Day - 1

- **Introduction to Git & GitLab**
  - What is Git? Why use Git?
  - What is GitLab? Key features & benefits
  - GitLab vs GitHub vs Bitbucket
  - Navigating the GitLab UI

- **Git Basics (CLI & GitLab UI)**
  - Repositories: Clone, Fork, Star, Watch
  - Git init, clone, add, commit, push, pull
  - Git status, diff, log, stash, reset, revert
  - Branching: create, switch, merge, rebase

- **Working with GitLab Repositories**
  - Creating new projects (blank, import, template)
  - File management via GitLab UI
  - Commit history and blame
  - GitLab Web IDE basics
  - Git tags and releases

- **Hands-on Labs**
  - Clone a project and push changes
  - Create and merge branches
  - Navigate repository history and use GitLab Web IDE

Day - 2

- **GitLab Collaboration & Issue Tracking**
  - Creating and managing issues
  - Labels, milestones, and assignees
  - Using GitLab boards for Agile workflows (Scrum/Kanban)
  - Creating and linking Epics (GitLab Premium+)
  - Discussions and comments on issues/MRs.

- **Merge Requests (MRs)**
  - Creating MRs via UI and CLI
  - Review process and approval rules
  - Squash and merge, Fast-forward merge
  - Resolving conflicts in MRs
  - MR Pipelines and status checks

- **Introduction to GitLab CI/CD**
  - What is CI/CD?
  - GitLab CI/CD overview
  - .gitlab-ci.yml basic structure
  - Stages, jobs, scripts, and artifacts
  - Pipeline execution flow

- **Hands-on Labs**
  - Create and track an issue
  - Create a merge request and complete a review cycle
  - Write a basic .gitlab-ci.yml file to build and test code

Day - 3

- **GitLab CI/CD Advanced Topics**
    - Using environments and deployments
    - Using variables and secrets
    - Caching, artifacts, and dependencies
    - Scheduled pipelines
    - Manual and delayed jobs
    - Pipeline templates and includes.

- **GitLab DevOps & Security Features**
    - Using GitLab Registry (container/image registry)
    - GitLab Package Registry (Maven, npm, etc.)
    - Secrets and environment management
    - Security scanning and code quality (GitLab Ultimate)
    - Auto DevOps and Auto-Deploy

- **GitLab Productivity Features**
    - Wikis and Project Documentation
    - Snippets (private/public)
    - Custom Issue Templates and Merge Request Templates
    - GitLab CLI (glab) for advanced usage
    - Keyboard shortcuts and productivity tips

- **GitLab Integration & API**
    - Integrating GitLab with Jira, Slack, Trello, Jenkins
    - GitLab API overview (reading/writing issues, projects)
    - Webhooks and triggers
    - GitLab Notifications and To-Dos

- **Hands-on Labs**
    - Advanced pipeline creation with stages and environments
    - Use GitLab Container Registry
    - Integrate GitLab project with Slack or Trello
    - Create a snippet and a wiki page
    - Trigger pipelines via GitLab API