

Introduction to GitLab (TTDV7553)

Category: Software Development & Programming | **Vendor:** Trivera Tech

Duration: 16.00 hours (2 days)

13.0 CPD Hours

Rating: ★ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

Immerse yourself in the dynamic world of GitLab, a leading web-based platform for version control and collaboration, through our intensive two-day course,®GitLab Quick Start. Version control systems, such as GitLab, are the backbone of modern software development, enabling teams to work cohesively and maintain a structured workflow. By mastering GitLab, you can improve efficiency, encourage collaboration, and ensure accuracy and reliability within your projects, adding significant value to your organization.

About This Course

Immerse yourself in the dynamic world of GitLab, a leading web-based platform for version control and collaboration, through our intensive two-day course, GitLab Quick Start. Version control systems, such as GitLab, are the backbone of modern software development, enabling teams to work cohesively and maintain a structured workflow. By mastering GitLab, you can improve efficiency, encourage collaboration, and ensure accuracy and reliability within your projects, adding significant value to your organization.

Throughout the course you'll explore various aspects of GitLab, starting from the fundamental principles of source code management to advanced concepts like rebasing and continuous integration/design. Key topics covered include Git and GitLab basics, reviewing and editing commit history, mastering GitFlow and GitLab Flow, branching and merging strategies, and understanding remote repositories. You'll also learn how to utilize Git as a debugging tool and explore the power of GitLab's built-in CI/CD capabilities.

The core value of this course lies in its practical application. You'll learn how to effectively manage changes in code with GitLab, allowing you to maintain audit trails, create reproducible software, and seamlessly move from another version control system. Then you'll learn how to enhance your workflow efficiency using aliases for common commands, saving changes for later use, and ignoring build artifacts. You'll also explore GitLab's CI/CD, which will enable you to automate your software delivery process. These hands-on labs will walk you through creating, merging, and synchronizing remote branches, configuring Git, troubleshooting using Git as a debugging tool, and setting up GitLab Runner for CI/CD. Each lab is designed to simulate real-world projects, offering you a first-hand experience in managing and contributing to a version control system like GitLab.

By the end of the course you'll be equipped to manage complex codebases, refine daily workflows, handle version control tasks, and integrate continuous delivery into your projects. This expertise will empower you to drive productivity and collaboration within your organization, making you an indispensable part of your team's software development lifecycle.

Who Should Attend

The introductory-level course is geared for software developers, project managers, and IT professionals seeking to enhance their understanding and practical skills in version control and collaboration using GitLab. It's also well-suited for those transitioning from another version control system to GitLab, or those responsible for software development lifecycle within their organization. Whether you are an individual looking to boost your proficiency or a team leader aiming to drive productivity and collaboration, this course will provide the necessary expertise to make the most of GitLab's capabilities.

Prerequisites & Entry Requirements

General Prerequisites:

To ensure a smooth learning experience and maximize the benefits of attending this course, you should have the following prerequisite skills:

- Basic Computing Skills: Familiarity with navigating a computer environment, including file and directory management, is a fundamental requirement.
- Understanding of Software Development: A rudimentary understanding of how software is developed and the concept of version control systems can help you grasp the course content more effectively.
- Command-Line Comfort: Some comfort with using command-line interfaces can be helpful, as many operations in GitLab can be executed via commands.
- General Coding Knowledge: A basic grasp of any programming language will allow you to better understand and implement the concepts of version control and collaboration.

Learning Outcomes

Upon successful completion of this course, participants will be able to:

This course combines engaging instructor-led presentations and useful demonstrations with valuable hands-on labs and engaging group activities. Throughout the course you'll:

- Gain a firm understanding of the fundamentals of Git and GitLab, setting a solid foundation for advanced concepts.
- Learn to effectively manage and track changes in your code, ensuring a clean and reliable codebase.
- Discover ways to streamline your daily tasks with aliases, stashing, and other GitLab workflow optimization techniques.
- Develop skills in creating, merging, and synchronizing branches, enabling seamless collaboration and version control.
- Equip yourself with the knowledge to use Git as a powerful debugging tool, saving time and effort when troubleshooting issues.
- Understand the basics of continuous integration and continuous deployment (CI/CD) in GitLab, helping you automate the software delivery process.

Detailed Course Outline

Introduction to Source Code Management

The Core Principles of Change Management

The Power to Undo Changes

Audit Trails and Investigations

Reproducible Software

Changing code-hosting platform

Moving from another version control system

Git and GitLab Introduction and Basics

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 Basics

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

Optional: Resetting Trees

Introduction to Resetting

Resetting Branch Pointers

Resetting Branches and the Index

Resetting the Working Directory

Making Good Use of the Reset Command

Optional More on Improving Your Daily Workflow

Interactively Staging Changes

Optional: Including External Repositories

Submodules

Subtrees

Choosing Between Submodules and Subtrees

Workflow Management

Additional Course Details

Nexus Humans Introduction to GitLab (TTDV7553) training program is a workshop that presents an invigorating mix of sessions, lessons, and masterclasses meticulously crafted to propel your learning expedition forward.

This immersive bootcamp-style experience boasts interactive lectures, hands-on labs, and collaborative hackathons, all strategically designed to fortify fundamental concepts.

Guided by seasoned coaches, each session offers priceless insights and practical skills crucial for honing your expertise. Whether you're stepping into the realm of professional skills or a seasoned professional, this comprehensive course ensures you're equipped with the knowledge and prowess necessary for success.

While we feel this is the best course for the Introduction to GitLab (TTDV7553) course and one of our Top 10 we encourage you to read the course outline to make sure it is the right content for you. Additionally, private sessions, closed classes or dedicated events are available both live online and at our training centres in Dublin and London, as well as at your offices anywhere in the UK, Ireland or across EMEA.

Frequently Asked Questions

Q: What delivery options are available for Introduction to GitLab (TTDV7553)?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
 - Traditional Instructor-Led Classroom Training (ILT)
 - On-site delivery at your offices anywhere in United Kingdom
 - Private dedicated courses customized for your team
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Q: How many CPD hours does this course provide?

The 2-day Introduction to GitLab (TTDV7553) course provides up to 13.0 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Introduction to GitLab (TTDV7553) training?

The training takes place over 2 day(s), with each day lasting approximately 16.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Introduction to GitLab (TTDV7553)?

Yes, we provide corporate training, dedicated training, and closed classes for Introduction to GitLab (TTDV7553). Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: GitLab

Q: Why choose Nexus Human for Introduction to GitLab (TTDV7553)?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Introduction to GitLab (TTDV7553) training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

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