Advance DevOps

Duration: 5 Days

Hands-On Format: This hands-on class is approximately 80/20 lab to lecture ratio, combining engaging lecture, demos, group activities and discussions with comprehensive machine-based practical programming labs and project work.

Module 1 – Git

Introduction to Version Control System
History of Git
Git Basics
States in Git
Installing Git
Configuration of Git
Working with Repositories
Basic Git Commands
Working with Remotes
Tagging
Git Branching

Module 2 – Docker

Introduction to Containers
Introduction to Docker
Downloading and Installing Docker
Docker Essential Commands
Docker Engine
Running your First Container
Docker Image
Build Image with Dockerfile
Private Registry
Storing and Retrieving Docker Images from Docker Hub
Networking Docker Containers
Data Persistence with Volumes

Module 3 – Automation with Ansible

Introduction to Ansible
Ansible Architecture
Installation and Configure Ansible
AD-Hoc Commands
Managing Playbooks
Managing Variables
Managing Loops
Managing Notify and Handlers
Ansible Vault
Jinja2 Templates
Managing Roles

Module 4 – Jenkins

Introduction to CI and CD
Introduction to Jenkins
Jenkins Process
Jenkins Installation
Jenkins User Interface
Build First Job: Deploy Web Server Automatically on Jenkins Machine
Add Remote Machines and Credentials
Deploy Web Server Automatically on Remote Machine
Introduction to Git Webhooks
Configure Git Web Hooks for Jenkins
Add Parameters in Jenkins
Integrate Jenkins with Ansible