

Sela.

ModOPCICD

modern CI/CD course

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modern CI/CD course

ModOPCICD - Version: 1

 2 days Course

Description:

Intended audience:

DevOps developers, software developers, software

Prerequisites:

Previous knowledge in the basics of Docker and Kubernetes

Objectives:

Initial familiarity with the basics of CICD and the tools used by the technology and initial ability to use them

Topics:

Introduction & Setup

- Course introduction
- Overview of the course objectives and structure
- Setup instructions for required software and tools

CI/CD introduction



- Understanding the principles and benefits of Continuous Integration and Continuous Deployment (CI/CD)
- Overview of the CI/CD pipeline and its components
- Introduction to common CI/CD practices and workflows

Jenkins overview

- Jenkins Pipeline as code
 - Introduction to Jenkins Pipeline and its benefits
 - Creating and configuring Jenkins Pipeline jobs
 - Defining stages, steps, and post-actions in a Jenkins Pipeline
- Jenkins Shared Library
 - Introduction to Jenkins Shared Library
 - Creating and managing reusable components in Jenkins Shared Library
 - Incorporating shared library components in Jenkins Pipelines

GitLab overview

- GitLab CI/CD pipeline
 - Configuring and defining a GitLab CI/CD pipeline
 - Understanding the structure of GitLab CI/CD configuration files
 - Configuring pipeline triggers and stages

GitHub overview

- GitHub Actions overview
 - Understanding the structure and components of GitHub Actions
 - Writing workflows using YAML syntax
 - Configuring triggers and event-based workflows in GitHub Actions
- CI/CD with GitHub Actions



- Building CI/CD pipelines using GitHub Actions
- Configuring different stages and actions in a workflow
- Integrating with external tools and services in GitHub Actions

Artifacts repositories overview

- Artifacts management with Sonatype Nexus
 - Configuring and utilizing Sonatype Nexus as an artifacts repository
 - Publishing and retrieving artifacts in Sonatype Nexus
 - Managing dependencies and versioning in Sonatype Nexus
- Artifacts management with JFrog Artifactory
 - Configuring and utilizing Sonatype Nexus as an artifacts repository
 - Publishing and retrieving artifacts in JFrog Artifactory
 - Managing dependencies and versioning in JFrog Artifactory

GitOps overview

- GitOps with ArgoCD
 - Introduction to ArgoCD as a GitOps tool
 - Installing and configuring ArgoCD
 - Managing and deploying applications using ArgoCD