

Git, Jenkins, Understanding SonarQube and AIOps

Duration: 3 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 & GitHub

- Introduction to Version Control System
- History of Git
- Introduction to GitHub, SourceTree
- Introduction to VsCode
- Git Basics
- Working of Git
- States in Git
- Installing Git
- Configuration of Git
- Basic Git Commands
- Working with Remotes
- Tagging
- Git Branches & Head
- Cloning, exploring public repo
- Git fetch, Git pull and Git push
- Forking and contribution to Public Repo
- Git tags and rebasing
- GitHub Issues and labels
- Watch, star, Raw, Blame and History of file on GitHub
- Ignoring files in Git

Module 2 – Jenkins

- Introduction to Continuous Integration
- Introduction to Jenkins
- Jenkins Installation
- Jenkins Management
- Build Java Program
- Run Jobs on Remote Machines
- Jenkins-Maven Setup
- Build a Jar using Maven
- Building with ant
- JUnit Testing
- Graphical View of Tests
- Saving Artifacts in Jenkins
- Introduction to Jenkins Pipeline
- Jenkins Pipeline with Maven

Module 3 – SonarQube

- Introduction to SonarQube
- Installation and Setup
- Sonar Integration with Apache Maven Basics
- Configuring Sonar with Jenkins Basics

Module 4 – Understanding AIOps

What is AIOps?

Why does it matter in modern IT Ops?

Use cases of AIOps

AIOps Tools Overview