

# NEXT IT CAREER

**AWS DEVOPS**



# AWS DEVOPS COURSE CONTENT

<b>LINUX Basics:</b>	<ul style="list-style-type: none"><li>• Unix and Linux difference</li><li>• Linux File system structure</li><li>• Basic Linux/Unix commands</li><li>• Changing file permissions and ownership</li><li>• Start and stop services</li><li>• Find and kill the process with id and name</li><li>• Package installation</li></ul>
<b>Introduction to Devops</b>	<ul style="list-style-type: none"><li>• Define Devops</li><li>• Devops Tools</li><li>• Configuration management</li><li>• Continuous Integration and Deployment</li></ul>
<b>GIT: Version Control</b>	<ul style="list-style-type: none"><li>• Introduction</li><li>• What is Git</li><li>• About Version Control System and Types</li><li>• Difference between CVCS and DVCS</li><li>• A short history of GIT</li><li>• GIT Basics</li><li>• GIT Command Line</li><li>• Installing Git</li><li>• Installing on Linux</li><li>• Initial setup</li><li>• Git Essentials</li><li>• Creating repository</li><li>• Cloning, check-in and committing o Fetch pull and remote</li><li>• Branching</li><li>• Creating the Branches, switching the branches, merging the branches.</li></ul>
	<ul style="list-style-type: none"><li>• Introduction.</li><li>• Understanding continuous integration</li><li>• Introduction about Jenkins</li><li>• Build Cycle</li><li>• Jenkins Architecture</li><li>• Installation</li><li>• Obtaining and installing Jenkins</li><li>• Maven Installation</li></ul>

## Jenkins – Continuous Integration

- Exploring Jenkins Dashboard.
- Jobs
- Creating Jobs
- Running the Jobs
- Setting up the global environments for Jobs
- Adding and updating Plug ins
- Disabling and deleting jobs
- Jenkins Master & Slave Configuration
- Jenkins Pipeline
- Jenkins Email Notification
- Build Deployments
- Understanding Deployment.
- Securing Jenkins
- Authentication
- Jenkins Plug in
- Authorization
- Confidentiality
- Creating users
- Best Practices for Jenkins

## Docker– Containers.

- Introduction
- What is a Docker
- Use case of Docker
- Platforms for Docker
- Dockers vs. Virtualization
- Architecture
- Docker Architecture.
- Understanding the Docker components
- Installation
- Installing Docker on Linux.
- Some Docker commands.
- Provisioning
- Docker Hub.
- Downloading Docker images.
- Uploading the images in Docker Registry
- Understanding the containers
- Running commands in container.
- Running multiple containers.
- Custom images
- Creating a custom image.
- Running a container from the custom image.
- Publishing the custom image.

	<ul style="list-style-type: none"> <li>• Docker Networking</li> <li>• Accessing containers</li> <li>• Linking containers</li> <li>• Exposing container ports</li> <li>• Container Routing</li> <li>• Docker Compose</li> <li>• Installing the Docker compose</li> <li>• Terminology in Docker compose</li> </ul>
<p>Ansible: --</p>	<ul style="list-style-type: none"> <li>• Introduction to Ansible</li> <li>• Installation, Configuration management &amp; Orchestration</li> <li>• Introduction Playbooks</li> <li>• Continuous Deployment using Ansible</li> <li>• Playbook's Deep-dive</li> <li>• Roles</li> <li>• Ansible Tower &amp;&amp; Galaxy</li> </ul>
<p>Kubernetes (K'8): -</p>	<ul style="list-style-type: none"> <li>• Sizes for virtual machines</li> <li>• Introduction K'8</li> <li>• K'8 Architecture</li> <li>• K'8 Installation &amp;&amp; Configuration</li> <li>• Defining POD'S</li> <li>• Minikube, Kubectl</li> <li>• Cluster's</li> <li>• K8s Volumes</li> <li>• K8s Name spaces</li> <li>• K8s Networks</li> <li>• K8s Components</li> <li>• K8s Probes</li> <li>• Config maps</li> <li>• HPA</li> <li>• Ingress Controller</li> <li>• RC</li> <li>• RS</li> <li>• DS</li> <li>• Deployment</li> <li>• Service</li> <li>• Strategies</li> <li>• PORT Forwarding</li> <li>•</li> </ul>
<p>What is ELK?</p>	<ul style="list-style-type: none"> <li>• Working with Linux Virtual Machines</li> <li>• ELK Installation</li> <li>• Elastic search</li> <li>• Logstash</li> </ul>

	<ul style="list-style-type: none"> <li>• Application monitoring</li> <li>• Configuring Logstash and Kibana</li> </ul>
<p><b>AWS Course</b></p>	<ul style="list-style-type: none"> <li>• <b>Managed disks overview</b></li> <li>• <b>Benefits of managed disks</b></li> <li>• <b>Disk roles</b></li> <li>• <b>Cloud Module 1</b></li> <li>• Introduction to cloud computing</li> <li>• History of cloud</li> <li>• Different vendors of Cloud computing (Amazon, Microsoft, GCP.)</li> <li>• Importance of cloud computing</li> <li>• Advantages and disadvantages of cloud computing</li> <li>• <b>Cloud Module 2</b></li> <li>• Cloud deployment methods</li> <li>• Private cloud</li> <li>• Public cloud</li> <li>• Community cloud</li> <li>• <b>Cloud Module 3</b></li> <li>• Cloud Service / Delivery models</li> <li>• Software as a service (SaaS)</li> <li>• Platform as a Service (PaaS)</li> <li>• Infrastructure as a Service (IaaS)</li> <li>• Functions as a service (FAAS)</li> <li>• Introduction to AWS</li> </ul>
<p><b>AWS Services Modules</b></p>	<ul style="list-style-type: none"> <li>• AWS Console &amp; AWS CLI</li> <li>• EC2(Elastic compute cloud)</li> <li>• Auto scaling</li> <li>• Load Balancer</li> <li>• AMI</li> <li>• S3</li> <li>• Glacier</li> <li>• Elastic bean stack</li> <li>• VPC (Virtual Private Cloud)</li> <li>• Route53</li> <li>• IAM (Identity and Cloud watch Access Management)</li> <li>• RDS (Relational Database)</li> <li>•</li> </ul>
	<ul style="list-style-type: none"> <li>• Introduction to VMSS</li> </ul>

<p><b>AWS Module 1</b></p>	<ul style="list-style-type: none"> <li>• AWS Architecture</li> <li>• AWS Management Console</li> <li>• AWS Account setup</li> <li>• AWS free subscription – Limits and Usage</li> <li>•</li> </ul>
<p><b>AWS Module 2</b></p>	<ul style="list-style-type: none"> <li>• Simple Storage Service (S3)</li> <li>• Creating and deleting buckets</li> <li>• Adding objects to buckets</li> <li>• Accessing objects</li> <li>• Deleting objects</li> <li>• Lifecycle of s3.</li> <li>• Versioning in s3.</li> <li>• Replication.</li> <li>• Uses of S3 storage</li> <li>• Permissions of S3</li> <li>• Discussing lifecycles in s3</li> <li>• Glacier</li> </ul>
<p><b>AWS Module 3</b></p>	<ul style="list-style-type: none"> <li>• Amazon Elastic Compute Cloud (EC2)</li> <li>• Different types of instance</li> <li>• Pricing model in EC2 instances</li> <li>• Regions and Availability Zones</li> <li>• Amazon Machine Images (AMI)</li> <li>• EC2 Windows instance &amp; Linux Instance</li> <li>• Security Groups</li> <li>• Key Pairs</li> <li>• Volumes</li> <li>• Elastic IPs</li> <li>• Launching an instance</li> <li>• Logging into the instance</li> <li>• Deployment</li> <li>• Load balancing</li> <li>• Auto scaling</li> </ul>
<p><b>AWS Module 4</b></p>	<ul style="list-style-type: none"> <li>• Virtual Private Cloud (VPC)</li> <li>• Different types of networks that can be setup in AWS</li> <li>• Public subnets &amp; private subnets</li> <li>• Route tables</li> <li>• CIDR</li> <li>• Creating a new VPC</li> <li>• ACL &amp; Security Groups</li> </ul>



	<ul style="list-style-type: none"> <li>• Creation of Internet Gateway</li> <li>• Connecting to instances in the gateway</li> </ul>
AWS Module 5	<ul style="list-style-type: none"> <li>• Identity and Access management (IAM):</li> <li>• Creation of user accounts in AWS</li> <li>• Setting up multi-factor Authentication (MFA)</li> <li>• Roles in IAM</li> <li>• Groups in IAM</li> <li>• AWS key &amp; Secret Key</li> <li>• Permissions for user</li> <li>• Creation of custom policies</li> <li>• Account settings</li> <li>• Credential Report</li> <li>•</li> </ul>
AWS Module 6	<ul style="list-style-type: none"> <li>• Relational Database Service (RDS)</li> <li>• Selecting the Engine</li> <li>• Configuring the Database Engine</li> <li>• Creating your Database</li> <li>• Setting up automatic backups</li> <li>• Authorizing access to the DB via DB Security Groups</li> </ul>
AWS Module 7	<ul style="list-style-type: none"> <li>• Elastic Block Store (EBS)</li> <li>• Creating and deleting volumes</li> <li>• Attaching and detaching volumes</li> <li>• Creating snapshots</li> <li>• Increasing the volume size</li> <li>• Simple Queue Service (SQS)</li> </ul>
AWS Module 8	<ul style="list-style-type: none"> <li>• Creation of a queue</li> <li>• Sending messages to the queue</li> <li>• Setting SNS to SQS</li> <li>• Retrieving messages from SQS</li> <li>• Simple Email Services (SES)</li> </ul>
AWS Module 9	<ul style="list-style-type: none"> <li>• Setting up email domain</li> <li>• Limits of SES</li> <li>• Test Email setup</li> <li>• Cloud watch</li> </ul>
	<ul style="list-style-type: none"> <li>• Monitoring with Cloud watch</li> <li>• Getting statistics for a specific EC2 instance</li> </ul>

<p><b>AWS Module 10</b></p>	<ul style="list-style-type: none"> <li>• Getting aggregated statistics</li> <li>• Metrics for other AWS Services and related namespaces</li> <li>• Setting up notifications</li> </ul>
<p><b>Real Time training</b></p>	<ul style="list-style-type: none"> <li>• Day to Day activities Devops</li> <li>• Job support</li> <li>• Proxy support</li> <li>• Ticketing Tools</li> <li>• Resume Creation</li> <li>• Interview questions</li> </ul>

## INTERVIEW QUESTIONS AND ANSWERS

**Duration** : 40 days

**Location** : Hyderabad, KPHB

### Project Orientation Program

## 100% JOB ASSISTANCE PROGRAM

**Contact: 7013123485**