



## DEVOPS SHACK

### BATCH-7 | Zero To Hero | DevSecOps & Cloud DevOps

A promotional banner for DevSecOps &amp; Cloud DevOps Batch-7. It features the Devops Shack logo at the top left. In the center, it says "Batch-7 | LIVE" and "ZERO TO HERO DevSecOps &amp; Cloud DevOps". Below this, there are social media stats: "180K+ SUBSCRIBERS" and "30K+ FOLLOWERS". A "Apply Now" button is present. To the right, there's a large image of a man with his hand to his chin, looking thoughtful. In the background, there are large, overlapping blue and purple circular graphics. At the bottom, there are six small thumbnail images for different modules: "DESECOPS", "AZURE DEVOPS", "PYTHON FOR DEVOPS", "DETAILED DOCS", "INTERVIEW PREP", and "GUIDANCE 1:1". Contact information "+91 8115430392" and website "www.devopsshack.com" are at the bottom.

Category	Details
Batch	Batch-7
Course Title	DevSecOps & Cloud DevOps Bootcamp
Topics	- Each module includes detailed custom recorded videos and live sessions. - At the end of each module, we will discuss projects, explain real-time architecture, and more.
Classes	<b>Weekends:</b> Live Classes (8 PM IST to 10 PM IST) [We will record it in case anyone missed or wants to watch later]. <b>Weekdays:</b> Recorded Custom Videos
Duration	<b>Course Duration:</b> 2 months and 1 week <b>Access to Contents:</b> 3 years
Doubts	<b>Telegram Group:</b> Dedicated Telegram Group <b>1:1 Connects:</b> Available over Discord
Detailed Docs	- All the scripts - Interview Prep Docs
Interview Prep	Detailed Interview Questions with Answers for every topic taught

# Module 1 | DevOps & DevSecOps Introduction

## **Introduction to DevOps**

- What is DevOps & DevSecOps?
- Real-Time Corporate DevOps Workflow with Flow Diagram
- Deployment Strategies

## **Detailed Documentation**

- Commands, steps, troubleshooting
  - 300 Interview Questions
- 

# Module 2 | Linux & Shell Scripting

## **Introduction to Linux**

- What is Linux?
- Overview and Key Features
- Linux File System Hierarchy & Key Directories

## **Virtual Machines (VMs)**

- Structure, Components, and Ports in VMs
- Creating and Connecting to a VM via SSH
- Managing Ports

## **Essential Linux Commands**

- Basic & Advanced Linux Commands

## **Package Management**

- Installing, Updating, Removing Packages

## **File/Folder Permissions**

- Understanding and Setting Permissions

## **User & Group Management**

- Adding, Modifying, Deleting Users & Groups

## **Linux Networking**

- Networking in Linux
- Common Networking Commands

## **Linux Troubleshooting**

- Errors & Solutions with Examples

## **Shell Scripting Hands-on**

- Practical Corporate Shell Scripts

## **Detailed Documentation [Commands, steps, troubleshooting, 300 Interview Questions]**

## Module 3 | Git

### Introduction to Git

- Version Control & Git Basics

### Essential Git Concepts

- Git Commands: add, commit, push, pull
- Advanced Topics: Merge vs. Rebase, Cherry Pick, Stash, Branching

### Corporate Branching Strategy

- Branching strategies used in companies
- Feature, Release, Hotfix Branches

### Detailed Documentation

- Commands, steps, troubleshooting
  - 300 Interview Questions
- 

## Module 4 | Build Tools

### Maven & NPM Deep Dive

- Maven Hand-on
- Building Maven Project
- Npm Hands-On
- Building Npm Project

### Detailed Documentation

- Commands, steps, troubleshooting
- 300 Interview Questions

## Module 5 | CI/CD Tools (Jenkins, GitHub Actions, GitLab CI/CD)

### Jenkins, GitHub Actions, GitLab CI/CD

- Jenkins Setup, Jenkins configurations, Jenkins Plugins
- Jenkins Jobs ( Freestyle, Pipeline MultiBranch)
- Upstream & Downstream Jobs
- Shared Libraries
- Parameters in Jenkins
- Webhooks for Auto Trigger
- Full Stack CI/CD Pipelines
- Integrations with SonarQube, Nexus, Docker, Kubernetes
- Notifications & Backups
- Troubleshooting
- GitHub Actions Complete Setup & Full Stack CICD Pipeline
- GitLab CICD Complete Setup & Full Stack CICD Pipeline

### Detailed Documentation

- Commands, steps, troubleshooting
  - 300 Interview Questions
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## Module 6 | SonarQube

### Code Quality & Coverage

- Setting up SonarQube & Webhooks
- SonarQube Analysis With Maven & NodeJS project (Code coverage enabled)
- Understanding Profiles & Rules
- Advanced third-party Plugin Installation from Backend
- Branch Analysis (Developer Edition Feature for free)
- Integrating with CI/CD Tools

### Detailed Documentation [Commands, steps, troubleshooting, 300 Interview Questions]

## Module 7 | Security Tools

### Security Tools

- Trivy Setup & File system Scanning
- OWASP Dependency Check Setup & Usage
- Prowler, Dockle
- OWASP ZAP Setup & Usage
- Vault Setup & Usage

### Detailed Documentation

- Commands, steps, troubleshooting
- 300 Interview Questions

## Module 8 | Nexus

### Artifact Management & Private Docker Registry

- Setup Nexus Locally & Via Docker
- Configuring Repositories, Artifacts
- Publishing Maven & NodeJS Artifacts to Nexus via CICD Tools
- Setup Private Docker Registry

### Detailed Documentation

- Commands, steps, troubleshooting
- 300 Interview Questions

## Module 9 | Docker

### Dockerfile, Docker Compose, & Networking

- Virtualization vs Containerization
- Understanding Docker Image, Dockerfile, Docker Container
- Writing Optimized Dockerfiles & Creating Registries (Public & Private)
- Building Docker Images Creating Containers
- Docker Compose
- Docker Networking & Volumes
- Projects on Docker containers [ (Multitier NodeJS + MySQL), (Multitier DOTNet + MongoDB), (MultiTier Python + Postgres) ]

### Detailed Documentation

- Commands, steps, troubleshooting
- 300 Interview Questions

## Module 10 | Kubernetes

### Cluster Setup & CI/CD Integrations

- Kubernetes Architecture & Advanced Concepts
- Pods, Services, Secrets, ConfigMaps, Persistence Volumes
- Kubernetes Networking
- Service Mesh Implementation
- RBAC & Highly Available Cluster (Setup)
- Local K8 Setup | EKS Setup
- Ingress, SSL Certificates, Taints & Tolerations
- Auto Scaling [Horizontal & Vertical]
- Rollback in K8
- Helm Chart Complete Setup & Project
- ArgoCD Complete Setup 7 Project
- Full stack Projects with K8
- Troubleshooting

### Detailed Documentation

- Commands, steps, troubleshooting
  - 300 Interview Questions
- 

## Module 11 | Azure DevOps

### Setting Up Azure DevOps

- Setting Up Azure Organisation
- Core Services (Repos, Pipelines, Artifacts, AKS, ACR)
- Service Principal
- CI/CD Pipelines to Deploy to Azure Kubernetes Service [Classic Build & Release Pipeline, YAML Pipeline ]
- Java Project Deploy To Webapps [ Classic Pipeline + YAML Pipeline]
- Multitier Java Project Deploy To AKS [Classic + YAML Pipeline]
- Multitier NodeJS+ DataBase Project Deploy To Webapp [Classic + Yaml]
- Multitier NodeJS+ DataBase Project Deploy To AKS [Classic + Yaml]

### Detailed Documentation

- Commands, steps, troubleshooting
- 300 Interview Questions

## **Module 12 | Infrastructure as Code (IaC)**

### **Hands-On Projects with Ansible & Terraform**

- IAC Introduction
- Terraform Deep Dive & Projects
- Ansible Deep Dive & Projects

### **Detailed Documentation**

- **Commands, steps, troubleshooting**
  - **300 Interview Questions**
- 

## **Module 13 | Monitoring**

### **Monitoring with Prometheus & Grafana**

- Prometheus, Node Exporter, Black Box Exporter, Alert Manager, Grafana Local Setup & Monitoring
- Monitoring Tools (Prometheus, Node Exporter, Black Box Exporter, Alert Manager, Grafana) Setup In Kubernetes
- Kubernetes Node Monitoring Project
- Application Monitoring in K8s Project
- Grafana + Github mini Project
- Gitlab Monitoring Project

### **Detailed Documentation**

- **Commands, steps, troubleshooting**
  - **300 Interview Questions**
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## **Module 14 | Python For DevOps**

- Python For DevOps With Documentation

### **Detailed Documentation**

- **Commands, steps**
- **300 Interview Questions**

## Module 15 | Resume Building & LinkedIn Profile Optimisation

- Resume Building & Corporate Projects
- Real-World Troubleshooting

### Detailed Documentation

- Commands, steps, troubleshooting
  - 300 Interview Questions
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## Ultimate Hands-On Projects

- Multitier NodeJS + MySQL
- Multitier DotNet + MongoDB
- Multitier Python + Postgres
- Multitier Java + MySQL
- Microservice Applications
- Full Stack Projects in Java
- Portfolio Website & Virtual WebBrowser Project
- Kubernetes Worker Node Monitoring
- Application Deployed in K8 Monitoring
- Terraform & Ansible Corporate Project
- Service Mesh with Istio Project