

Git, Android Studio, and Beyond

How an open source tool integrates with an open
source platform

My original intention for this presentation

- Android Studio app development
- Too big of a topic
- Started learning about Git, which I had never heard of
- Learned about Git taking Udacity Android development class, which suggested I need to take their git/github class as a prerequisite
- Found I enjoyed the git/github course a lot more than I expected
- Fit in with my interest about Open Source
- Much narrower topic, and still ties into Android Studio

My aims

- A brief history of Linux, git, and open source
- The basics of using git from the command line
- Go over the git project itself
- Git in Android
- Other interfaces to Git

A Brief History of Open Source

- Linux
- Git
- The Cathedral and The Bazaar
- The spread of open source
- Android sits on Linux

Where did Linux come from

- Unix and Minix
- Linus Torvalds
- Open Source development
- Took off
- A multitude of versions
- On a multitude of platforms

The Cathedral and the Bazaar

- Differentiated Open Source from Free Software
- Inspired Netscape to create Mozilla project, which eventually lead to Firefox
- https://en.wikipedia.org/wiki/The_Cathedral_and_the_Bazaar
- <http://www.catb.org/~esr/writings/cathedral-bazaar/cathedral-bazaar/>
- Enough eyeballs tame complexity

The need for Git

- Former VCS used for Linux development was Bitkeeper, proprietary system
- Need for a new VCS with better performance and right functionality
- Also Bitkeeper was starting to put restrictions on its free use
- Developed in 2005
- Many possible origins of the name Git
- About a month to really get up and running and performing the way intended
- But just 1 day to become self hosting

English
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 Edit links

Releases [\[edit \]](#)

Version	Original release date ^{[<i>citation needed</i>]}	Latest version	Release date ^{[<i>citation needed</i>]}
0.99	2005-07-11	0.99.9n	2005-12-15
1.0	2005-12-21	1.0.13	2006-01-27
1.1	2006-01-08	1.1.6	2006-01-30
1.2	2006-02-12	1.2.6	2006-04-08
1.3	2006-04-18	1.3.3	2006-05-16
1.4	2006-06-10	1.4.4.5	2008-07-16
1.5	2007-02-14	1.5.6.6	2008-12-17
1.6	2008-08-17	1.6.6.3	2010-12-15
1.7	2010-02-13	1.7.12.4	2012-10-17
1.8	2012-10-21	1.8.5.6	2014-12-17
1.9	2014-02-14	1.9.5	2014-12-17
2.0	2014-05-28	2.0.5	2014-12-17
2.1	2014-08-16	2.1.4	2014-12-17
2.2	2014-11-26	2.2.3	2015-09-04
2.3	2015-02-05	2.3.10	2015-09-29
2.4	2015-04-30	2.4.12	2017-05-05
2.5	2015-07-27	2.5.6	2017-05-05
2.6	2015-09-28	2.6.7	2017-05-05
2.7	2015-10-04	2.7.5	2017-05-05
2.8	2016-03-28	2.8.5	2017-05-05
2.9	2016-06-13	2.9.4	2017-05-05
2.10	2016-09-02	2.10.3	2017-05-05
2.11	2016-11-29	2.11.2	2017-05-05
2.12	2017-02-24	2.12.3	2017-05-05
2.13	2017-05-10	2.13.4	2017-08-01
2.14	2017-08-04	2.14	2017-08-04
Legend: ■ Old version ■ Older version, still supported ■ Latest version ■ Latest preview version			

Key dates for Linux and Git

- Linux 1991, developed on MINIX, announce August 25, 1991 on Usenet
- 1997 -- The Cathedral and the Bazaar first published
- Git first commit on April 7th, 2005, 1 day after it was initially announced, 4 days after the beginning of development
- Github originated October, 2007

Basic Git commands

- `git init`
- `git add`
- `git commit`
- `git push`
- `git pull`
- `git log`
- `git status`
- `git diff`

Git web site and demo

- Home for git -- <https://git-scm.com/>
- Tutorial to try git and learn basics -- <https://try.github.io/levels/1/challenges/1>

1.7 · Adding All Changes

Great! You also can use wildcards if you want to add many files of the same type. Notice that I've added a bunch of .txt files into your directory below.

I put some in a directory named "octofamily" and some others ended up in the root of our "octobox" directory. Luckily, we can add all the new files using a wildcard with **git add**. Don't forget the quotes!

→ `git add '*.txt'`



```
TryGit—1300x310
# Changes to be committed:
#   (use "git rm --cached <file>..." to unstage)
#
#       new file:   octocat.txt
#
Success!

$ git commit -m "Add cute octocat story"

[master (root-commit) 20b5ccd] Add cute octocat story
1 file changed, 1 insertion(+)
create mode 100644 octocat.txt

Success!
```

1.7 · Adding All Changes

Great! You also can use wildcards if you want to add many files of the same type. Notice that I've added a bunch of .txt files into your directory below.

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→ **git add '*.txt'**



```
TryGit—1300x310

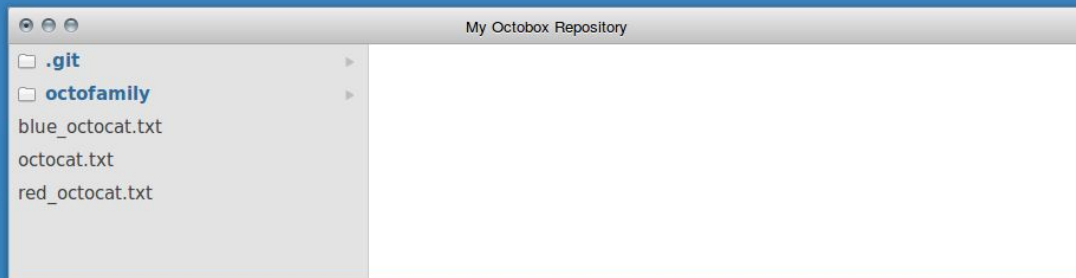
# Changes to be committed:
#   (use "git rm --cached <file>..." to unstage)
#
#       new file:   octocat.txt
#
Success!

$ git commit -m "Add cute octocat story"

[master (root-commit) 20b5ccd] Add cute octocat story
 1 file changed, 1 insertion(+)
 create mode 100644 octocat.txt

Success!

$
```



Advice

Wildcards:

We need quotes so that Git will receive the wildcard before our shell can interfere with it. Without quotes our shell will only execute the wildcard search within the current directory. Git will receive the list of files the shell found instead of the wildcard and it will not be able to add the files inside of the octofamily directory.



More git training resources

- https://try.github.io/wrap_up
- <https://help.github.com/>
- <https://services.github.com/customized-training>
- <http://gitimmersion.com/>
- <http://rogerdudler.github.io/git-guide/>
-

Linus Torvalds talks about Linux and Git

- Youtube TED talk -- <https://www.youtube.com/watch?v=Vo9KPk-ggKk>
- 20 minute talk where Linus Torvalds talks about his work, open source, Linux, git, and what makes him good at what he does

Some Linux numbers and facts

- 50 Core developers
- Roughly 1,000 contributors to each release
- Linux design tried initially to mimic Unix
- Git much more of a design from scratch
- Linux has a single kernel that runs on a multitude of processors -- from mobile devices to supercomputers

Mirror of Git project on Github

- A mirror of Git project, can't update it
- Cool from a historical perspective
- Very first commit (git doing a repository of it's own development) --
<https://github.com/git/git/commits/master?after=20fed7cad40ed0b96232feb828129e3a2ee9860d+48804>
- April 7, 2005
- 10 years of Git interview with Torvalds --
<https://www.linuxfoundation.org/blog/10-years-of-git-an-interview-with-git-creator-linus-torvalds/>
-

Linux irony

- Linus Torvalds was trying to optimize Linux as a desktop operating system
- Even with the huge number and variety of distributions, it's never quite taken off in the desktop market
- However, other than the gaming platform market and desktops, linux dominates on most other computer platforms

Market share by category [\[edit \]](#)



This section needs to be **updated**. Please update this article to reflect recent events or newly available information. *(January 2017)*

Category	Source	Date	Linux	Unix and Unix-like (not incl. Linux)	Windows	In-house	Other
Desktop, laptop (excluding Android and Chrome OS)	Net Applications ^[219]	August 2017	3.37% (Ubuntu, etc.)	5.94% (macOS)	90.7% (10, 8.1, 7)		
Smartphone, tablet	StatCounter Global Stats ^[220]	July 2017	70.27% (Android)	22.47% (iOS)	0.81% (Windows 10 Mobile, Windows Phone 8.1 and older)		6.43%
Server (web)	W3Techs ^[221]	Apr 2017	66.6–37% (of the known-for-sure lower bound of Linux share: Ubuntu 35.8%, Debian 31.9%, CentOS 20.6%, Red Hat (RHEL) 3.3%, Gentoo 2.7%, Fedora 0.9%)	<p>≤. 1% (BSD; Unix-like could be up to 30.18%, then "Unknown" needs to be known to be not Linux)</p> <p>66.6% Unix-like share is mostly Linux; the "Unknown" part, there-of 43.1%, is assumed to be also Linux (for upper bound of that column), could be some non-Linux or e.g. any of the named Linux distributions in the Linux column.</p>	33.5% (Windows Server 2016, W2K12, W2K8)		
Supercomputer	TOP500	June 2017	99.88% (Custom)	0.12% (IBM AIX)			
Mainframe	Gartner ^[213]	Dec 2008	28% (SLES, RHEL)	72% (z/OS) UNIX System Services			
Video game consoles (7th & 8th generation only)	VGChartz ^[222]	Aug 2017		35% (PS4, PS3, Vita, PSP)	16.69% (Xbox One, Xbox 360)	48.30% (Switch, Wii U, Wii, 3DS, DS)	0%
Embedded	UBM Electronics ^[223]	Mar 2012	29.44% (Android plus other non-Android Linux)	4.29% (QNX)	11.65% (WCE 7)	13.5% ("Inhouse/custom" is most popular, single choice)	41.1%

Note



Learn Git in your browser for free with [Try Git](#).



About

The advantages of Git compared to other source control systems.



Documentation

Command reference pages, Pro Git book content, videos and other material.



Downloads

GUI clients and binary releases for all major platforms.



Community

Get involved! Bug reporting, mailing list, chat, development and more.



Pro Git by Scott Chacon and Ben Straub is available to [read online for free](#). Dead tree versions are available on [Amazon.com](#).



[Linux GUIs](#)



[Tarballs](#)



[Mac Build](#)



[Source Code](#)

Companies & Projects Using Git

Google

facebook

Microsoft

twitter

LinkedIn

NETFLIX



PostgreSQL



This open sourced site is hosted on GitHub.
Patches, suggestions and comments are welcome.

Git is a member of Software Freedom Conservancy

```
matt (master) GitAndMore $ git help
usage: git [--version] [--help] [-C <path>] [-c name=value]
           [--exec-path[=<path>]] [--html-path] [--man-path] [--info-path]
           [-p | --paginate | --no-pager] [--no-replace-objects] [--bare]
           [--git-dir=<path>] [--work-tree=<path>] [--namespace=<name>]
           <command> [<args>]

These are common Git commands used in various situations:

start a working area (see also: git help tutorial)
  clone      Clone a repository into a new directory
  init       Create an empty Git repository or reinitialize an existing one

work on the current change (see also: git help everyday)
  add        Add file contents to the index
  mv         Move or rename a file, a directory, or a symlink
  reset      Reset current HEAD to the specified state
  rm         Remove files from the working tree and from the index

examine the history and state (see also: git help revisions)
  bisect     Use binary search to find the commit that introduced a bug
  grep       Print lines matching a pattern
  log        Show commit logs
  show       Show various types of objects
  status     Show the working tree status

grow, mark and tweak your common history
  branch     List, create, or delete branches
  checkout   Switch branches or restore working tree files
  commit     Record changes to the repository
  diff       Show changes between commits, commit and working tree, etc
  merge      Join two or more development histories together
  rebase     Forward-port local commits to the updated upstream head
  tag        Create, list, delete or verify a tag object signed with GPG

collaborate (see also: git help workflows)
  fetch      Download objects and refs from another repository
  pull       Fetch from and integrate with another repository or a local branch
  push       Update remote refs along with associated objects

'git help -a' and 'git help -g' list available subcommands and some
concept guides. See 'git help <command>' or 'git help <concept>'
to read about a specific subcommand or concept.
matt (master) GitAndMore $
```

```
File Edit View Search Terminal Help
available git commands in '/usr/lib/git-core'

add
add--interactive
am
annotate
apply
archive
bisect
bisect--helper
blame
branch
bundle
cat-file
check-attr
check-ignore
check-mailmap
check-ref-format
checkout
checkout-index
cherry
cherry-pick
citool
clean
clone
column
commit
commit-tree
config
count-objects
credential
credential-cache
credential-cache--daemon
credential-store
daemon
describe
diff
diff-files
diff-index
diff-tree
difftool
difftool--helper
fast-export
fast-import
fetch
fetch-pack
filter-branch
fmt-merge-msg
for-each-ref
format-patch
fsck
fsck-objects
gc
get-tar-commit-id
grep
gui
gui--askpass
hash-object
help
http-backend
http-fetch
http-push
imap-send
index-pack
init
init-db
merge-octopus
merge-one-file
merge-ours
merge-recursive
merge-resolve
merge-subtree
merge-tree
mergetool
mktag
mktree
mv
name-rev
notes
pack-objects
pack-redundant
pack-refs
patch-id
prune
prune-packed
pull
push
quiltimport
read-tree
rebase
receive-pack
reflog
relink
remote
remote-ext
remote-fd
remote-ftp
remote-ftp
remote-http
remote-https
remote-testsvn
repack
replace
request-pull
rerere
reset
rev-list
rev-parse
revert
rm
send-pack
sh-i18n--envsubst
shell
shortlog
show
show-branch
show-index
show-ref
stage
stash
status
strip-space
submodule
submodule--helper
subtree
symbolic-ref
tag
unpack-file
unpack-objects
update-index
```

Basic Git concepts

- Repository
- Branch
- Fork
- Pull request
- Merge


```
Terminal
File Edit View Search Terminal Help

new file:   GitInit.png
new file:   GitStatus.png
```

Untracked files:
(use "git add <file>..

Screenshot from

```
matt (master +) GitAndMo
matt (master +) GitAndMo
On branch master
```

Initial commit

Changes to be committed:
(use "git rm --cached

```
new file:   Crea
new file:   GitA
new file:   GitI
new file:   GitS
```

```
matt (master +) GitAndMo
```

```
~/version-control/GitAndMore/.git/COMMIT_EDITMSG - Sublime Text (UNREGISTER... - + x
File Edit Selection Find View Goto Tools Project Preferences Help
```

```
COMMIT_EDITMSG
1 Initial Commit
2 # Please enter the commit message for your changes. Lines
  starting
3 # with '#' will be ignored, and an empty message aborts the
  commit.
4 # On branch master
5 #
6 # Initial commit
7 #
8 # Changes to be committed:
9 #   new file:   CreateDirectory.png
10 #   new file:   GitAdds.png
11 #   new file:   GitInit.png
12 #   new file:   GitStatus.png
13 #
14 # Untracked files:
15 #   GitCommit.png
16 #
17
```

Line 1, Column 15

Tab Size: 4

Plain Text

Logs



This repository

Search

Pull requests

Issues

Marketplace

Explore

+ ▾

MattBroihier / GitAndMore

Watch ▾ 0

Star 0

Fork 0

Code

Issues 0

Pull requests 0

Projects 0

Wiki

Settings

Insights ▾

No description, website, or topics provided.

Edit

[Add topics](#)

2 commits

1 branch

0 releases

1 contributor

Branch: master ▾

New pull request

Create new file

Upload files

Find file

Clone or download ▾



MattBroihier Add 2 new screen prints

Latest commit 3a7d464 21 minutes ago

CreateDirectory.png

Initial Commit

an hour ago

EditCommitMessage.png

Add 2 new screen prints

21 minutes ago

GitAdds.png

Initial Commit

an hour ago

GitCommit.png

Add 2 new screen prints

21 minutes ago

GitInit.png

Initial Commit

an hour ago

GitStatus.png

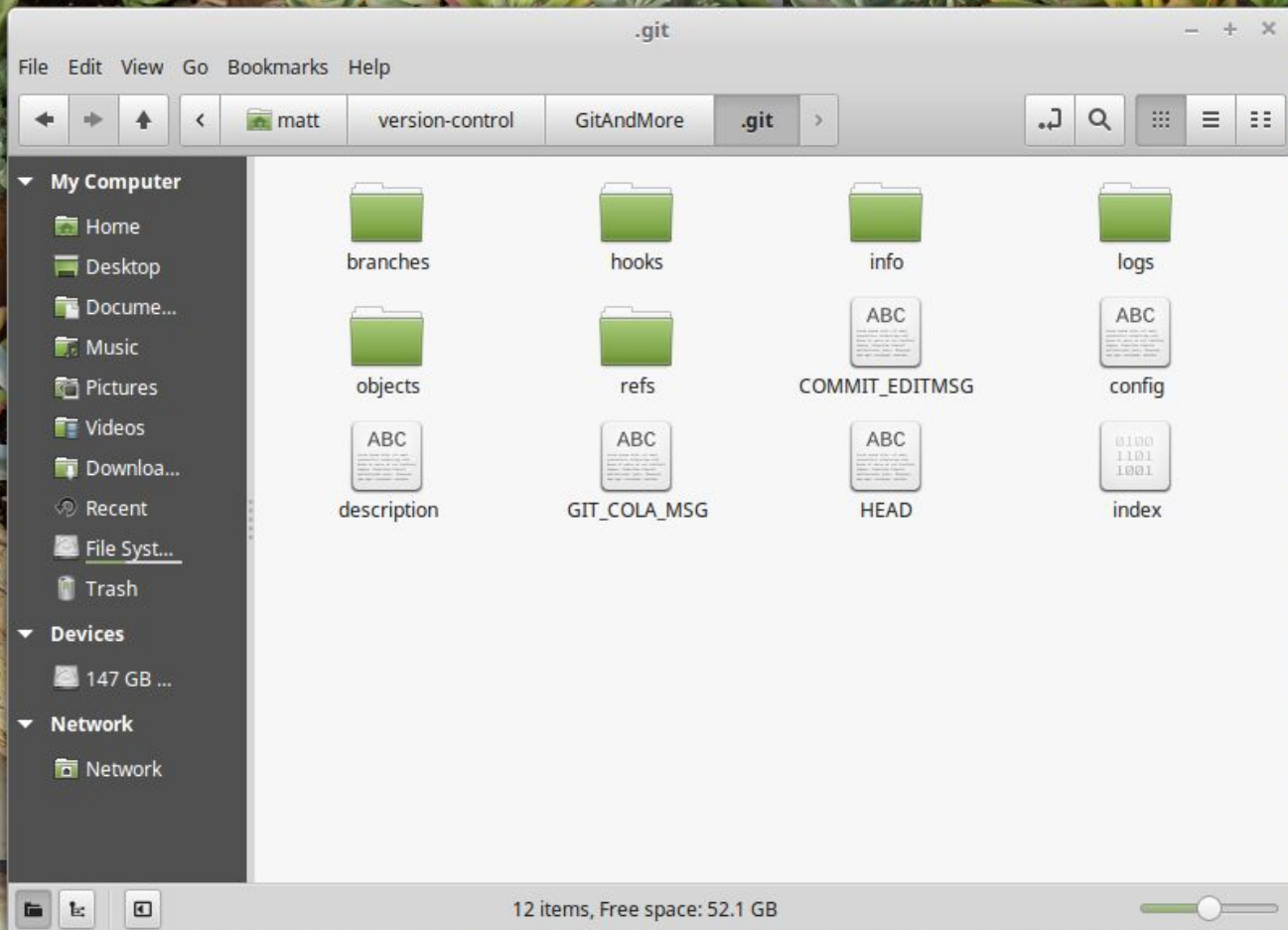
Initial Commit

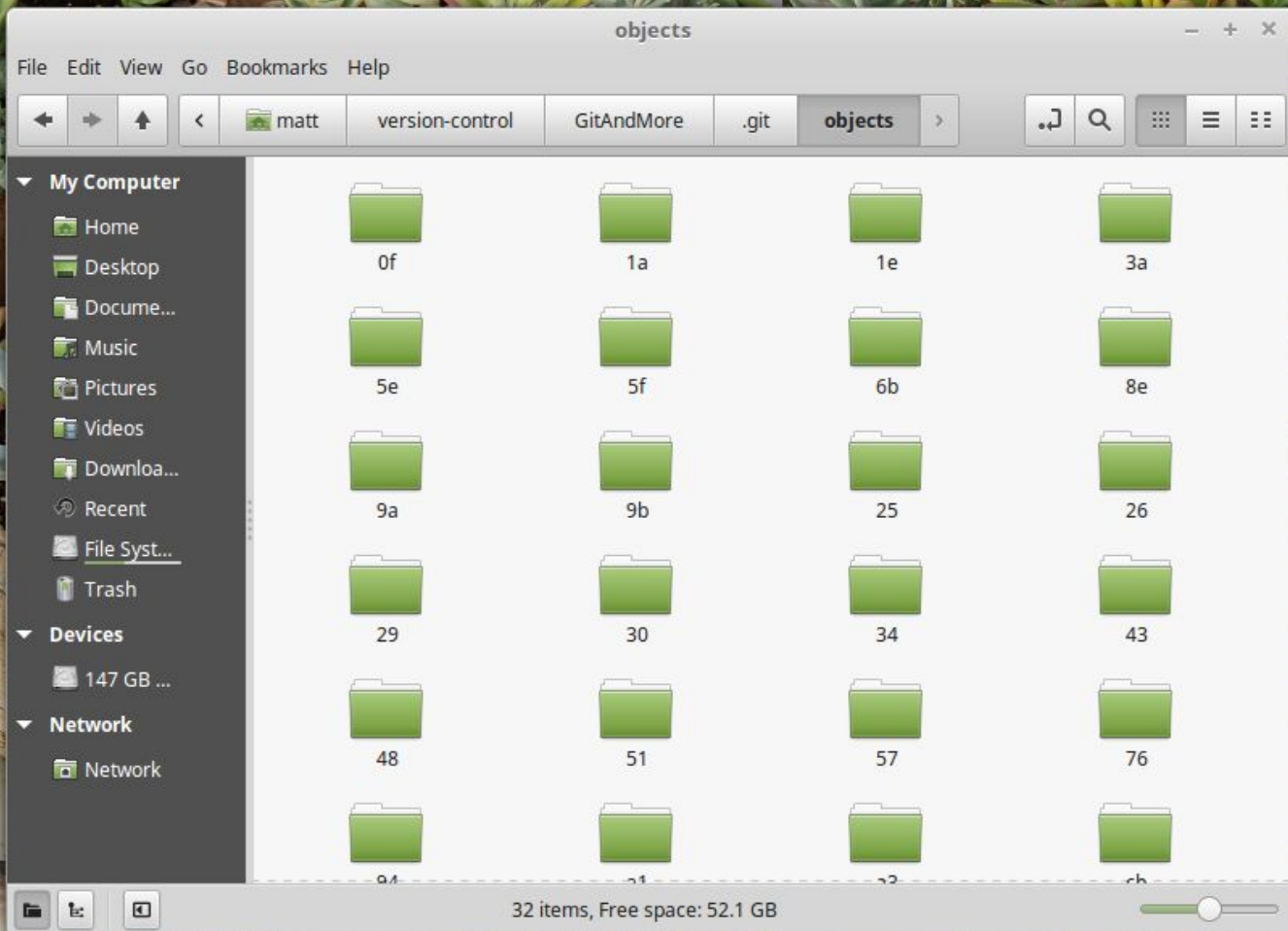
an hour ago

Help people interested in this repository understand your project by adding a README.

Add a README







View

Log

1000

Graph

Summary	Author	Date, Time
playing with colors a bit	Matt	Wed Sep 27 16:31:32 2017 ...
merge	zhangzhikai	Mon Aug 22 10:20:37 2016 +...
fix the format problem	zhikaizhang	Fri Jul 29 23:59:28 2016 +0800
memorize the playerColor and difficulty of last choice	zhangzhikai	Mon Aug 22 10:07:47 2016 +...
update README	zhangzhikai	Fri Jul 29 23:40:38 2016 +0800
v1.0.0	zhangzhikai	Thu Jul 28 20:15:30 2016 +0...

Diff


zhangzhikai <zhangzhikai@seu.edu.cn>
memorize the playerColor and difficulty of last choice
d0857945213a0add8971646c8a46bd995c603776

```
diff --git a/.idea/misc.xml b/.idea/misc.xml
index 7158618..cca2cda 100644
--- a/.idea/misc.xml
+++ b/.idea/misc.xml
@@ -37,7 +37,7 @@
<ConfirmationsSetting value="0" id="Add" />
<ConfirmationsSetting value="0" id="Remove" />
</component>
- <component name="ProjectRootManager" version="2" languageLevel="JDK_1_7" default="true" assert-keyword="true" jdk-15="true" pro
+ <component name="ProjectRootManager" version="2" languageLevel="JDK_1_8" default="true" assert-keyword="true" jdk-15="true" pro
  <output url="file://$PROJECT_DIR$/build/classes" />
</component>
<component name="ProjectType">
diff --git a/app/src/main/java/cn/zhikaizhang/activity/GameActivity.java b/app/src/main/java/cn/zhikaizhang/activity/GameActivity.java
index 69f420b..f964fce 100644
--- a/app/src/main/java/cn/zhikaizhang/activity/GameActivity.java
+++ b/app/src/main/java/cn/zhikaizhang/activity/GameActivity.java
@@ -2,9 +2,11 @@ package cn.zhikaizhang.activity;

import android.app.Activity;
import android.content.Intent;
+import android.content.SharedPreferences;
import android.os.Bundle;
import android.os.Handler;
import android.os.Message;
+import android.preference.PreferenceManager;
import android.view.KeyEvent;
import android.view.MotionEvent;
import android.view.View;
@@ -30,125 +32,131 @@ import cn.zhikaizhang.game.ReversiView;

public class GameActivity extends Activity {
```

HEAD master origin/master



Files

Filename	Additions	Deletions
.idea/misc.xml	1	1
app/src/main/java/cn/zhikaizhang/activity/GameActivity.java	241	229
app/src/main/java/cn/zhikaizhang/activity/MainActivity.java	8	2
app/src/main/java/cn/zhikaizhang/widget/NewGameDialog.java	10	3
app/src/main/res/layout/new_game_dialog.xml	1	0

25 facts about Linux on it's 25th birthday

<https://medium.freecodecamp.org/linux-is-25-yay-lets-celebrate-with-25-rad-facts-about-linux-c8d8ac30076d>

What is a pull request?



The image shows a screenshot of a GitHub 'Advice' card. The card has a blue background and a white border. At the top, the word 'Advice' is written in white. To the right of the title is a small cartoon cat holding a red heart. Below the title, the heading 'Pull Requests' is written in white. The main text of the card explains that if you're hosting your repo on GitHub, you can do something called a pull request. It then describes a pull request as a way for the boss of the project to look through your changes and make comments before deciding to merge in the change. It's a really great feature that is used all the time for remote workers and open-source projects. Finally, it says to check out the pull request help page for more information.

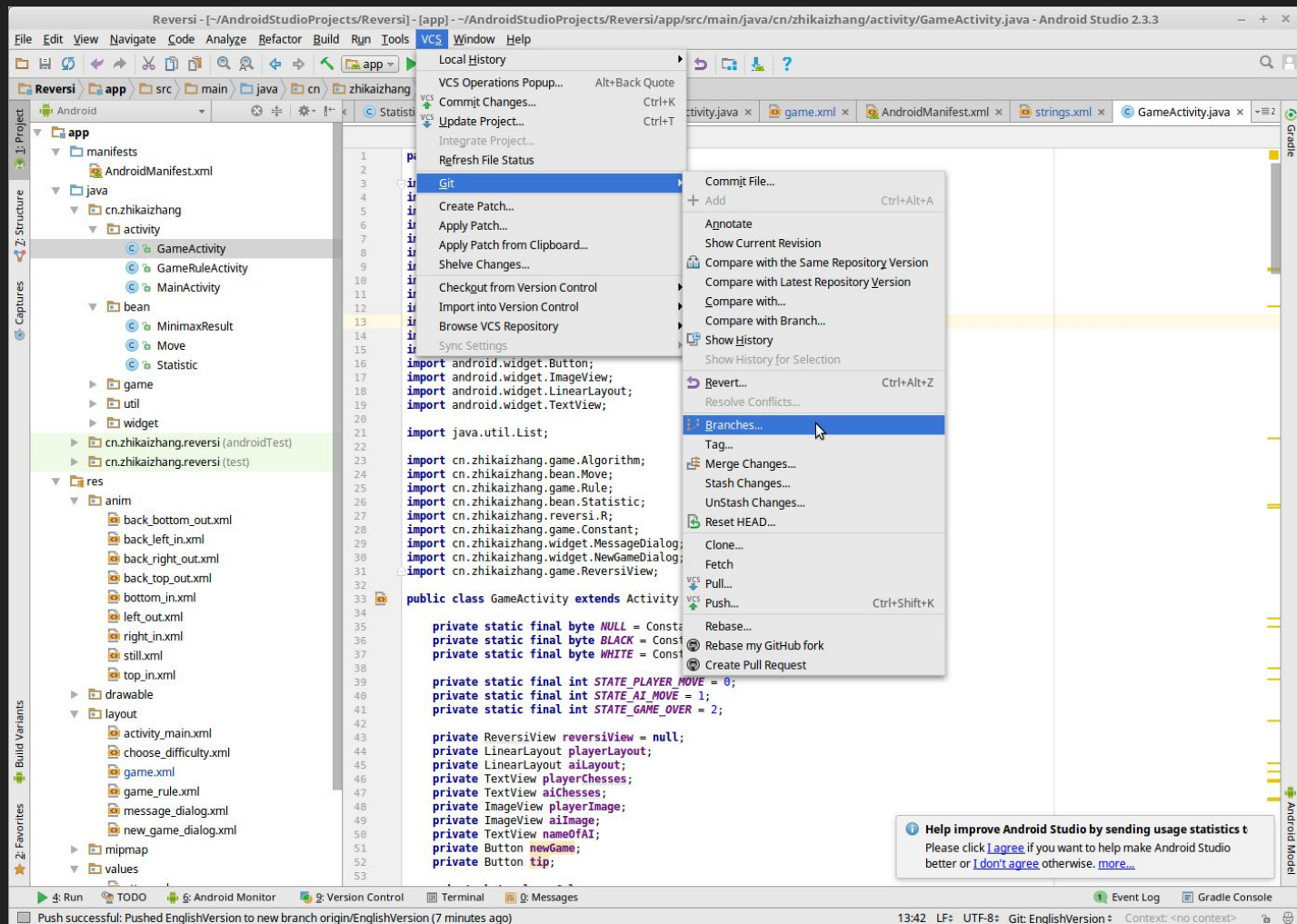
Advice

Pull Requests

If you're hosting your repo on GitHub, you can do something called a pull request.

A pull request allows the boss of the project to look through your changes and make comments before deciding to merge in the change. It's a really great feature that is used all the time for remote workers and open-source projects.

Check out the [pull request help page](#) for more information.



Reversi [-/AndroidStudioProjects/Reversi] - [app] -- ~/AndroidStudioProjects/Reversi/app/src/main/java/cn/zhikaizhang/activity/GameActivity.java - Android Studio 2.3.3

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

Reversi app src main java cn zhikaizhang activity MainActivity.java game.xml AndroidManifest.xml strings.xml GameActivity.java

1: Project
2: Structure
3: Captures

Android
app
manifests
AndroidManifest.xml
java
cn.zhikaizhang
activity
GameActivity
GameRuleActivity
MainActivity
bean
MinimaxResult
Move
Statistic
game
util
widget
cn.zhikaizhang.reversi (androidTest)
cn.zhikaizhang.reversi (test)
res
anim
back_bottom_out.xml
back_left_in.xml
back_right_out.xml
back_top_out.xml
bottom_in.xml
left_out.xml

```
1 package cn.zhikaizhang.activity;
2
3 import android.app.Activity;
4 import android.content.Intent;
5 import android.content.SharedPreferences;
6 import android.os.Bundle;
7 import android.os.Handler;
8 import android.os.Message;
9 import android.preference.PreferenceManager;
10 import android.view.KeyEvent;
11 import android.view.MotionEvent;
12 import android.view.View;
13 import android.view.View.OnClickListener;
14 import android.view.View.OnTouchListener;
15 import android.view.Window;
16 import android.widget.Button;
17 import android.widget.ImageView;
18 import android.widget.LinearLayout;
19 import android.widget.TextView;
20
21 import java.util.List;
22
23 import cn.zhikaizhang.game.Algorithm;
24 import cn.zhikaizhang.bean.Move;
25 import cn.zhikaizhang.game.Rule;
26 import cn.zhikaizhang.bean.Statistic;
27 import cn.zhikaizhang.reversi.R;
28 import cn.zhikaizhang.game.Constant;
29 import cn.zhikaizhang.widget.MessageDialog;
30 import cn.zhikaizhang.widget.NewMessageDialog;
31 import cn.zhikaizhang.game.ReversiView;
32
33 public class GameActivity extends Activity {
34     private static final byte MULE = Constant.MULE;
35 }
```

Version Control: Local Changes Log Console

Branch: All User: All Date: All Paths: All

HEAD EnglishVersion origin/EnglishVersion Creating English version
master origin/master playing with colors a bit
merge
memorize the playerColor and difficulty of last choice
fix the format problem
update README
v1.0.0

Commit details

Matt	9/28/17 10:04 AM
Matt	9/27/17 4:31 PM
zhangzhikai	8/21/16 9:20 PM
zhangzhikai	8/21/16 9:07 PM
zhikaizhang*	7/29/16 10:59 AM
zhangzhikai	7/29/16 10:40 AM
zhangzhikai	7/28/16 7:15 AM

4: Run TODO 5: Android Monitor 6: Version Control Terminal Messages

Event Log Gradle Console

Push successful: Pushed EnglishVersion to new branch origin/EnglishVersion (9 minutes ago)

21:23 LF: UTF-8 Git: EnglishVersion Context: <no context>

Git gui tools

- A bunch out there, here are a couple
- <https://github.com/git-cola/git-cola/>
- Within Git Cola (DAG) --
<https://git-cola.github.io/share/doc/git-cola/html/git-dag.html>
-

Terminal



File Edit View Search Terminal Help



```
matt ~ $ cd version-control/git
bash: cd: version-control/git: No such file or directory
matt ~ $ cd version-control/Git
matt Git $ git clone https://github.com/git/git.git
Cloning into 'git'...
remote: Counting objects: 232648, done.
remote: Total 232648 (delta 0), reused 0 (delta 0), pack-reused 232648
Receiving objects: 100% (232648/232648), 93.65 MiB | 10.38 MiB/s, done.
Resolving deltas: 100% (171398/171398), done.
Checking connectivity... done.
matt Git $ git status
fatal: Not a git repository (or any of the parent directories): .git
matt Git $ cd ..
matt version-control $ cd git
matt (master) git $ git status
On branch master
Your branch is up-to-date with 'origin/master'.
nothing to commit, working directory clean
matt (master) git $ git clone https://github.com/git/git.git
```

- Split up read-cache.c into more logical clumps.
- Clean up the Makefile a bit.
- Add the simple scripts I used to do a merge with content conflicts.
- Merge the new object model thing from Daniel Barkalow
- [PATCH] Switch implementations of merge-base, port to parsing
- [PATCH] Port fsck-cache to use parsing functions
- [PATCH] Port rev-tree to parsing functions
- [PATCH] Implementations of parsing functions
- [PATCH] Header files for object parsing
- [PATCH] fix bug in read-cache.c which loses files when merging a tree
- [PATCH] fix confusing behaviour of update-cache --refresh on unmerged paths

Linus Torvalds <torvalds@ppc970.osdl.org>	2005-04-18 15:04:43
Daniel Barkalow <torvalds@ppc970.osdl.org>	2005-04-18 14:49:39
Linus Torvalds <torvalds@ppc970.osdl.org>	2005-04-18 14:15:10
Linus Torvalds <torvalds@ppc970.osdl.org>	2005-04-18 14:12:00
Daniel Barkalow <barkalow@iabervon.org>	2005-04-18 13:39:48
Daniel Barkalow <barkalow@iabervon.org>	2005-04-18 13:39:48
Daniel Barkalow <barkalow@iabervon.org>	2005-04-18 13:39:48
Daniel Barkalow <barkalow@iabervon.org>	2005-04-18 13:39:48
James Bottomley <james.bottomley@Steeleye.com>	2005-04-18 13:44:31
junin C Hamano <junin@rox.net>	2005-04-18 12:42:48

```
2005-04-18 15:04:43
2005-04-18 14:49:39
2005-04-18 14:15:10
2005-04-18 14:12:00
2005-04-18 13:39:48
2005-04-18 13:39:48
2005-04-18 13:39:48
2005-04-18 13:39:48
2005-04-18 13:39:48
2005-04-18 13:44:31
2005-04-18 12:42:48
```

← → Row 50989 / 51112

Find   commit containing:

Exact ▾ All fields ▾

Search

```

Diff Old version N version Lines of context: 3 Ignore space change Line diff
Author: Daniel Barkalow <barkalow@iabervon.org> 2005-04-18 13:39:48
Committer: Linus Torvalds <torvalds@pp3979.osdl.org> 2005-04-18 13:39:48
Parent: 17578565d7f21798e45868d47d811ac14d08 (PATCH) Implementations of parsing functions
Child: 175785629b0c25c1bdc1ef18925541d484a820 (PATCH) Port fsck-cache to use parsing functions
Branches: master, remotes/origin/main, remotes/origin/master, remotes/origin/next, remotes/origin/p
Follows:
Precedes: v0.99

```

[PATCH] Port rev-tree to parsing functions

This ports rev-tree to use the parsing functions introduced in the previous patches.

Signed-Off-By: Daniel Barkalow <barkalow@iabervon.org>

Signed-off-by: Linus Torvalds <torvalds@osdl.org>

```
----- Makefile -----
index 871cbb..fede848 100644
@@ -52,8 +52,8 @@ checkout-cache: checkout-cache.o read-cache.o
diff-tree: diff-tree.o read-cache.o
$(CC) $(CFLAGS) -o diff-tree diff-tree.o read-cache.o $(LIBS)

- rev-tree: rev-tree.o read-cache.o
- $(CC) $(CFLAGS) -o rev-tree rev-tree.o read-cache.o $(LIBS)
+ rev-tree: rev-tree.o read-cache.o object.o commit.o tree.o blob.o
+ $(CC) $(CFLAGS) -o rev-tree rev-tree.o read-cache.o object.o commit.o tree.o blob.o $(LIBS)

show-files: show-files.o read-cache.o
$(CC) $(CFLAGS) -o show-files show-files.o read-cache.o $(LIBS)
```

```

rev-tree.c
index fell4ab..c3884e3 100644
@@ -4,7 +4,7 @@
#include <ctype.h>

#include "cache.h"
-#include "revision.h"
+#include "commit.h"

/*
 * revision.h leaves the low 16 bits of the "flags" field of the
@@ -18,38 +18,7 @@ static inline basemask = 0;

static void read_cache_file(const char *path)
{
    FILE *file = fopen(path, "r");
    char line[500];

    if (!file)
        die("bad revtree cache file (%s)", path);
}

```

View

Log

50000

Graph

Summary

Author

Date, Time

Export "cache_name_compare()" helper function.

Linus Torvalds

Sat Apr 9 12:59:11 2005 ...

Make "read-tree" read the tree into the current directory cache.

Linus Torvalds

Sat Apr 9 12:11:25 2005 ...

Make "write_cache()" and friends available as generic routines.

Linus Torvalds

Sat Apr 9 12:09:27 2005 ...

Fix "checkout-cache.c" mis-use of read_sha1_file() interface.

Linus Torvalds

Sat Apr 9 11:24:41 2005 ...

Fix up "checkout-cache" a bit

Linus Torvalds

Sat Apr 9 09:59:44 2005 ...

Add a "checkout-cache" command which does what the name suggests.

Linus Torvalds

Sat Apr 9 09:53:05 2005 ...

Make the cache stat information comparator public.

Linus Torvalds

Sat Apr 9 09:48:20 2005 ...

Make "cache_name_pos()" available to others.

Linus Torvalds

Sat Apr 9 09:26:55 2005 ...

Fix missing return values and some error tests for empty index files

Linus Torvalds

Sat Apr 9 00:25:22 2005 ...

Make fsck-cache start parsing the object types, and checking their internal format.

Linus Torvalds

Fri Apr 8 17:11:14 2005 -0...

Add "-lz" to link line to get in zlib.

Linus Torvalds

Fri Apr 8 15:31:19 2005 -0...

Add new fsck-cache to Makefile.

Linus Torvalds

Fri Apr 8 15:04:51 2005 -0...

Add first cut at "fsck-cache" that validates the SHA1 object store.

Linus Torvalds

Fri Apr 8 15:02:42 2005 -0...

Add "check_sha1_signature()" helper function

Linus Torvalds

Fri Apr 8 15:01:15 2005 -0...

Factor out "read_sha1_file" into mapping/inflating/unmapping.

Linus Torvalds

Fri Apr 8 14:42:29 2005 -0...

Use "-Wall -O2" for the compiler to get more warnings.

Linus Torvalds

Fri Apr 8 09:59:28 2005 -0...

Make "cat-file" output the file contents to stdout.

Linus Torvalds

Fri Apr 8 09:16:38 2005 -0...

Make read-tree actually unpack the whole tree.

Linus Torvalds

Thu Apr 7 21:03:28 2005 ...

Add copyright notices.

Linus Torvalds

Thu Apr 7 15:16:10 2005 ...

Initial revision of "git", the information manager from hell

Linus Torvalds

Thu Apr 7 15:13:13 2005 ...

Diff

Linus Torvalds <torvalds@ppc970.osdl.org>

Initial revision of "git", the information manager from hell

e83c5163316f89bfde7d9ab23ca2e25604af290

diff --git a/Makefile b/Makefile

new file mode 100644

index 0000000..a6bba79

--- /dev/null

+++ b/Makefile

@@ -0,0 +1,40 @@

+CFLAGS=-g

+CC=gcc

+PROG=update-cache show-diff init-db write-tree read-tree commit-tree cat-file

+all: \$(PROG)

+install: \$(PROG)

+install \$(PROG) \$(HOME)/bin/

+LIBS= -lssl

+init-db: init-db.o

+update-cache: update-cache.o read-cache.o

+\$(CC) \$(CFLAGS) -o update-cache update-cache.o read-cache.o \$(LIBS)

+show-diff: show-diff.o read-cache.o

+\$(CC) \$(CFLAGS) -o show-diff show-diff.o read-cache.o \$(LIBS)

+write-tree: write-tree.o read-cache.o

+\$(CC) \$(CFLAGS) -o write-tree write-tree.o read-cache.o \$(LIBS)

+read-tree: read-tree.o read-cache.o

+\$(CC) \$(CFLAGS) -o read-tree read-tree.o read-cache.o \$(LIBS)

Files

Filename

Additions

Deletions

Makefile

40

0

README

168

0

cache.h

93

0

cat-file.c

23

0

commit-tree.c

172

0

init-db.c

51

0

read-cache.c

259

0

read-tree.c

43

0

show-diff.c

81

0

update-cache.c

248

0

write-tree.c

66

0

git (~/.version-control)
master

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gitgui-0.0.0
gitgui-0.6.1
gitgui-0.6.2
gitgui-0.6.3
gitgui-0.6.4
gitgui-0.6.5
gitgui-0.7.0
gitgui-0.7.0-rc1
gitgui-0.7.1
gitgui-0.7.2
gitgui-0.7.3
gitgui-0.7.4
gitgui-0.7.5
gitgui-0.8.0
gitgui-0.8.1
gitgui-0.8.2
gitgui-0.8.3
gitgui-0.8.4
gitgui-0.9.0
gitgui-0.9.1
gitgui-0.9.2
gitgui-0.9.3
junio-gpg-pub
v0.99
v0.99.1
v0.99.2
v0.99.3
v0.99.4
v0.99.5
v0.99.6
v0.99.7
v0.99.7a
v0.99.7b
v0.99.7c
v0.99.7d
v0.99.8
v0.99.8a
v0.99.8b
v0.99.8c
v0.99.8d
v0.99.8e
v0.99.8f
v0.99.8g

● Add documentation for the rest of commands.
● Adjust core-git documentation to more recent Linux GIT.
● Reference documentation for the core git commands.
● Merge of <http://members.cox.net/junkio/git-jc.git>
● [PATCH] create subdirs for symlinks
● Be more careful about tree entry modes.
● Octopus merge of the following five patches.
● Update git-apply-patch-script for symbolic links.
● Update diff engine for symlinks stored in the cache.
● Fix git-resolve-script.
● Fix symlink handling
● diff-cache shows differences for unmerged paths without --cache.
● Do not write out new index if nothing has changed.
● Make git-prune-script executable again.
● [PATCH] git: Mention the '-p' option in the usage help string if git-diff-tree.
● Split "git-pull-script" into two parts

Linus Torvalds <torvalds@ppc970.osdl.org>
05/05/2005 04:18:48 PM - 0700

Be more careful about tree entry modes.
The tree object parsing used to get the executable bit wrong, and didn't know about symlinks. Also, fsck really wants the full mode value so that it can verify the other bits for sanity, so save it all in struct tree_entry.

Expand all

▶ 22 fsck-cache.c

▶ 6 tree.c

▶ 2 tree.h

42ea9cb286423c949d42ad33823a5221182f84bf

Junio C Hamano
Junio C Hamano
David Greaves
Linus Torvalds
Kay Sievers
Linus Torvalds
Junio C Hamano
Junio C Hamano
Junio C Hamano
Linus Torvalds
Linus Torvalds
Junio C Hamano
Junio C Hamano
Junio C Hamano
Thomas Glanzmann
Linus Torvalds

May 5 2005, 23:50
May 5 2005, 23:49
May 5 2005, 23:48
May 5 2005, 18:30
May 6 2005, 01:34
May 5 2005, 16:18
May 5 2005, 16:16
May 5 2005, 16:14
May 5 2005, 16:10
May 5 2005, 16:07
May 5 2005, 16:01
May 5 2005, 15:35
May 5 2005, 15:29
May 5 2005, 15:10
May 5 2005, 21:51
May 5 2005, 11:43

git (~/.version-control)
master

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All commits

Branches

✓ master

Remotes

origin

maint

master

next

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todo

Tags

gitgui-0.10.0

gitgui-0.10.1

gitgui-0.10.2

gitgui-0.11.0

gitgui-0.12.0

gitgui-0.13.0

gitgui-0.14.0

gitgui-0.15.0

gitgui-0.16.0

gitgui-0.17.0

gitgui-0.18.0

gitgui-0.19.0

gitgui-0.20.0

gitgui-0.21.0

gitgui-0.6.0

gitgui-0.6.1

gitgui-0.6.2

gitgui-0.6.3

gitgui-0.6.4

gitgui-0.6.5

gitgui-0.7.0

gitgui-0.7.0-rc1

gitgui-0.7.1

gitgui-0.7.2

gitgui-0.7.3

gitgui-0.7.4

gitgui-0.7.5

gitgui-0.8.0

gitgui-0.8.1

gitgui-0.8.2

gitgui-0.8.3

Merge branch 'jv/per-repo-object-store-fixes'

Merge branch 'jk/write-in-full-fix'

Merge branch 'ez/doc-duplicated-words-fix'

Merge branch 'kd/doc-for-each-ref'

Merge branch 'cc/subprocess-handshake-missing-capabilities'

Merge branch 'kw/write-index-reduce-alloc'

Merge branch 'mg/name-rev-tests-with-short-stack'

parse-options: only insert newline in help text if needed

parse-options: write blank line to correct output stream

t0040,t1502: Demonstrate parse_options bugs

merge-strategies: avoid implying that "-s theirs" exists

Documentation/config: clarify the meaning of submodule.<name>.update

mailinfo: don't decode invalid =XY quoted-printable sequences

refs: pass NULL to resolve_ref_unsafe() if hash is not needed

refs: pass NULL to refs_resolve_ref_unsafe() if hash is not needed

refs: make sha1 output parameter of refs_resolve_ref_unsafe() optional

Junio C Hamano

Sep 25, 15:24

Junio C Hamano

Sep 25, 15:24

Junio C Hamano

Sep 25, 15:24

Junio C Hamano

Sep 25, 15:24

Junio C Hamano

Sep 25, 15:24

Junio C Hamano

Sep 25, 15:24

Junio C Hamano

Sep 25, 15:24

Brandon Casey

Sep 24, 21:08

Brandon Casey

Sep 24, 21:08

Junio C Hamano

Sep 25, 14:34

Stefan Beller

Sep 22, 15:52

René Scharfe

Sep 23, 20:04

René Scharfe


Sep 23, 11:45

René Scharfe

Sep 23, 11:44

René Scharfe

Sep 23, 11:41



Brandon Casey <drafnel@gmail.com>

09/24/2017 09:06:05 PM -0700

Committed by: Junio C Hamano <gitster@pobox.com>

09/25/2017 02:35:53 PM +0900

parse-options: only insert newline in help text if needed

Currently, when parse_options() produces a help message it always emits a blank line after the usage text to separate it from the options text. If the option spec does not define any switches, or only defines hidden switches that will not be displayed, then the help text will end up with two trailing blank lines instead of one. Let's defer emitting the blank line between the usage text and the options text until it is clear that the options section will not be empty.

Fixes t1502.5, t1502.6.

Signed-off-by: Brandon Casey Signed-off-by: Junio C Hamano

Expand all

▼ 10

parse-options.c

... @@ -581,6 +581,7 @@ static int usage_with_options_internal(struct parse_opt_ctx_t *ctx,

const struct option *opts, int full, int err)

{

FILE *outfile = err ? stderr : stdout;

int need_newline;

if (!usagestr)

return PARSE_OPT_HELP;

... @@ -603,8 +604,7 @@ static int usage_with_options_internal(struct parse_opt_ctx_t *ctx,

usagestr++;

}

if (opts->type != OPTION_GROUP)

fputc('\n', outfile);

need_newline = 1;

for (; opts->type != OPTION_END; opts++) {

size_t pos;

... @@ -612,6 +612,7 @@ static int usage_with_options_internal(struct parse_opt_ctx_t *ctx,

Visual Studio support for Git and Github

- Starting with TFS 2013, Microsoft added native support for Git
- Cloning an existing Git repository --
<https://docs.microsoft.com/en-us/vsts/git/tutorial/clone?tabs=visual-studio>
- Github Extension for Visual Studio -- <https://visualstudio.github.com/>
-

