

Containers for Developers and Quality Assurance (LFD254)

Master the art of building, packaging and running container-based applications with an open container ecosystem, and learn how to deploy those applications at scale using Kubernetes.

Duration: 7 Days

Prerequisites for this course

- Familiarity with development practices including continuous integration and revision control
- Understanding of cloud native/microservices applications
- Google Cloud Account
- Laptop/desktop with any OS
- Minimum memory: 8GB
- CPUs: 4
- Core disk space: 10GB
- Understanding of Software Delivery Process
- Docker Desktop (comes with Kubernetes)
- Internet connection

Outline for this course

Chapter 1 – Course Introduction

Chapter 2 – Introduction to Open Container Ecosystem

Chapter 3 – Run and Operate Containers

Chapter 4 – Building Container Images

Chapter 5 – Advanced Image Building and Distribution

Chapter 6 – Developing with Alternative Tools - Buildah, Podman, Skopeo

Chapter 7 – Container Networking and Storage

Chapter 8 – Building and Deploying Microservices Stack with Docker Compose

Chapter 9 – Mini Project 1

Chapter 10 – Beyond Development - Deploying Containers in Production

Chapter 11 – Kubernetes - Pods, Namespaces and ReplicaSets

Chapter 12 – Kubernetes - Services, Deployments, Storage

Chapter 13 – Mini Project 2

Chapter 14 – Kubernetes Native CI/CD