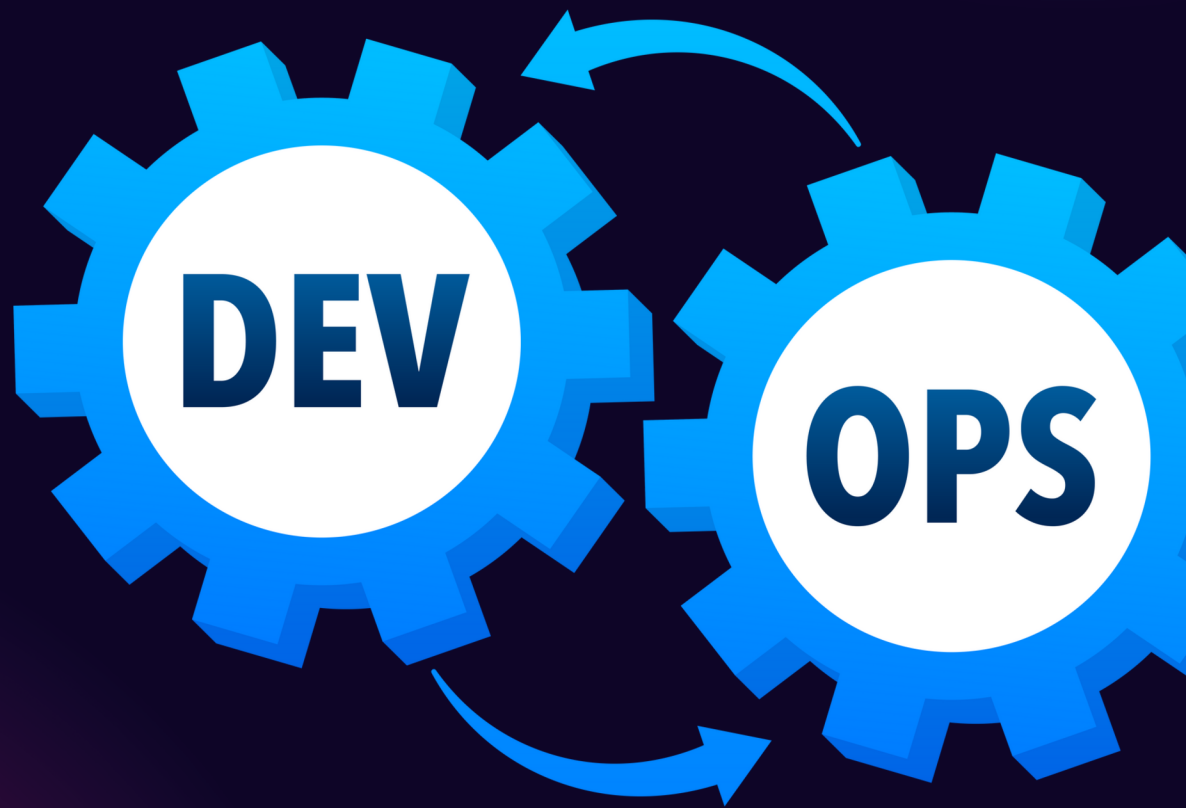


ADVANCED CERTIFICATION COURSE IN DEVOPS



ABOUT US

Infobyte Career Institute offers a high-quality learning experience in the field of IT training to train students on brand new technologies and train them to deliver the desired results with commercially relevant and re-organized technical skills.

The probability of achieving your dream job will keep on increasing day by day once you complete a course in Infobyte Career Institute. We also focus on improving soft skills in terms of communication, leadership, teamwork, external appearance, and attitude which helps everyone to be professional in all the aspects of their career.

ABOUT DEVOPS

DevOps is a set of practices and cultural philosophies that aims to improve collaboration and communication between development and IT operations teams. The goal is to shorten the software development lifecycle, increase deployment frequency, and achieve high-quality software through automation, continuous integration, and continuous delivery (CI/CD). By integrating development and operations, DevOps helps organizations respond faster to market demands, enhance system reliability, and foster a culture of collaboration and shared responsibility. The key principles include automation of repetitive tasks, monitoring and feedback loops, and a focus on continuous improvement.

BENEFITS OF CERTIFIED DEVOPS

- Career Growth - Higher Pay & Position
- Encourages professional Development
- Enriches self-image and Reputation
- Enhances professional Credibility.
- Abundant Job Opportunities
- Used In Many Industries
- Global Recognition
- Secure and Flexible
- 50+ Case Studies
- 50+ Projects

DEVOPS CONTENT

1. Introduction

- Definition of SDLC
- Purpose of SDLC General Phases of
- SDLC Various Models of SDLC
- About Waterfall SDLC Model
- Waterfall SDLC Model - Advantages
- Waterfall SDLC Model -
- Disadvantages About Agile SDLC
- Model Agile SDLC Model -
- Advantages
- Introduction to DevOps History of
- DevOps
- What is DevOps
- Definition of DevOps
- Fundamental Principles of DevOps
- Benefits of DevOps

DEVOPS CONTENT

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DEVOPS CONTENT

2.DevOps Tools

1. Git and GitHub

- Source code management
- Version control system
- Repository
- Work space/Work dir/Work tree
- Branch
- Commit/Check-in
- Version/Version-ID/Commit-ID
- Advantages of Git
- Git Snapshots
- Work space
 - Staging area
 - Repository (Local)
- Repository (Remote)
- Installation & configuration
- Git add
- Git commit
- Git log
- Git push
- Git status
- Git ignore

DEVOPS CONTENT

- Git branch
- Git checkout
- Git merge
- Git conflict
- Git stash
- Git revert
- Git remove
- Git fetch
- Git diff
- Git rebase
- Git push
- Git pull
- Git Clone
- Git log
- Git remote
- GitLAB Installation on Centos/Ubuntu

DEVOPS CONTENT

2.2 Jenkins

- Introduction to Jenkins
- Why Jenkins
- Relation between Jenkins and Hudson
- History of Jenkins
- Why Jenkins is so popular
- Features of Jenkins
- Jenkins Architecture
- Jenkins Prerequisites
- Continues Integration(CI)
- Jenkins workflow
- Ways of CI
- Benefits of CI
- Why only Jenkins
- Git for Windows
- Java installation & configuration
 - Maven installation & Configuration
- Jenkins installation & configuration
- Free style project
- Maven project by Jenkins
- NodeJS Project by Jenkins

DEVOPS CONTENT

- Jenkins Plugins
- Scheduled Projects
- Source code polling (Git)
- Related/Linked projects
- Upstream & Downstream projects
- CI-CD pipeline
- Jenkins Views
- User management
- Jenkins Slaves
- Jenkins Job using Groovy(Pipeline)

2.3 Ansible

- Configuration Management tool
- Introduction To Ansible
- History
- Advantages of CM tool
- Why Ansible
- Ansible Advantages
- Ansible Architecture setup
- Install & configure Ansible
- Features Of Ansible
- Use Cases Of Ansible

DEVOPS CONTENT

- What Can Do In Production Environment
- Ansible Documentation
- How Ansible Is Different From Configuration Management
- Tools
- Ansible Architecture
- Ansible Control Machine Requirements
- Ansible Installation Process
- Ansible Terminologies
- How Ansible Works
- Ansible Lab-setup
- Ansible Inventory
- Test Environment setup
- Host Patterns
- Ad-Hoc commands
- Modules
- Gathering facts
- Playbooks
- YAML Language
- Target section
- Variable section
- Task section
- Vault

DEVOPS CONTENT

2.4 Docker

- What is Container
- Docker features
- Docker history Docker
- usage Docker
- Architecture Docker
- Editions
 - Docker system Requirements
- Docker installation and setup
- How to verify docker installation
- About Docker version
 - OS-Level-Virtualization
 - Layered file system
 - VM Ware vs Docker
 - Docker components
- Docker workflow
- Docker benefits
- Docker images
- Docker Container
- Docker file
- Docker hub/registry
- Docker daemon

DEVOPS CONTENT

- Docker Install & Configure
- Docker all commands
- Docker Volumes
- Volume (container-container)
- Volume (Host- Container)
- Port mapping
- Registry server
- Pull/push images from /to registry
- CMD
- RUN
- ENTRYPOINT
- Relation between container and docker
- Why docker is so popular
- Difference b/w container and image
- Docker Images
- Docker PS
- Docker top
- Docker log
- docker rmi
- docker rm
- docker pull
- docker search

DEVOPS CONTENT

- docker stop
- docker start
- docker restart
- docker exec
- docker cp
- docker events
- Docker Pause
- Docker Unpause
- Docker update
- Docker commit
- docker network
- docker volume
- Docker port
- docker tag
- Docker Kill
- docker login
- docker diff
- docker system
- Docker Compose
- docker build
- docker save
- docker import

DEVOPS CONTENT

- docker export
- docker swarm

2.5 K8S

- What is kubernetes
- Features of kubernetes
- Architecture of kubernetes
- Kubernetes Master
- Kubernetes nodes
- Kubernetes components
- Installation of Kubernetes (Centos/Ubuntu/Cloud)
- Kubelet
- pods
- Replica sets
- ReplicaController
- Deployments
- DaemonSet

DEVOPS CONTENT

2.6 Terraform

- What is terraform
- What are the advantages of terraform
- why we have to use terraform
- What is IAC?
- What are the advantages of IAC?
- list of cloud providers
- what are the cloud providers support terraform
- how to download terraform software
- Terraform installation on windows & Linux Servers
- how to set terraform path temporarily and permanently
- AWS Resource Provisioning:
 - VPC, Subnet, RouteTable, Intergateway, SecurityGroup, Pemfile.
 - EC2 Provisioning.
 - S3 Bucket Provisioning
- Azure Resource Provisioning:
 - Virtual Network, Subnet, NSG,
 - Virtual Machine
- Terraform init
- Terraform plan
- Terraform apply

DEVOPS CONTENT

- Terraform destroy
- Terraform show
- Terraform validate

2.7 Monitoring

- What is monitoring
- Why do we need monitoring
- Installation of Prometheus
- Installation of Grafana
- Alert Manager
- Alert Rule
- What is node exporter
- Install WMI tool on Windows machine

DevOps-Projects:

- Maven Based project using Groovy including Git, Jenkins, Docker Images to deploy on target machine
- NodeJS Based project using Groovy including Git, Jenkins, Docker Images to deploy on target machine
- NodeJS Based project using Groovy including Git, Jenkins, Ansible to deploy on target server

WHO CAN LEARN ?

- Anyone who wants to build a career in DevOps
- Anyone who wish to gain knowledge about ProgrammingStudents
- who are currently in college or university

CAREER OPPORTUNITIES

- DevOps Architect
- DevOps Engineer
- DevOps Cloud Engineer
- Cloud Architect
- Solution Architect Engineer

FACILITIES OFFERED

- Practical Training on Live Projects
- Complete Placement Assistance
- Interview Preparation
- Global Certification
- Fully functional labs
- Online / Offline Training
- Study Materials
- Expert Level Industry Recognized Training

OUR RECRUITERS



AND MANY MORE..