

GitHub Cheat Sheet

Ignore Whitespace

Adding ?w=1 to any diff URL

```
- below branch is the  
+below branch is the  
+  
+## Whitespace
```

```
below branch is the  
+  
+## Whitespace
```

Adjust Tab Space

Adding ?ts=4 to a diff or file URL

```
if install_ingress:  
    self.kubernetes  
    self.linux  
    self.windows  
    self.solaris  
    self.centos
```

```
if install_ingress:  
    self.kubernetes  
    self.linux  
    self.windows  
    self.solaris  
    self.centos
```

 Lorem ipsum dolor sit

Commit History by Author

Adding ?author={user} to the URL



Cloning a Repository

When cloning a repository the .git can be left off the end.

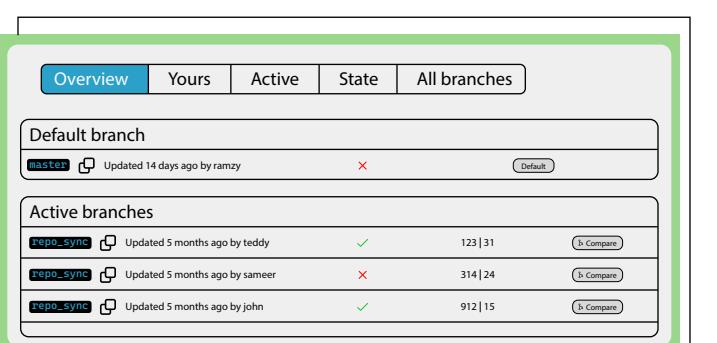
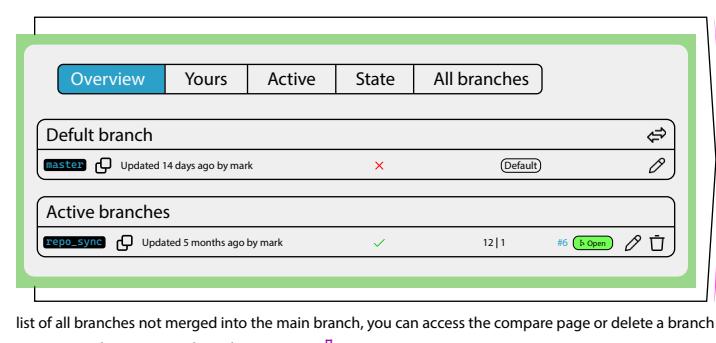
```
$ git clone https://github.com/gluu/example
```

Branch

Compare all branches to another branch

<https://github.com/{user}/{repo}/branches>

If you go to the repo's branches page, next to the commits button:



Gists

Work with small codes without create fully fledged repo

```
21 index.md  
... @@ -1+20 @@  
1 + hello, world  
+ ======  
3 +  
4 + A Second Level Header  
+ ======  
6 +  
7 + Now is the time for all talented programmers to show the  
8 + world what are they made of. This is just a  
9 + regular paragraph  
10 +  
11 + The only one stopping you from achieving your biggest  
12 + dreams is you.  
13 +  
14 + ### Header 3
```

Add .pibb to the end of Gist URL to get the HTML-only version

Gists can be treated as a repository so they can be cloned like any other:

```
$ git clone https://gist.github.com/tiimgreen/10545817
```

Keyboard Shortcuts

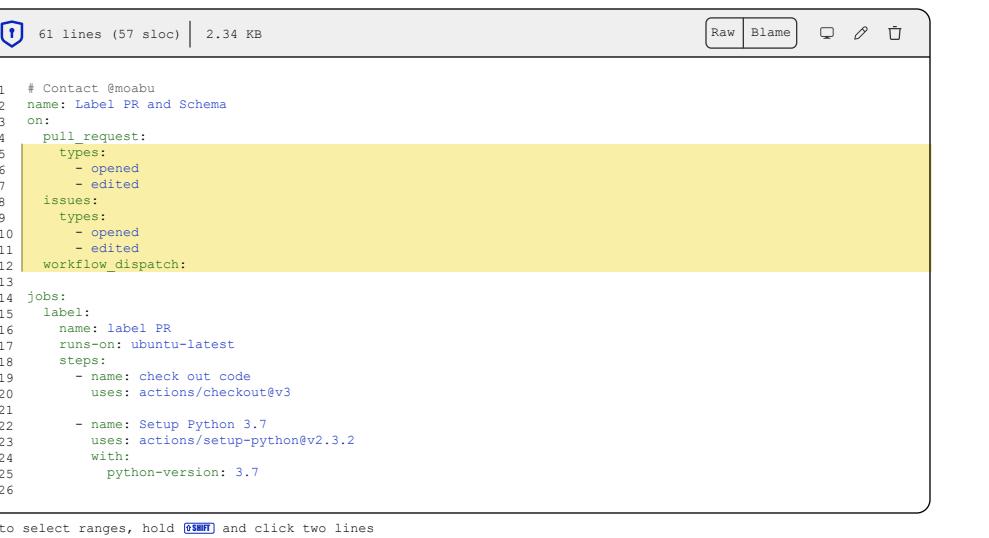
Allow you to navigate repository easily

T	Bring up a file explorer
W	Bring up the branch selector
S	Focus the search field for the current repository. Pressing ↓ to select the "All GitHub" option changes the field to search all of GitHub.
L	Edit labels on existing Issues
Y	When looking at a file will change your URL to one which, in effect, freezes the page you are looking at. If this code changes, you will still be able to see what you saw at that current time
Site Wide Shortcuts	
S	Focus command bar Search all repository
/	Focus command bar Search current repository
G N	Go to notifications
?	Bring up help dialog
J	Move selection Down
K	Move selection Up
X	Toggle selection
Issues	
⌘ ENTER	Submit comment
⌘ SHIFT P	Preview comment
⌘ SHIFT L	Go fullscreen
C	Create issue
L	Create label
U	Back to issue
⌘ /	Focus issues search
R	Replay (quoting selected text)
Pull request list	
O / ⌘ ENTER	Open issue
⌘ ENTER	Submit comment
⌘ SHIFT P	Preview comment
⌘ SHIFT L	Go fullscreen
Network graph	
← / H	Scroll left

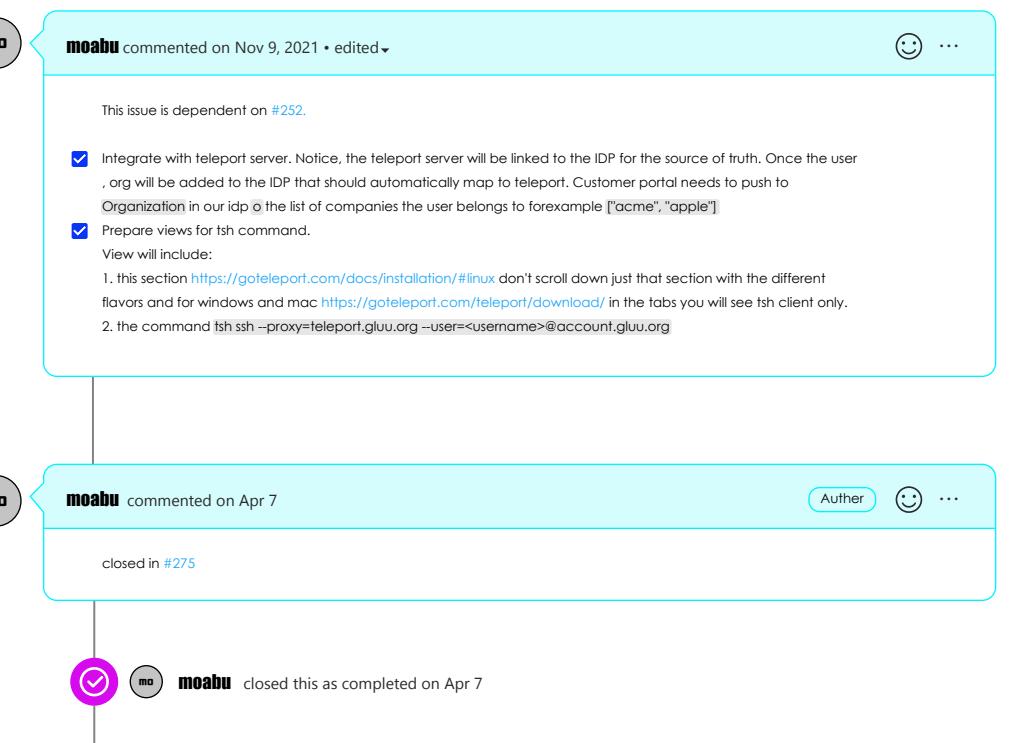
Line Highlighting in Repositories

adding #L(line number) or #L(line number)-(line number) to the end of URL will highlight that line numbers

Example: [github/workflows/label_pr.yml#L5-L12](https://github.com/actions/label_pr.yml#L5-L12)



Closing Issues via Commit Messages



Keywords fix/fixes/fixed, close/closes/closed, resolve/resolves/resolved, followed by the issue number, will close the issue once it is committed to the repository's default branch.

Cross-Link Issues

to link to another issue in the same repository, type: #issue number and it will be auto-linked, to link to an issue in another repository type: {user}/{repo}#ISSUE_NUMBER

Compare Branches across Forked Repositories

<https://github.com/{user}/{repo}/compare/{foreign-user}:{branch}...{own-branch}>

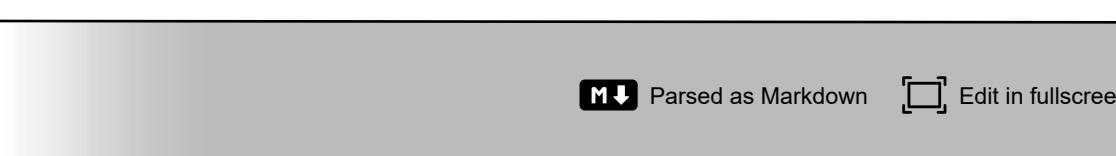
Compare Range

<https://github.com/{user}/{repo}/compare/{range}> Dates are in the format YYYY-MM-DD

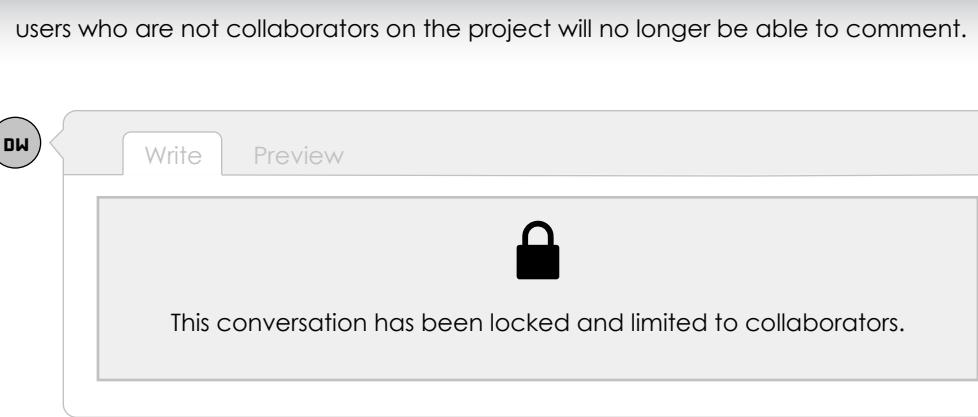
EXAMPLE <https://github.com/{user}/{repo}/compare/master@{1.day.ago}...master>
<https://github.com/{user}/{repo}/compare/master@{2014-10-04}...master>

Locking Conversations

Pull Requests and Issues can now be locked by owners or collaborators of the repo.

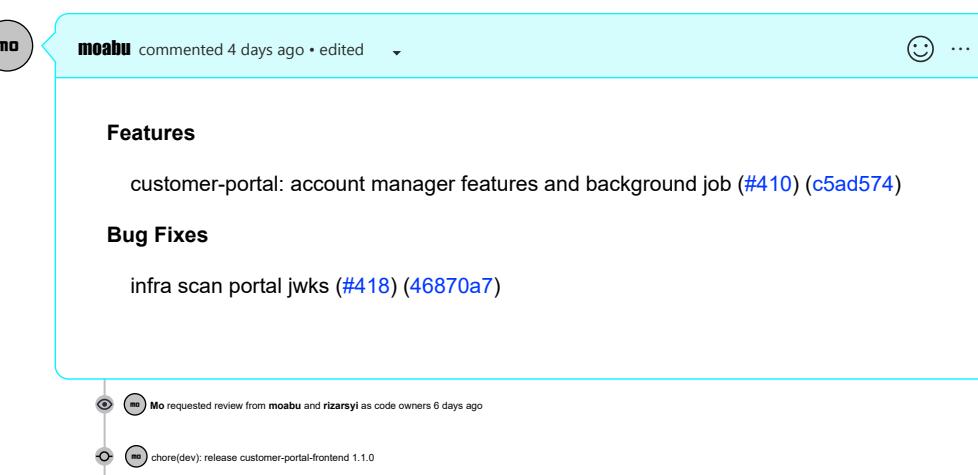


Lock issue



CI Status on Pull Requests

Travis CI build received Pull Request like it would every time you make a new commit



Filters

issues and pull requests allow filtering in the user interface.

For the Rails repo: github.com/rails/rails/issues, the following filter is built by selecting the label "activerecord":

is:issue label:activerecord

But, you can also find all issues that are NOT labeled activerecord:

is:issue -label:activerecord

Additionally, this also works for pull requests:

is:pr -label:activerecord

Github has tabs for displaying open or closed issues and pull requests but you can also see merged pull requests. Just put the following in the filter:

is:merged

GitHub Cheat Sheet

Lorem ipsum

2

Syntax Highlighting in Markdown Files

```
```ruby
require 'blockquote'
table = Blockquote.new('Name', 'Email')
table.add_row('ma don', 'mark@gmail.com')
puts table.to_s
````
```

```
```ruby
require 'blockquote'
table = Blockquote.new('Name', 'Email')
table.add_row('ma don', 'mark@gmail.com')
puts table.to_s
````
```

Emojis

Emojis can be added to Pull Requests, Issues, commit messages, repository descriptions, etc. using :name_of_emoji:.

The top 5 used Emojis on GitHub are:

1. :shipit: 🚢
2. :sparkles: 🌟
3. :tada: 🎉
4. :+1: 👍
5. :clap: 🙌

Images/GIFs

Images and GIFs can be added to comments

```
![Alt Text](http://www.URL.com/image.gif)
```

Raw images from the repo can be used by calling them directly

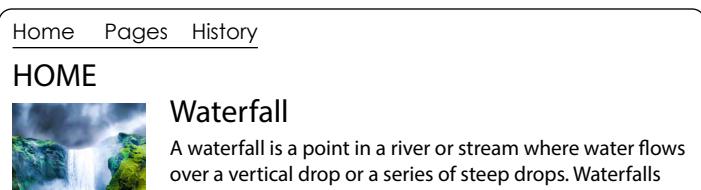
```
![Alt Text](https://github.com/{user}/{repo}/path/image.gif)
```

All images are cached on GitHub, so if your host goes down the image will remain available.

Embedding Images in GitHub Wiki

This syntax allow you to specify the height or width of the image

```
http://www.URL.com/image.gif | height = 100px
```



Pasting Clipboard Image to Comments

(Tested on Chrome and Firefox browsers)

After taking a screenshot and adding it to the clipboard (mac: cmd+ctrl+shift+4), you can simply paste (cmd-v / ctrl-v) the image into the comment section and it will be auto-uploaded to github.

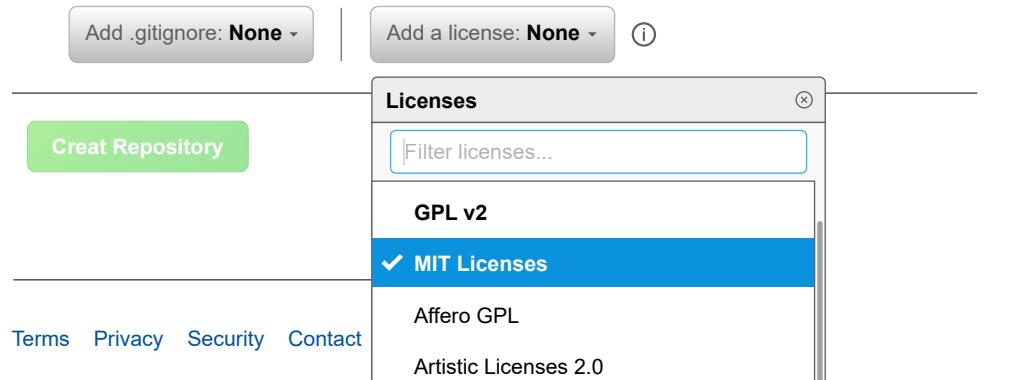


Quick Licensing

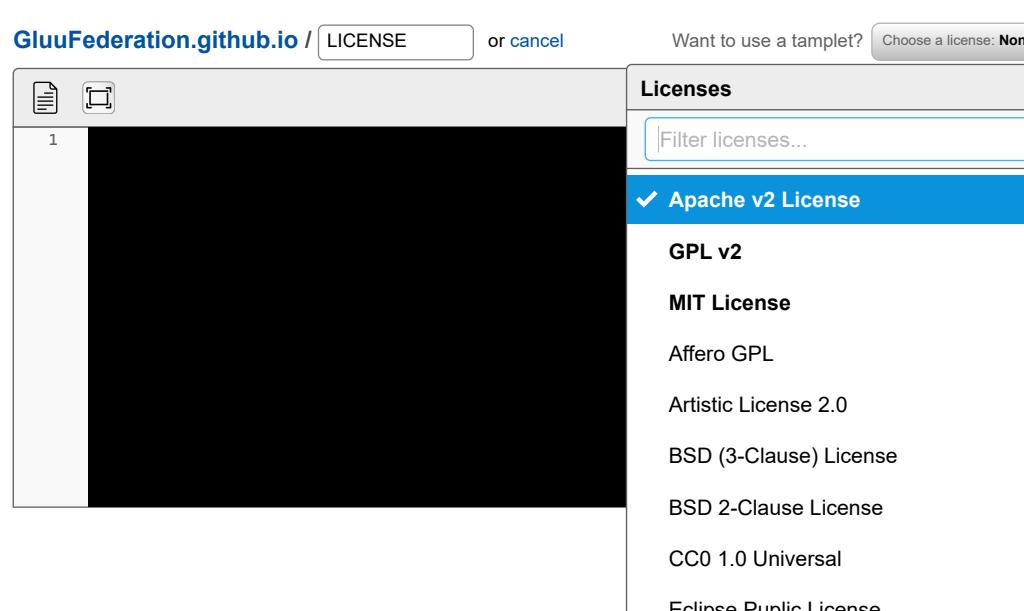
When creating a repository, GitHub gives you the option of adding in a pre-made license

Initialize this repository with a README

This will allow you to git clone the repository immediately. Skip this step if you have already run git



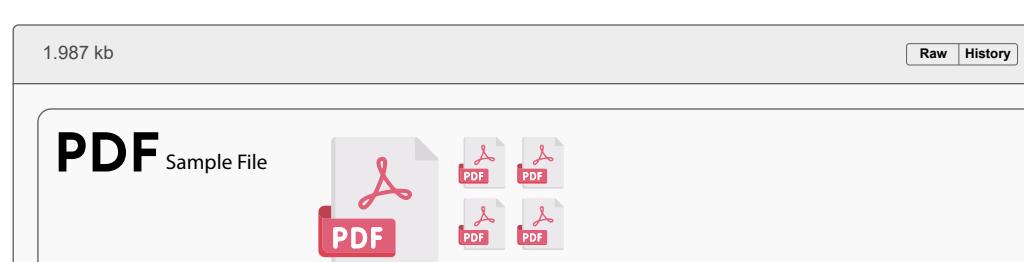
Licenses can be added to an existing repositories by creating a new file, type LICENSE to get an option to use a template:



Rendering PDF

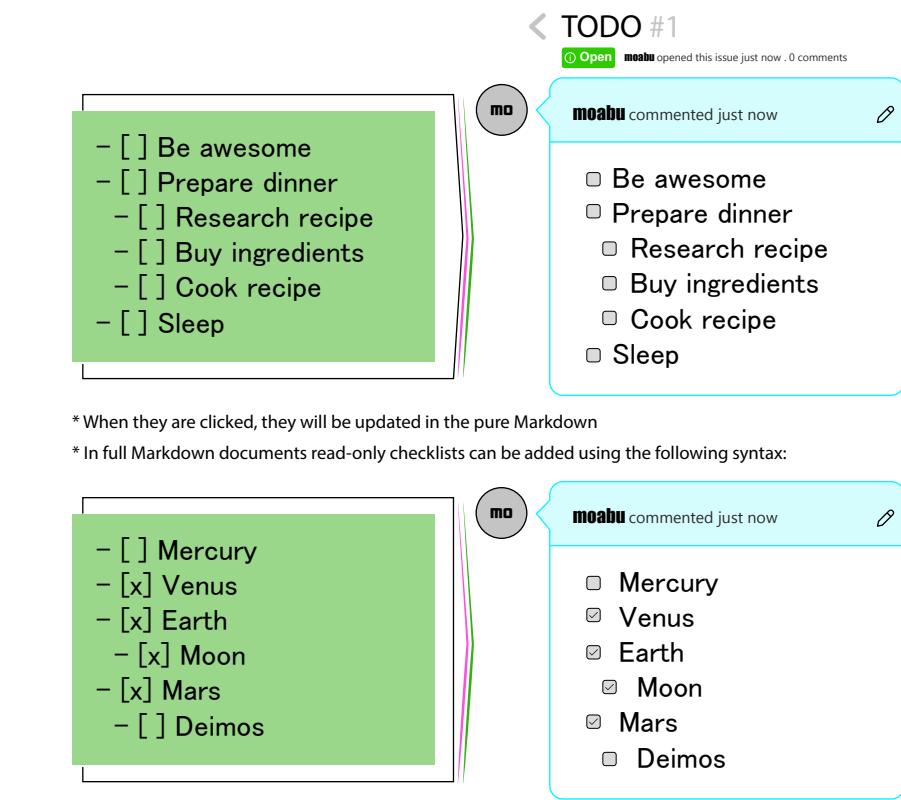
Rendering PDF

Simply browse to a PDF document and it will be rendered in the browser like any other file.



Task Lists

In Issues and Pull requests check boxes can be added with the following syntax (notice the space):



Relative Links

Relative links are recommended in your Markdown files when linking to internal content.

```
[Link to a header] (#awesome-section)
[Link to a file] (docs/readme)
```

* Absolute links have to be updated whenever the URL changes.
* Using relative links makes your documentation easily stand on its own.

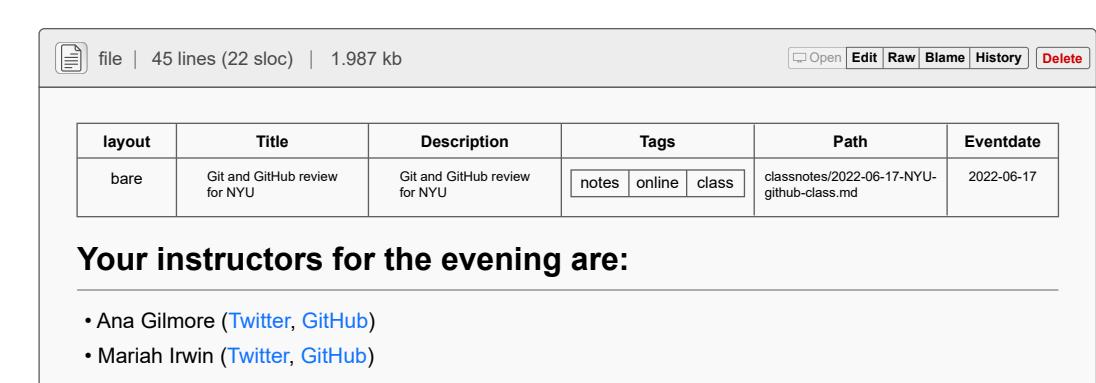
Metadata and Plugin Support for GitHub Pages

Within Jekyll pages and posts, repository information is available within the site.github namespace, and can be displayed, for example, using [[site.github.project_title]].

The Jemoji and jekyll-mentions plugins enable emoji and @mentions in your Jekyll posts and pages to work just like you'd expect when interacting with a repository on GitHub.com.

Viewing YAML Metadata in your Documents

Blogging websites, like Jekyll with GitHub Pages, depend on YAML-formatted metadata at the beginning of the post. GitHub will render this metadata as a horizontal table for easier reading



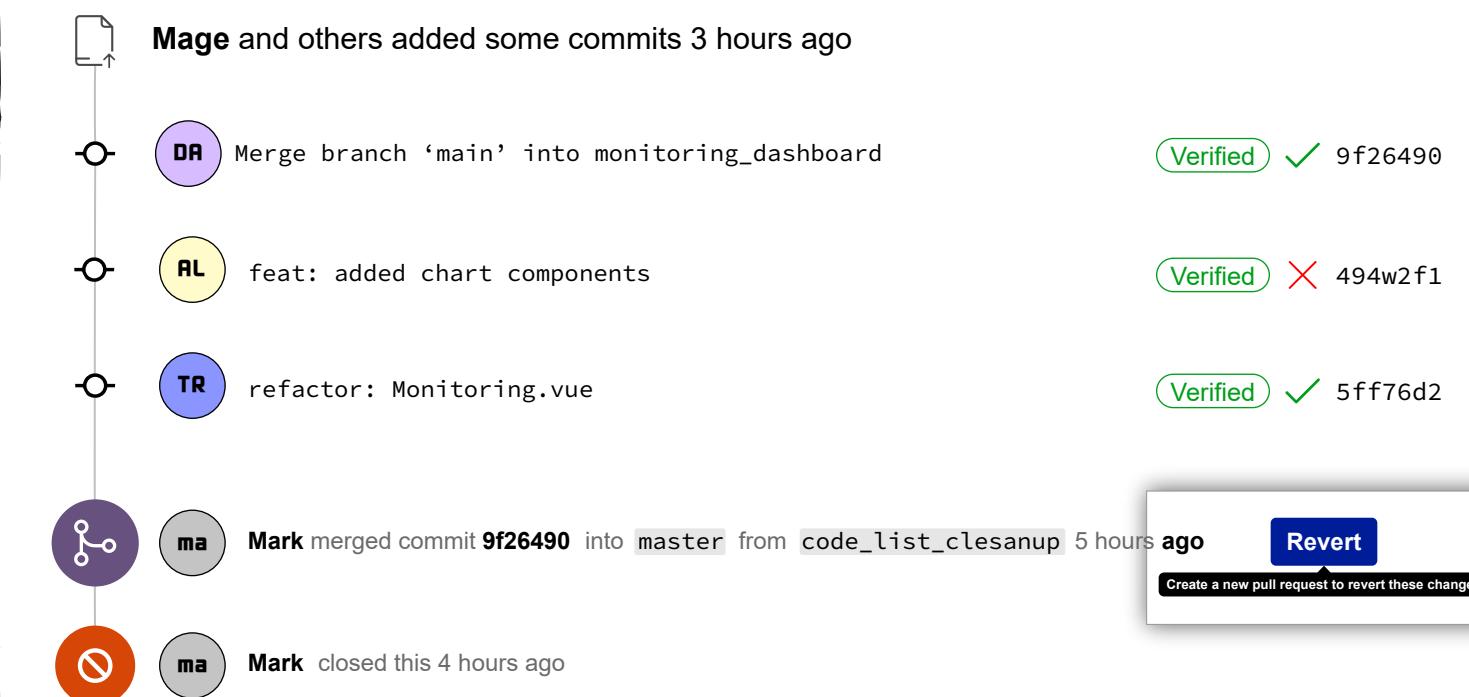
Rendering Tabular Data

GitHub supports rendering tabular data in the form of .csv (comma-separated) and .tsv (tab-separated) files.

| 1 | Title | Release Year | Locations | Fun Facts | Production Company |
|---|---------------------|--------------|-----------|-----------|--------------------|
| 2 | Extreme Flexibility | 2008 | London | | Gluu Cloud |
| 3 | Scales to Billions | 2009 | Cairo | | Gluu Cloud |
| 4 | Cloud Native | 2003 | Paris | | Gluu Cloud |
| 5 | Open Source | 2019 | Kyoto | | Gluu Cloud |
| 6 | Digital Identity | 2016 | Sao Paulo | | Gluu Cloud |
| 7 | OpenID Connect | 2002 | Madenah | | Open ID |
| 8 | FIDO | 2007 | Kansas | | FIDO Inc |
| 9 | User Access | 2004 | New York | | Gluu Cloud |

Revert a Pull Request

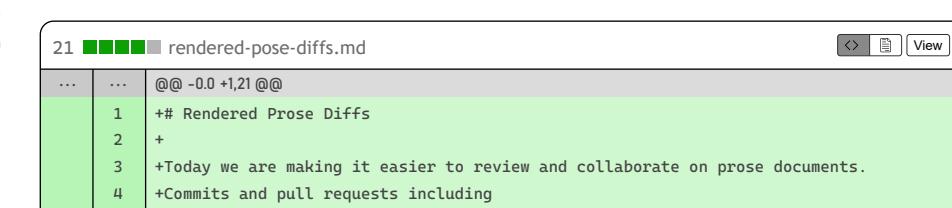
After a pull request is merged, you can revert the process by clicking the Revert button to create a pull request with reverted changes to this specific pull request.



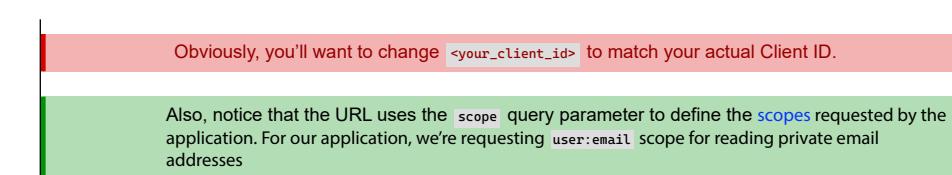
Diffs

Rendered Prose Diffs

Commits and pull requests, including rendered documents supported by GitHub, feature source and rendered views.



Click the "rendered" button to see the changes as they'll appear in the rendered document. Rendered prose view is handy when you're adding, removing, and editing text:



GitHub Cheat Sheet

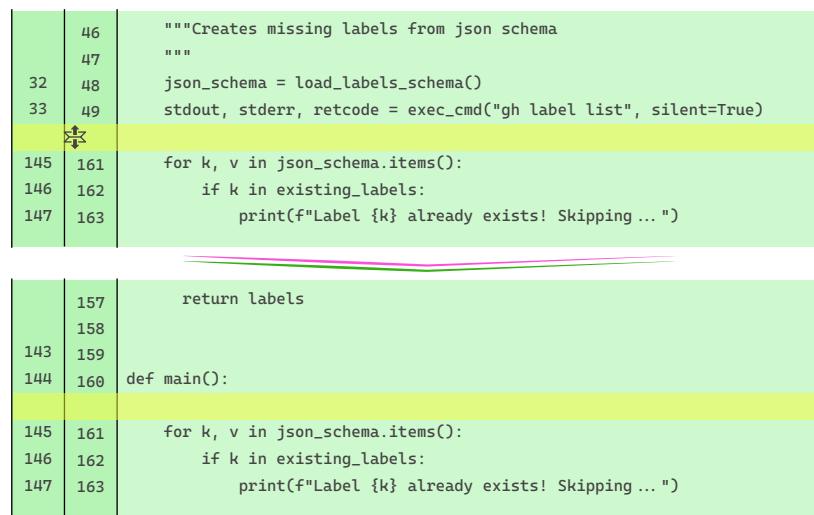
Diffable Maps

Any time you view a commit or pull request on GitHub that includes geodata, GitHub will render a visual representation of what was changed.



Expanding Context in Diffs

Using the unfold button in the gutter of a diff, reveals additional lines of context with a click. clicking unfolds will reveal the whole file, this feature is available anywhere GitHub renders diffs.



Diff or Patch of Pull Request

Get the diff of a Pull Request by adding a `.diff` or `.patch` extension to the end of the URL. For example:

```
https://github.com/cheat-sheet/pull/15
https://github.com/cheat-sheet/pull/15.diff
https://github.com/cheat-sheet/pull/15.patch
```

The `.diff` extension would give you this in plain text:

```
diff --git a/README.md b/README.md
index 88cf69..8614873 100644
--- a/README.md
+++ b/README.md
@@ -28,6 +28,7 @@ All the hidden and not hidden features of
Git and GitHub. This cheat sheet was i
- [Merged Branches](#merged-branches)
- [Quick Licensing](#quick-licensing)
- [TODO Lists](#todo-lists)
+- [Relative Links](#relative-links)
- [.gitconfig Recommendations](#gitconfig-recommendations)
- [Aliases](#aliases)
- [Auto-correct](#auto-correct)
@@ -381,6 +382,19 @@ When they are clicked, they will be updated
in the pure Markdown:
- [ ] Sleep
(...)
```

Rendering and diffing images

GitHub can display several common image formats, including PNG, JPG, GIF, and PSD. In addition, there are several ways to compare differences between versions of those image formats.



Hub

Hub is a command line Git wrapper that gives extra features and commands that make working with GitHub easier. This allows you to do things like:

```
$ hub clone GluuFederation/oxd
```

Contribution Guidelines

GitHub supports adding three different files which help users contribute to your project. These files can either be placed in the root of your repository or a `.github` directory under the root.

CONTRIBUTING File

Adding a `CONTRIBUTING` or `CONTRIBUTING.md` file to either the root of your repository or a `.github` directory will add a link to your file when a contributor creates an Issue or opens a Pull Request.

Browse Issues Milestones Search: Issues &

Please review the [guidelines for contributing](#) to this repository.

Moabu, we have a problem!

[Write](#) [Preview](#) Comments are parsed with GitHub Flavored Markdown

[Leave a comment](#)

SSH keys

You can get a list of public ssh keys in plain text format by visiting:

```
https://github.com/{user}.keys
```

e.g. <https://github.com/tiimgreen.keys>

Profile Image

You can get a user's profile image by visiting:

```
https://github.com/{user}.png
```

e.g. <https://github.com/moabu.png>

ISSUE_TEMPLATE file

A template can be defined for all new issues opened in a project. The content of this file will pre-populate the new issue box when users create new issues.

Add an `ISSUE_TEMPLATE` or `ISSUE_TEMPLATE.md` file to either the root of repository or a `.github` directory.

The screenshot shows two GitHub repository pages. The top page is for `GluuFederation`, and the bottom page is for `GluuFederation / Flex`. Both pages show the creation of a new file named `ISSUE_TEMPLATE.md`. The content of the file is as follows:

```
Title
use strict;
//Make sure jQuery has been loaded before app.js
if(typeof jQuery === "undefined"){
  //choose to enable the plugin, make sure you load the script
  //before AdminLTE's app.js
  enableFastclick: true,
```

PULL_REQUEST_TEMPLATE file

You can define a template for all new pull requests opened in your project. The content of this file will pre-populate the text area when users create pull requests. Add a `PULL_REQUEST_TEMPLATE` or `PULL_REQUEST_TEMPLATE.md` file to either the root of your repository or a `.github` directory.

Octicons

GitHub's icons (Octicons) have now been open sourced.



GitHub Student Developer Pack

If you are a student you will be eligible for the GitHub Student Developer Pack. This gives you free credit, free trials and early access to software that will help you when developing.

education.github.com/pack

GitHub Student Developer Pack

Learn to ship software like a pro. There's no substitute for hands-on experience. But for most students, real world tools can be cost-prohibitive. That's why we created the GitHub Student Developer Pack with some of our partners and friends.

[Sign up for Student Developer Pack](#)

Love the pack? Spread the word

[Twitter](#) [Like](#)

GitHub Resources

| Title | Link |
|-----------------------|---|
| GitHub Explore | https://github.com/explore |
| GitHub Blog | https://github.com/blog |
| GitHub Help | https://help.github.com/ |
| GitHub Training | https://training.github.com/ |
| GitHub Developer | https://developer.github.com/ |
| GitHub Education | https://education.github.com/ |
| GitHub Best Practices | https://www.datree.io/resources/github-best-practices |

Repository Templates

You can enable templating on your repository which allows anyone to copy the directory structure and files, allowing them to instantly use the files (e.g. for a tutorial or if writing boilerplate code). This can be enabled in the settings of your repository.

The screenshot shows the repository settings for `GluuFederation / oxAuth`. Under the `General` tab, the `Template repository` checkbox is checked. A tooltip explains that this setting lets users generate new repositories with the same directory structure and files. Below the checkbox, there is a note about signing off on commits.

Changing to a template repository will give a new URL endpoint which can be shared and instantly allows users to use your repository as a template. Alternatively, they can go to your repository and click the 'Use as template' button.

The screenshot shows the repository settings for `GluuFederation / oxAuth`. The `Use as template` button is highlighted with a yellow arrow. Below the button, there is a section for creating a new repository from the template.

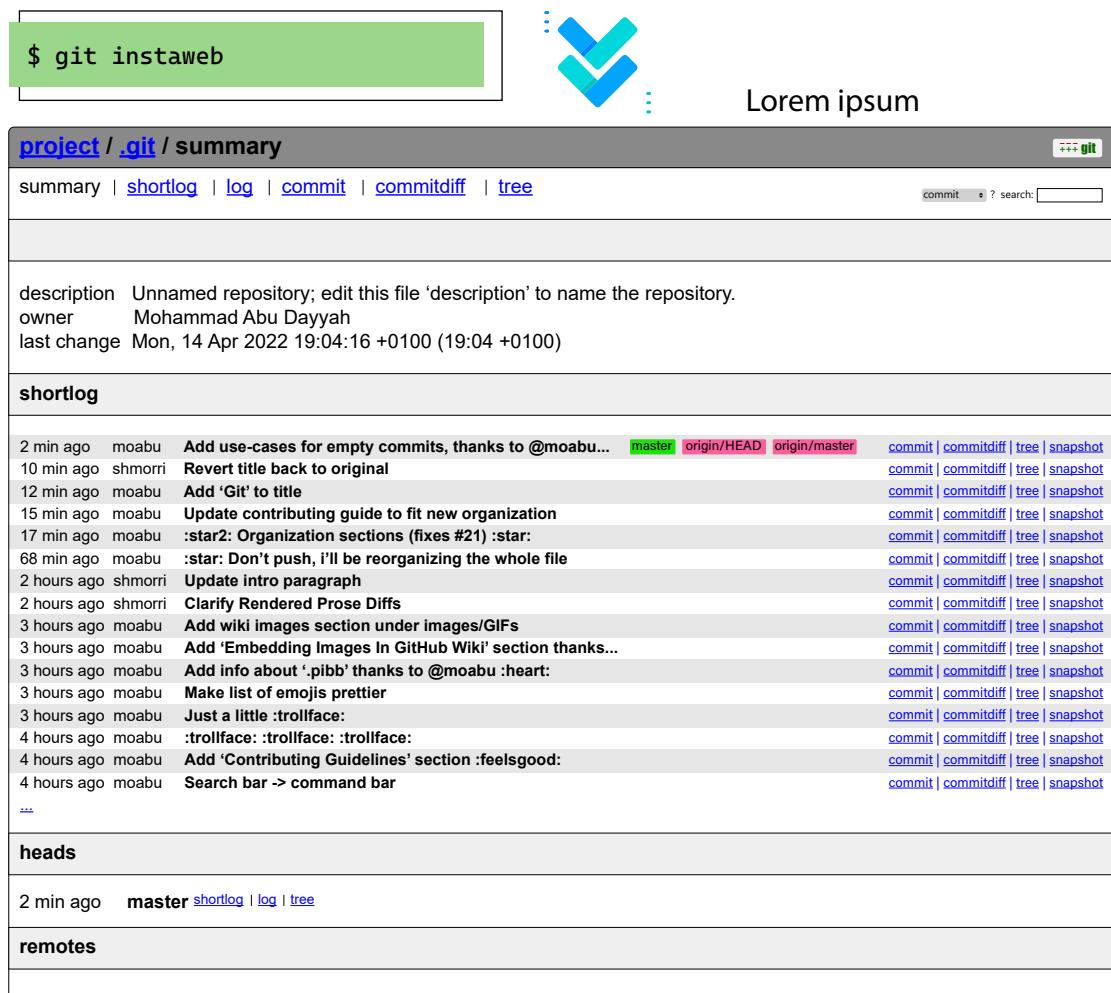
GitHub Cheat Sheet

5

Web Server for Browsing Local Repositories

Use the Git `instaweb` command to instantly browse your working repository in `gitweb`. This command is a simple script to set up `gitweb` and a web server for browsing the local repository.

```
$ git instaweb
```



The screenshot shows a GitHub repository interface. At the top, there's a green bar with the command '\$ git instaweb'. To the right is a blue Vercel logo and the text 'Lorem ipsum'. Below this is a navigation bar with links: 'summary', 'shortlog', 'log', 'commit', 'committdiff', and 'tree'. The main content area displays the repository's description ('Unnamed repository; edit this file 'description' to name the repository.'), owner ('Mohammad Abu Dayah'), and last change ('Mon, 14 Apr 2022 19:04:16 +0100 (19:04 +0100)'). The 'shortlog' section lists recent commits from 'moabu' and 'shimori' with their descriptions. The 'heads' section shows a single commit on the 'master' branch. The 'remotes' section is empty.

Auto-Correct

Git gives suggestions for misspelled commands and if auto-correct is enabled the command can be fixed and executed automatically. Auto-correct is enabled by specifying an integer which is the delay in tenths of a second before git will run the corrected command. Zero is the default value where no correcting will take place, and a negative value will run the corrected command with no delay.

For example, if you type `git comit` you will get this:

```
$ git comit -m "Message"  
# git: 'comit' is not a git command. See 'git --help'.  
  
# Did you mean this?  
#   commit
```

Auto-correct can be enabled like this (with a 1.5 second delay):

```
$ git config --global help.autocorrect 15
```

So now the command `git comit` will be auto-corrected to `git commit` like

```
$ git comit -m "Message"  
# WARNING: You called a Git command named 'comit', which does not exist.  
# Continuing under the assumption that you meant 'commit'  
# in 1.5 seconds automatically...
```

The delay before git will rerun the command is so the user has time to abort.

Aliases

Aliases are helpers that let you define your own git calls. For example you could set `git a` to run `git add --all`.

To add an alias, either navigate to `~/.gitconfig` and fill it out in the following format:

```
[alias]  
co = checkout  
cm = commit  
p = push  
# Show verbose output about tags, branches or remotes  
tags = tag -l  
branches = branch -a  
remotes = remote -v
```

...or type in the command-line:

```
$ git config --global alias.new_alias git_function
```

For example:

```
$ git config --global alias.cm commit
```

For an alias with multiple functions use quotes:

```
$ git config --global alias.cm commit
```

Git Configurations

Your `.gitconfig` file contains all your Git configurations.

Color

To add more color to your Git output:

```
$ git config --global color.ui 1
```

Git Resources

| Title | Link |
|--|---|
| Official Git Site | http://git-scm.com/ |
| Official Git Video Tutorials | http://git-scm.com/videos |
| Code School Try Git | http://try.github.com/ |
| Introductory Reference & Tutorial for Git | http://gitref.org/ |
| Official Git Tutorial | http://git-scm.com/docs/gittutorial |
| Everyday Git | http://git-scm.com/docs/everyday |
| Git Immersion | http://gitimmersion.com/ |
| Git Fast | https://github.com/gorogobe/git-fast |
| Git for Computer Scientists | http://eagain.net/articles/git-for-computer-scientists/ |
| Git Magic | http://www.cs-students.stanford.edu/~blynn/gitmagic/ |
| Git Visualization Playground | http://onlywei.github.io/explain-git-with-d3/#freplay |
| Learn Git Branching | http://pcottle.github.io/learnGitBranching/ |
| A collection of useful <code>.gitignore</code> templates | https://github.com/github/gitignore |
| Unix's git-extra-commands collection of git scripts | https://github.com/unixorn/git-extra-commands |
| GitHub repo cheat sheet | https://github.com/tiimgreen/github-cheat-sheet |

Illustrated by

Mohammad Abudayyeh



LinkedIn
<https://linkedin.com/in/moabu>

Git Books

| Title | Link |
|-------------------------------------|---|
| Pragmatic Version Control Using Git | https://pragprog.com/titles/tsgit/pragmatic-version-control-using-git |
| Pro Git | http://git-scm.com/book |
| Git Internals PluralSight | https://github.com/pluralsight/git-internals-pdf |
| Git in the Trenches | http://cbx33.github.io/git/ |
| Version Control with Git | http://www.amazon.com/Version-Control-Git-collaborative-development/dp/1449316387 |
| Pragmatic Guide to Git | https://pragprog.com/titles/pg_git/pragmatic-guide-to-git |
| Git: Version Control for Everyone | https://www.packtpub.com/application-development/git-version-control-everyone |

Git Videos

| Title | Link |
|---|---|
| Linus Torvalds on Git | https://www.youtube.com/watch?v=4XpnKHJAOk8 |
| Introduction to Git with Scott Chacon | https://www.youtube.com/watch?v=ZDR433bOHJY |
| Git From the Bits Up | https://www.youtube.com/watch?v=MYP56QjpDr4 |
| Graphs, Hashes, and Compression, Oh My! | https://www.youtube.com/watch?v=ig5E8CcdM9g |
| GitHub Training & Guides | https://www.youtube.com/watch?list=PLg7s6cbtAD15G81NyoYDuKZSKyJrgwB-&v=FyfuLX4HaxM |

Git Articles

| Title | Link |
|---|---|
| GitHub Flow | http://scottchacon.com/2011/08/31/github-flow.html |
| Migrating to Git Large File Storage (Git LFS) | http://vooban.com/en/tips-articles-geek-stuff/migrating-to-git-lfs-for-developing-deep-learning-applications-with-large-files/ |

THE END