Agile and DevOps Training

Day 1: -

Agile Methodology (4 Hours)

1. SDLC Life Cycle
2. Waterfall Model
3. Agile Methodology
4. Introduction to Agile
5. Why Agile?
6. Lean Methodology
7. Agile Principles & Practices
8. Scrum
9. Sprint Meetings and daily standups
10. Kanban and Scrum Boards
11. User Stories

Demo: Tracking user stories with JIRA

DevOps Fundamentals (1 Hour)

1. Why DevOps is needed
2. What is DevOps
3. Objective of DevOps
4. Overview of then end-to-end flow of DevOps tooling/pipeline
5. CICD Pipelines as focus for Grads because they are primarily looking at Dev side
6. DevOps Skillset – tooling and culture
7. DevOps in Real world practice
8. How DevOps is different than traditional approach

Version Control System (GIT) (1.5 Hours)

1. Understanding Code Versioning and Central Management using GitHub
2. What is VCS?
3. Different type of VCS – CVCS, DVCS
4. Introduction to GIT (brief as they will already know how to use it)
5. Git add, Commit, log and reverts
6. Versioning basics
7. Remote Repositories and need for same
8. Pull & Push for codes
9. Branching at Git

Lab: Git Fundamentals

Day 2: -

Version Control System (GIT) (1 Hour)

1. Conflict management
2. GIT Workflow

Continuous Integration and Deployment with Jenkins CICD Pipelines (5.5 Hours)

1. Introduction to Jenkins
2. Introduction to CICD Pipelines
3. How Jenkins can be used for CICD Pipelines
4. Why Jenkins?
5. Role played by Jenkins in Continuous Integration
6. Working with Jenkins Plug-ins
7. Build Plans in Jenkins
8. Configuring Jenkins
9. Integrating Jenkins with GIT
10. Configuring End to End Delivery Pipeline in Jenkins
11. Working with Global Tools Configuration
12. Setting up system properties
13. Jenkins Server-Client Architecture
14. Multi-pipelining concepts
15. Triggers and Dependency runs

Lab: Create a CICD pipeline to auto-fetch the code from GitHub on commits. Build same using Maven and Deploy it with tomcat.