

SWA Topics for the final exam.

The questions are mainly about the topics of the second half of the course, but you still need to know the basics of what we learned in the first half of the course. For example in Lesson 7 we learned the basics of microservices. I expect that you still know these basics.

Lesson 8

Registry failover (replicas)
Load balancing :client side, server side
API gateway

Lesson 9

Tracing: zipkin
Logging: ELK
Resilience: circuit breaker
Spring cloud contract

Lesson 10

Containers
CQRS
Event sourcing
Config server

Lesson 11

Transactions: SAGA
Compensating action
Security
Authentication, authorization, confidentiality, data integrity
Token based security (OAuth2)
Authorization server
Grant types
JWT
Encoding, encryption, digital signature

Lesson 12

Event driven architecture
Blackboard architecture
Stream based architecture
Kafka
Publish/subscribe
Event sourcing
Message retention
Partitioning
Replication
Consumer group

Lesson 13

Architectural characteristics

Which qualities are available?

We need to balance the qualities

A quality itself is not precise enough

Stakeholders have different interests

Architecture characteristics scenarios

Risk storming

Quantify risk

Risk mitigation

You do not need to write Java code or configuration code.

You do need to recognize and understand the concepts of given java or configuration code