

Introduction to Version Control with Git

Learning Objectives

Get an introduction to the core concepts and functions of Git while learning how to configure Git and initialize Git repositories

Topics

- Introduction to Git Essentials
- What is Version Control?
- What is Git?
- Analogy
- Git Concepts and Taxonomy
- Command Line vs Graphical User Interface
- Installation of Git
- Configure the Git Settings
- Initialize a Git Repository
- Git Hosting Providers
- Get Started with GitHub

Git from the Command Line

Learning Objectives

Learn how to stage, compare, and commit changes in various versions of your code using different Git commands

Topics

- Git Workflow
- Local and Remote Repositories
- Tracking Changes using git status
- Three File Stages of Git
- Staging Changes with git add
- Commit Changes with git commit
- Comparing Changes using git diff

Everyday Git Commands

Learning Objectives

Understand how to push new Git branches to remote repos on GitHub

Topics

- Pushing to Remote Origin
- Checking Commit History
- Removing and Moving Content
- Git Branches

Git for Collaboration

Learning Objectives

Learn how to create a repository and add someone as a reviewer to your pull request. Also understand how to resolve "merge conflicts" using the GitHub interface.

Topics

- Cloning and Forking Repositories
- Pull Requests
- Code Reviews
- Resolving Merge Conflicts
- Documentation using readme.md
- Ignoring Content and the .gitignore File
- Best Practices While Working in Teams

Capstone Project

Learning Objectives

Manage a front end and backend website build using Git and GitHub.

Topics

- Capstone Project