

Module 02:

"Introducing Clean Architecture"



Agenda

- ▶ Introduction
- ▶ **What is Clean Architecture?**
- ▶ Inside Clean Architecture
- ▶ Summary

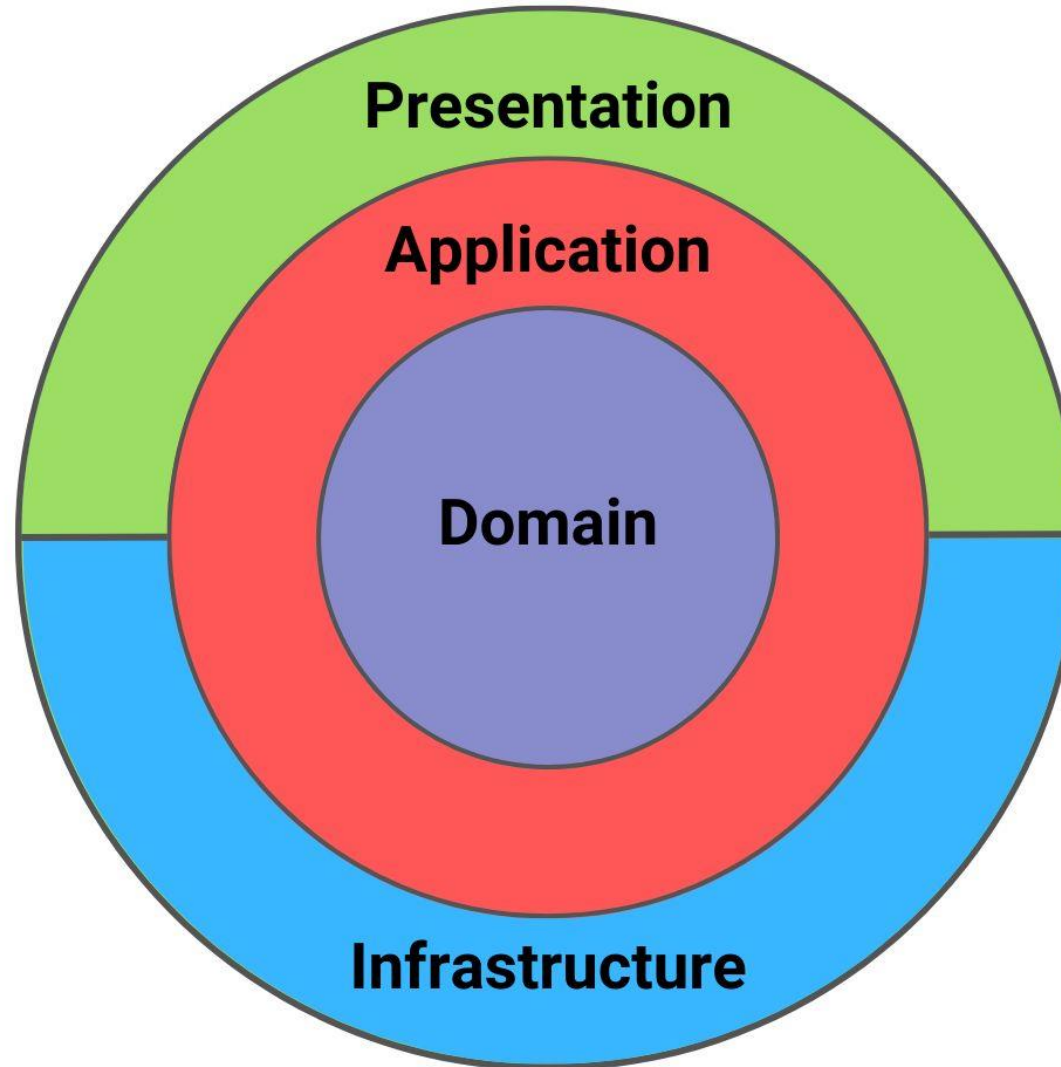


What is Clean Architecture?

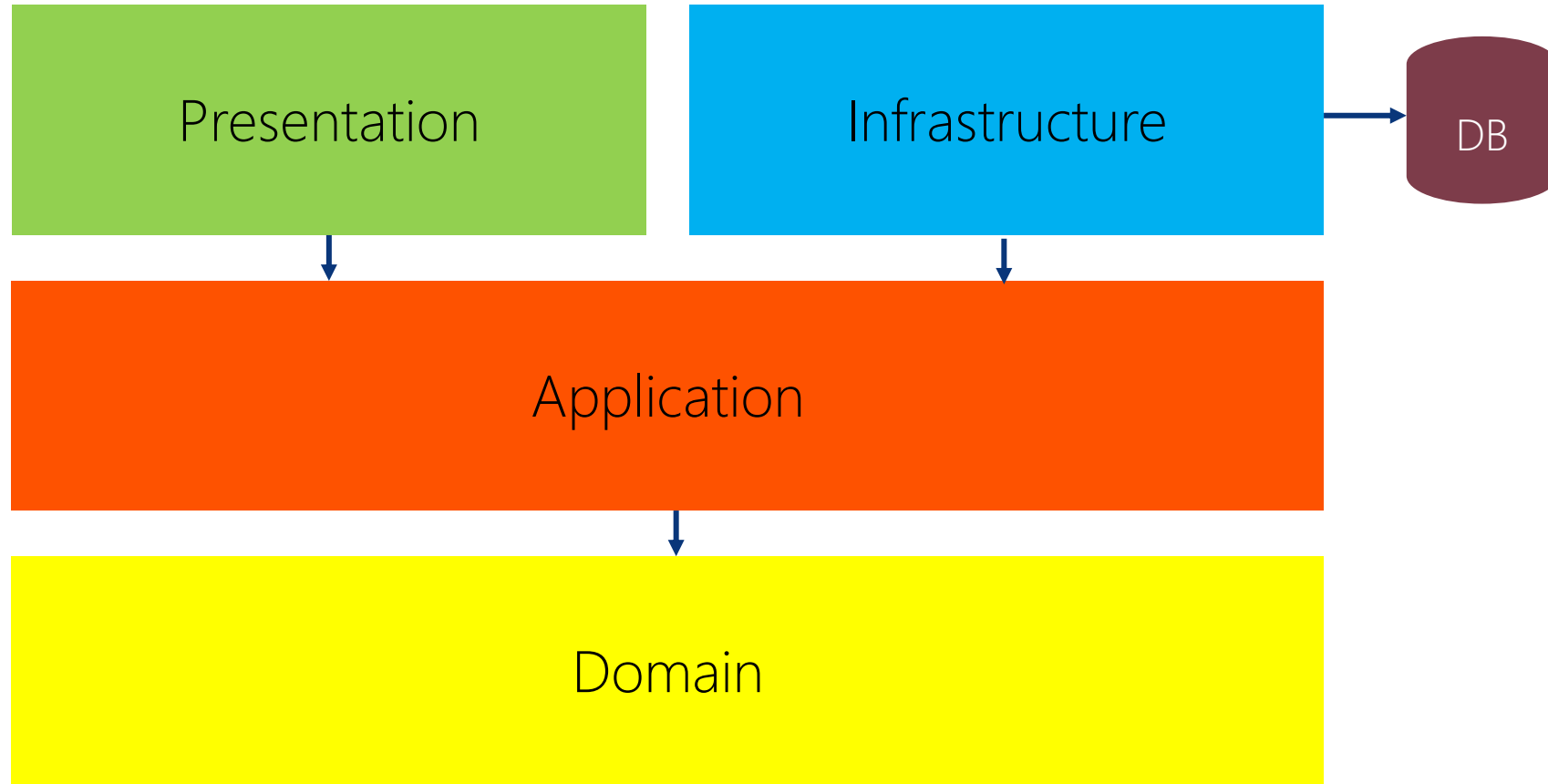
- ▶ Domain-centric architecture with specific fixed set of layers / assemblies
- ▶ References between assemblies always point inwards!
- ▶ Not mandatory, but supported by many open-sources tools
 - MediatR
 - FluentValidation
 - ErrorOr
 - ...



Usually Presented as...



Clean Architecture



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Clean Architecture Mantras

- "Inner layers contain business logic"
- "Outer layers contain infrastructure and external interactions"



Presentation Layer

- ▶ Handling interactions with outside world
 - Users
 - Other systems
- ▶ Presenting and translating data
- ▶ Set up startup and configuration
- ▶ Controlling the Application Layer



Application Layer

- ▶ Orchestrate the application's use cases
- ▶ Retrieve and manipulate Domain objects



Infrastructure Layer

- ▶ Handling data persistence
 - Database
 - File system
- ▶ Interacting with other services and external frameworks
 - Message queues
 - HTTP clients
- ▶ Interacting with system dependencies
 - System clock
- ▶ Retrieve and manipulate Domain objects

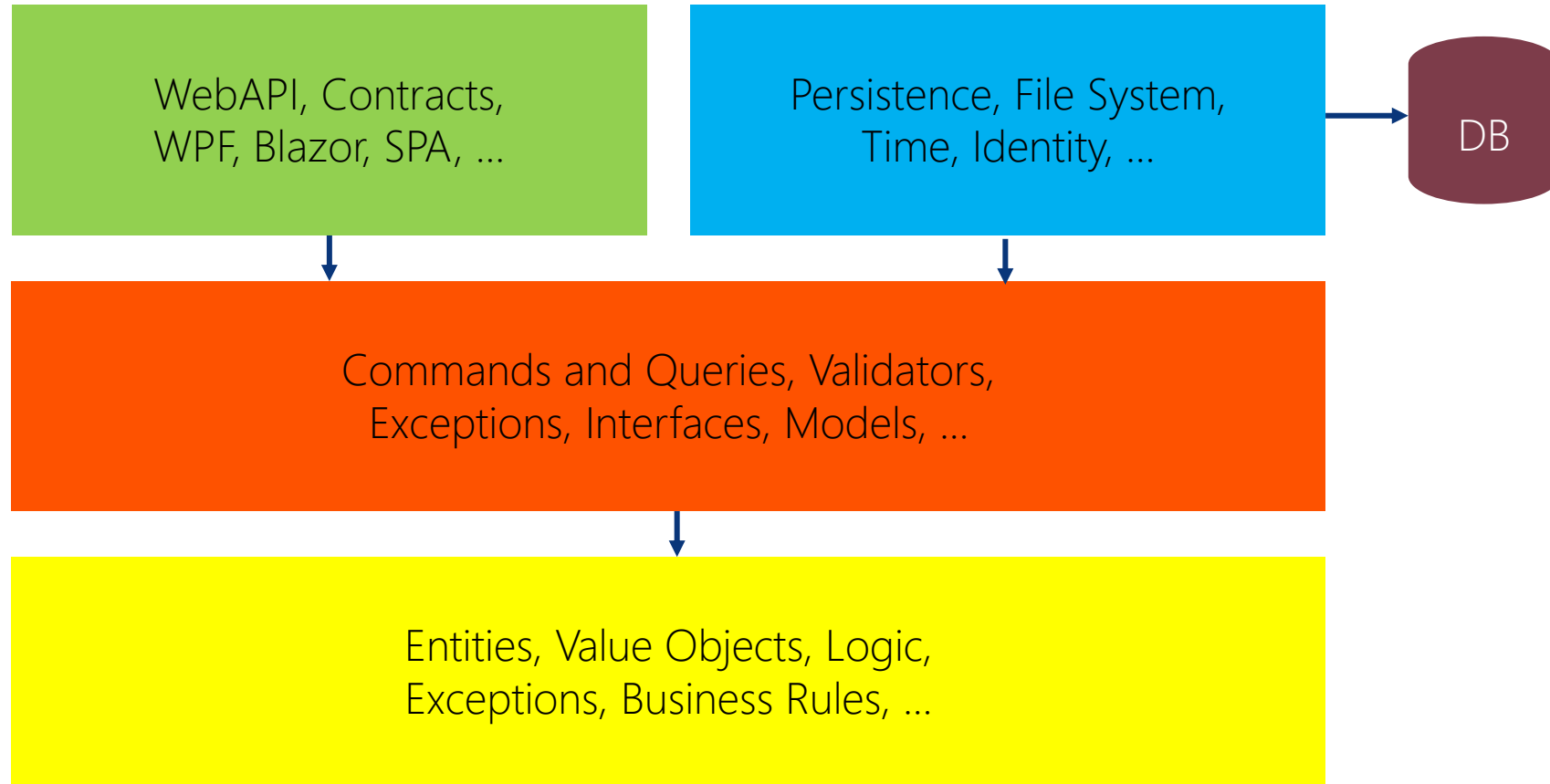


Domain Layer

- ▶ Defining domain models and errors
 - Entities
 - Value objects
 - ...
- ▶ Performing domain logic
- ▶ Enforcing business rules



A More Detailed Look Inside



Summary

- ▶ Introduction
- ▶ What is Clean Architecture?
- ▶ Inside Clean Architecture



