AWS DevOps

ioneer



Table of content:

- Module: 1: Install DevOps Tools
 - o Git
 - Docker
 - o Selenium
 - Maven
 - o Jenkins
 - Puppet
 - Ansible
 - Kubernetes
 - Nagios

Module 2: Introduction to DevOps

- What is Software Development
- Understanding Software Development Life Cycle
- O What & Why Devops?
- Devops Lifecycle & Tools
- Module Software Version Control
- What is software version control
- Types of Version control
- Create a git project
- Create a file and add to git, edit file, Commit the code
- Study about SVN & Git

Module 3: Containerization with Docker

- Docker Fundamentals
- What is Container Orchestration
- Docker Volumes
- Docker Swarm
- Create an image in Docker and run it

Module 4: Puppet Configuration Management Tool

- Study about Configuration Management
- O What is a Puppet?
- Puppet Architecture
- Setting up Master Slave with Puppet
- Learn Puppet Manifests
- Learn Puppet Modules
- Learn Puppet Commands
- Applying configuration using Puppet
- Understanding Puppet File Server

Module 5: Ansible

- What is Ansible
- Configuration, Writing Ansible Playbooks
- Ansible based Configuration Management
- o Ansible RolesCommand Line usage.
- Write Ansible playbook

Solution

• Module 6: Continuous Testing

- o Basics about the Automating Builds Maven, Ant
- o What is Maven?
- Running Testing Cases

• Module 7: Jenkins

- O What is Continuous Integration?
- o What is Jenkins?
- Setting up continuous Delivery Pipeline using Jenkins
- Building a continuous Delivery Pipeline Using Jenkins
- Understanding CI/CD Pipelines
- Creating an end-to-end automated CI/CD Pipeline

Module 8: Continuous Orchestration with Kubernetes

- What is Kubernetes
- Docker Swarm vs Kubernetes
- Explain Kubernetes Architecture
- Deploying Kubernetes using Kubeadm
- Alternate ways of deploying Kubernetes
- Study about YAML Files
- Creating a Deployment in Kubernetes using YAML
- Services & Ingress in Kubernetes

• Module 9: Continuous Monitoring with Nagios

- What is Continuous Monitoring
- What is Nagios
- Explain Nagios Architecture
- Monitoring Services in Nagios
- Study about NRPE Plugin
- Monitoring System Info using NRPE plugins

Module 10: AWS DevOps Services

- AWS CodeCommit
- AWS CodeDeploy
- AWS CodePipeline
- o AWS CodeBuild