

Duration: 3 days

Course Overview

Module-1: Deep Dive on Devops Infrastructure

Lessons:

- Case Study Discussion - Business – Application-Customer
- AWS DEVOPS Architecture
- DEVOPS Artifacts and How it Works
- DEVOPS Services and How it works

Module-2: AWS Devops Repositories and Continuous Integration

Lessons:

- Understanding AWS Repos
- Understanding GITHUB Repos, BIT Bucket and Many More
- Understanding the branches (Main/Master, Sub-Branch)
- Understanding version Control
- Understanding Revert, Pull and Merge Request
- Understanding different types of Merge request

Lab:

- Creating the AWS Repos
- Uploading and managing the code in the Azure Repos
- Modifying the code and creating and managing the version Control
- Comparing the Versions, Revert and Merge the Versions
- Creating the Sub-Branch
- Modifying the Code in the Sub-branch
- Creating a GIT HUB organization
- Creating Main Branch and Sub Branch
- Upload and Manage Code in GIT Hub

Module-3: Build and Code Build Pipeline

Lessons:

- Understanding Runtime
- Understanding what is Build and package
- Various Types of Package generator such NPM, MAVEN and
- Many.
- Understanding YAML to build the Package of any Codes.

Labs:

- Creating the build
- Creating the build pipeline
- Validating the build
- Deploying Build, Enabling and Configuring Continuous Deployment

Module-4: Release and Code Pipeline

Lessons:

- Understanding Pipelines
- Continuous Deployment with Single Stage and Multi Stage Pipeline
- Continuous Delivery with Singel Stage and Multi Stage Pipeline
- CI/CD pipelines to deploy applications on Amazon EC2, serverless applications, and container-based applications

Labs:

- Creating and Configuring Test-Stage
- Creating and Configuring Production-Stage
- Release Test and Production-stage
- CI/CD pipelines to deploy applications on Amazon EC2, serverless applications, and container-based applications
- Implement common deployment strategies such as “all at once,” “rolling,” and “blue/green”

Module-5 Deploying and Delivering Infrastructure as a Code using AWS Pipeline

Lessons:

- Understanding Cloud Formation Stack
- Understanding the YAML format
- Writing the YAML Code for AWS Infrastructure and Various Environments (VPC, EC2, EBS, ELB and All the Necessary services)
- Understanding the terraform Infrastructure
- Writing the Infrastructure as a Code using terraform

Lab:

- Writing the Infrastructure as a code
- Modifying the Infrastructure as a Code
- Deploying and Delivering Infrastructure as a code using AWS Pipeline

Module -6 Implement Security and Compliance

Lessons:

- Integrate testing and security into CI/CD pipelines
- Monitor applications and environments using AWS tools and technologies

Lab:

- Implementing testing and Security Technologies for AWS CI/CD pipelines
- Monitoring AWS Applications and Environments using AWS tools and technologies