Microservices Architecture

CSSE6400

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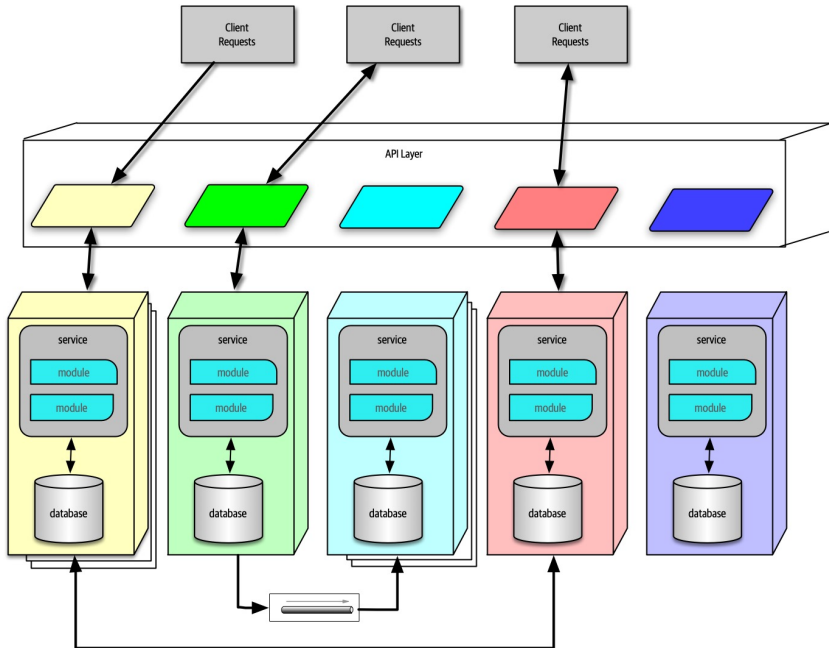
Microservices
Inspired by DDD

Definition 1. Bounded Context

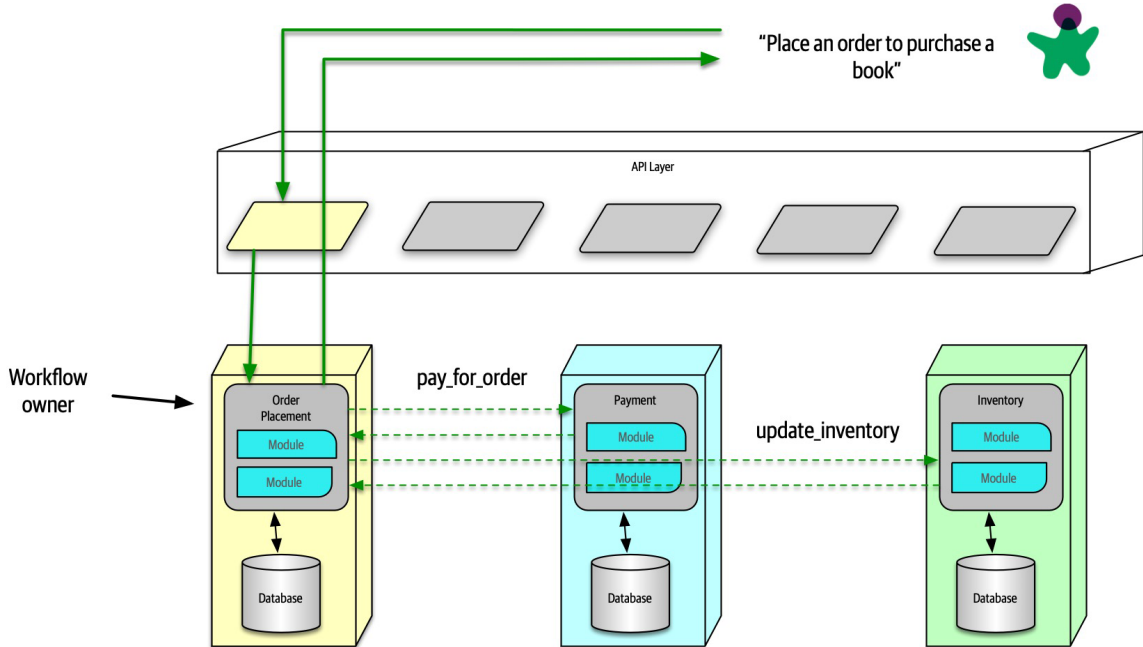Logical boundary of a domain where particular terms and rules apply consistently.

Sales Context
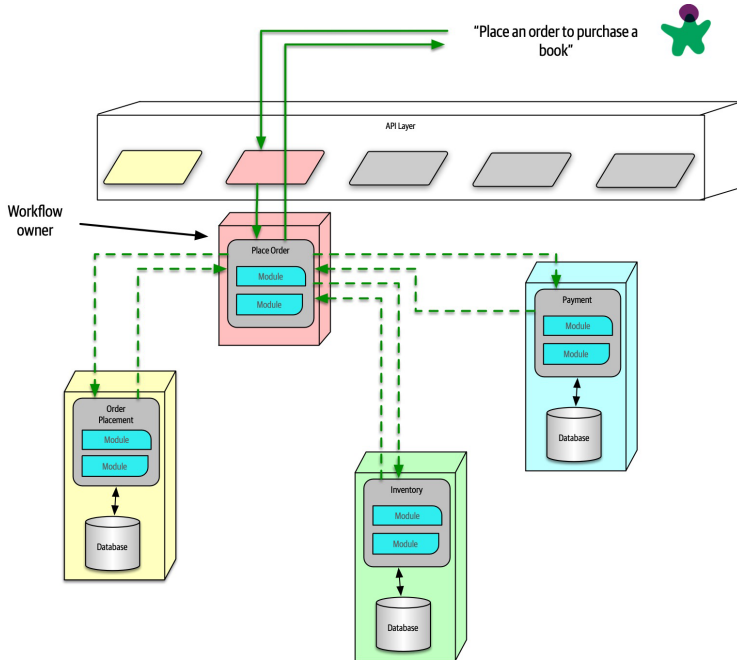
Support Context

Opportunity

Pipeline

Territory

Customer

Customer

Ticket

Product

Product

Defect

Sales Person

Product Version

Choreography Similar to event-driven *broker*

Orchestration Similar to event-driven

mediator

"Place an order to purchase a book"

API Layer

Workflow owner

Order Placement

Module

Module

Database

pay_for_order

Payment

Module

Module

Database

update_inventory

Inventory

Module

Module

Database

"Place an order to purchase a book"

API Layer

Workflow owner

Place Order
Module
Module

Order Placement
Module
Module
Database

Inventory
Module
Module
Database

Payment
Module
Module
Database

Pros & Cons

Modularity 👍

Extensibility 👍

Reliability 👍

Interoperability 👍

Scalability 👍

Security 😐

Deployability 😐

Testability 😐

Simplicity 🤔