



GitHub Git Training

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github
SOCIAL CODING

Git Training

What is Git?

Git is a blazing fast, feature rich, open source, and agile-leaning distributed version control system (DVCS).

Git's distributed version control allows for more flexible workflows, higher performance VCS interactions and working while disconnected (no work stoppage if the central git repository becomes unavailable)

Git is entering its 6th year of existence and is now the most popular DVCS in existence.

More widely-team-distributed projects converted to Git than to any other VCS in 2010 as evidenced by the recent 1.5 million repository milestone at GitHub.com.

Git offers both a rich command line interface, preferred

by most senior engineers, and a plethora of GUIs for more UI-leaning developers.

Git offers round-trip compatibility with Subversion repositories while offering about 70% of its feature set in this mode of operation.

Git can be piloted by a subset of the overall company using this bridge-to-Subversion approach.

Git is scalable to the largest enterprises, having been installed and delightedly accepted by a stock exchange, medical hardware provider, and one of the largest game developers, just to name a few. These organizations have a range of 200 to 1000 developers.

Matthew McCullough

Matthew McCullough is an energetic 15 year veteran of enterprise software development, world-traveling open source educator, and co-founder of Ambient Ideas, LLC, a US consultancy. Matthew currently is a trainer for GitHub.com, author of the Git Master Class series for O'Reilly, speaker on the No Fluff Just Stuff tour, author of three of the top 10 DZone RefCards,

including the Git RefCard, and President of the Denver Open Source Users Group.

His current topics of research center around project automation: build tools (Maven, Leiningen, Gradle), distributed version control (Git), Continuous Integration (Hudson) and Quality Metrics (Sonar).

Instructor



The Class

Did you know?

Content and class outline dynamically adjust to audience skill level and questions

Course Outline

Getting Started

- Why a distributed version control system?
- How does Git differ from previous VCS systems?

Installing Git

- The 5 minute litmus test
- No systemic intrusions

Using Git

- Day-to-day commands
- Three stage thinking
- Git under the hood: Hashes, DAGs and Treeish
- A code-and-commit workflow
- Remotes
- Branching in Git
- Cheap branches
- Managing branches
- Merging code
- Rebasing: A better merge
- Navigating the tree: diff, ls-tree and show

Workflows

- Offline sharing
- Pushing & pulling
- Commander, lieutenant & soldier

Tools & Extras

- GUIs & IDEs
- Web tools
- Git hosting

Class Pre-requisites

Basic knowledge about a version control system, whether that be Subversion, CVS, Perforce, StarTeam, SourceSafe, ClearCase or any similar product.

Class Objectives

Getting Started

- Understand how Git works and how to apply that to day to day development.
 - Learn the basic 10 commands that will appear in every-day use of Git.
 - Know how to “back out” mistakes using Git’s incredible history and ability to revert almost any change.
- Leverage the collaboration features of Git for productivity boosts with colleagues.
 - Discover how the offline capabilities of Git work “under the hood” and how to use those to work in more places with less reliance on connectivity.

Accolades

Want to learn more about git? Look no further than @matthewmccull - his Git Foundations class rocks, outstandingly good!

Nate Schutta, Software Architect and Author of Foundations of Ajax

-Peter Bell, CTO of SystemsForge

Excellent training. Nicely paced, good range of content. Really great.

David Bock, Founder, Code Sherpas

Online git training today was phenomenal. Highly recommended

"Thank you very much for your Git class! It was excellent, very clear, great examples, very professional. I am a lot more comfortable with Git now."

-Oscar Pagani, Front End Web Developer, Wells Fargo Bank

Would love for more presentarions to be this polished and structured

-Heiko S.

Additional Accolades

"Matthew, this class was truly excellent. It may be the best online class I've ever attended. What you did is not easy with that tool suite, but you make it look so."

-Bruce Tate, President of RapidRed and author of Seven Languages in Seven Weeks, Deploying Rails Applications, From Java to Ruby, Rails: Up and Running, Beyond Java, 6 others.

"Matthew McCullough did a fantastic job during today's github training! Highly recommended!"

-Josh Long, Developer Evangelist, SpringSource

"Great git class by @matthewmccull. LOT of actionable info."

-Sri Sankaran, Software Architect, SAS

"Thanks again for the training - I really enjoyed it and will heartily recommend it to others."

-John Dubchak, Software Engineer

"Wow - finally seeing the full power of rebase - loving the git training from Matthew McCullough."

-Peter Bell, CTO of SystemsForge

"Fantastic Git training with @matthewmccull today, a really polished pro. Get in on the next one!"

-Brad Armstrong, Digital River

"Spending the day in Git training by @matthewmccull. Great class! Head hurts, moving fast, but great!"

*-Erik Weibust, Software Architect
and Dallas MUG President*

"I feel you were a great instructor. The presentation, your control, and the overall presentation were great. I feel that class had enough freedom to explore different things, but was still grounded with a plan of attack. Very easy to listen for 6 hours today; can't say that with every instructor. Overall I would give this course and you very high marks."

*-Ryan Gibbons, Senior Developer
at Warren Douglas*

"Loving the Git presentation by Matthew McCullough. Choosing which lines to commit = mind blown."

-Greg Case