



Learnomate Technologies is the Information technology company which provide training on different IT Technologies.

Our DevOps AWS training program is designed for students who want to learn the essential skills needed to implement DevOps practices on Amazon Web Services (AWS) platform. In this course, you'll learn how to use AWS tools to automate the software development lifecycle, including building, testing, and deploying applications on AWS. You'll also learn how to use popular DevOps tools such as Docker, Kubernetes, and Jenkins to manage and scale applications in the cloud. Our experienced instructors will guide you through hands-on labs and real-world scenarios to help you gain practical experience in deploying and managing applications on AWS. By the end of this course, you'll have the skills and knowledge to implement DevOps practices in your organization and take advantage of the powerful tools offered by AWS

COURSE SYLLABUS

Module 1: Introduction to DevOps & AWS

- What is DevOps?
- History of DevOps
- Dev and Ops
- DevOps definitions
- DevOps and Software Development Life Cycle
- DevOps main objectives
- Infrastructure As A Code
- Prerequisites for DevOps
- Tools (Jenkins, Chef, Docker, ansible, maven, GiT and so on.)









- Continuous Integration and Deployment
- Introduction of cloud
- Use of AWS cloud in DevOps

Module 2: Linux Concepts

- Operating System Concepts
- Multiuser Systems
- Users and Groups
- Processes
- Kernel Architecture

Module 3: Version Control / Repository tools

- Concepts on various Version Controlling Tools
- Concepts on various Respository Tools

Module 4: GIT Hub

- Subversion Controls/Git & GitHUB
- Working with local repositories
- Working with remote repositories
- Branching
- Merging
- Cloning
- fetch/pull
- cherry-pick,rebase

Module 5: SVN (Subversion)

- Introduction of SVN
- Code checkin in SVN
- Creare branches
- difference of SVN & GIT









Module 6: SonarQube: (Code Analysis tool)

- Introduction about sonar
- Jenkins to Sonar automation
- Configure Quality gates
- Automate the process using Quality gates

Module 7: Configuration Management tools

- Tools you could use for configuration management
- Working with key components of configuration management
- Managing system configuration

Module 8: Ansible

- Chef/Puppet/Ansible
- Introduction
- Ansible server Hands-on
- Ansible server installation/configuration
- Write ansible playbooks
- Remin all ansible
- Concepts
- Install ansible on AWS environment
- Continuous deployment using Ansible
- Jenkins + Ansible integration
- Hans on -Oneclick deployment

Module 9: Environments

- Playbooks
- Modules
- Valut
- Continuous deployment using ansible









Module 10: Nexus Artifactory Tool

- Install nexus artifactory tool
- Deploy war file
- Continuous Deployment
- Automate the process using Jenkins

Module 11: Build Automation

- Introduction with Maven
- Maven structure
- Maven Phases
- Installation of Maven
- integrate Jenkins+Maven
- Configuration
- Maven dependencies/plugins
- jar/war project structure
- Automate build automation process

Module 12: Tomcat Web Server

- Installation and Configuration
- Tomcat Manager
- Tomcat userfile modification
- integrate jenkins+ tomcat
- Application Management
- App Deployment Methods
- Automate deployment process









Module 13: Jenkins Framework

- Introduction to Jenkins
- Jenkins Installation
- User Profile
- User Management
- Security Management
- Plugins Management
- Global tools configuration
- Builds Setup
- Creating Node servers
- Creating pipeline jobs
- automate pipeline jobs using Groovy script
- Integration with Git/github
- Integration with Maven
- Integration with Tomcat
- Integration with artifactory tools
- Jenkins to sonar integration
- Jenkins Nexus integration
- Jenkins to S3 bucket integration
- Jenkins to Ansible integration

Module 14: Working with Docker

- Introduction to Docker
- Docker Terminologies
- Installation of Docker
- Docker image creation
- Creating dockor containers
- Writing Docker file
- About Dockerhub
- Push/Pull docker images from Docker hub









Module 15: System Monitoring

- Introduction to Cloudwatch
- Concepts behind Cloudwatch

Module 16: Kubernetes

- Kubernetes installation, core components
- Creating POD's,
- NameSpaces, objects
- Container configuration
- Configmaps
- With environment variables
- With mounted volumes
- Multi Container POD
- Container Logging
- Deployments, Rollback
- POD ,Node Networking
- Load Balancer
- Cluster authentications
- Upgrading Cluster, OS

Module 17: Amazon Web Service

- Ec2 instances creation linux/redhat/ubuntu/windows
- Create IAM service
- Virtual private cloud (VPC) Creation/subnets
- Creating storage services ie S3/Glacier/EFS
- Setup the cloudwatch & creating Alarms
- Creating Auto Scaling group & adding instances to auto scaling group
- Creating Cloud trail/snapshots









PROJECT WORK

- Creating end to end automation
- Bring the code from github through jenkins job
- Build the code through maven
- Deploys War file to tomcat through automated jenkin job
- Pushing the Artifacts in ot nexus artifactory tool
- Integrate jenkins to Sonar coverage tool
- Deploy artifacts to different servers using ansible

TRAINING AND CERTIFICATION

- Understanding AWS Certification
- Creating road maps to AWS training and Certification
- Steps to get a AWS Certification
- Training guidance to AWS Certification
- Reference material for AWS Certification







TRAINING HIGHLIGHTS

- Recording Access shared to students on Learnomate App
- Professional Resume building by Industrial working mentors
- Placement assistance/Job requirement notification support/HR contacts
- Training Certificate: Receive a recognized certificate upon course completion
- LinkedIn, <u>Naukri.com</u> Profile: Enhance your online presence with professionally curated profiles.
- Flexible Learning Options: Choose between offline and online training to suit your schedule.
- Interview Preparation, Mock Interviews: Nail your interviews with our tailored preparation and mock interview sessions
- Real-time Scenarios Explained: Learn through practical examples to master real-world applications.
- ? Doubt Sessions: Clarify your doubts through dedicated doubt-clearing sessions.







CONTACT DETAILS

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