

Introduction to GIT

Git is a distributed Version-controlling tool for tracking the changes in source code during software development. Git is designed in order to handle every change that occurs in code from very small to large scale projects with speed and efficiency. It is the best way for coordination among the developers or programmers. It speeds up the development process, supports data integrity, history tracking and also supports distributed and non-linear workflows.

Git was introduced by Linus Torvalds in 2005 for development of the Linux Kernel. Since 2005, Junio Hamano has been the core maintainer for the Git.

The major benefits of Git may include:

- Support for non-linear Development
- Distributed Development
- Compatibility with existent Systems and Protocols
- Large Project management
- Secure Backup
- CI-CD Implementation

Course Structure:

Introduction To Git

- What is git?
- Overview of Git
- Installing Git
- Environment Setup in Git
- Git tools(Git Bash)
- Terminologies
 - o Branch
 - o Checkout
 - o Clone
 - o Fetch
 - o Master
 - o Merge
 - o Origin
 - o Push/pull
 - o Remote
 - o Repository
 - o Git Ignore
- Workflow of git
- Repository Provider(GitLab)

GIT Commands

- Git config Command
- Git init command
- Git clone command
- Git remote command
- Git add command
- Git commit command
- Git status command
- Git push command
- Git pull command
- Git branch command
- Git merge command
- Git log command

Git Branching And Merging

- Git branch
- Merge and Merge conflict
- Merge resolution

Issue Tracking and Project management using GitLab

- Development Board
- Agile Process
- Milestones
- Issue tracking
- Merge Request

Git Continuous Integration(CI/CD) Introduction

- Introduction
- Features and Advantages
- CI-CD using GitLab Introduction

Course Duration: 6 hours