

# Using Git with a GUI

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THE CASE FOR GIT WITH A GUI:  
MINIMIZING THE LEARNING CURVE



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PASSIONATE ABOUT TEACHING

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# Command Line or GUI?

## Command Line

```
posh-git ~ using-git-with-gui [master]
D:\Dropbox\xavier-morera-pluralsight-dev\using-git-with-gui [master +0 ~1 -0] > git status
On branch master
Your branch is up-to-date with 'origin/master'.
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)

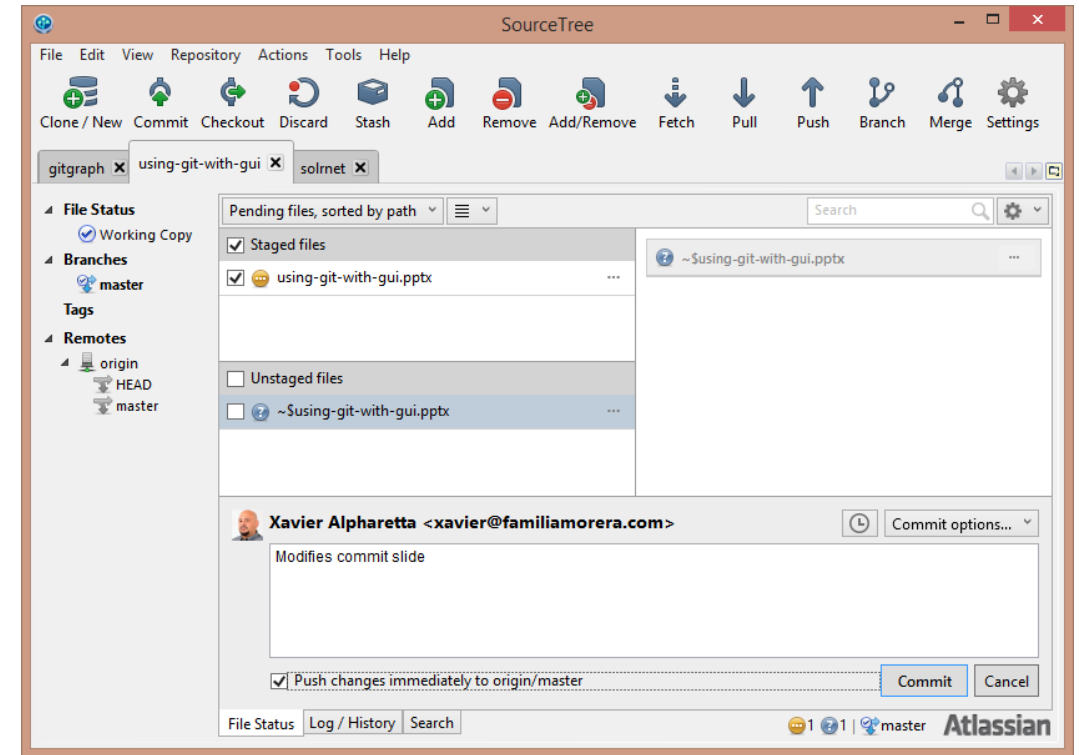
    modified:   using-git-with-gui.pptx

no changes added to commit (use "git add" and/or "git commit -a")
D:\Dropbox\xavier-morera-pluralsight-dev\using-git-with-gui [master +0 ~1 -0] > git add using-git-with-gui.pptx
D:\Dropbox\xavier-morera-pluralsight-dev\using-git-with-gui [master +0 ~1 -0] > git status
On branch master
Your branch is up-to-date with 'origin/master'.
Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)

    modified:   using-git-with-gui.pptx

D:\Dropbox\xavier-morera-pluralsight-dev\using-git-with-gui [master +0 ~1 -0] > git commit -m "Modifies commit slide"
[master 7dce2e6] Modifies commit slide
 1 file changed, 0 insertions(+), 0 deletions(-)
D:\Dropbox\xavier-morera-pluralsight-dev\using-git-with-gui [master] > git push
Counting objects: 3, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 71.54 KiB | 0 bytes/s, done.
Total 3 (delta 2), reused 0 (delta 0)
To https://xmorera@bitbucket.org/xmorera/pluralsight-sourcetree-git.git
   f9a46a6..7dce2e6  master -> master
D:\Dropbox\xavier-morera-pluralsight-dev\using-git-with-gui [master] > git status
On branch master
Your branch is up-to-date with 'origin/master'.
nothing to commit, working directory clean
D:\Dropbox\xavier-morera-pluralsight-dev\using-git-with-gui [master] >
```

## Atlassian SourceTree



IMHO: A GUI Makes Me More Effective



Demo



## Command Line vs. GUI



# Why Git?

**(The Best)  
Source Control**

**Integrity  
Amazingly Fast**

**Local Operations  
Disconnected**

**Distributed**

**Incredibly  
Powerful**

**A Must In Your  
Skillset**



Killer Feature



# Branches



They Are Different



# Let Me Tell You a Story

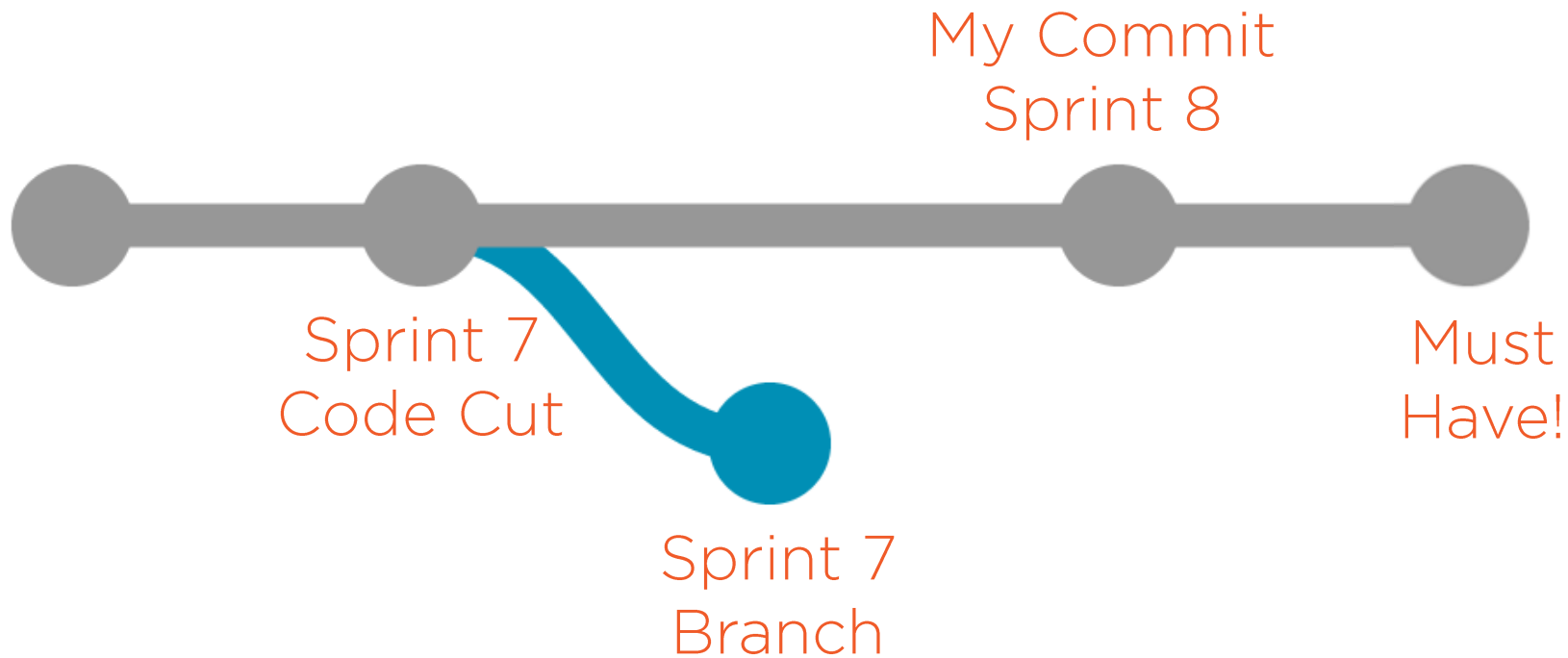


Sprint 7  
Code Cut

*(with another source control)*



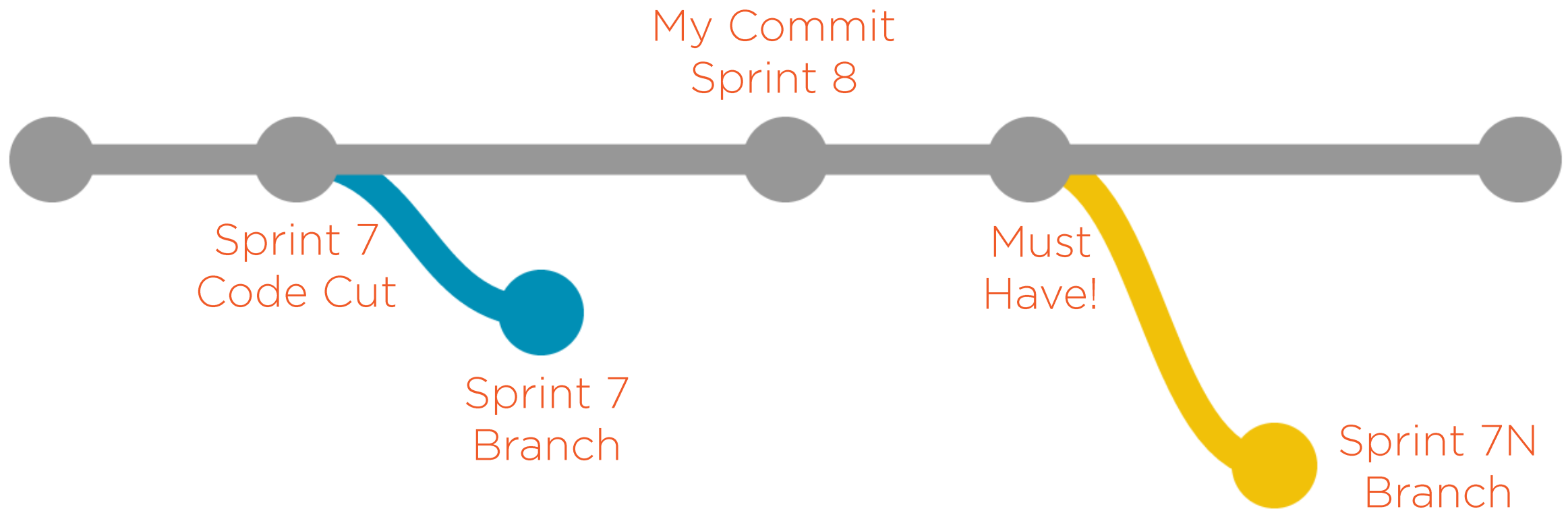
# Let Me Tell You a Story



*(with another source control)*



# Let Me Tell You a Story



*(with another source control)*





# Do You See the Problem?

Sprint 7  
Without Must Have



Sprint 7N  
With Must Have  
“My Commit” Sprint 8



# This Is What Happened

Chaos and Debugging



With Git





# Still Not Convinced?

Microsoft/dotnet

Linux

SolrNet

Json.NET

Bootstrap

FontAwesome

Node.js

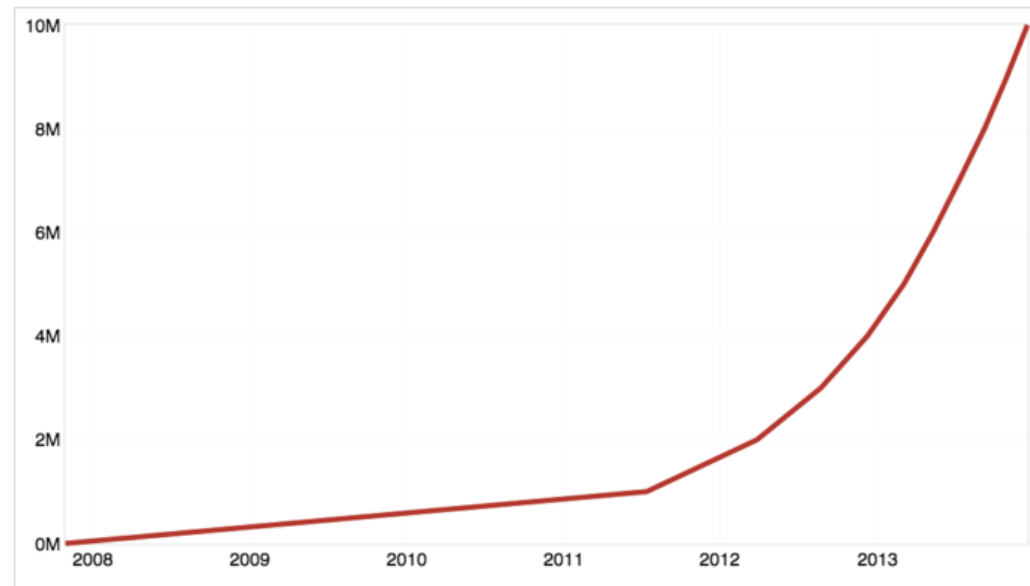
AngularJS

D3

JQuery

Backbone.js

Ruby on Rails



<https://github.com/blog/1724-10-million-repositories>

# GitHub



# Git



# Why Is It Hard to Learn Git?

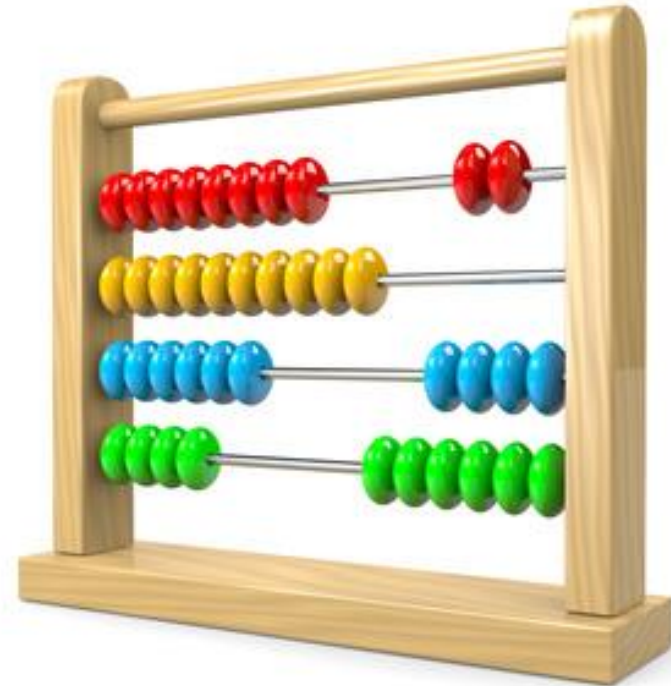


# Why Is It Hard to Learn Git?

SVN, TFS and others...

They are easier!

- Simpler workflow
  - Downsides
- Not distributed
- Not as powerful as Git
- Git is different



# Why Is It Hard to Learn Git?

More places where your code can exist

- Stash, local working directory, index, local repository and remote repository
- Increases possible interactions



A few concepts that are hard at first

- Merge, rebase? Fast forward merge?

Git internals



# Tools - Why Is It Hard to Learn Git?

- Many - command line being widely used
- Can be hard - especially if used to IDE
- Others tools are not very good
- Atlassian SourceTree is here to help!





# Git Is Hard

“Early versions of Git did require a certain amount of brain power to wrap your mind around...”

**Linus Torvalds**



Git

# Get Started

Don't Get Scared



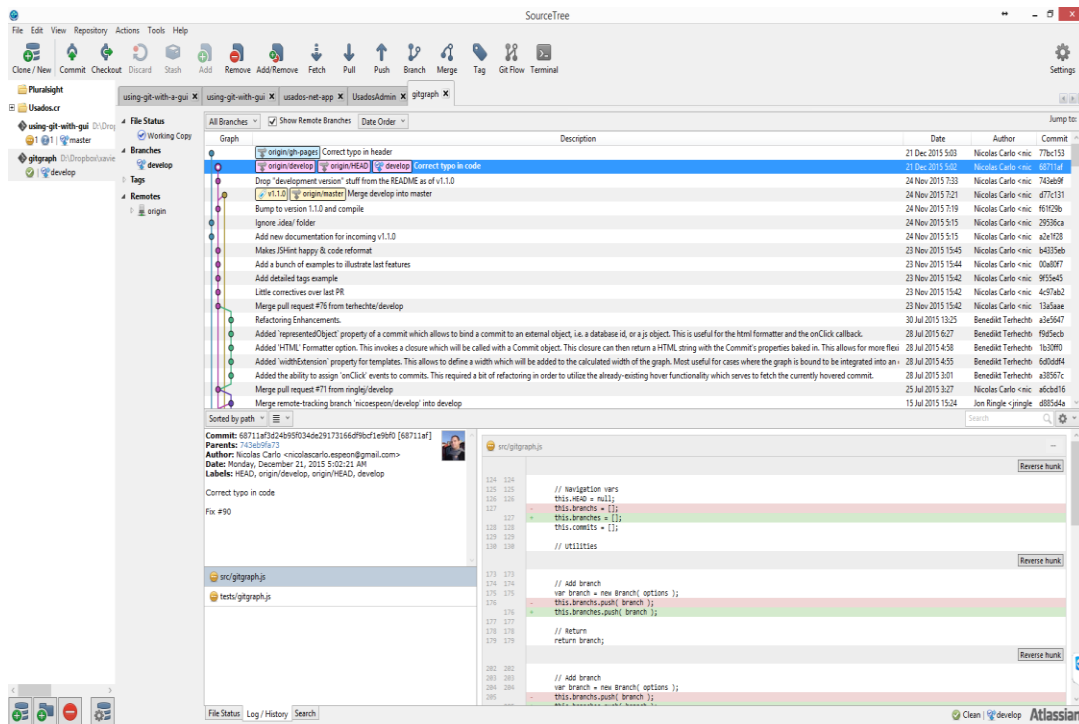
# Using Git with a GUI

Easier  
Quicker  
Productive



# Why Git with a Gui?

## Atlassian SourceTree



Makes you life easier

## Git Personal Assistant

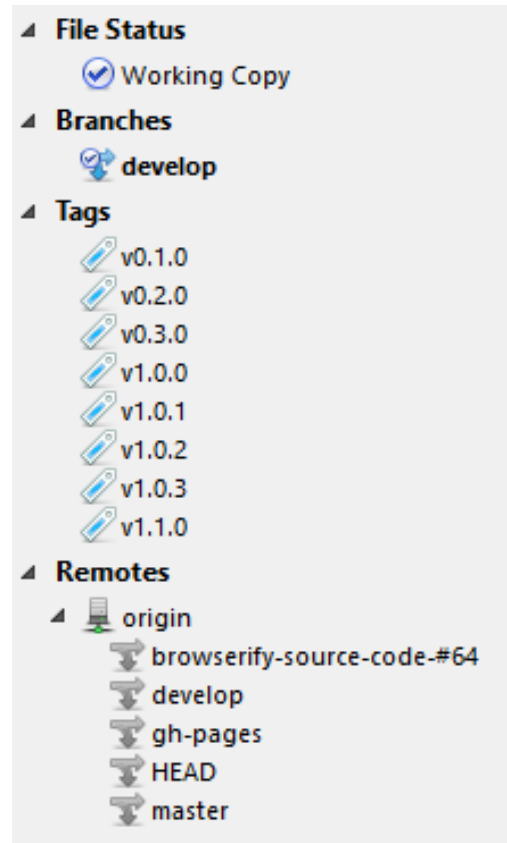


Helps you improve productivity

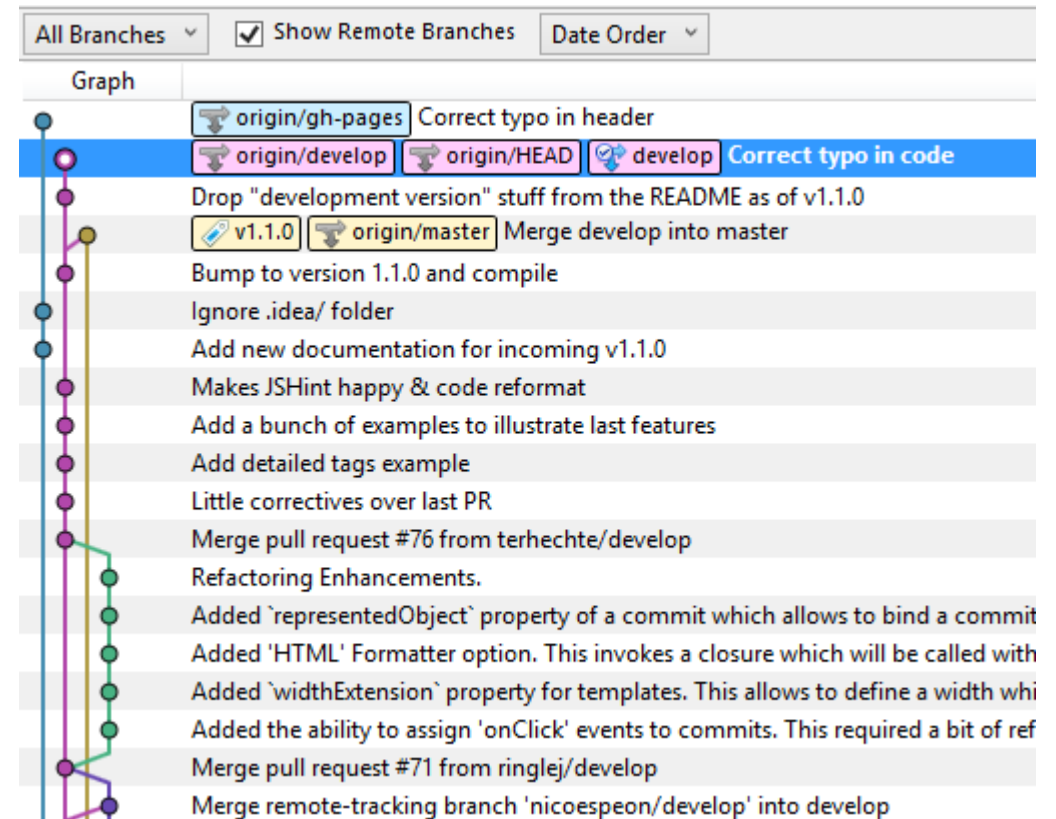


# Minimize Git's Learning Curve

## Visualize Branches



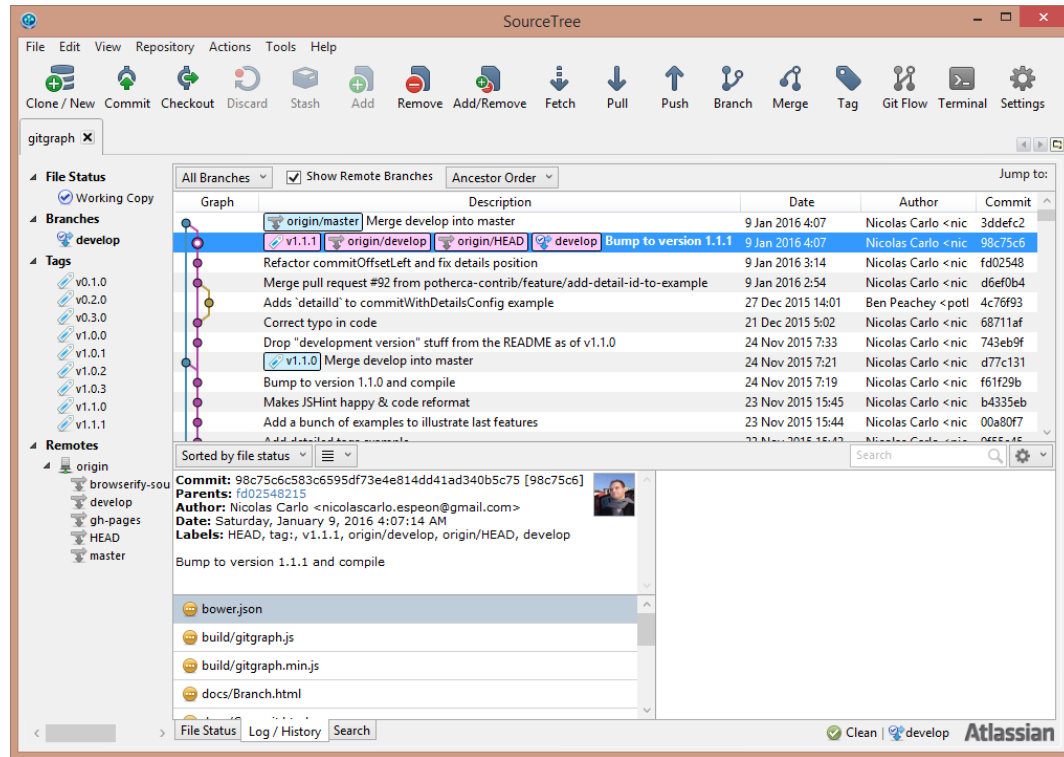
## And History



# Minimize Git's Learning Curve

## Git's Commands

## From Basic To Advanced...



Checkout...

Merge...

Rebase...

Tag...

Archive...

Branch...

Rebase children of 77bc153 interactively...

Reset current branch to this commit

Reverse commit...

Create Patch...

Cherry Pick

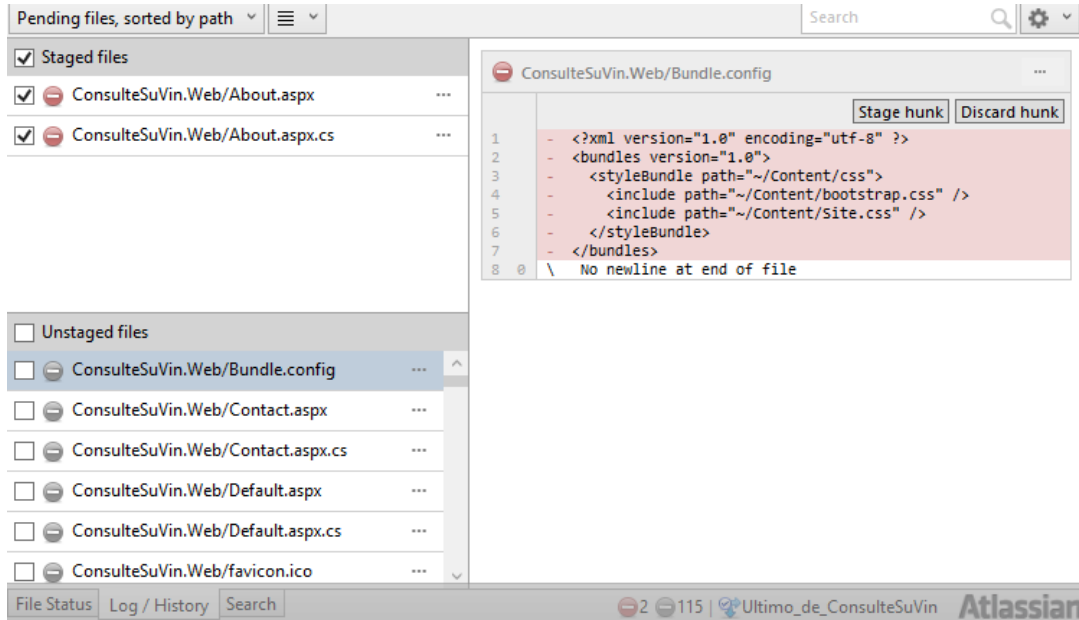
Copy SHA to Clipboard

Custom Actions

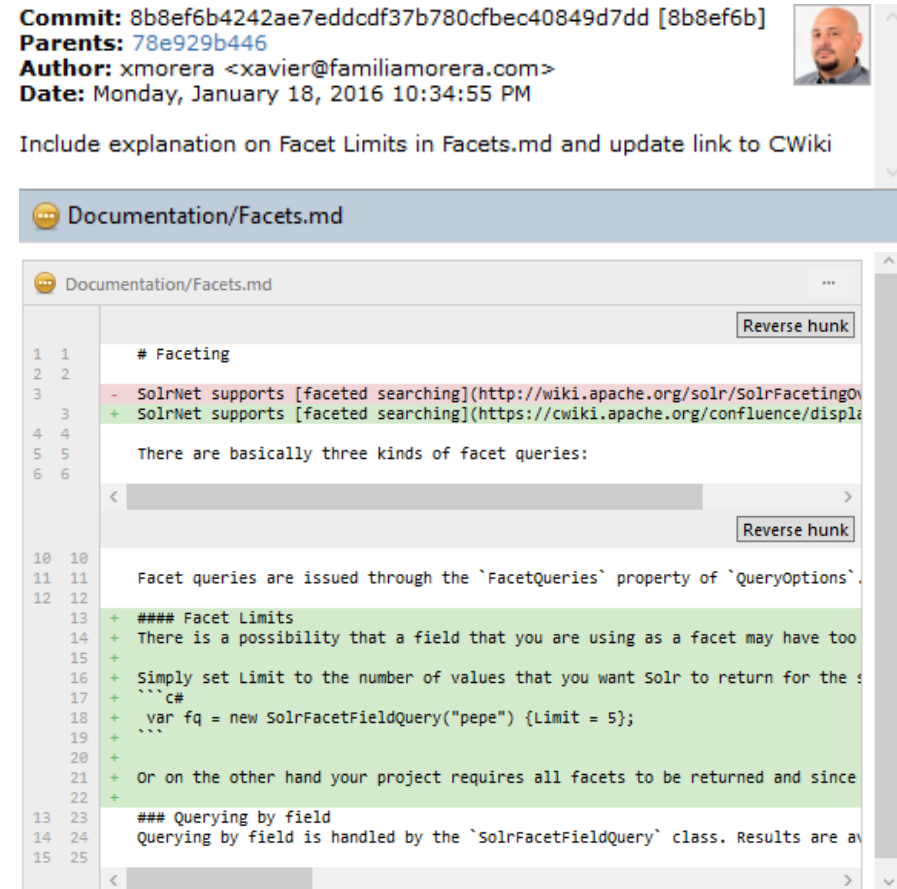


# Minimize Git's Learning Curve

## Prepare Commits



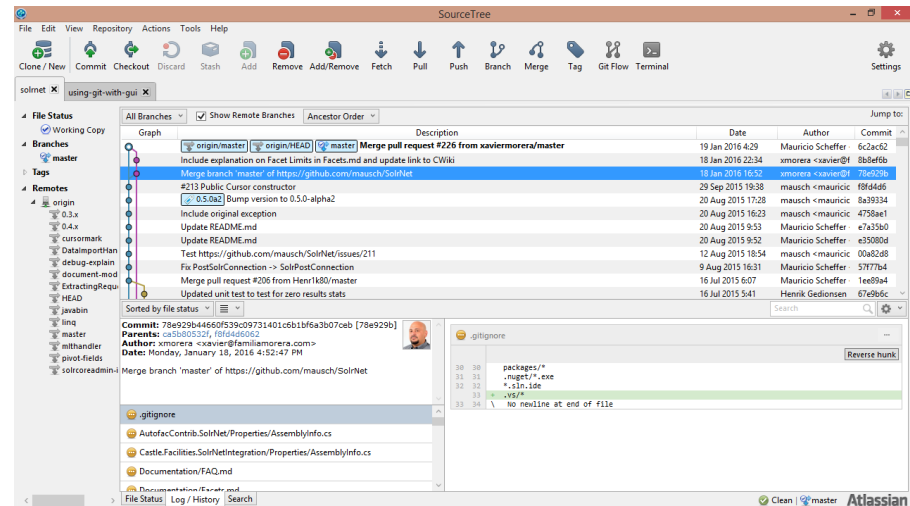
## Visualize Changes



Demo



# Improving Productivity With a GUI





# Atlassian SourceTree

## Perfect for Beginners

GUI

Much easier than command line

Pareto's Law (80/20 Rule)

Most likely does everything you need

Easy... Simple...

Smoother learning curve

Git feel familiar from day 1

## Powerful Enough for Experts

Terminal

Extensible

Custom Actions

Review outgoing/incoming changesets

Cherry-pick between branches

Patch handling, (interactive) rebase, stash, shelve, and much more



# Atlassian Behind SourceTree

The screenshot displays the SourceTree application window. The top menu bar includes File, Edit, View, Repository, Actions, Tools, and Help. The Help menu is open, showing options like 'About SourceTree...', 'Check For Updates', 'Release Notes...', 'Frequently Asked Questions', 'Ask a Question at Atlassian Answers', 'Raise a Support Ticket', and 'Report Bug / Request a New Feature'. The main toolbar contains icons for Pull, Push, Branch, Merge, Tag, Git Flow, and Terminal. The left sidebar shows the 'File Status' section with 'Working Copy' and 'Branches' (master). The 'Remotes' section lists 'origin' and various branches like '0.3.x', '0.4.x', 'cursormark', 'DataImportHan', 'debug-explain', 'document-mod', 'ExtractingRequ', 'HEAD', 'javabin', 'linq', 'master', 'mlthandler', 'pivot-fields', and 'solrcoreadmin-i'. The central pane shows a commit history table with columns for Description, Date, Author, and Commit. The selected commit is 'Include explanation on Facet Limits in Facets.md and update link to CWiki' by xmorera. The bottom pane shows a diff view for 'Documentation/Facets.md' with a 'Reverse hunk' button.

SourceTree

File Edit View Repository Actions Tools Help

Clone / New Commit Checkout Discard S

solrnet X using-git-with-gui X

File Status

Working Copy

Branches

master

Tags

Remotes

origin

0.3.x

0.4.x

cursormark

DataImportHan

debug-explain

document-mod

ExtractingRequ

HEAD

javabin

linq

master

mlthandler

pivot-fields

solrcoreadmin-i

All Branches

Graph

request #226 from xaviormorera/master

Description	Date	Author	Commit
Include explanation on Facet Limits in Facets.md and update link to CWiki	18 Jan 2016 22:34	xmorera <xavier@f	8b8ef6b
Merge branch 'master' of https://github.com/mausch/SolrNet	18 Jan 2016 16:52	xmorera <xavier@f	78e929b
#213 Public Cursor constructor	29 Sep 2015 19:38	mausch <mauricic	f8fd4d6
0.5.0a2 Bump version to 0.5.0-alpha2	20 Aug 2015 17:28	mausch <mauricic	8a39334
Include original exception	20 Aug 2015 16:23	mausch <mauricic	4758ae1
Update README.md	20 Aug 2015 9:53	Mauricio Scheffer	e7a35b0
Update README.md	20 Aug 2015 9:52	Mauricio Scheffer	e35080d
Test https://github.com/mausch/SolrNet/issues/211	12 Aug 2015 18:54	mausch <mauricic	00a82d8
Fix PostSolrConnection -> SolrPostConnection	9 Aug 2015 16:31	Mauricio Scheffer	57f77b4
Merge pull request #206 from Henr1k80/master	16 Jul 2015 6:07	Mauricio Scheffer	1ee89a4
Updated unit test to test for zero results stats	16 Jul 2015 5:41	Henrik Gedionsen	67e9b6c

Sorted by file status

Commit: 8b8ef6b4242ae7eddcdf37b780cfbec40849d7dd [8b8ef6b]

Parents: 78e929b446

Author: xmorera <xavier@familiariorera.com>

Date: Monday, January 18, 2016 10:34:55 PM

Include explanation on Facet Limits in Facets.md and update link to CWiki

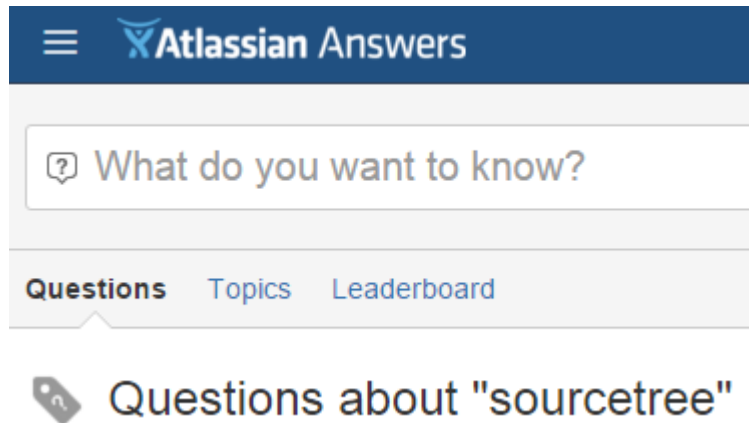
Documentation/Facets.md

Reverse hunk

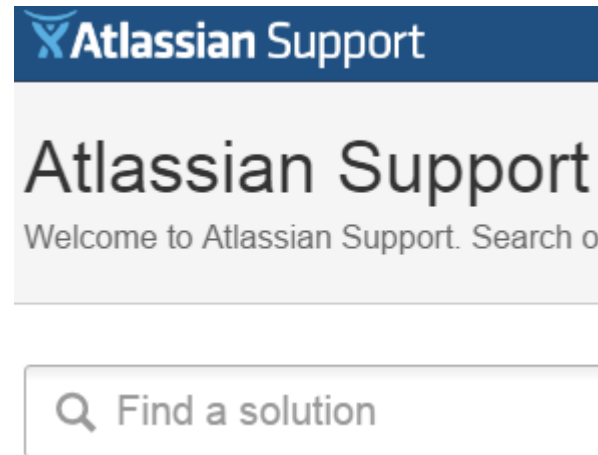
```
1 1 # Faceting
2 2
3 3 - SolrNet supports [faceted searching](http://wiki.apache.org/solr/SolrFacetingOverview).
4 4 + SolrNet supports [faceted searching](https://cwiki.apache.org/confluence/display/solr/Faceting)
5 5
```

There are basically three kinds of facet queries:

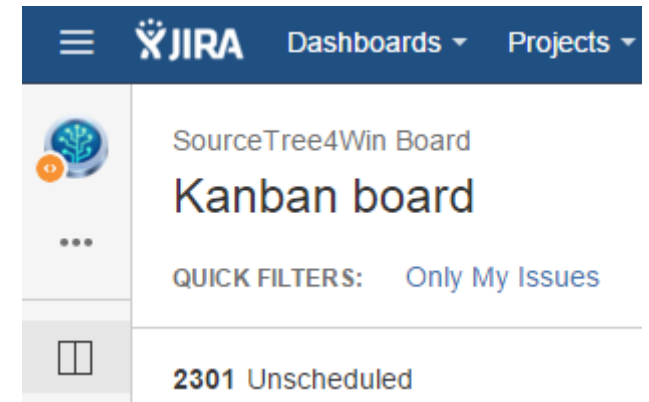
# Atlassian Behind SourceTree



Atlassian Answers



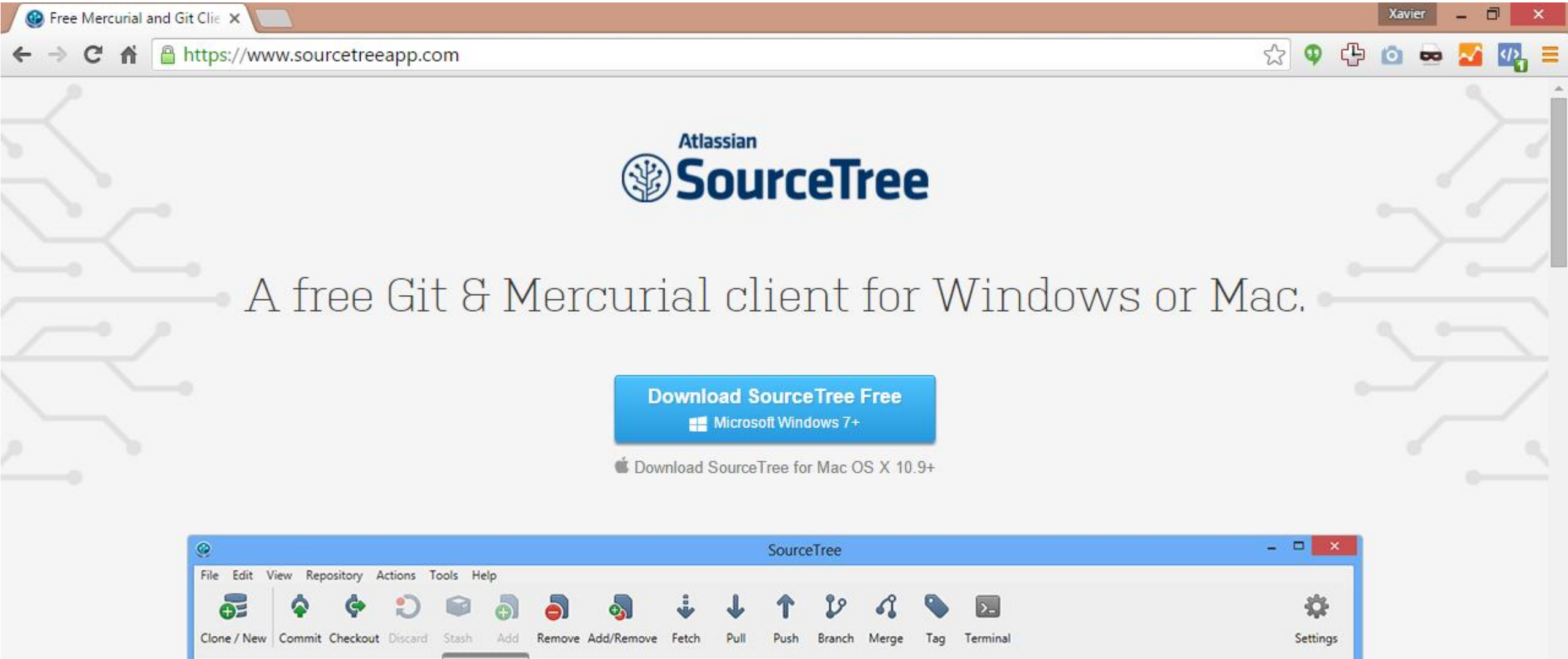
Support Ticket



Report Bug  
Request Feature



# How Do I Get SourceTree?



The image shows a web browser window displaying the SourceTree website. The browser's address bar shows the URL <https://www.sourcetreeapp.com>. The website features the Atlassian SourceTree logo and the text "A free Git & Mercurial client for Windows or Mac." Below this, there are two download buttons: "Download SourceTree Free" for Microsoft Windows 7+ and "Download SourceTree for Mac OS X 10.9+". At the bottom of the image, a portion of the SourceTree application window is visible, showing a menu bar with "File", "Edit", "View", "Repository", "Actions", "Tools", and "Help". The toolbar includes icons for "Clone / New", "Commit", "Checkout", "Discard", "Stash", "Add", "Remove", "Add/Remove", "Fetch", "Pull", "Push", "Branch", "Merge", "Tag", "Terminal", and "Settings".

Free Mercurial and Git Client

<https://www.sourcetreeapp.com>

Atlassian  
**SourceTree**

A free Git & Mercurial client for Windows or Mac.

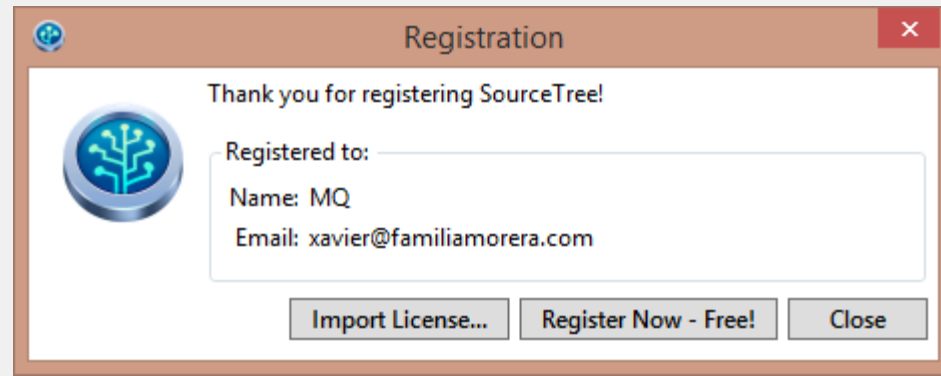
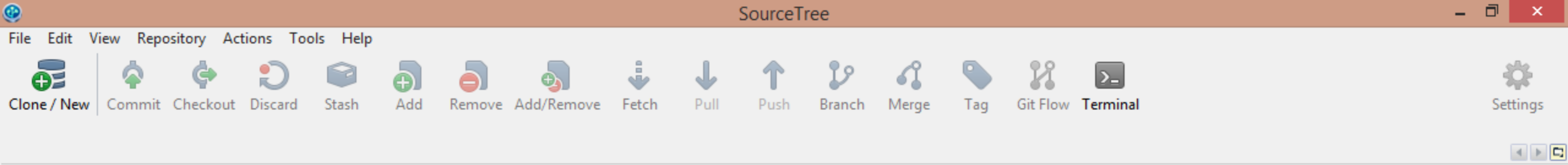
**Download SourceTree Free**  
Microsoft Windows 7+

Download SourceTree for Mac OS X 10.9+

SourceTree

File Edit View Repository Actions Tools Help

Clone / New Commit Checkout Discard Stash Add Remove Add/Remove Fetch Pull Push Branch Merge Tag Terminal Settings



Free!

# Takeaway

**Git is Great**

**Widely Used**

**Hard**

**Minimize the  
Learning Curve**

**Git with a GUI**

**Atlassian  
SourceTree**

