

DEVOPS

INTERMEDIATE

5 DAYS

Git Essentials

Build a strong foundation in Git by understanding core concepts, repository setup, and essential commands. Learn how to manage branches, collaborate effectively, and apply version control best practices to support efficient team based development.

Why Git?

Faster collaboration

Share code safely with branches, reviews, and remotes.

CI-ready workflows

Integrate Git into pipelines and team branching strategies.

Safer history

Recover from mistakes with rebase, reflog, and bisect patterns.

Fewer merge conflicts

Apply conflict resolution and team best practices.

What you'll be able to do

- ✓ Gain a Solid understanding of Git and its key concepts
- ✓ Learn how to create and manage branches in Git
- ✓ Learn to set up Git
- ✓ Learning Collaborating with Git
- ✓ Learning basic Git commands

Who this is for

- Developers
- DevOps Engineers
- Test Engineers
- Project Managers
- IT professionals
- Data Scientists
- System Administrators
- QA Engineers

Curriculum

01 Git Foundations and Setup

- Apply git foundations and setup with Git in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
- Validate outcomes, logs, and failure modes
- Capture reusable patterns for team standards

02 Basic Commands and Daily Workflow

- Apply basic commands and daily workflow with Git in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
- Validate outcomes, logs, and failure modes
- Capture reusable patterns for team standards

03 Branching, Merging, and Conflicts

- Apply branching, merging, and conflicts with Git in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
- Validate outcomes, logs, and failure modes
- Capture reusable patterns for team standards

04 Collaboration with Remotes

- Apply collaboration with remotes with Git in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
- Validate outcomes, logs, and failure modes
- Capture reusable patterns for team standards

05 Team Workflows and Hooks

- Apply team workflows and hooks with Git in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
- Validate outcomes, logs, and failure modes
- Capture reusable patterns for team standards

06 Advanced History (stash, rebase, cherry-pick, reflog)

- Apply advanced history (stash, rebase, cherry-pick, reflog) with Git in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
- Validate outcomes, logs, and failure modes
- Capture reusable patterns for team standards

07 Debugging with Bisect and Blame

- Apply debugging with bisect and blame with Git in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
- Validate outcomes, logs, and failure modes
- Capture reusable patterns for team standards

08 Submodules, Subtrees, and Sparse Checkout

- Apply submodules, subtrees, and sparse checkout with Git in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
- Validate outcomes, logs, and failure modes
- Capture reusable patterns for team standards

09 Git in CI/CD Pipelines

- Apply git in ci/cd pipelines with Git in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
- Validate outcomes, logs, and failure modes
- Capture reusable patterns for team standards

10 Hosting Platforms (GitHub, GitLab, Bitbucket)

- Apply hosting platforms (github, gitlab, bitbucket) with Git in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
- Validate outcomes, logs, and failure modes
- Capture reusable patterns for team standards

11 Troubleshooting and Recovery

- Apply troubleshooting and recovery with Git in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
- Validate outcomes, logs, and failure modes
- Capture reusable patterns for team standards

12 Best Practices for Teams

- Apply best practices for teams with Git in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
- Validate outcomes, logs, and failure modes
- Capture reusable patterns for team standards