LEARN
40+
TOOLS

Practical DevSecOps

Online Training

Program Highlights

InfosecTrain's Practical DevSecOps course provides a comprehensive, hands-on learning experience in implementing DevSecOps practices within Docker and Kubernetes environments, specifically emphasizing Spring Boot applications. This course blends theoretical knowledge with immersive labs and a compelling Spring Boot application demonstration to ensure a profound understanding of DevSecOps principles and best practices.
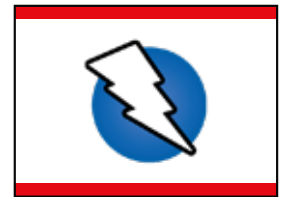
Tools Covered
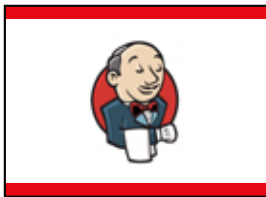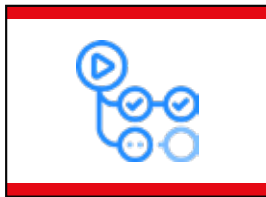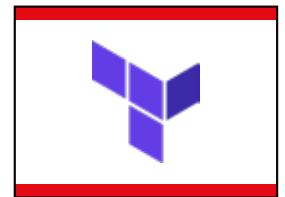
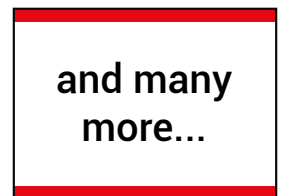| Jenkins	GitHub Actions	SonarQube	OWASP ZAP
Docker	Ansible	kubernetes	Terraform
OpenScap	Defect Dojo	SonarCloud	and many more...

Course Highlights

40 Hours LIVE
Instructor-led Training

Career Guidance and
Mentorship

Access to
Recorded Sessions

40+
Open-Source Tools

Comprehensive Hands-On
Projects for Each Tool

Practical Approach with
Scenario-Based Learning

Cover **6+ Intermediate**
Learning Projects

Integrated Learning Project
(ILP) after Every Topic

1 Capstone Project Simulating Real-World
DevSecOps Implementation

Target Audience

DevOps Engineers

Security Engineers

Software Engineers

System Administrators

Architects and Product Managers

Developers

Testers

Cloud Architects

Cloud Infrastructure Specialists

Pre-Requisites

- Basic knowledge of Linux command-line usage, containerization concepts, and general DevOps practices.
- Understanding of Spring Boot application development and Jenkins is required.
- Technical background or B.E/B.Tech degree.

Course Objectives

- Understand DevSecOps principles, benefits, and challenges
- Familiarize with Docker and Kubernetes for container management
- Implement CI/CD pipelines using Kubernetes
- Perform vulnerability scanning and testing in DevSecOps
- Utilize tools for identifying code and resource vulnerabilities
- Secure Kubernetes networking and communication with TLS
- Authenticate and authorize Kubernetes API Server, etc
- Monitor Kubernetes for security
- Manage secrets and sensitive data in the DevSecOps pipeline
- Learn about popular secrets management tools like HashiCorp Vault
- Integrate Vault with Kubernetes for secure secret injection
- Explore bonus topics covering security orchestration tools

Tools Covered : 40+

Intermediate Learning
Projects: 6

Capstone Project: 1

Course Content

Introduction To The Basics

- What is DevOps?
- What is Continuous Integration and Continuous Deployment?
- DevOps vs. DevSecOps vs. Rugged DevOps
- Introduction to DevSecOps and Its Benefits

Introduction To The Tools

- Git/Github
- GitHub Actions/Jenkins
- OWASP ZAP
- Ansible
- Docker
- K8S
- Inspec

Software Component Analysis (SCA) in CI/CD Pipeline

- SCA Introduction
- Tools Used for SCA
- Demo/Hands-On (OWASP Dependency Checker/RetireJS/Safety)
- **Intermediate Project- 1**

SAST (Static Analysis) in CI/CD Pipeline

- SAST Introduction
- Tools Used for SAST
- Demo/Hands-On(SpotBugs,SonarQube,SonarCloud)
- **Intermediate Project- 2**

DAST (Dynamic Analysis) in CI/CD Pipeline

- DAST Introduction
- Tools Used for DAST
- Demo/Hands-On(OWASP ZAP)
- **Intermediate Project- 3**

Infrastructure As Code And Its Security

- IaaC Introduction
- Tools Used for IaaC
- Demo/Hands-On(Docker,Ansible,Terraform)
- **Intermediate Project- 4**

Compliance/Audit/Policy As Code

- Policy as a Code Introduction
- Tools Used for Compliance/Audit as Code
- Demo/Hands-On(Inspec/OpenScap)
- **Intermediate Project- 5**

Vulnerability Management

- Vulnerability Management Introduction
- Tools Used for Vulnerability Management
- Demo/Hands-On(Defect Dojo)
- **Intermediate Project- 6**

Final Capstone Project:

Integrating All the Tools in a Single CI/CD Pipeline

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