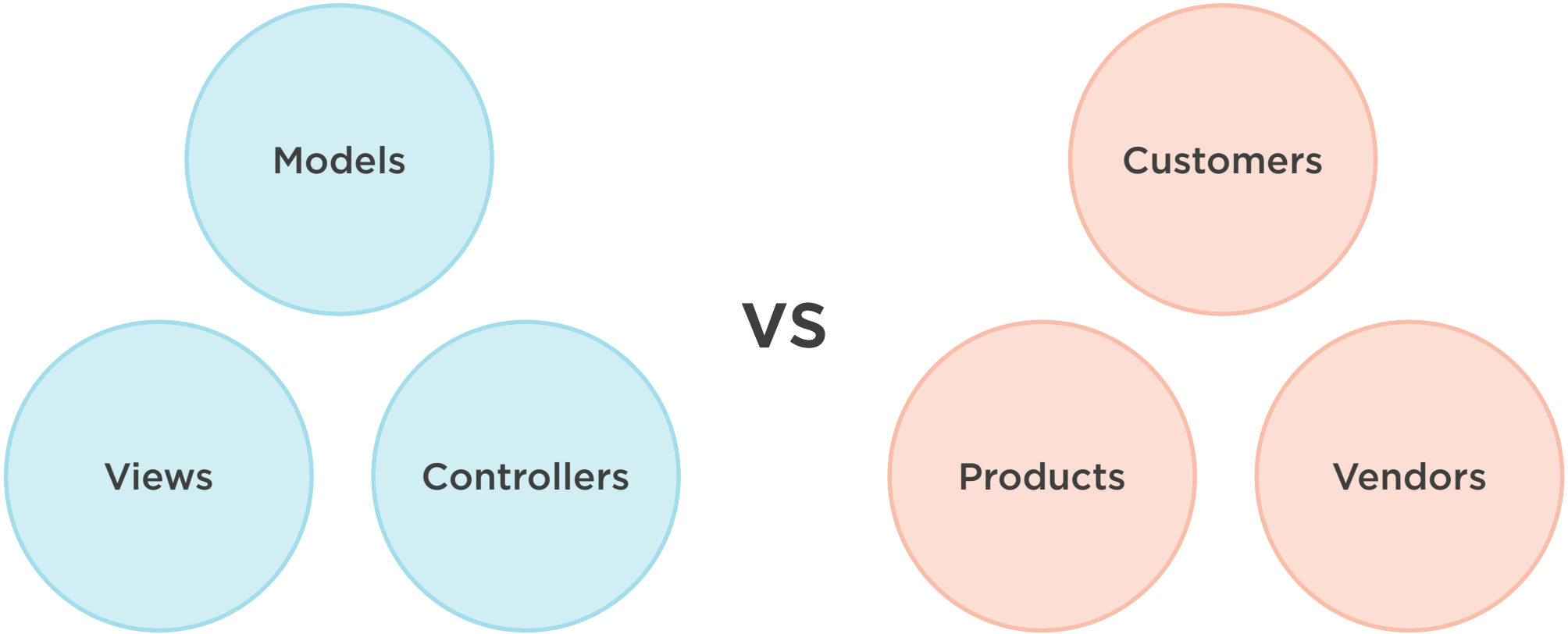
Demo

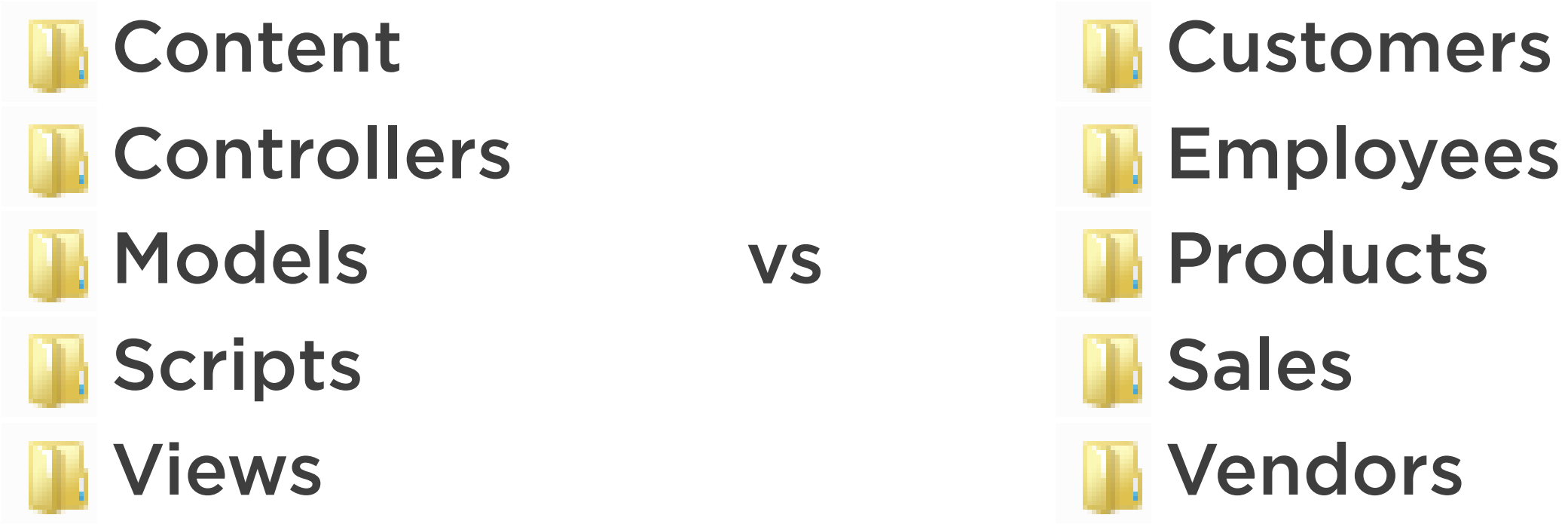
“The architecture should scream
the intent of the system!”

– Uncle Bob


Utility
Bath

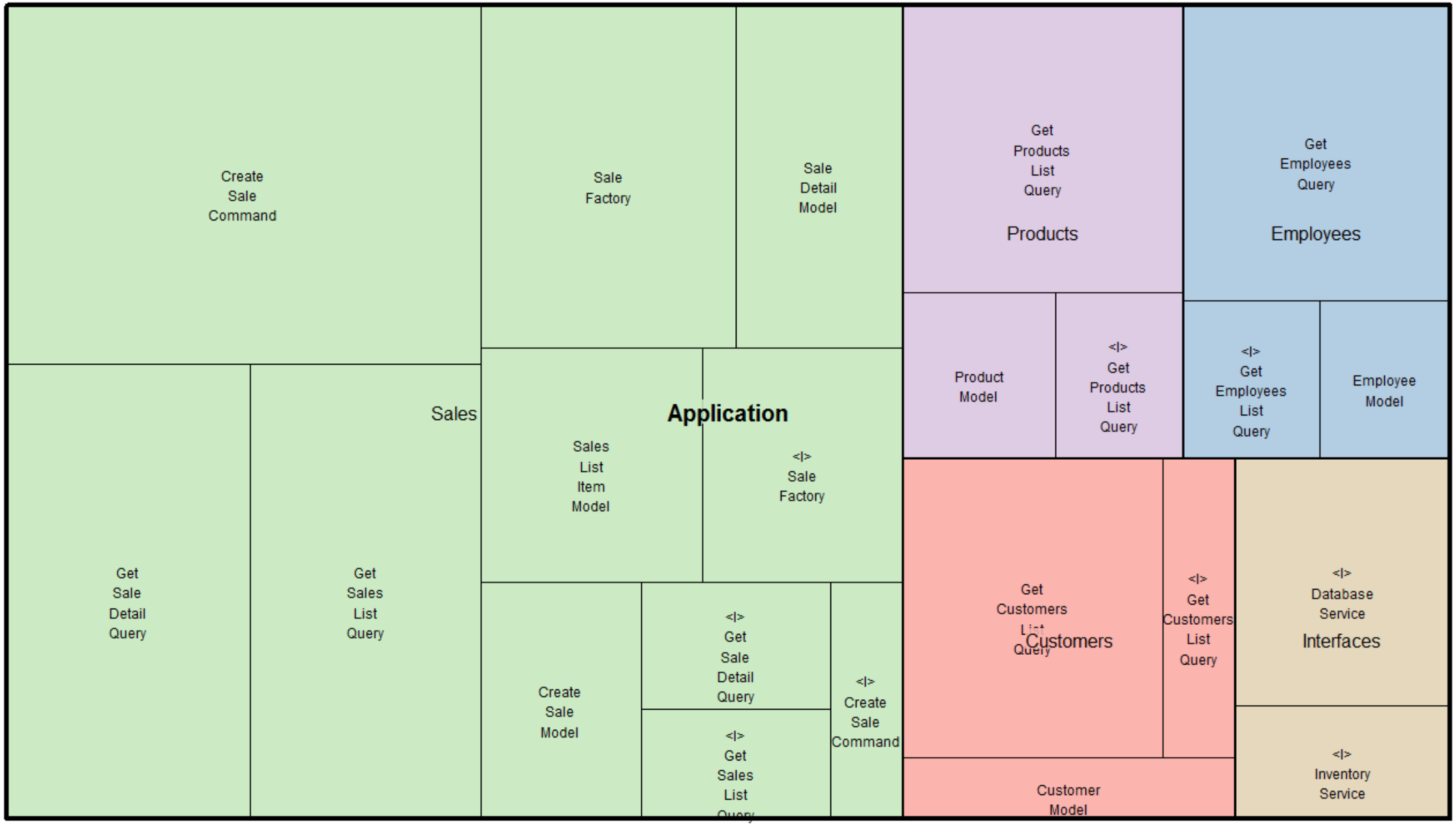
Material	Quantity	Cost
Appliances	5	$5,000
Cabinets	10	$2,500
Doors	15	$750
Fixtures	12	$2,400
Floors	9	$4,000
Walls	20	$10,000
Windows	8	$2,500

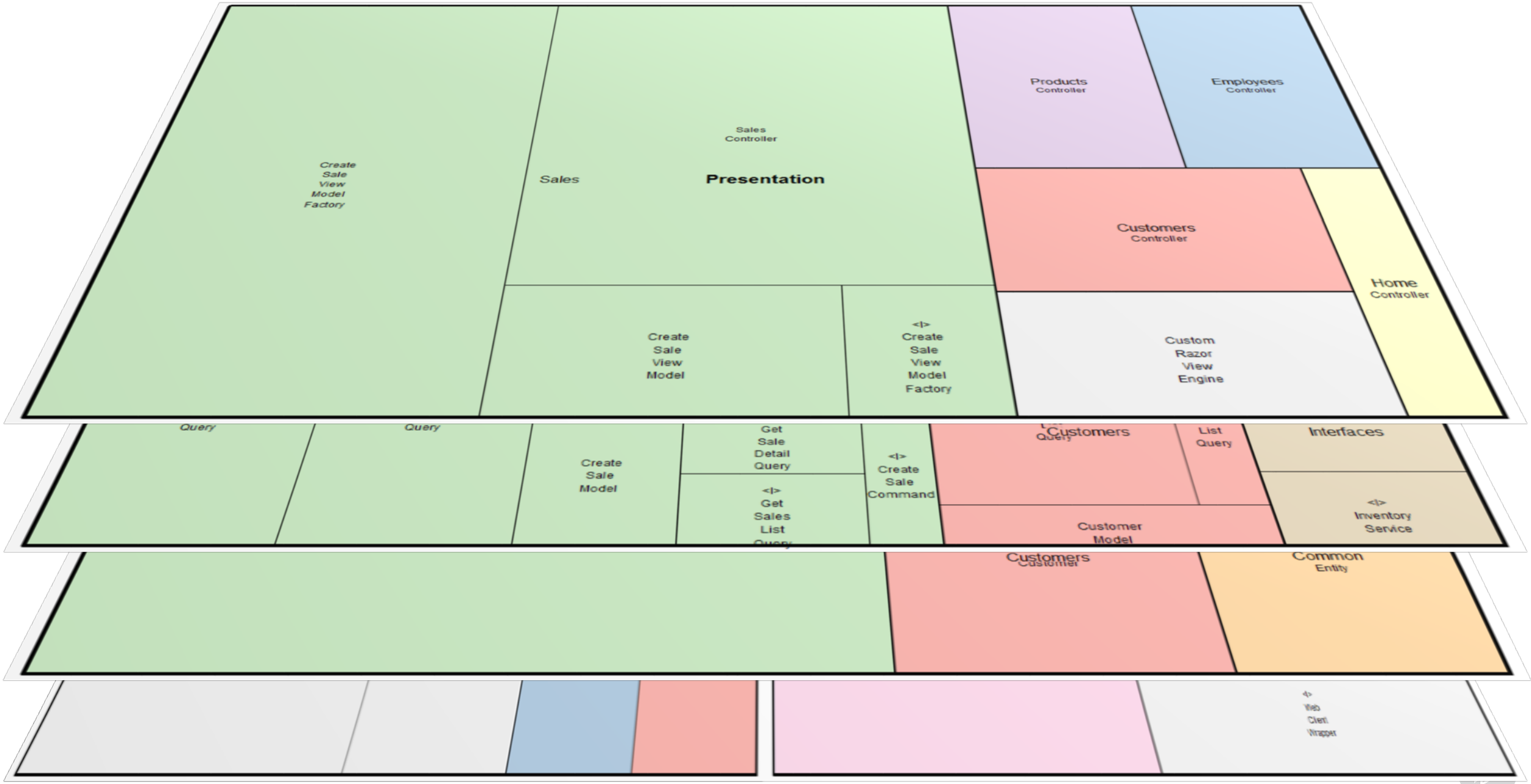

Models
Views
Controllers
VS
Customers
Products
Vendors


Content
Controllers
Models
Scripts
Views
vs
Customers
Employees
Products
Sales
Vendors

So what?

VS


Create Sale Command
Sale Factory
Sale Detail Model
Get Products List Query
Products
Get Employees Query
Employees
Sales
Get Sale Detail Query
Get Sales List Query
Application
Sales List Item Model
<|> Sale Factory
Product Model
<|> Get Products List Query
<|> Get Employees List Query
Employee Model
Get Customers List Query
Customers
<|> Get Customers List Query
<|> Database Service
Interfaces
Create Sale Model
<|> Get Sale Detail Query
<|> Get Sales List Query
<|> Create Sale Command
Customer Model
<|> Inventory Service


Create Sale View Model Factory
Sales
Sales Controller
Presentation
Products Controller
Employees Controller
Customers Controller
Home Controller
Create Sale View Model
<|>
Create Sale View Model Factory
Custom Razor View Engine
Query
Query
Create Sale Model
Get Sale Detail Query
<|>
Get Sales List Query
<|>
Create Sale Command
Customers
List Query
Interfaces
Customer Model
<|>
Inventory Service
Customers
Common
Entity
<|>
Web Client Wrapper

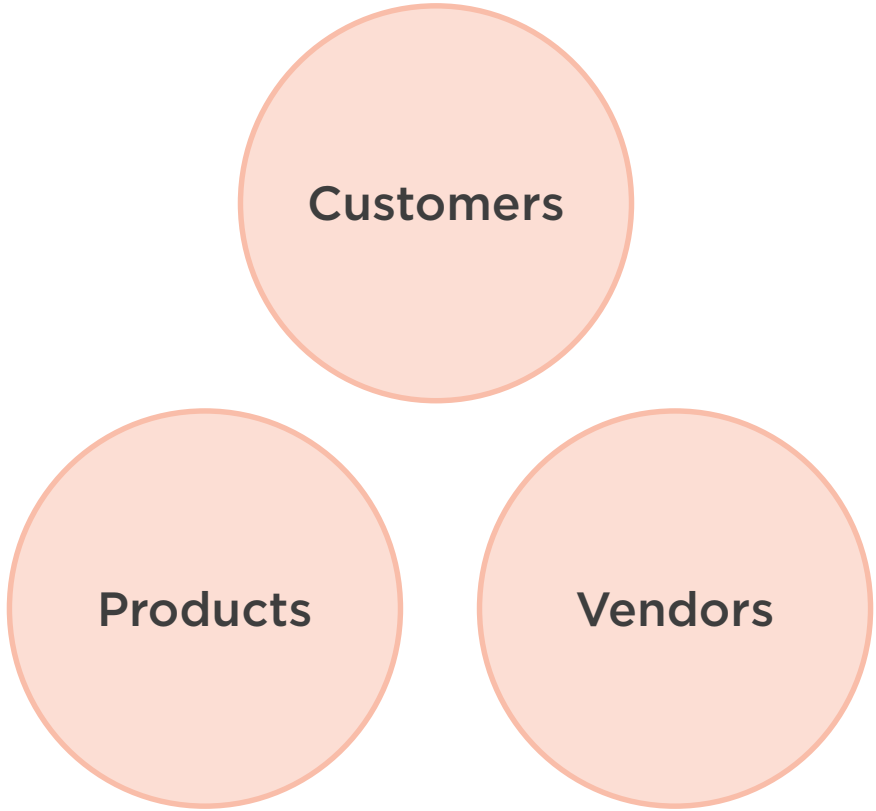
Why Use Functional Organization?

Pros

Spatial locality

Easy to navigate

Avoid vendor lock-in



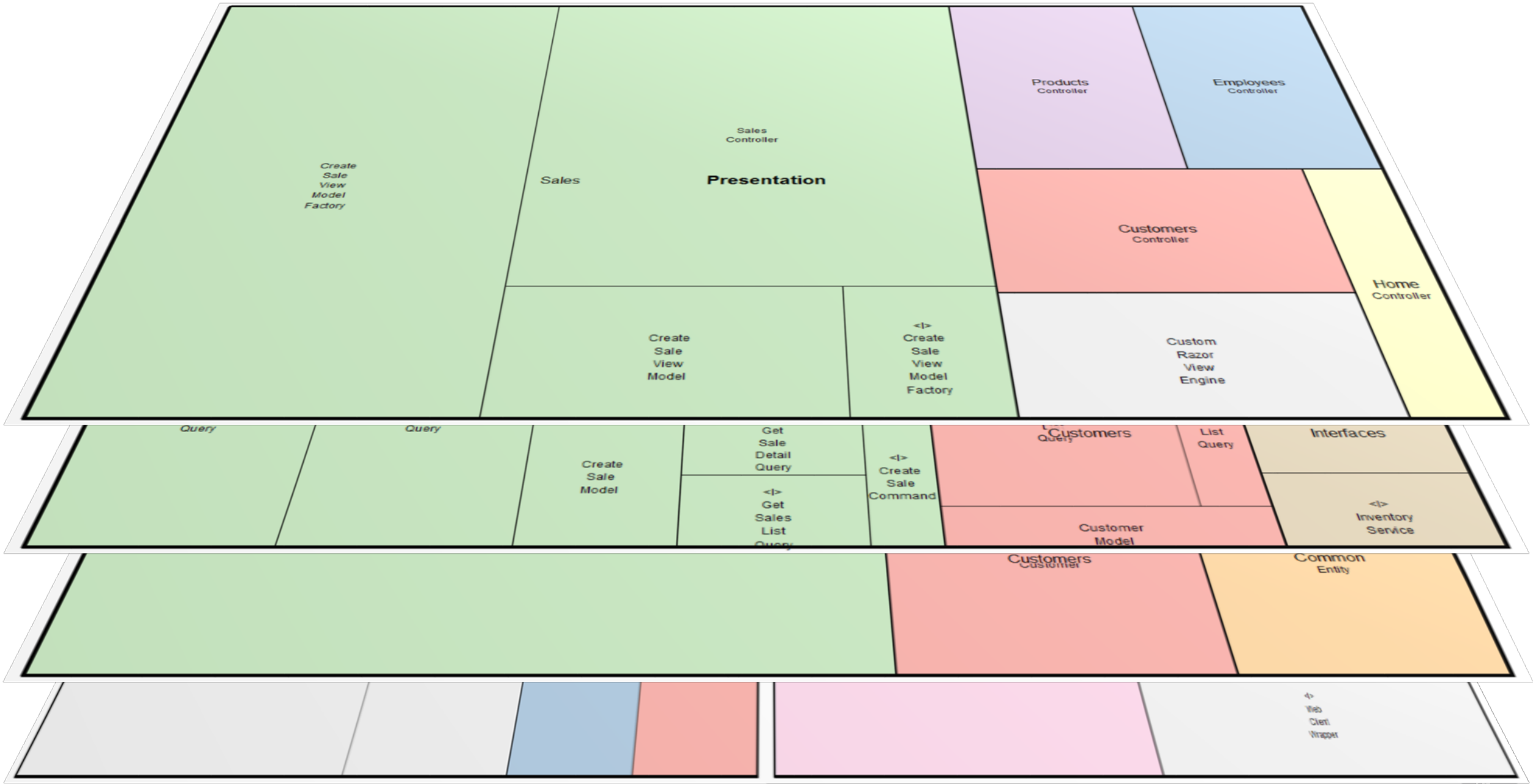
Why Use Functional Organization?

Pros

- Spatial locality
- Easy to navigate
- Avoid vendor lock-in

Cons

- Lose framework conventions
- Lose automatic scaffolding
- Categorical is easier at first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<|>
Get Sales List Query
<|>
Create Sale Command
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<|>
Inventory Service
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Entity
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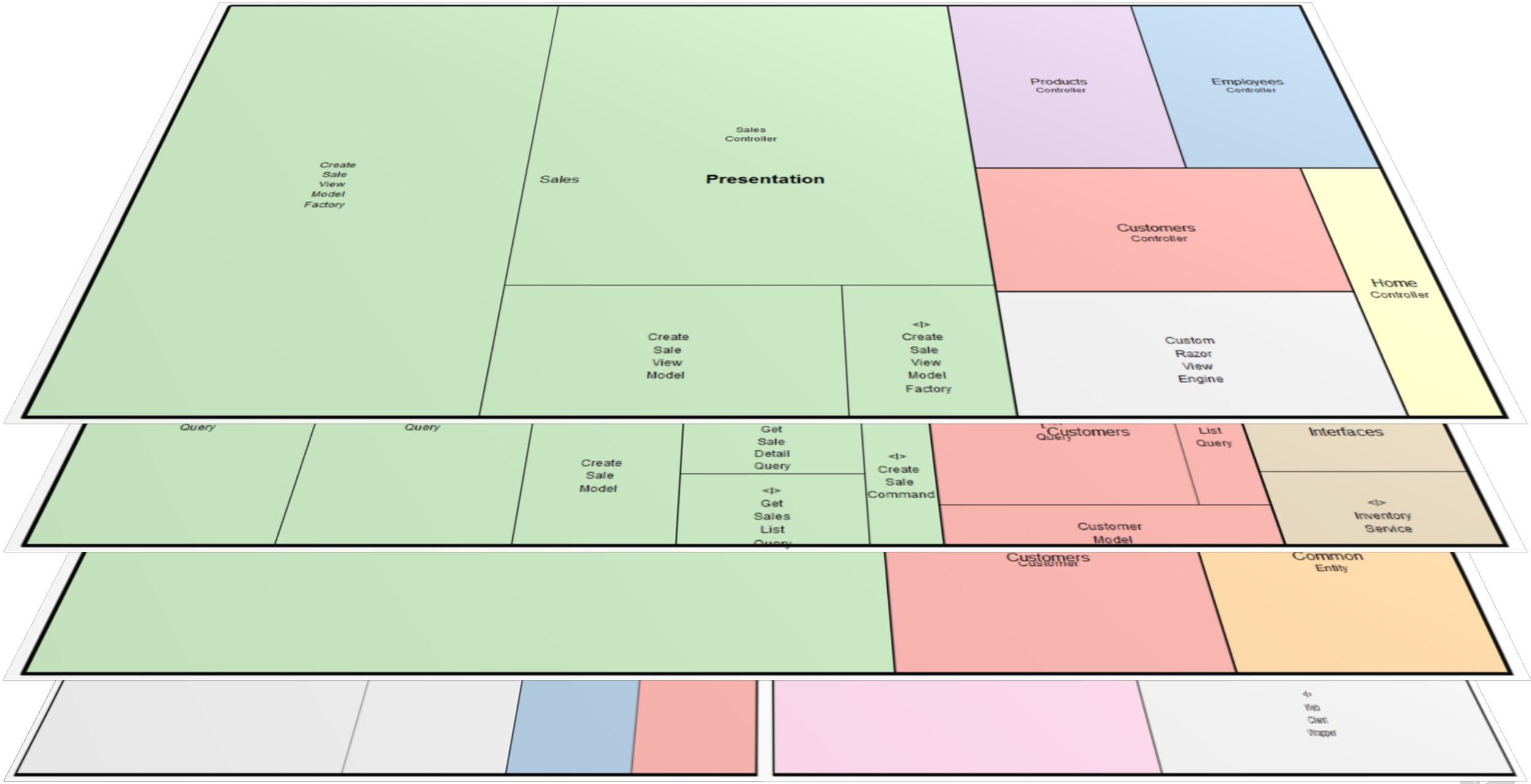
Web Client Wrapper

Mock
Mocks
Set
Extensions
Common
Date
Service
Dates
<I>
Date
Service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Web Client Wrapper

Show Presentation Project

Show Application Project

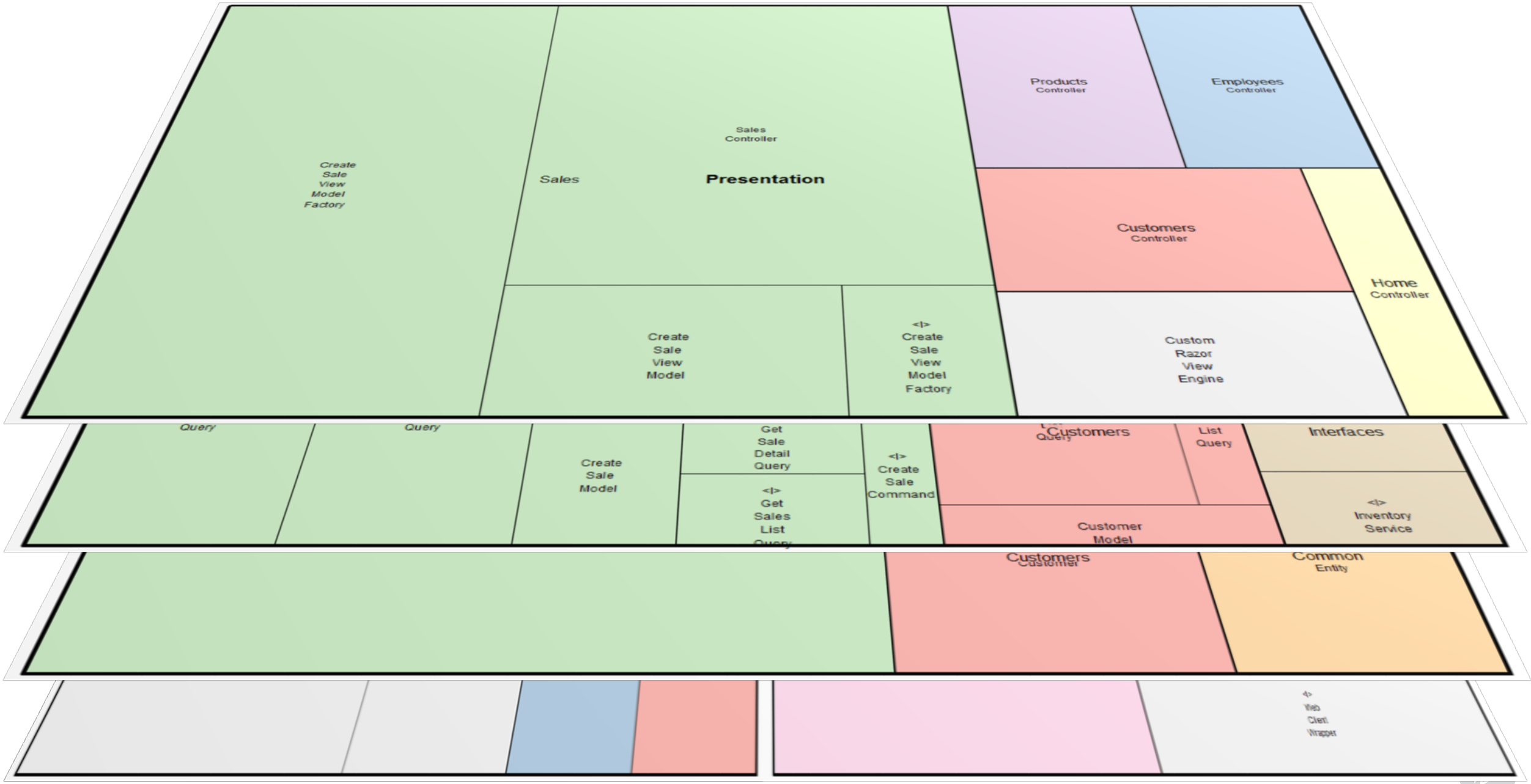
Show Domain Project

Show Persistence Project

Show Infrastructure Project

Show Cross-Cutting Concerns

Specifications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Summary

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