



**Start**

# DEVOPS ROADMAP



**Finish!**



**Step One**

**Linux  
Basics**



**Step Two**

**Terraform  
+  
Azure**



**Step Three**

**CI/CD  
Pipelines  
+  
Scripting**



**Step Four**

**Docker +  
Kubernetes  
+  
DevSecOps  
Tools**

# Syllabus



Azure Pipelines

checkov



argo



Grafana



PowerShell



prometheus



Azure



docker



aqua  
tfsec



Git



kubernetes



BASH  
THE BOURNE-AGAIN SHELL

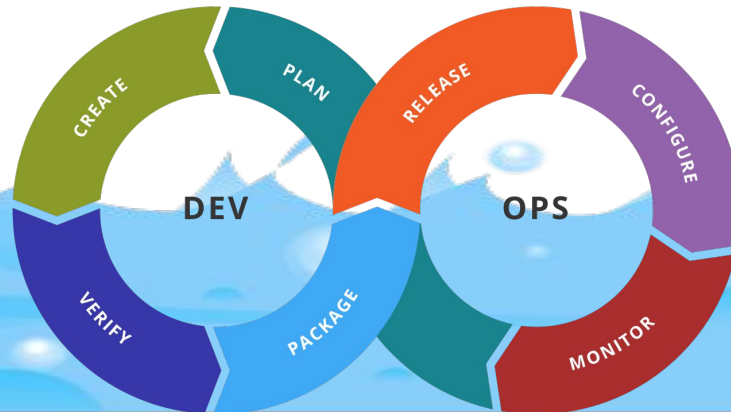


HashiCorp

Terraform

## Module 1: Linux Basics and Introduction to DevOps and Cloud Computing

- **Understanding DevOps:** Principles, benefits, and practices
- **Cloud Computing Overview:** Types (IaaS, PaaS, SaaS), public vs. private clouds
- **Popular Cloud Providers:** AWS, Azure, Google Cloud, etc.
- **DevOps and Cloud Integration:** Why they work well together



## Module 2: Version Control Systems

- Introduction to Version Control Systems (VCS)
- **Git Basics:** Repositories, branching, merging, pull requests
- Collaboration platforms: GitHub, GitLab, Bitbucket
- Best practices for version control in DevOps



## Module 3: Microsoft Azure AZ-104

- Managing Azure Subscriptions and Resource Groups
- **Azure Virtual Networks and Network Security**
- Overview of Azure Virtual Machines
- Overview of Azure Storage Services
- Secure and Manage Azure Storage
- Configure Virtual Machines for High Availability
- Network Traffic Distribution and Connectivity
- Integrate On-premises Network with Azure Virtual Network
- Monitoring and Access Management for Cloud Resources
- Manage Azure Active Directory (AD)
- Implementing and Managing Hybrid Identities



## Module 4: Terraform

- Infra-as-a-code: Overview
- What is Infrastructure as Code with Terraform
  - Manage any infrastructure
  - Standardize your deployment workflow
  - Track your infrastructure
- Terraform module output
- Terraform state
- Azure key vault integration
- Creating VM images
- Terraform registry
- Azure Virtual Machines
- Azure CLI



# Terraform





## Module 5: Git, Jenkins & Maven Integration

- Branching and merging in Git
- Merge Conflicts
- Stashing, Rebasing, Reverting, and Resetting
- Git Workflows
- Introduction to Maven
- Maven Architecture
- Introduction to Continuous Integration



# Jenkins

## Module 6: Continuous Integration using Jenkins

- Jenkins Architecture
- Plugin Management in Jenkins
- Jenkins Security Management
- Notification in Jenkins
- Jenkins Master-slave architecture
- Jenkins Delivery Pipeline
- Jenkins Declarative pipeline

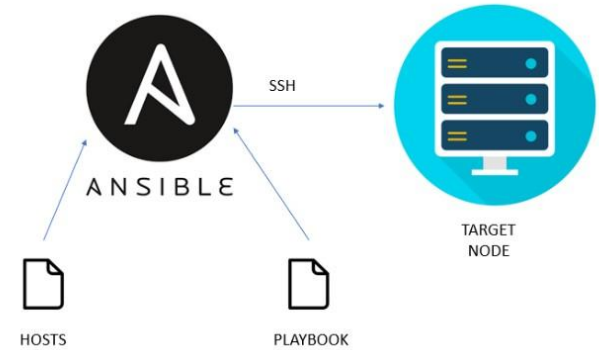


# Jenkins



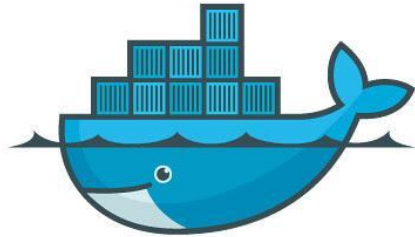
## Module 7: Configuration Management Using Ansible

- Introduction to Configuration Management
- Infrastructure as Code
- Introduction to Ansible
- Ansible Architecture
- AD-HOC Commands
- Inventory Management
- Ansible Playbooks
- Ansible Modules
- Ansible Roles



## Module : Containerization using Docker Part – I

- Containerization
- Namespaces
- Docker
- Docker Architecture
- Container Lifecycle
- Docker CLI
- Port Binding
- Detached and Foreground Mode
- Dockerfile
- Dockerfile Instructions
- Docker Image

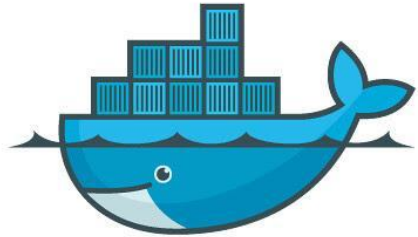


docker

## Module : Containerization using

### Docker Part – II

- Docker Registry
- Container Storage
- Volumes
- Docker Compose
- Docker Swarm



docker

# Orchestration using Kubernetes Part - I

- Introduction to Container Orchestration
- Kubernetes Core Concepts
- Understanding Pods
- ReplicaSet and Replication Controller
- Deployments
- DaemonSets
- Rolling Updates and Rollbacks
- Scaling Application



**kubernetes**



## Orchestration using Kubernetes Part - II

- Services
- Persistent Storage in Kubernetes
- Primitives for PersistentVolumeClaims
- Secrets and ConfigMaps
- Headless Services
- StatefulSets
- Helm Charts



**kubernetes**



# Monitoring using Prometheus and Grafana

- Introduction to Prometheus and Grafana
- Prometheus and Grafana Setup
- Monitoring using Prometheus
- Dashboard Visualization using Grafana
- Creating a Dashboard to monitor the Pipeline



Grafana



Prometheus



# RESUME WRITTING

RESUME,  
COVER  
LETTER,  
LINKEDIN  
PROFILE





A person wearing a dark blue suit, a light blue shirt, and a red tie is pointing their right index finger towards the camera. The background is a solid light blue. Overlaid on the image is a semi-transparent grey rectangle containing the text 'THANK YOU' in white, bold, sans-serif capital letters.

THANK YOU