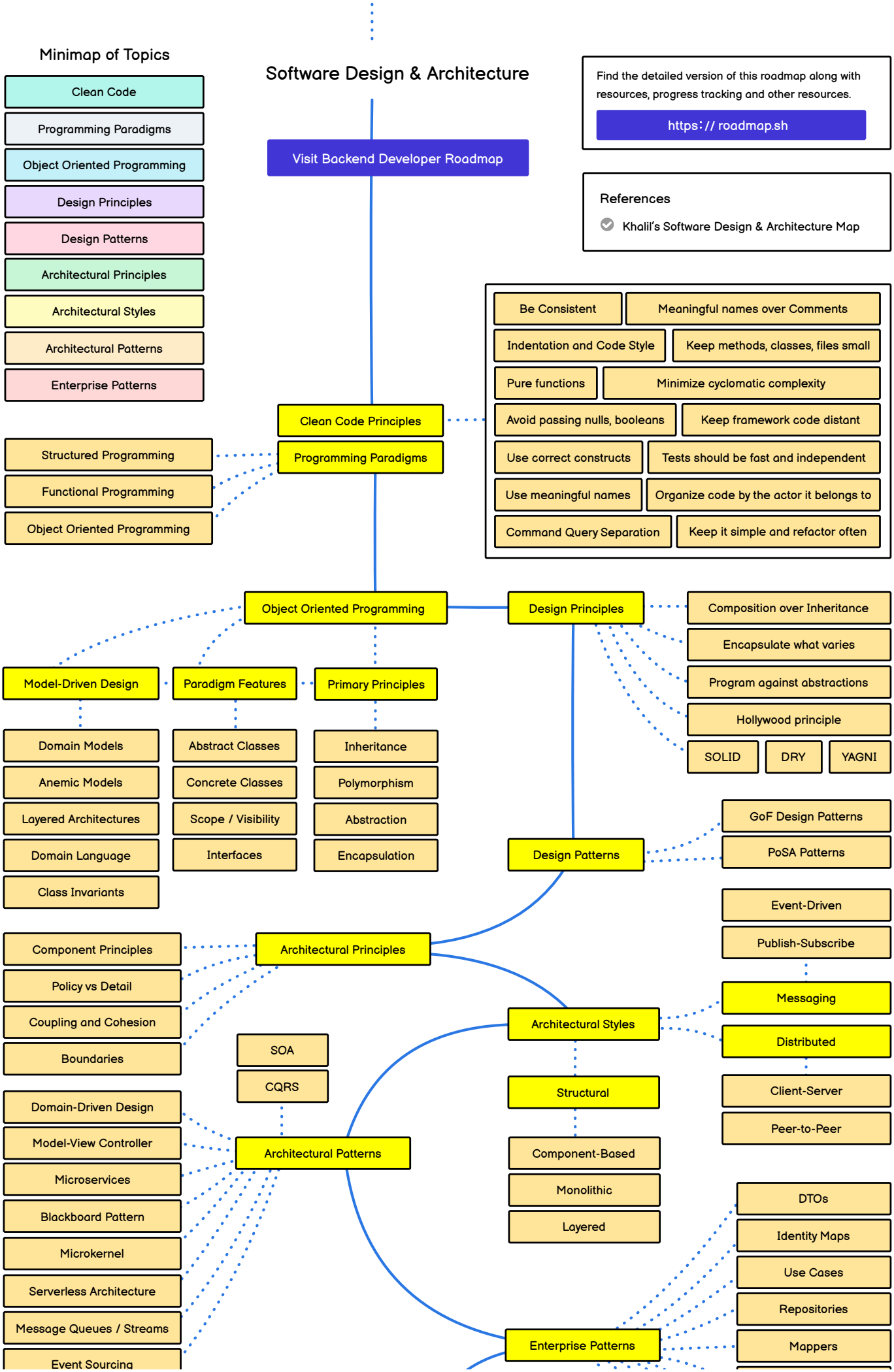
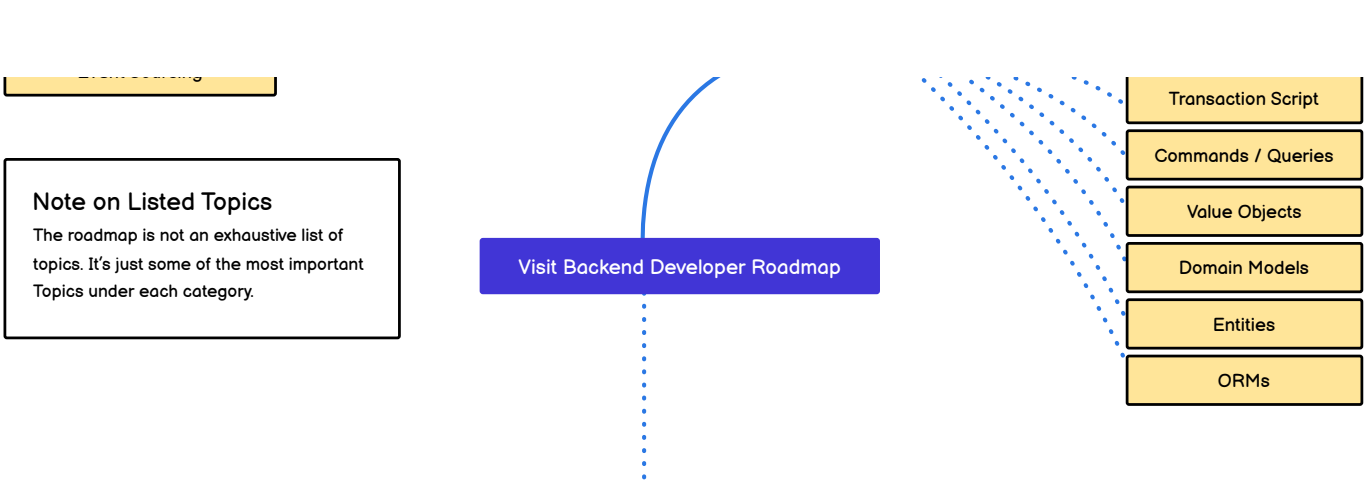

Minimap of Topics
Clean Code
Programming Paradigms
Object Oriented Programming
Design Principles
Design Patterns
Architectural Principles
Architectural Styles
Architectural Patterns
Enterprise Patterns
Software Design & Architecture
Visit Backend Developer Roadmap
Find the detailed version of this roadmap along with resources, progress tracking and other resources.
https:// roadmap.sh
References
Khalil's Software Design & Architecture Map
Clean Code Principles
Be Consistent
Meaningful names over Comments
Indentation and Code Style
Keep methods, classes, files small
Pure functions
Minimize cyclomatic complexity
Avoid passing nulls, booleans
Keep framework code distant
Use correct constructs
Tests should be fast and independent
Use meaningful names
Organize code by the actor it belongs to
Command Query Separation
Keep it simple and refactor often
Programming Paradigms
Structured Programming
Functional Programming
Object Oriented Programming
Object Oriented Programming
Model-Driven Design
Paradigm Features
Primary Principles
Domain Models
Anemic Models
Layered Architectures
Domain Language
Class Invariants
Abstract Classes
Concrete Classes
Scope / Visibility
Interfaces
Inheritance
Polymorphism
Abstraction
Encapsulation
Design Principles
Composition over Inheritance
Encapsulate what varies
Program against abstractions
Hollywood principle
SOLID
DRY
YAGNI
Design Patterns
GoF Design Patterns
PoSA Patterns
Architectural Principles
Component Principles
Policy vs Detail
Coupling and Cohesion
Boundaries
Architectural Styles
Event-Driven
Publish-Subscribe
Messaging
Distributed
Client-Server
Peer-to-Peer
Structural
Component-Based
Monolithic
Layered
SOA
CQRS
Architectural Patterns
Domain-Driven Design
Model-View Controller
Microservices
Blackboard Pattern
Microkernel
Serverless Architecture
Message Queues / Streams
Event Sourcing
Enterprise Patterns
DTOs
Identity Maps
Use Cases
Repositories
Mappers



Note on Listed Topics

The roadmap is not an exhaustive list of topics. It's just some of the most important Topics under each category.

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