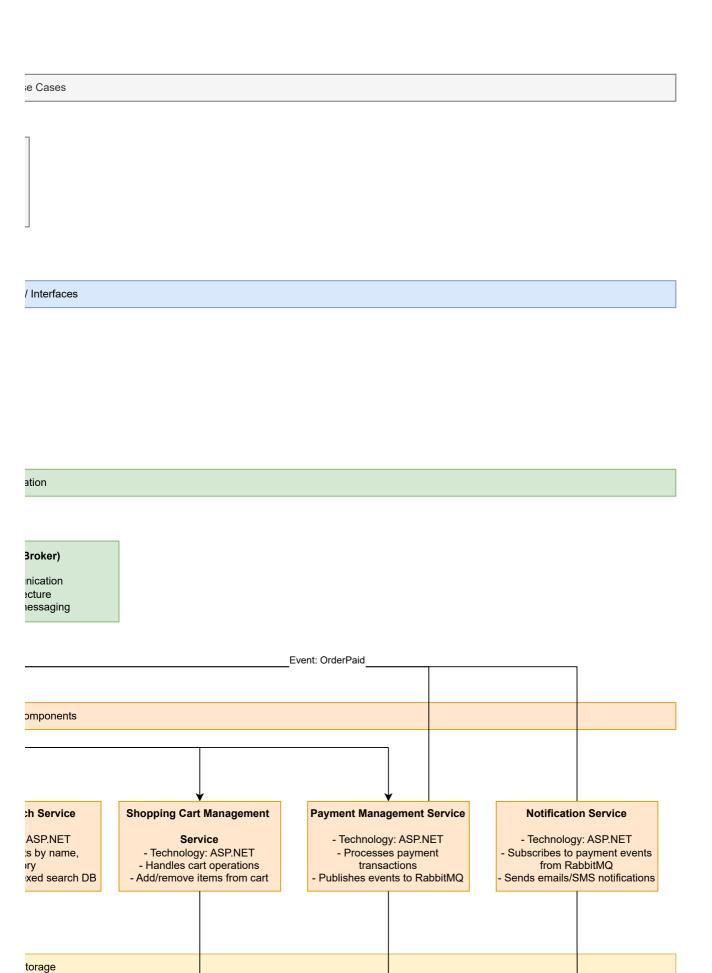
Service

Management



B joDB ∋arch Service ShoppingCartDB
- Type: PostgreSQL
- Used by: Shopping Cart

Management Service

- Type: MongoDB
- Used by: Payment Management
Service

PaymentDB

NotificationDB
- Type: PostgreSQL
- Used by: Notification Service

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6. Secu

JWT Token Authentication

JSON Web Tokens used for secure user authentication
 Issued by: Authentication Service
 Validated by: API Gateway and microservices

Role-based Access Control (RBAC)

 Roles: Admin, Customer
 Access restrictions applied by: API Gateway and Admin Interface

- S

7. Infrastr

Kubernetes Cluster (AKS / EKS)

Hosts microservices and RabbitMQ Provides scalability and orchestration

MongoDB Server (Self-hosted)

Stores non-relational data (e.g., SearchDB, PaymentDB)

RabbitMQ Cluster

Deployed inside Kubernetes Manages asynchronous messaging between serviceS

Monitoring Tools (Grafana + Prometheus)

Tracks service health, uptime, and metrics

rity

HTTPS (TLS Encryption)

Secure communication between all components Applied across UI, API Gateway and services

Password Hashing

- Passwords are hashed before storing in UserDB
- Technology: ASP.NET Identity / Bcrypt / SHA256

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PostgreSQL RDS (Managed)

Cloud-managed SQL database for multiple services

Secrets Manager (AWS / Azure)

Stores encrypted secrets, DB credentials, and tokens