

Day - 1

- **Understanding Microservices**
 - What are Microservices?
 - The pattern language is your guide
 - Avoid the potholes
 - Assess your architecture
- **Application architecture patterns**
 - Monolithic architecture
 - Microservices architecture
- **Decomposition**
 - Decompose by business capability
 - Decompose by subdomain
- **Data management**
 - Database per Service
 - Shared database
 - Saganew
 - API Composition new
 - CQRS
 - Domain event
 - Event sourcing

Day - 2

- **Transactional messaging**
 - Transactional outbox
 - Transaction log tailing
 - Polling publisher
- **Testing**
 - Service Component Test
 - Consumer-driven contract test
 - Consumer-side contract test

Day - 3

- **Deployment patterns**
 - Multiple service instances per host
 - Service instance per host
 - Service instance per VM
 - Service instance per Container
 - Serverless deployment
 - Service deployment platform
- **Cross cutting concerns**
 - Microservices chassis
 - Externalized configuration

Day - 4

- **Communication style**
 - Remote Procedure Invocation
 - Messaging
 - Domain-specific protocol
- **External API**
 - API gateway
 - Backend for front-end
- **Service discovery**
 - Client-side discovery
 - Server-side discovery
 - Service registry
 - Self-registration
 - 3rd party registration
- **Reliability**
 - Circuit Breaker
- **Security**
 - Access Token

- **Observability**

- Log aggregation
- Application metrics
- Audit logging
- Distributed tracing
- Exception tracking
- Health check API
- Log deployments and changesnew

- **UI patterns**

- ECS
- ECR
- SQS
- SNS
- SES
- CloudFront
- Dynamod DB
- kinesys
- AWS Lambda
- Docker
- Kubernetes