Course Outline

Cloud-native Intro with KCNA exam.prep.

Course Summary

Description

Cloud-native technologies are reshaping the way IT Services are built and operated. Understanding the functionalities of the building blocks and the resulting cloud-native systems will allow you to make good decisions on your way of planning and building the next generation IT and telco systems.

This course will present the main concepts and features of cloud-native systems: Cloud-native architecture, Cloud-native application delivery, Cloud-native observability, Container orchestration and Kubernetes fundamentals.

This course doesn't only deal with the basic concepts, features and building blocks of cloud-native systems but also prepares for the official Kubernetes and Cloud Native Associate (KCNA) exams of the Cloud Native Computing Foundation (CNCF).

Topics

- Cloud Native Architecture
- Cloud Native Application Delivery
- Cloud Native Observability
- Container Orchestration
- Kubernetes Fundamentals

Audience

This course is designed for technical managers, project leaders as well as IT and Telco professionals who want to familiarize themselves with cloud-native technologies.

Prerequisites

A general understanding of operating systems, virtualization, and networking concepts are required for this course.

Duration

Two Days

Course Outline

I. Cloud Native Architecture
- A. Cloud Native Architecture Fundamentals
- B. Autoscaling
- C. Serverless
- D. Community and Governance
- E. Personas
- F. Open Standards

II. Cloud Native Application Delivery
- A. Application Delivery Fundamentals
- B. CI/CD
- C. GitOps

III. Cloud Native Observability
- A. Telemetry & Observability
- B. Monitoring & Prometheus
- C. Data Visualization & Grafana
- D. Cost Management

IV. Container Orchestration

V. Container Orchestration Fundamentals
- A. Runtime
- B. Security
- C. Networking
- D. Service Mesh
- E. Storage

VI. Kubernetes Fundamentals
- A. Kubernetes Architecture
- B. Kubernetes API
- C. Kubernetes Resources
- D. Logging & Monitoring
- E. Scheduling