PHASE 1: Salesforce DevOps Foundations

Step 1: Introduction to Salesforce DevOps

- What is DevOps?
- Why DevOps is required in Salesforce
- Traditional Deployments vs DevOps
- Salesforce Development Lifecycle
- CI/CD Concepts (Beginner Friendly)
- Source-Driven Development

Outcome: Understand why DevOps is critical in Salesforce

PHASE 2: Git & Version Control (Core for All Tools)

Step 2: Git Fundamentals

- What is Version Control?
- Git Architecture (Local vs Remote)
- Git Installation & Setup
- Git Commands:
    - clone
    - add
    - commit
    - push
    - pull
- .gitignore for Salesforce

Step 3: Git Branching Strategy

- Main / Master Branch
- Feature Branch
- Release Branch
- Hotfix Branch
- Merge vs Rebase
- Conflict Resolution

Outcome: Work confidently with Git repositories

PHASE 3: Salesforce DevOps Center

Step 4: Salesforce DevOps Center Overview

- What is DevOps Center?
- DevOps Center Architecture
- Supported Salesforce Orgs
- Limitations of DevOps Center

Step 5: DevOps Center Implementation

- Connecting Git Repository
- Setting up Environments (Dev, QA, UAT, Prod)
- Creating Work Items
- Deployments using DevOps Center
- Validation & Promotion
- Best Practices

Outcome: Use native Salesforce DevOps tool

PHASE 4: Flosum DevOps (Salesforce-Native DevOps)

Step 6: Introduction to Flosum

- What is Flosum?
- Flosum Architecture
- Flosum vs DevOps Center vs Copado
- Why enterprises use Flosum
- Salesforce-native advantage

Step 7: Flosum Repository & Version Control

- Flosum Repositories
- Salesforce Metadata Tracking
- Branching & Versioning in Flosum
- Commit & Promote Changes
- Conflict Detection & Resolution

Step 8: Flosum CI/CD Pipeline

- Environment Setup (Dev → QA → UAT → Prod)

- Promotion Paths
- Automated Validation
- Deployment Options
- Rollback & Recovery
- Flosum Release Management

Step 9: Flosum Backup & Compliance

- Flosum Backup Overview
- Metadata Backup
- Data Backup
- Restore Scenarios
- Audit Logs & Compliance
- Disaster Recovery Planning

Outcome: Master Salesforce-native DevOps with Flosum

PHASE 5: Gearset DevOps

Step 10: Gearset Overview

- Gearset Architecture
- Org-to-Org vs Git-Based Deployment
- Comparison Rules

Step 11: Gearset Deployment & Automation

- Delta Deployments
- Pre-Deployment Validation
- CI Jobs
- Automated Deployment Pipelines
- Rollback Strategies

Step 12: Gearset Backup & Restore

- Metadata Backup
- Data Backup
- Restore Scenarios
- Compliance & Auditing

PHASE 6: Copado DevOps

Step 13: Copado Fundamentals

- Copado Architecture
- User Stories & Tasks
- Promotion Paths
- Environments

Step 14: Copado CI/CD Pipelines

- Copado Pipelines
- Test Level Management
- Conflict Resolution
- Deployment & Rollback
- Best Practices

PHASE 7: Code Quality, Security & Monitoring

Step 15: Code Quality & Scanning

- Importance of Code Quality
- Clayton Code Analysis Tool
- Static Code Analysis
- Apex Best Practices Enforcement
- Security Vulnerability Detection

Step 16: Monitoring & Observability

- Introduction to Datadog
- Salesforce Logs & Metrics
- Alerts & Dashboards
- Performance Monitoring
- Incident Detection

PHASE 8: Testing & Validation Strategy

Step 17: Salesforce Testing in DevOps

- Unit Testing Strategy
- Test Class Optimization

- Test Data Management
- Pre-Deployment Validation
- Post-Deployment Smoke Testing

PHASE 9: CI/CD with GitHub Actions (Optional Advanced)

Step 18: CI/CD Pipeline Implementation

- GitHub Actions Overview
- Salesforce CLI in Pipelines
- Automated Validation & Deployment
- Environment-based Deployment
- Real-world Pipeline Example

PHASE 10: End-to-End Real-World DevOps Project

Step 19: Salesforce DevOps Project

- Requirement Analysis
- Repository Strategy
- Tool Selection (DevOps Center / Flosum / Gearset / Copado)
- CI/CD Pipeline Design
- Deployment Execution
- Rollback & Recovery
- Monitoring & Documentation

COURSE OUTCOMES

After completing this DevOps syllabus, learners will be able to:

- Implement **Salesforce DevOps from scratch**
- Work with **DevOps Center, Flosum, Gearset & Copado**
- Design **enterprise-grade CI/CD pipelines**
- Handle **conflicts, rollbacks & compliance**
- Monitor Salesforce using **Datadog**

- Apply **code quality & security best practices**
- Become **job-ready Salesforce DevOps professionals**