

Course Overview

Contents

1. Microservice Introduction
2. Building Microservice with Spring Boot
3. Spring Cloud Configuration
4. Service Discovery
5. Client Resiliency Pattern, Spring Cloud and Netflix Hystrix
6. Service Routing with Spring Cloud and Zuul
7. Securing Microservice
8. Distributed Tracing, Spring Cloud Sleuth and Zipkin
9. Docker and AWS



Chapter 1 - Microservice Introduction

- Traditional Monolithic Architecture
- Microservice Architecture
- Spring Boot and Spring Cloud
- Microservice Challenges
- Core Patterns to Build Microservice

Chapter 2 - Building Microservices with Spring Boot

- Microservice Architecture Limitation
- Principles on Microservice Development
- Development Roadmap

Chapter 3 - Spring Cloud Configuration

- Configuration Architecture
- Configuration Solution Options
- Spring Cloud Configuration

Chapter 4 - Service Discovery

- Traditional Service Locating Model
- Service Discovery in the Cloud
- Client-side Load Balancing
- Service Discovery using Eureka

Chapter 5 -Client Resiliency Patterns with Spring Cloud and Netflix Hystrix

- What are client-side resiliency patterns?
- An example failing scenario
- Introducing Hystrix

Chapter 6 -Service Routing with Spring Cloud and Zuul

- Service Gateway
- Introducing Netflix Zuul
- Zuul Filters

Chapter 7 - Securing Microservices

- OAuth 2
- How to implement OAuth 2 with Spring Cloud

Chapter 8 - Distributed Tracing with Spring Cloud Sleuth and Zipkin

- Spring Cloud Sleuth
- Papertrail (with Docker)
- Zipkin

Chapter 9 - Docker and AWS

- Introducing Docker and AWS
- Build service images
- Set up AWS ECS instance
- Deploy service images to ECS instance