

INTRODUCTION TO GITLAB

Course Code: 100877

Learn how to use GitLab to manage your code and projects effectively.

This course provides a deep dive into Git and GitLab, a version control repository management system.

What You'll Learn

Join an engaging hands-on learning environment, where you'll learn:

- Source code management
- Git and GitLab introduction
- Reviewing and editing the commit history
- Improving your daily workflow
- Branching
- Merging
- Remote repositories
- Centralizing and controlling access
- Rebasing
- Resetting trees
- Including external repositories
- Git as a debugging tool
- Workflow management
- Continuous Integration/Continuous Design (CI/CD)

This course has a 50% hands-on labs to 50% lecture ratio with engaging instruction, demos, group discussions, labs, and project work.

Who Needs to Attend

Developer

Prerequisites

Before attending this course, you should have:

- Basic understanding of application development principles
- Basic Linux skills
- Familiarity with command-line options such as ls, cd, cp, and su

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VIRTUAL CLASSROOM LIVE

\$1,995 USD

2 Day

Virtual Classroom Live Outline

Introduction to Source Code Management

- The core principles of change management
- Undo changes
- Audit trails and investigations
- Reproducible software
- Changing code-hosting platform
- Moving from another version control system

Git and GitLab Introduction

- Introduction to Git
- GitFlow
- GitLab Flow
- Trees and commits
- Configuring Git
- Adding, renaming, and removing files

Reviewing and Editing the Commit History

- Reviewing the commit history
- Revision shortcuts
- Fixing mistakes

Improving Your Daily Workflow

- Simplifying common commands with aliases
- Ignoring Build Artifacts
- Saving changes for later use (Stashing)

Branching

- Branching
- Listing differences between branches
- Visualizing branches

- Deleting branches
- Tagging

Merging

- Merging Basics
- Merge conflicts
- Merging remote branches

Remote Repositories

- Remote repositories
- Synchronizing objects with remotes
- Tracking branches

Centralizing and Controlling Access

- Introduction to GitLab
- Git repositories on GitLab
- Daily workflow

Reviewing Branching and Merging

- Branch review
- Merging basics

Rebasing

- Rebasing basics
- Rebasing with local branches
- Rebasing with remote branches
- Interactive rebasing
- Squashing commits
- Getting out of trouble

Git as a Debugging Tool

- Using the blame command to see file history
- Performing a binary search

Continuous Integration / Continuous Design (CI/CD)

- How to install GitLab Runner
- Adding to our example project
- Breaking down .gitlab-ci.yml
- Adding .gitlab-ci.yml to our example project
- Deconstructing an advanced .gitlab-ci.yml file
- GitLab CI/CD web UI

*** Optional Day Three Topics** - The following topics can be added to your private group training events.

Resetting Trees*

- Introduction to resetting
- Resetting branch pointers
- Resetting branches and the index

- Resetting the working directory
- Making good use of the reset command

Improving Your Daily Workflow*

- Interactively Staging Changes

Including External Repositories*

- Submodules
- Subtrees
- Choosing between submodules and subtrees

Workflow Management*

- Branch management

Aug 21 - 22, 2025 | 10:00 AM - 6:00 PM EST

Oct 23 - 24, 2025 | 10:00 AM - 6:00 PM EST

Dec 17 - 18, 2025 | 10:00 AM - 6:00 PM EST



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PRIVATE GROUP TRAINING

2 Day

Visit us at www.globalknowledge.com or call us at 1-866-716-6688.

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