

Experience a learning path that resonates with you. Learn full-stack development, Cloud computing, DevOps, Automation, Artificial intelligence and much more ...



Live Classes



Practice Labs



Project Work



Assessments



Certifications



Recordings



Mentorship



Placement



Community

Classroom (Bengaluru) | Online (Global) | On-premise (Corporate)

Unit 1: Introduction to DevOps

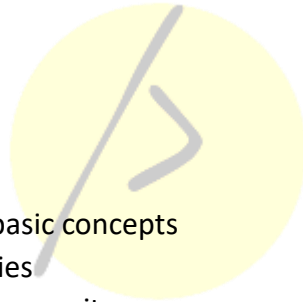
1. What is DevOps?
2. What is Continuous Integration?
3. What is Continuous Delivery?
4. Benefits of DevOps for organizations
5. Overview of DevOps tools and practices
6. Virtualization
7. Microservices

Unit 2: Linux

1. Introduction to Linux
2. Linux file system
3. Linux Commands
4. Filters
5. Users and Groups
6. File permissions
7. Package management

Unit 3: Git

1. Introduction to Git and its basic concepts
2. Local and remote repositories
3. Install Git and initialize a git repository
4. Managing a Git repository
5. Git branches and merging branches
6. Cloning remote repositories
7. Pushing to remote repositories
8. Pull requests
9. Merge conflicts

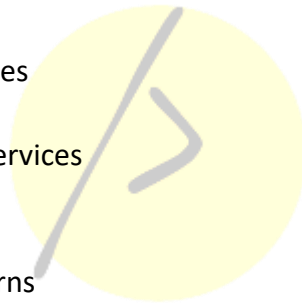


Unit 4: Jenkins

1. Installing Jenkins on a VM
2. Searching through Plugins
3. Jenkins CLI
4. Create new freestyle jobs from Jenkins Dashboard
5. Give commands
6. Create Build
7. Configure Job
8. Copy existing jobs
9. Delete jobs
10. Update jobs
11. Plugins
12. Versions
13. Pipeline setup
14. Pipeline script

Unit 5: Microservices

1. Introduction to Microservices
2. Problems with monolith
3. Problems solved by microservices
4. Microservices Architecture
5. Microservices Principles
6. Microservices Design Patterns
7. Deploying microservices



Unit 6: YAML & JSON

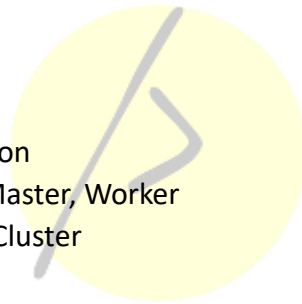
1. Introduction to YAML
2. Key-value pairs
3. Objects
4. Lists
5. Booleans
6. Multi-line string
7. Environment variables
8. YAML syntax check
9. JSON serialization
10. JSON to YAML conversion

Unit 7: Docker

1. What is Docker?
2. Before docker
3. Containers
4. Docker installation
5. Important docker commands
6. Docker compose
7. Dockerfile
8. Docker Volumes
9. Namespaces
10. Network & Ports
11. Creating and running Docker containers
12. Docker Hub – Keeping Images remote
13. Docker Dashboard to manage with UI

Unit 8: Kubernetes

1. What is Kubernetes?
2. Need for Kubernetes
3. Kubernetes architecture
4. Installation and Configuration
5. Kubernetes components: Master, Worker
6. Setting up the Kubernetes Cluster
7. Kubernetes objects
8. Deploying and scaling application with k8s
9. Networking
10. Storage
11. Kubectl: Kubernetes Command-line
12. Kubernetes Clusters
13. Security: Kubernetes secrets
14. Troubleshooting



Unit 9: Infrastructure monitoring: Helm, Prometheus, Grafana

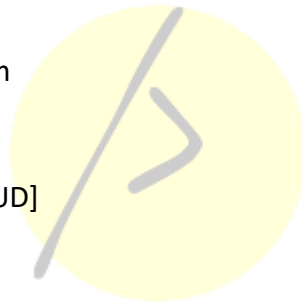
1. Using HELM to setup monitoring with Prometheus and Grafana
2. Introduction to HELM
3. Setting up helm with tiller
4. Launching Prometheus Quick overview of helm Charts
5. How to convert manifests into helm charts
6. HELM Package Manager
7. Helm Chart Development

Unit 10: Infrastructure as Code with: Ansible

1. Configuration management tool: Infrastructure Automation
2. Install Ansible
3. Ansible architecture
4. How Ansible connects to its target
5. Creating and managing Ansible playbooks
6. Inventory: identity and login details
7. Ad-hoc commands: Eg. ping
8. Playbook: Ansible to-do list in yaml format
9. Modules: import dependency and pass parameters as needed
10. Ansible Configuration
11. Provisioning and configuring infrastructure with Ansible

Unit 11: Terraform

1. What is Infrastructure as Code with Terraform?
2. Install Terraform
3. Using Terraform Providers
4. Using Variables in Terraform
5. Terraform State
6. Terraform Commands
7. Manage Infrastructure [CRUD]
8. Query Data with Outputs



Unit 12: Containers on AWS: ECS, ECR, EKS and Fargate

1. Amazon ECS
2. Creating ECS Cluster
3. ECS Auto Scaling
4. Amazon ECR
5. Amazon EKS
6. Amazon Fargate

About the trainer

Carrying an experience of over 10 years, I pride myself for experiential learning approach. A training path that consists of visual learning, hands-on learning, project work, periodic assessments and mentorship. With us, you can be sure about getting the knowledge, certificate and placement.



■ **Ram Kumar**

- ✓ **University: UVCE, Bangalore**
- ✓ 100+ Corporate Batches
- ✓ Python Certified Professional
- ✓ Certified Kubernetes Administrator
- ✓ **Last Employer: Amazon, India**
- ✓ 3000+ Students
- ✓ AWS Certified Cloud Architect
- ✓ AWS Certified Machine Learning

Top clients

