1. Spring Cloud
   1. About Spring Cloud
   2. Architectural Patterns & Principles
      1. Single Responsibility Principle
      2. Share-Nothing Architecture
      3. Asynchronous Message-Passing
      4. Microservice Architecture
      5. Service Discovery Pattern
2. Microservices Approach
   1. Spring Cloud Netflix
   2. Microservices
      1. Service Discovery
      2. Client-Side Load Balancer
      3. REST Client
      4. Bottlenecks & Issues
         1. Discovery Server Bottleneck
         2. Network Partition Issue
      5. Circuit Breaker
      6. API Gateway
   3. Centralized Configuration
3. Fault Tolerance
   1. Hystrix
      1. Hystrix Command
      2. Hystrix Stream
   2. Turbine
      1. Turbine Stream
      2. Turbine AMQP
   3. Troubleshooting Latency Issues
      1. Distributed Tracing
      2. Zipkin
4. Microservices Security
   1. Securing The Monolith
   2. Microservices Security Implementations
      1. API Gateway / Perimeter Security
      2. Everybody Can Auth (with HTTP Basic)
      3. Basic + Central Auth Database
      4. Sessions Everywhere
      5. API Tokens
      6. SAML
   3. Common Concerns
   4. OAuth2
   5. JWT
   6. OpenID Connect
   7. Spring Cloud Security
5. Cloud Bus
   1. Spring Cloud Bus
   2. Management Endpoints
   3. Event Broadcasting
   4. Event Tracing
   5. Push Configurations
6. Cloud Streams
   1. Spring Cloud Stream
      1. Publish-Subscribe
      2. Binders
      3. API
   2. Consumer Groups
   3. Durability
   4. Partitioning
   5. Configuration Properties
   6. Stream Aggregation
7. Summary
   1. What We Covered
   2. What’s Next

Training for: Java Developers

Knowledge requirements: Java Programming language, Spring Framework and entry level understanding of Spring Boot.

Software requirements: Git Client, IntelliJ IDEA, NetBeans, Eclipse

PC requirements: 8 GB of free RAM