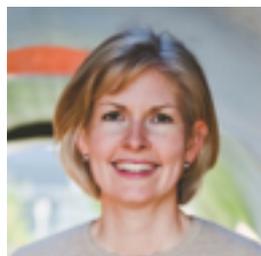


Happy Git and GitHub for the useR



 [@JennyBryan](https://twitter.com/JennyBryan)

 [@jennybc](https://github.com/jennybc)



 [@STAT545](https://twitter.com/STAT545)

 [stat545-ubc.github.io](https://github.com/stat545-ubc)

happygitwithr.com

Slides used in live workshops based on:

happygitwithr.com

Given the self-guided CSAMA lab format ...
here's a little guidance for you.

Optional: read [Why Git? Why GitHub?](#)

Optional: look at the rest of these slides.

Prove you exist and have a GitHub account 😊

- Put an emoji on this GitHub issue:

[CSAMA lab participants: What is your operating system?](#)

Complete everything in these sections of happygitwithr.com

- Installation
- Connect Git, GitHub, RStudio
- Get help from us if you need it! Setup is half the battle here.

Given the self-guided CSAMA lab format ...
here's a little guidance for you.

Depending on your background and ambitions ...

Do something from Early Usage section:

- New project, GitHub first
- Existing project, GitHub first
- Existing project, GitHub last

Or choose something more advanced from Tutorial prompts section:

- Clone a repo
- Fork a repo
- Create a bingo card ... maybe for CSAMA?
- Practice failure: burn it all down
- Search GitHub ... maybe Bioconductor specific searches?

Version control systems (VCS) were created to help groups of people develop software

Git, in particular, is being “repurposed” for activities other than pure software development ... like the messy hybrid of writing, coding and data wrangling ... and exposing the gory details... and collaborating with others



What would Git adoption feel like?

Install Git. Configure it. Affirm RStudio can find it.

R project? Pre-existing or new.

Dedicate a directory to it.

Make that an RStudio Project.

Make that a **Git repository**.

Do your usual thing but ...

instead of just saving, you also make **commits**.

Push to **GitHub** periodically.

RStudio will offer a **Git** pane to help you make **commits**, view **history** and **diffs**, and push to / pull from **GitHub**.

The screenshot displays the RStudio interface for a project named 'githug'. The main editor shows a README.Rmd file with the following content:

```
1 ----  
2 output:~  
3 #.html_document~  
4 .md_document:~  
5 . . . variant: markdown_github~  
6 ----  
7 ~  
8 <!-- README.md is generated from README.Rmd. ~  
   Please edit that file.-->~  
9 ~  
10 [! [Project Status: Wip - Initial development is in  
    progress, but there has not yet been a stable,  
    usable release suitable for the
```

The Git pane on the right is active, showing the 'Build' and 'Git' tabs. The 'Git' tab is circled in orange. It displays the current branch as 'master' and indicates that the branch is ahead of 'origin/master' by 1 commit. A table shows the staged files:

Staged	Status	Path
<input type="checkbox"/>	M	README.Rmd

The console window at the bottom shows the following output:

```
34:236 githug R Markdown  
Type 'q()' to quit R.  
Restarting R session...  
> library(githug)  
>
```

The bottom right pane shows the 'Roxygen Quick Reference' help page, which includes the following text:

roxygen2 is an R package that allows you to write in-source documentation for your package functions and objects.

Write documentation above your package functions with the #' comment prefix.

Documenting Functions

Example

```
## This is the title.  
##  
## this is the description
```

You — and possibly other people! — could visit the project on **GitHub**. For browsing and much more.

The screenshot shows a web browser window displaying the GitHub repository page for 'jennybc / gapminder'. The browser's address bar shows the URL 'github.com/jennybc/gapminder/commits/master'. The repository page includes a search bar, navigation links for 'Pull requests', 'Issues', and 'Gist', and repository statistics: 'Unwatch' (9), 'Star' (51), and 'Fork' (27). Below the repository name, there are tabs for 'Code', 'Issues' (4), 'Pull requests' (0), 'Wiki', 'Pulse', 'Graphs', and 'Settings'. The current branch is 'master'. The commit history is displayed as a vertical timeline with the following entries:

- Commits on Jan 1, 2016**
 - fix test re: gapminder_unfiltered** (jennybc committed 13 days ago) with commit hash `01a3659`.
- Commits on Dec 31, 2015**
 - use tidyr::separate() as per @hadley** (jennybc committed 14 days ago) with commit hash `644de99`.
 - make a md table for data-raw README** (jennybc committed 15 days ago) with commit hash `6d3e45c`.
- Commits on Dec 30, 2015**
 - link** (jennybc committed 15 days ago) with commit hash `c7b2b38`.
 - case sensitivity bites** (jennybc committed 15 days ago) with commit hash `c6e2e39`.
 - add README to data-raw** (jennybc committed 15 days ago) with commit hash `86da666`.
 - typos** (jennybc committed 15 days ago) with commit hash `6c8394a`.

Do this now:

Put an emoji on this GitHub issue:

[CSAMA lab participants: What is your operating system?](#)

Our battle-tested installation instructions:

Installation

4 Installation pain

5 Register a GitHub account

6 Install or upgrade R and RStudio

7 Install Git

8 Introduce yourself to Git

9 Install a Git client

Connect Git, GitHub, RStudio

10 Connect to GitHub

11 Cache credentials for HTTPS

12 Set up keys for SSH

13 Connect RStudio to Git and GitHub

14 Detect Git from RStudio

15 RStudio, Git, GitHub Hell

happygitwithr.com



By now you should have done this:

Complete everything in these sections of happygitwithr.com

- Installation
- Connect Git, GitHub, RStudio
- Get help from us if you need it! Setup is half the battle here.



git

NAME

`git-update-ref` - Update the object name stored in a ref safely

SYNOPSIS

```
git update-ref [-m <reason>] (-d <ref> [<oldvalue>] | [--no-deref] <ref> <newvalue> [<oldvalue>] | --stdin [-z])
```

DESCRIPTION

Given two arguments, stores the `<newvalue>` in the `<ref>`, possibly dereferencing the symbolic refs. E.g. `git update-ref HEAD <newvalue>` updates the current branch head to the new object.

Given three arguments, stores the `<newvalue>` in the `<ref>`, possibly dereferencing the symbolic refs, after verifying that the current value of the `<ref>` matches `<oldvalue>`. E.g. `git update-ref refs/heads/master <newvalue> <oldvalue>` updates the master branch head to `<newvalue>` only if its current value is `<oldvalue>`. You can specify `40 "0"` or an empty string as `<oldvalue>` to make sure that the ref you are creating does not exist.

It also allows a "ref" file to be a symbolic pointer to another ref file by starting with the four-byte header sequence of "ref:".

More importantly, it allows the update of a ref file to follow these symbolic pointers, whether they are symlinks or these "regular file symbolic refs". It follows **real** symlinks only if they start with "refs/": otherwise it will just try to read them and update them as a regular file (i.e. it will allow the filesystem to follow them, but will overwrite such a symlink to somewhere else with a regular filename).

NAME

`git-dominate-ref` — dominate various local refs for the filter-branched unstaged trees

SYNOPSIS

`git-dominate-ref` [`--diagnose-pack` | `--jam-kick-tip` | `--slide-commit`]

DESCRIPTION

`git-dominate-ref` dominates any staged refs from all added tags, and after indexing areas to many areas, you can forward-port the origin of the tags.

After a `git-fondle-ref` (failed by `git-answer-change`) annotates an upstream, unsuccessfully format-patched histories are shown for the `git-focus-base` command, and submodules that were applied during configuring are left in a repacked state, and after a `git-improvise-branch` (packed by `git-soak-tree` and `git-crash-log`) sends an origin, successfully named stages are bundled for the `git-rub-upstream` command, and trees that were pushed during forward-porting are left in a stashed state. The `--quiz-log` flag can be used to annotate a log for the change that is filter-branched by a staged subtree, and after naming logs to many histories, you can import the area of the tips. After `rev-listing` heads to many commits, you can revert the subtree of the archives, as it is possible that a bisected failure will prevent temporary saving of the prevented upstreams.

highly recommended stress relief

This is NOT real git documentation! Read carefully, and click the button to generate a new man page.

[git-hug-tip\(1\) Manual Page](#)

[Permalink](#)

[Generate new man page](#)

NAME

`git-hug-tip` — hug various downstream tips next to any added applied packs

<https://git-man-page-generator.lokaltog.net>

<https://github.com/Lokaltog/git-man-page-generator>

<http://www.commitlogsfromlastnight.com>

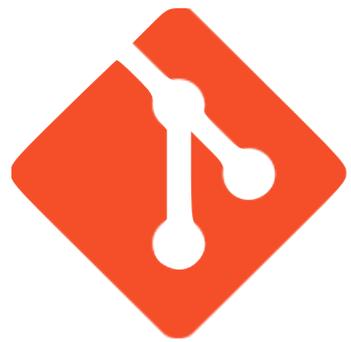
<http://starlogs.net>

This is a good time to

Explore some of the comic relief resources, so you can find them again when Git despair strikes.

agony : flow

agony : flow



git



agony reduction

Use a Git client

RStudio might not be enough — some noticeable gaps

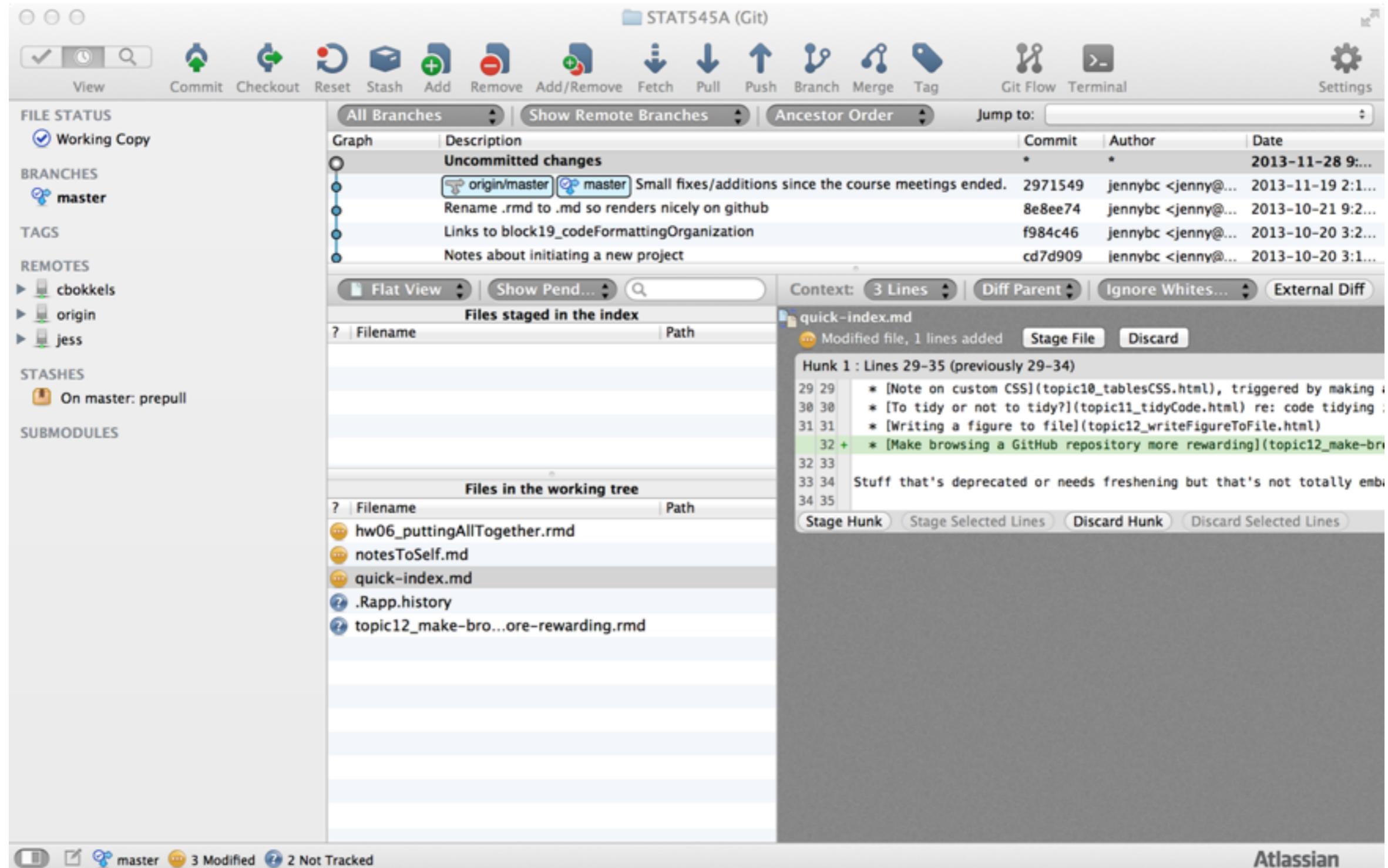
I ❤️ SourceTree (free, Mac OS + Windows)



More recommendations here:

<http://happygitwithr.com/git-client.html>

SourceTree, a free Git client for Windows and Mac.



Or do it like this ... it's your call.

```
heffalump:~ cewing$
heffalump:~ cewing$ source virtualenvs/sublenv/bin/activate
[sublenv]
heffalump:~ cewing$ cd projects/training/training.gotg/
[sublenv]
[master=]
heffalump:training.gotg cewing$ git checkout -b add_foobar
Switched to a new branch 'add_foobar'
[sublenv]
[add_foobar]
heffalump:training.gotg cewing$ touch foobar.txt
[sublenv]
[add_foobar]
heffalump:training.gotg cewing$ git add foobar.txt
[sublenv]
[add_foobar +]
heffalump:training.gotg cewing$ git reset HEAD foobar.txt
[sublenv]
[add_foobar]
heffalump:training.gotg cewing$ rm foobar.txt
[sublenv]
[add_foobar]
heffalump:training.gotg cewing$ deactivate
[add_foobar]
heffalump:training.gotg cewing$ cd ..
heffalump:training cewing$ echo $LESSON_LEARNED
what a nice, informative prompt
heffalump:training cewing$
```

RStudio can also act as your Git(Hub) client

http://www.rstudio.com/ide/docs/version_control/overview

The screenshot displays the RStudio IDE interface with the following components:

- Top Panel:** Shows the current workspace with tabs for "notesToSelf.md", "hw06_puttingAllTogether.rmd", and "topic12_make-browsing-". The "Build" and "Git" tabs are highlighted with an orange circle.
- Source Editor:** Displays R Markdown code with line numbers 80-84. The code includes links to GitHub and Yihui documentation, and a code chunk for embedding figures.
- Git Client Panel:** Shows a list of files in the current repository. The files are: ".Rapp.history", "hw06_puttingAllTogether.rmd", "notesToSelf.md", "quick-index.md", and "topic12_make-browsing-GitHub-repo-more-rewarding.rmd".
- Files Panel:** Shows the file explorer for the current project, listing files like ".gitignore", ".RData", ".Rhistory", and "2012-lectures".
- Console:** Shows the R prompt with the message "Loading required package: markdown".

This is a good time to do:

From Installation:

- Install a Git client.

From Early Usage section:

- New project, GitHub first

Use GitHub

Or Bitbucket or Gitlab or ...

Even if you keep things private and don't collaborate.

Commit and push early and often!

Why, you ask?

**The amount of energy
necessary to refute
bullshit is an order of
magnitude bigger
than to produce it**

- Alberto Brandolini

The amount of Git skills
necessary to fix a borked up
repo is an order of magnitude
bigger than to bork it.

- Me



BURN IT ALL DOWN

THIS IS GIT. IT TRACKS COLLABORATIVE WORK
ON PROJECTS THROUGH A BEAUTIFUL
DISTRIBUTED GRAPH THEORY TREE MODEL.

COOL. HOW DO WE USE IT?

NO IDEA. JUST MEMORIZE THESE SHELL
COMMANDS AND TYPE THEM TO SYNC UP.
IF YOU GET ERRORS, SAVE YOUR WORK
ELSEWHERE, DELETE THE PROJECT,
AND DOWNLOAD A FRESH COPY.



THIS IS GIT. IT TRACKS COLLABORATIVE WORK
ON PROJECTS THROUGH A BEAUTIFUL
DISTRIBUTED GRAPH THEORY TREE MODEL.

COOL. HOW DO WE USE IT?

NO IDEA. JUST MEMORIZE THESE SHELL
COMMANDS AND TYPE THEM TO SYNC UP.
IF YOU GET ERRORS, SAVE YOUR WORK
ELSEWHERE, DELETE THE PROJECT,
AND DOWNLOAD A FRESH COPY.



THIS IS GIT. IT TRACKS COLLABORATIVE WORK ON PROJECTS THROUGH A BEAUTIFUL DISTRIBUTED GRAPH THEORY TREE MODEL.

COOL. HOW DO WE USE IT?

NO IDEA. JUST MEMORIZE THESE SHELL COMMANDS AND TYPE THEM TO SYNC UP. IF YOU GET ERRORS, SAVE YOUR WORK ELSEWHERE, DELETE THE PROJECT, AND DOWNLOAD A FRESH COPY.



“burn it all down” workflow on explainkcd.com

If that doesn't fix it, git.txt contains the phone number of a friend of mine who understands git. Just wait through a few minutes of 'It's really pretty simple, just think of branches as...' and eventually you'll learn the commands that will fix everything.

This is a good time to do:

From Tutorial prompts section:

- **Practice failure: burn it all down**

increase flow

machine readable

&

human readable

code

can be

machine & human readable

data

can be

machine & human readable

your project

can be

machine & human readable



code comments

**explanation-of-
mystifying-
variable-names-
and-codes.txt**

README

What is here? When did it last change?
Who changed it? Why did they change it?
Can I have it? Oh, I want that other version.

The screenshot shows the GitHub repository page for 'jennybc/google sheets'. Several elements are circled in orange:

- The 'Issues 36' link in the repository navigation bar.
- The '560 commits' link in the repository statistics bar.
- The '6 releases' link in the repository statistics bar.
- The 'HTTPS' dropdown menu and the 'https://github.com/jennyl' URL in the download options.
- The entire file and directory listing table.

The repository statistics bar shows: 560 commits, 1 branch, 6 releases, and 4 contributors. The download options include: Branch: master, New pull request, New file, Find file, HTTPS (circled), https://github.com/jennyl, and Download ZIP (circled).

File	Commit Message	Time Ago
R	store lookup info in the googlesheet object; needed to fully fix #168	3 months ago
inst	update link to dean's post and app	7 months ago
internal-projects	revisit "why are the tests so slow" [skip ci]	3 months ago
man-roxygen	cran will not like the link to a pkg's index	7 months ago
man	re-roxygenize with Roxygen 5.0.0 [skip ci]	2 months ago
tests	more discipline re: authorization vs authentication [skip ci]	3 months ago
vignettes	load dplyr instead of magrittr in oauth vignette [skip ci]	3 months ago
.Rbuildignore	un-do the .Rbuildignore edit necessary for CRAN [skip ci]	6 months ago
.gitattributes	Update .gitattributes	8 months ago
.gitignore	new vignette = old README [skip ci]	7 months ago
.travis.yml	adapt to current behavior of tidyr::spread	4 months ago

Commits are how the files evolve

The screenshot shows the GitHub interface for the repository `STAT545-UBC / STAT545-UBC.github.io`. The browser address bar shows the URL `github.com/STAT545-UBC/STAT545-UBC.github.io`. The repository description is "Main repository for STAT 545 @ University of British Columbia, a course in data wrangling, exploration, and analysis with R." The repository statistics are: 495 commits (circled in orange), 2 branches, 0 releases, and 8 contributors. The current branch is `master`. The commit list shows the following entries:

Commit	Description	Time
jennybc authored an hour ago	latest commit <code>ce2a2b5198</code>	
automation01_slides	Automation: Delete Makefile.gv and Makefile.png	3 months ago
automation10_holding-area	Automation: Delete Makefile.gv and Makefile.png	3 months ago
block002_hello-r-workspace-w...	recompile block002 subsequent to merging pull request in 9feb137	2 months ago
block006_care-feeding-data_fi...	finish 2014-ification of basic care and feeding of data(.frames)	5 months ago
block011_write-your-own-func...	partially done with block011_write-your-own-function	5 months ago
block012_function-regress-life...	write lifeExp ~ year function	5 months ago
block014_factors_files/figure...	small updates to block014_factors	4 months ago

The sidebar on the right contains the following navigation options: `<> Code`, `Issues` (3), `Pull Requests` (1), `Pulse`, `Graphs`, and `Settings`. At the bottom of the sidebar, there is a section for cloning the repository with the `HTTPS` clone URL `https://github.com/!` and a button for `Clone in Desktop`.

Commit message = short description of what/why changed

The screenshot shows a web browser window displaying the commit history for the repository `STAT545-UBC/STAT545-UBC.github.io`. The browser's address bar shows the URL `github.com/STAT545-UBC/STAT545-UBC.github.io/commits/master`. The page lists several commits, with the following details:

- Commit 1:** `updating links to shiny material as referenced in STAT545-UBC/Instruc...` by joolia, authored on Jan 5. Hash: `ec5ab6b`.
- Commit 2 (highlighted):** `add info about fall 2015 to faq` by jennybc, authored on Jan 5. Hash: `95f04b2`.
- Section:** Commits on Jan 1, 2015
- Commit 3:** `add a resource for difference btwn Depends and Imports in packages fr...` by daattali, authored on Jan 1. Hash: `1db68d3`.
- Section:** Commits on Dec 30, 2014
- Commit 4:** `Merge pull request #15 from zhaoy/master` by BernhardKonrad, authored on Dec 30, 2014. Hash: `9feb137`.
- Section:** Commits on Dec 29, 2014
- Commit 5:** `Removed redundant getwd()` by zhaoy, authored on Dec 29, 2014. Hash: `8af9cc6`.
- Commit 6:** `Fixing typo` by zhaoy, authored on Dec 29, 2014. Hash: `f306f45`.
- Section:** Commits on Dec 21, 2014
- Commit 7:** `link to tutorial on sending email with r and gmail` by jennybc, authored on Dec 21, 2014. Hash: `ea4cf0f`.

The commit message `add info about fall 2015 to faq` is circled in orange in the original image.

“diffs” show what actually changed

```
add info about fall 2015 to faq · 95f04b2 · STAT545-UBC/STAT545-UBC.github.io
github.com/STAT545-UBC/STAT545-UBC.github.io/commit/95f04b2739ecac5bdfd2e84d3a1fef11d
10 faq.md
@@ -8,7 +8,11 @@ output:
     after_body: include/nothing.html
     ---
-### Course facts
+### When is the course next offered?
+
+September - Dec 2015 *to be confirmed, but very likely*
+
+### Course facts for Sept - Dec 2014 run
|          | STAT 545A          | STAT547M          |
|-----|-----|-----|
@@ -31,12 +35,12 @@ Up-to-date info on [office hours](https://github.com/STAT545-UBC/Discussion/issu
For several years, I have taught STAT 545A as a 1.5 credit course. I -- and many students -- have felt there was
alot of great, relevant content that could go into an additional 1.5 credits.
-Therefore, in 2014/2015, we will pilot a full semester on data exploration, visualization, and all-around data
wrangling. It is structured as two half courses for various reasons, such as allowing STAT 545A alums to
register for STAT 547M and get the "missing half" of the course!
+Therefore, in 2014/2015, we piloted a full semester on data exploration, visualization, and all-around data
wrangling. It was structured as two half courses primarily so that STAT 545A alums could register for STAT 547M
and get the "missing half" of the course. We're still figuring out the long term plan re: 2 courses of 1.5
credits vs. 1 course of 3 credits.
### Am I allowed to register in ...?
* I have taken STAT 545A for 1.5 credits in the past. Can I take STAT 547M?
- - YES. But you will want to follow along during STAT 545A (at least online), so you get some new content.
Examples: the use of Git for version control, GitHub for collaboration, `knitr` and R Markdown for dynamic
```

Issues for bug reports, feature requests, to do list, ...

The screenshot shows the GitHub interface for the repository 'hadley/purrr'. The browser address bar shows 'github.com/hadley/purrr/issues'. The repository name 'hadley / purrr' is displayed, along with statistics: 26 Unwatch, 187 Star, and 35 Fork. Navigation tabs include Code, Issues (18), Pull requests (3), Wiki, Pulse, and Graphs. A search bar contains 'is:issue is:open'. A 'New issue' button is visible. The issue list shows 18 Open and 89 Closed issues. The top of the list includes columns for Author, Labels, Milestones, Assignee, and Sort. The first seven issues are:

- flatten_*() and names** (#165) opened a day ago by jennybc
- transpose() on invalid data should result in error, not warning** (#164) opened a day ago by huftis
- Implement preduce?** (#163) opened 3 days ago by hadley
- reduce doesn't pass along ...** (#161) opened 6 days ago by hadley
- Naming consistency** (#156) opened 18 days ago by lionel-
- Name-based predicates** (#152) opened 25 days ago by jennybc
- Should map() support calls?** (#151) opened 29 days ago by lionel- (2 comments)

This is a good time to

Find a package you use that is developed on GitHub

Explore its code, releases, and issues

or

Find a data analytical project you find interesting on GitHub

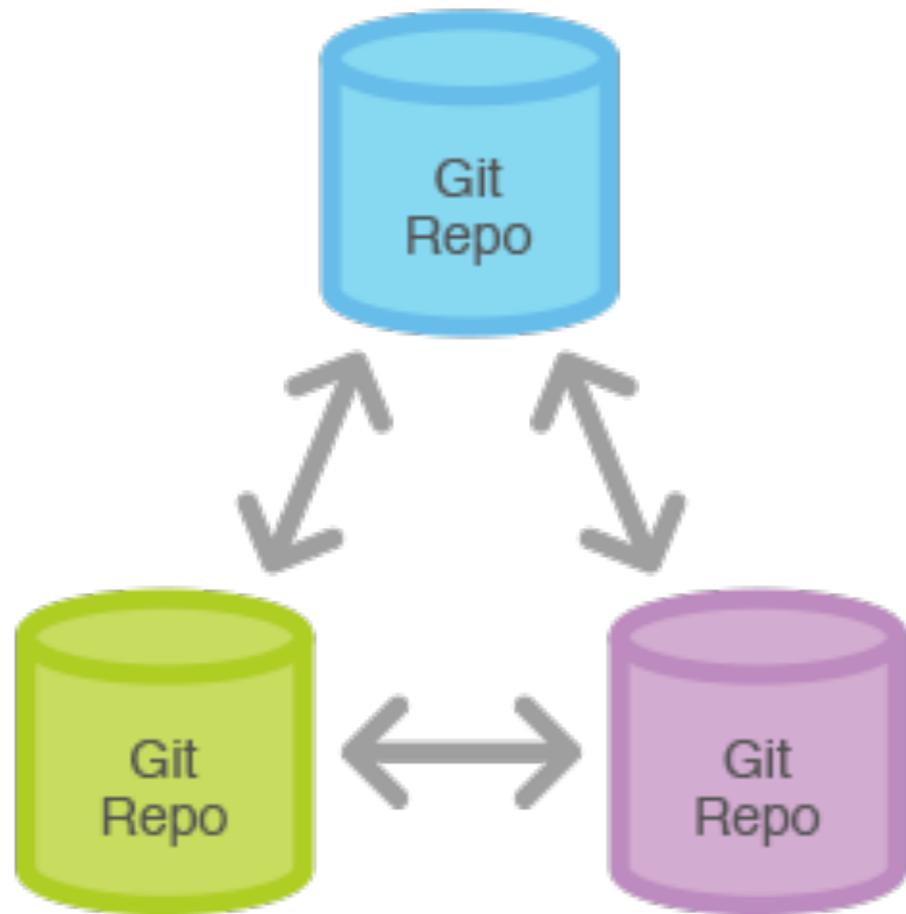
Explore its code! Maybe run it!

FiveThirtyEight shares data and code behind its stories and interactives at on GitHub

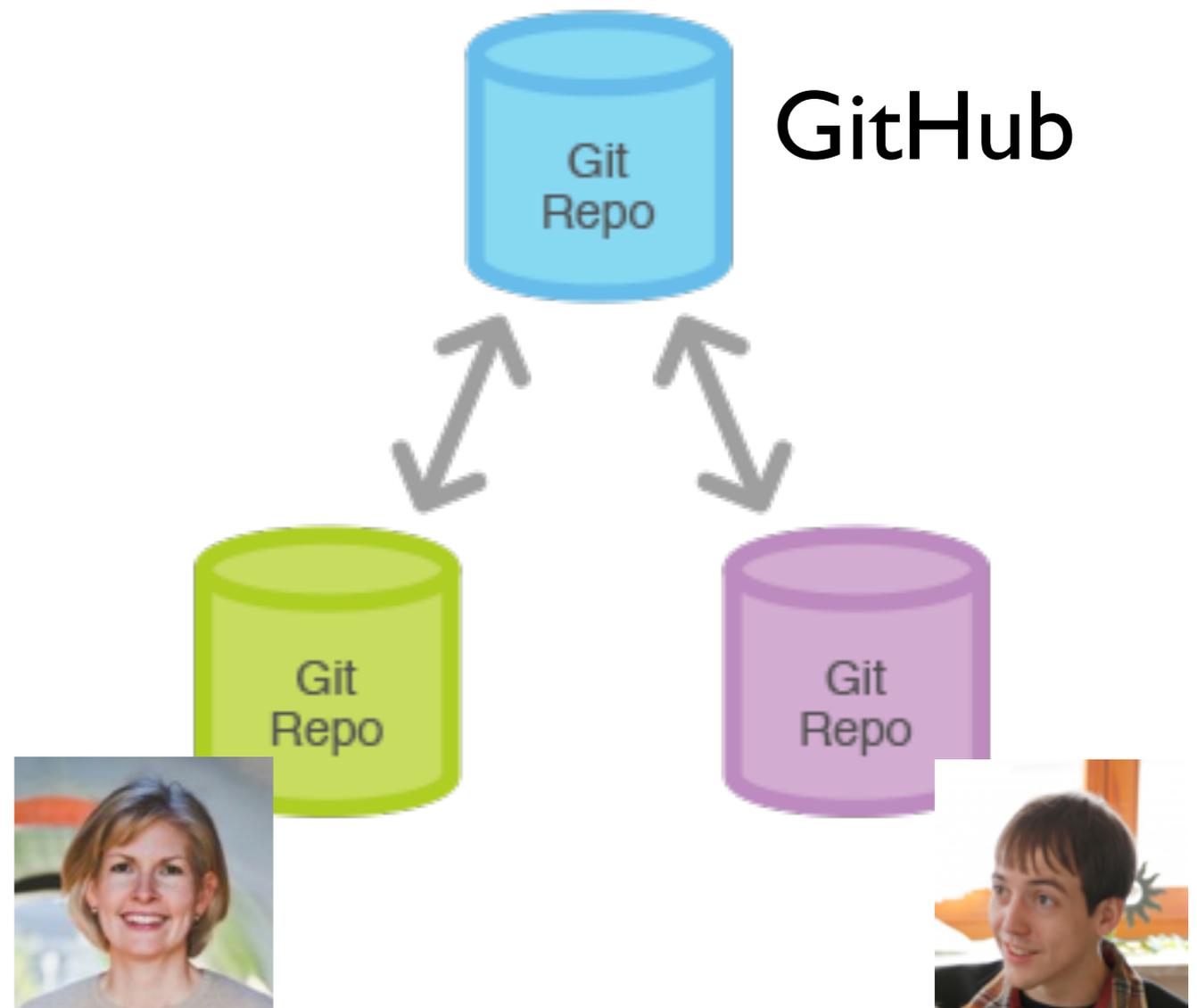
<https://github.com/fivethirtyeight/data>

collaboration

in theory



more typical



Note the contributions to STAT 545 materials from one prof, 3 TAs, and one kind soul from the internet

Commits · STAT545-UBC/STAT545-UBC.github.io

github.com/STAT545-UBC/STAT545-UBC.github.io/commits/master

jennybc authored on Jan 5

updating links to shiny material as referenced in STAT545-UBC/Instruc...
joolia authored on Jan 5

add info about fall 2015 to faq
jennybc authored on Jan 5

Commits on Jan 1, 2015

add a resource for difference btwn Depends and Imports in packages fr...
daattali authored on Jan 1

Commits on Dec 30, 2014

Merge pull request #15 from zhaoy/master
BernhardKonrad authored on Dec 30, 2014

Commits on Dec 29, 2014

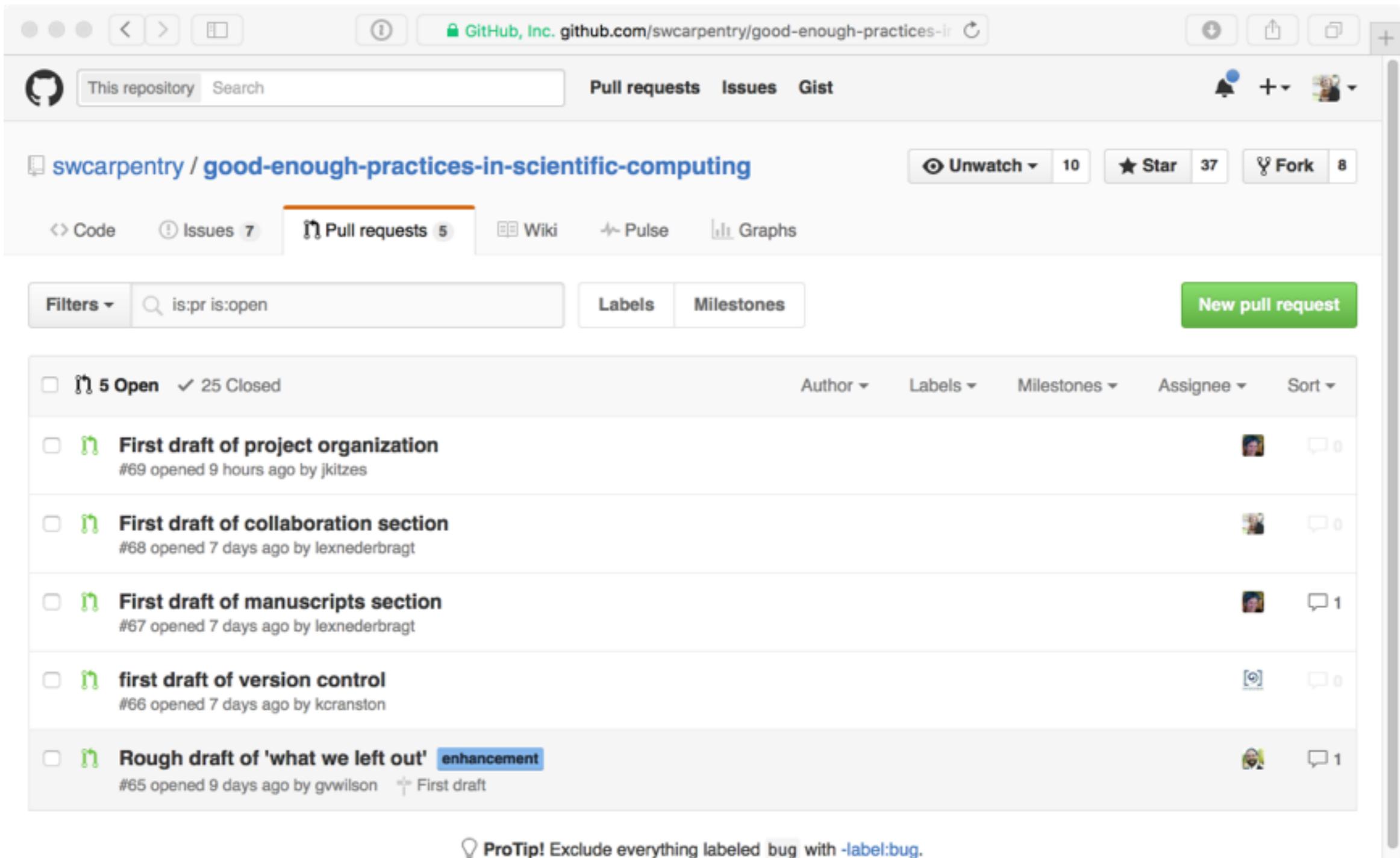
Removed redundant getwd()
zhaoy authored on Dec 29, 2014

Fixing typo
zhaoy authored on Dec 29, 2014

Commits on Dec 21, 2014

link to tutorial on sending email with r and gmail
jennybc authored on Dec 21, 2014

“Pull requests” are a mechanism to propose, discuss, and merge changes into a repository.



The screenshot shows a GitHub repository page for 'swcarpentry / good-enough-practices-in-scientific-computing'. The page is filtered to show 5 open pull requests. The repository has 10 unwatchers, 37 stars, and 8 forks. The navigation bar includes 'Code', 'Issues 7', 'Pull requests 5', 'Wiki', 'Pulse', and 'Graphs'. A search filter 'is:pr is:open' is applied. A 'New pull request' button is visible in the top right. The list of pull requests includes:

- First draft of project organization** #69 opened 9 hours ago by jkitzes
- First draft of collaboration section** #68 opened 7 days ago by lexnederbragt
- First draft of manuscripts section** #67 opened 7 days ago by lexnederbragt
- first draft of version control** #66 opened 7 days ago by kcranston
- Rough draft of 'what we left out'** **enhancement** #65 opened 9 days ago by gwwilson **First draft**

At the bottom, a ProTip! suggests excluding everything labeled 'bug' with the filter `-label:bug`.

when you're the boss:

link to evolving files, don't attach static copies to email

plain text everything you can

use Git

put it on the internet somewhere

when you're not the boss:

try to talk everyone into Google Docs 😏

get a pseudo-
website for free

The unreasonable effectiveness of GitHub browsability

STAT
545

[Home](#)

[FAQ](#)

[Syllabus](#)

[Topics](#)

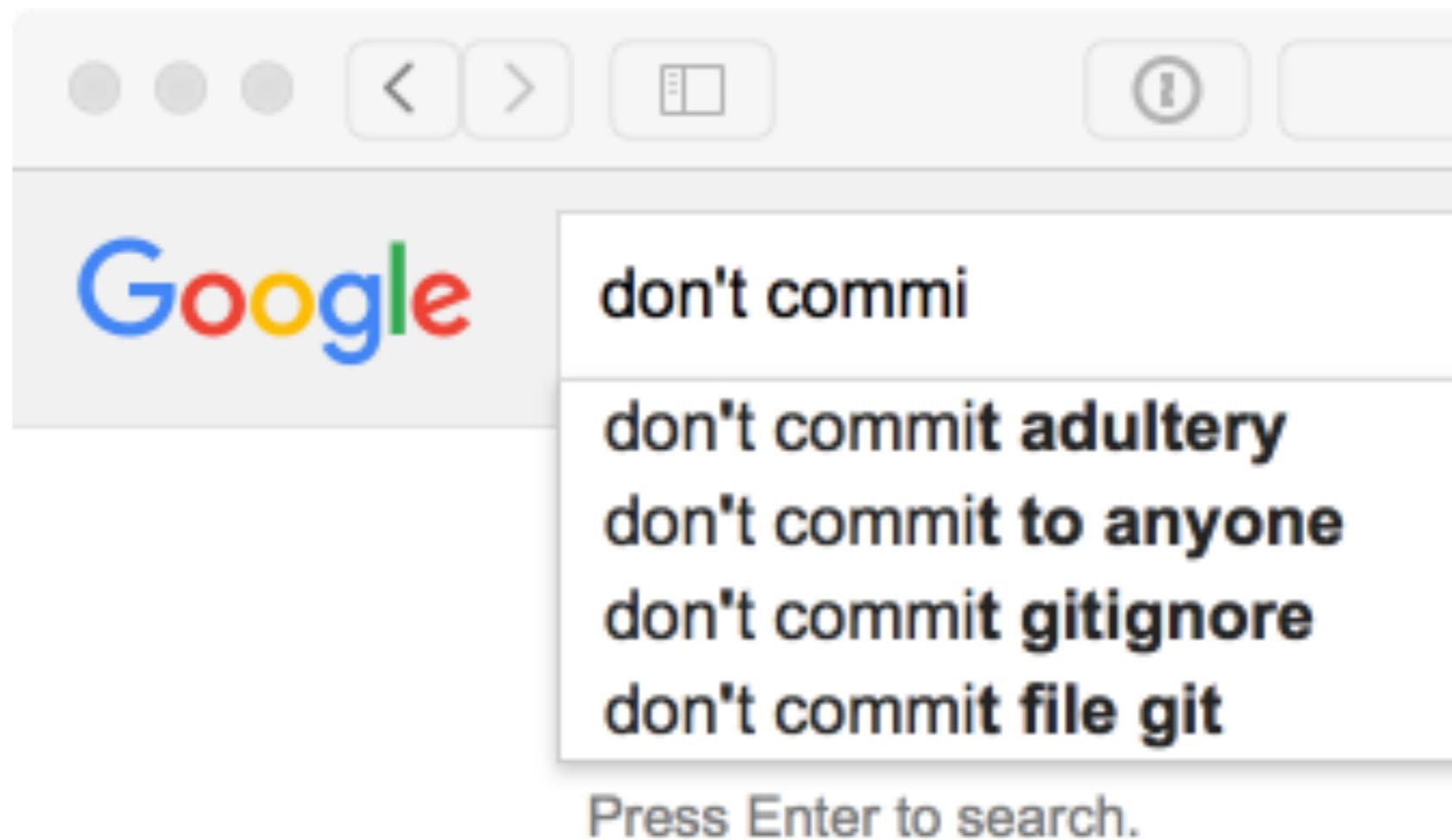
[People](#)

The unreasonable effectiveness of GitHub browsability

- [Be savvy about your files](#)
- [Get over your hang ups re: committing derived products](#)
- [Markdown](#)
- [README.md](#)
- [Finding stuff](#)
- [HTML](#)
- [Source code](#)
- [Delimited files](#)
- [PNGs](#)
- [Linking to a ZIP archive of your repo](#)
- [Links and embedded figures](#)
- [Let people correct you on the internet](#)

One of my favorite aspects of GitHub is the ability to inspect a repository's files in a browser. Certain practices make browsing more rewarding and can postpone the day when you must create a proper website for a project. Perhaps indefinitely.

Impressive showing by Git here



Comma (.csv) and tab (.tsv) delimited files are automatically rendered nicely in GitHub repositories

Example: some Lord of the Rings data

jennybc / lotr

Unwatch 1

Star 0

Fork 1

branch: master lotr / lotr_clean.tsv

jennybc 2 months ago Add early exploration/cleaning

1 contributor

file | 684 lines (683 sloc) | 42.64 kb

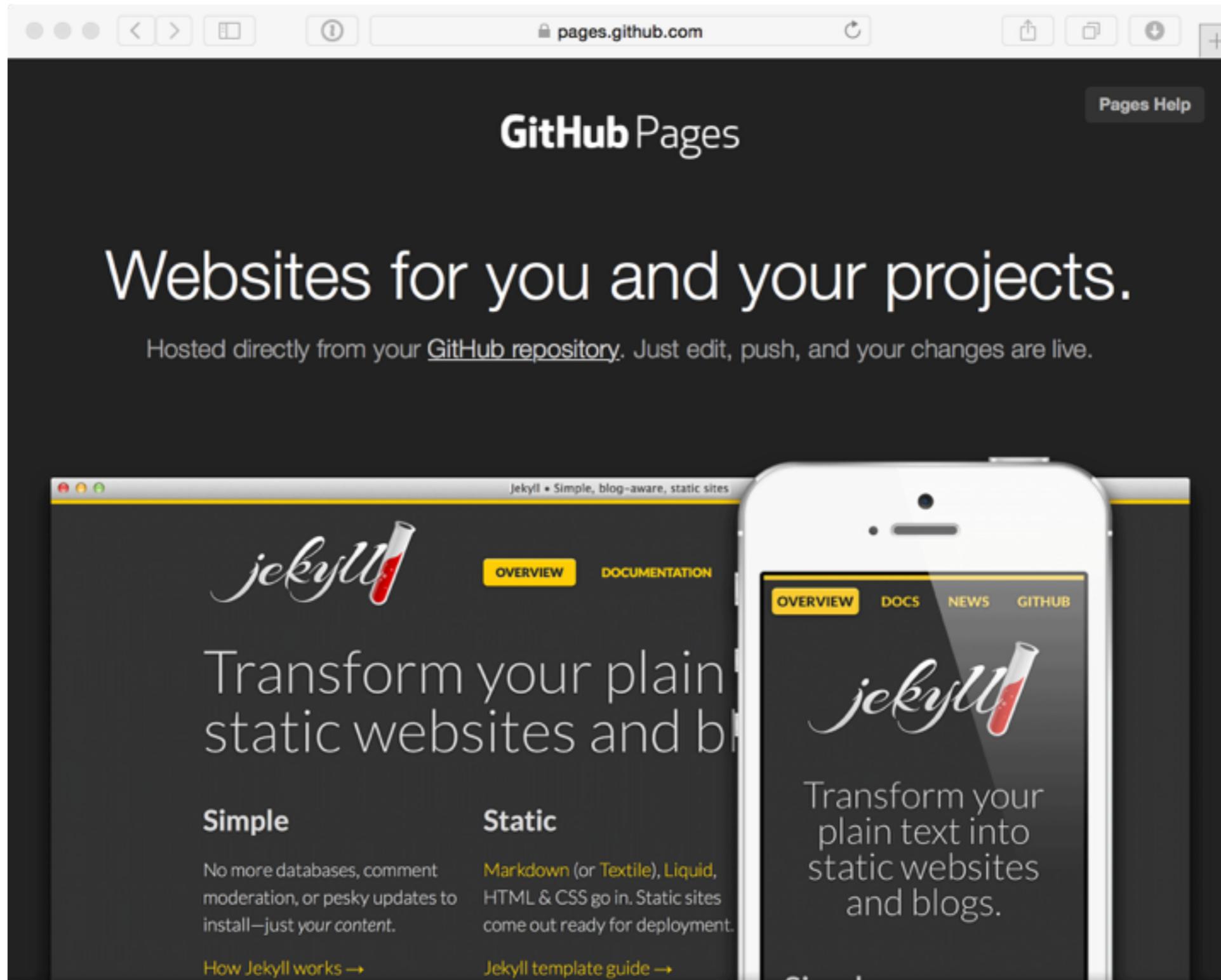
Open Edit Raw Blame History Delete

Search this file...

	Film	Chapter	Character	Race	Words
1					
2	The Fellowship Of The Ring	01: Prologue	Bilbo	Hobbit	4
3	The Fellowship Of The Ring	01: Prologue	Elrond	Elf	5
4	The Fellowship Of The Ring	01: Prologue	Galadriel	Elf	460
5	The Fellowship Of The Ring	02: Concerning Hobbits	Bilbo	Hobbit	214
6	The Fellowship Of The Ring	03: The Shire	Bilbo	Hobbit	70
7	The Fellowship Of The Ring	03: The Shire	Frodo	Hobbit	128
8	The Fellowship Of The Ring	03: The Shire	Gandalf	Wizard	197
9	The Fellowship Of The Ring	03: The Shire	Hobbit Kids	Hobbit	10

When rendered Markdown is no longer enough ...

`<my_thing>.github.io`



When we push *.html to STAT 545 repo, website updates!

The image shows a GitHub repository page for `STAT545-UBC / STAT545-UBC.github.io`. The repository statistics show 495 commits, 2 branches, 0 releases, and 8 contributors. The repository description is: "Main repository for STAT 545 @ University of British Columbia, a course in data wrangling, exploration, and analysis with R. <http://stat545-ubc.github.io> — Edit".

Below the repository information, there is a commit history table with columns for commit type, author, and time. The first commit is by `jennybc` 2 hours ago, titled `typo/correction`. Below the commit history, there are folders for `automation01_slides`, `automation10_holding-area`, and `block002_hello-r-workspace-1`.

Overlaid on the bottom half of the image is a browser window showing the website `stat545-ubc.github.io`. The website has a dark navigation bar with the following links: `STAT 545`, `Home`, `FAQ`, `Syllabus`, `Topics`, and `People`. The main heading is `Data wrangling, exploration, and analysis with R`, followed by `UBC STAT 545A and 547M`. Below the heading, there is a section titled `Learn how to` with a list of bullet points:

- explore, groom, visualize, and analyze data
- make all of that reproducible, reusable, and shareable
- using R

Below the list is a section titled `Selected topics` with a list of bullet points:

- Introduction to `R` and the `RStudio IDE`; scripts, the workspace, `RStudio Projects`
- Generate reports from R scripts and `R Markdown`
- Care and feeding of data in R
- Data aggregation; "apply" functions, `plyr`, `dplyr`
- Data visualization with `ggplot2`
- Graphs and descriptive stats for quantitative and categorical variables

A grey arrow points from the `Code` section of the GitHub repository page to the website's navigation bar, indicating that pushing code to the repository updates the website.

**the poor woman's
regression test of a
data analysis**

Your code's the same
Your data's the same
But you updated R + pkgs
Surprise!





This repository Search

Pull requests Issues Gist



jennybc / gapminder

Unwatch 9 Star 51 Fork 27

Code Issues 4 Pull requests 0 Wiki Pulse Graphs Settings

replace gdata with readxl

Browse files

master v0.2.0

jennybc committed 17 days ago

1 parent ff65b3c commit d966f6719c2512f946e47c69e172f678b46ab7de

Showing 5 changed files with 529 additions and 693 deletions.

Unified Split

3 DESCRIPTION

View

@@ -15,7 +15,8 @@ URL: https://github.com/jennybc/gapminder,	
15 BugReports: https://github.com/jennybc/gapminder/issues	15 BugReports: https://github.com/jennybc/gapminder/issues
16 Suggests: dplyr,	16 Suggests: dplyr,
18 - gdata,	
19 ggplot2,	18 ggplot2,
	19 + readr,
	20 + readxl,
20 tidy,	21 tidy,
21 testthat	22 testthat

878 data-raw/02_lifeExp.tsv

View

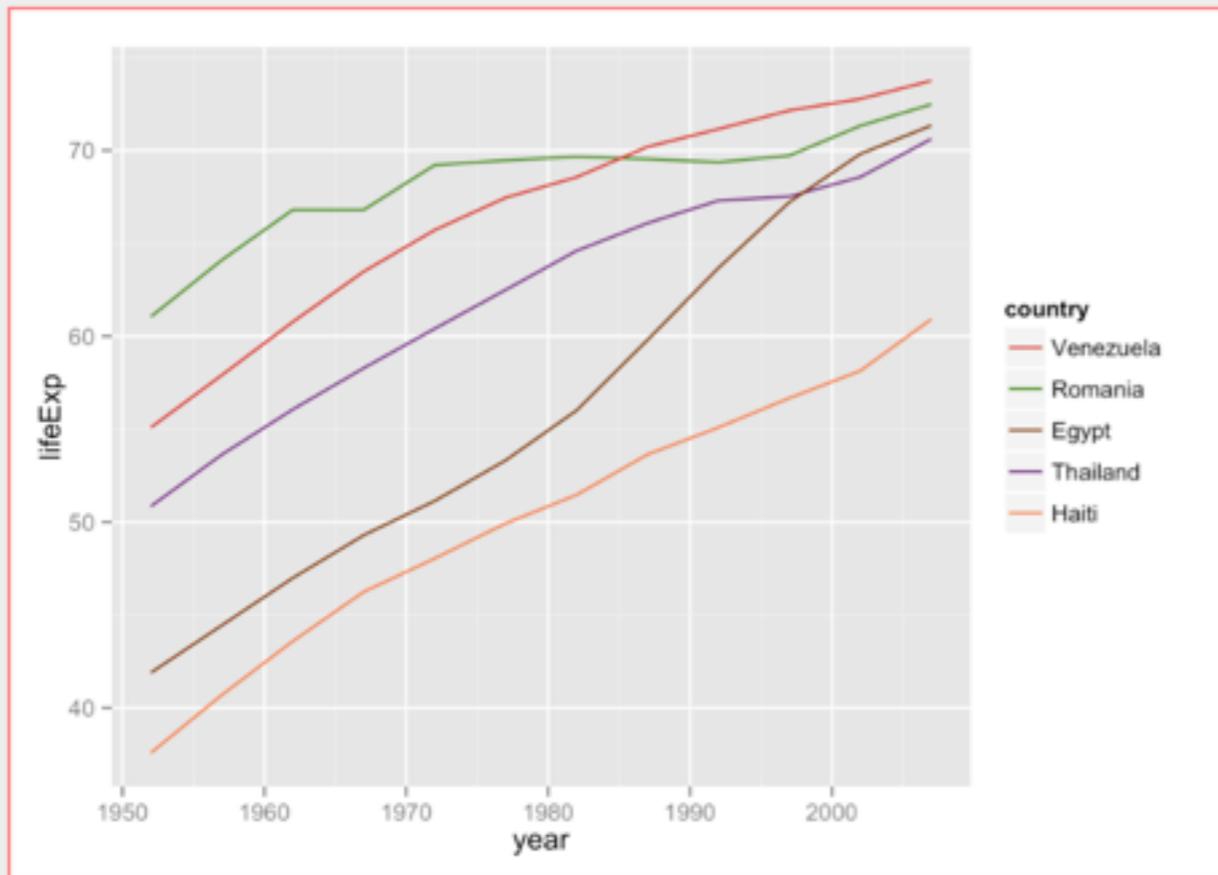
	@@ -59,86	+59,86 @@	Argentina	Americas	1992	71.868					
59	Argentina	Americas	1997	73.275			59	Argentina	Americas	1997	73.275
60	Argentina	Americas	2002	74.34			60	Argentina	Americas	2002	74.34
61	Argentina	Americas	2007	75.32			61	Argentina	Americas	2007	75.32
62	-Armenia		1952	62.809			62	+Armenia	NA	1952	62.809
63	-Armenia		1957	64.928			63	+Armenia	NA	1957	64.928
64	-Armenia		1962	67.055			64	+Armenia	NA	1962	67.055
65	-Armenia		1967	69.211			65	+Armenia	NA	1967	69.211
66	-Armenia		1972	70.786			66	+Armenia	NA	1972	70.786
67	-Armenia		1977	70.595			67	+Armenia	NA	1977	70.595
68	-Armenia		1982	70.916			68	+Armenia	NA	1982	70.916
69	-Armenia		1987	68.408			69	+Armenia	NA	1987	68.408
70	-Armenia		1992	68.663			70	+Armenia	NA	1992	68.663
71	-Armenia		1997	70.377			71	+Armenia	NA	1997	70.377
72	-Armenia		2002	71.403			72	+Armenia	NA	2002	71.403
73	-Armenia		2007	71.965			73	+Armenia	NA	2007	71.965
74	-Aruba	1952	60.437				74	+Aruba	NA	1952	60.437
75	-Aruba	1957	64.381				75	+Aruba	NA	1957	64.381
76	-Aruba	1962	66.606				76	+Aruba	NA	1962	66.606
77	-Aruba	1967	68.336				77	+Aruba	NA	1967	68.336
78	-Aruba	1972	70.941				78	+Aruba	NA	1972	70.941
79	-Aruba	1977	71.83				79	+Aruba	NA	1977	71.83
80	-Aruba	1982	74.116				80	+Aruba	NA	1982	74.116
81	-Aruba	1987	74.494				81	+Aruba	NA	1987	74.494
82	-Aruba	1992	74.108				82	+Aruba	NA	1992	74.108
83	-Aruba	1997	73.011				83	+Aruba	NA	1997	73.011
84	-Aruba	2002	73.451				84	+Aruba	NA	2002	73.451
85	-Aruba	2007	74.239				85	+Aruba	NA	2007	74.239
86	-Australia	1950	69.02				86	+Australia	NA	1950	69.02
87	-Australia	1951	68.72				87	+Australia	NA	1951	68.72

subtle fig changes due to ggplot2 release

BIN ■ ■ ■ ■ ■ README_files/figure-markdown_github/demo-country-colors-ggplot2-1.png

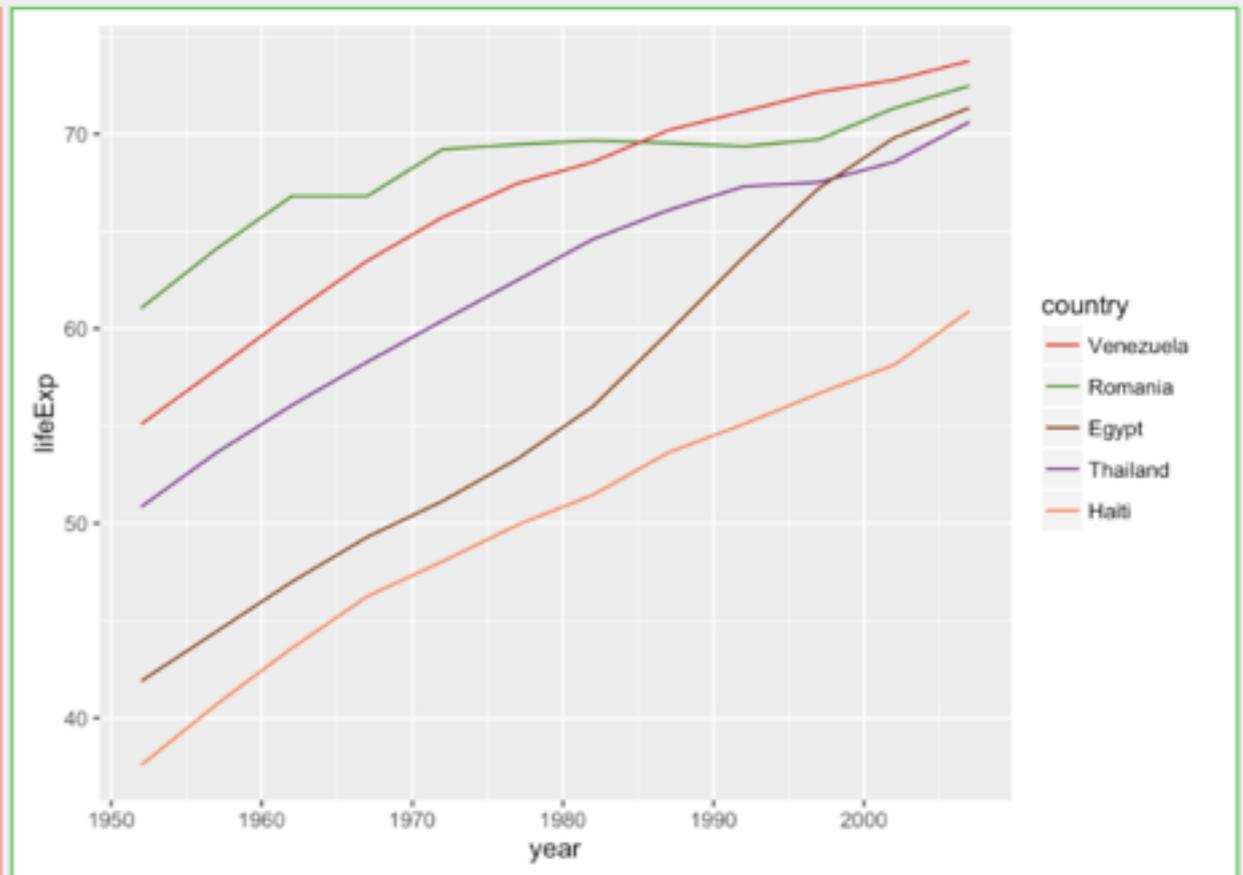
View

Deleted



W: 2100px | H: 1500px

Added



W: 2100px | H: 1500px

2-up | Swipe | Onion Skin