#### DevOps With AWS Real Time Training by Rushi Sir

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Course Duration: 2 MONTHS 20 DAYS

### INTRODUCTION TO DEVOPS

- What is DevOps? History of DevOps
- What is Dev and Ops
- DevOps definition
- DevOps and Software Development Life Cycle
- Build and release workflow
- DevOps main objectives

#### LINUX

- All basics of Linux
- How to create files, dir, and groups
- How to change permissions of files, dir, and groups How to create users
- Ssh
- Winscp
- Scp Crontab
- Passwordless authentication
- Working with services
- Most usefull commands like cp, mv, tar, yum, rpm, wget, rm, find, etc...

### GIT (SCM)

- What is GIT?
- Installing Git for Windows
- **Basic Commands Overview**
- Diff b/w Git and SVN
- 囚囚囚囚囚囚囚囚囚 Git stages
- Creating Branches
- Git merge andrebase
- Backing Out Changes
- Renaming and Moving Files & Deleting Files



Git Repository Setup

Git push, pull and fetch

囚囚囚囚囚 Git Stash

Git Conflicts

Git fetch, merge

Git Tags

#### MAVEN

Overview of Maven

Diff b/w Maven and Ant How to install Maven in Windows and Linux

囚囚囚囚囚 Maven Phases

Maven repositories

How to create .Jar, .war and files How to add dependency files Sample Maven Projects

How to Deploy Executable files in Application Servers

#### TOMCAT

What is Tomcat

How to install Tomcat in windows How to install Tomcat in Linux

How to deploy code in Tomcat

囚囚囚囚囚 Deploying code by using Jenkins

#### JENKINS (CI/CD)

What is CI/CD

Introduction to Jenkins

History of Jenkins/Hudson

How to install Jenkins in Windows and Linux

How to create Jobs Diff types of jobs Working with Github Working with Build tools

Build from Github Project



- Managing Remote Systems with Jenkins Parameterised Builds

- Parameterised Builds
  Securing Jenkins
  How to install plugins in Jenkins
  Scheduling Builds
  Setting up Different Types of Automated Builds
  How to configure one job to another job
  Configure Global Security Jenkins Administration
  How to create maven type job
  How to create ant type job
  Jenkins pipeline
  Jenkins Backup
  How to deploy code in servers
  How to create Nodes in diff Servers
  Build pipeline view

- Build pipeline view Most useful 20 plugins

#### ANSIBLE

- What is Ansible
- Difference b/wansible and other configuration management tools
- What is Ansible & its features How to setup Ansible
- Understanding Ansible architecture & Execution Ansible documentation
- Installing packages by using Ansible Ansibleadhoc commands

- Ansible Modules, Writing playbook Ansible playbook for aws
- Most useful ansible playbooks
- Ansible vault

#### Docker

- Learning the Basics of Docker
- Introduction to Docker
- Containers vs Virtual Machines



- **Docker Architecture**
- Docker Hub
- Docker Installation
- 囚囚囚囚囚囚囚囚囚囚囚 Docker basic commands
- Creating Our First Image Working with Multiple Images
- Packaging a Customized Container
  Running Container Commands with Docker
  Managing and Removing Base Images
  Pushing to Docker Hub

- Creating Shared volume groups
- Create own images
- Creating own docker files Docker Events Docker Networking Docker file for user

- Volume management
  - Docker Compose
- Docker swarm

#### Kubernetes:

- Introduction
- 囚 Containers Overview
- **Container Orchestration**
- **Kubernetes Architecture**
- setup kubernetes
- kubeadm method
- Kops method
- What is POD
- Introduction to YAML
- Replication Controllers and ReplicaSets
- Namespaces
  - Deployments
- 囚囚囚囚 Deployments - Update and Rollback
- Networking in Kubernetes Services NodePort
- Services ClusterIP





- **TERAFORM**
- 囚 MYSQL BACKUPS AND RESTORATION
- □ NAGIOS
- □ SHELL SCRIPT

#### AWS:

- Introduction to AWS
- AWS Account creation & free tier limitations overview
- EC2 Instance Launch Wizard
- EC2 Instance Types
- Generating custom Public Key and Private keys for EC2 instances volumes and Snapshots
- Creating customized Amazon Machine Images

- Elastic Load Balancers & Health Checks
  Auto Scaling Groups
  Cloud Watch
  Creating Billing Alarm and EC2 instance alarms.
  VPC (Virtual Private Cloud):
  Networking Basics
  Creating custom VPCs and custom Subpate

- Creating custom VPCs and custom Subnets Route Tables & IGW
- VPN Configuration with AWS (OpenVPN)
- Elastic IP
- Simple Notification Service
- Databases RDS
- Cost Optimization
- AWS Backup service
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### FINAL CLASSES

- 2 Live Projects End to End Setup
- Roles and Responsibilities of a DevOps Engineer
- 区 Roles and Responsibilitie 
   Roles and Responsibilitie 
   Daily Activities 
   Issues faced in Projects Roles and Responsibilities of a AWS Engineer

- 囚 Resumes
- 囚 Naukari Tips
- 囚 Most asked Interview questions

### **WEBSITES**

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