Git & GitHub with Jenkins

Duration: 4 days

Prerequisite: Basic Linux Knowledge

Applications Required: Git, GitHub Desktop, SourceTree, Visual Studio Code

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