

A top-down view of a white desk. A person's hands are typing on a white Apple keyboard. A white Apple mouse is to the right. A bright yellow watch is on the right side. A smartphone is partially visible in the bottom right corner. A purple triangle is in the bottom right corner.

Make your own blog!

Using R ... and maybe more



Hello!

I am Claudia

I am an R-addict and a scientist.

I work at the [European Centre for Medium-range Weather Forecasts](#).

You can find me on Twitter [@clavitolo](#).



Today's plan

- Why you should blog
- HTML pages vs WordPress vs static site generators
- Jekyll (markdown)
- Blogdown (HUGO + R + Rmarkdown)



Why/how you should blog

Reasons to blog

- Helps your communications skills (explain complex topics in simple terms to wide audience).
- Allows you to showcase your skills, you can get noticed and be invited to join events, speak at conferences and maybe land your dream job!
- Widen your network of contacts.
- Saves time. Any time you answer a question multiple times through email, you should turn it into a blog post, which makes it easier for you to share the next time someone asks.

(Based on a blog post by Rachel Thomson @math_rachel: <http://www.fast.ai/2017/04/06/alternatives/>)



Tips to start your first post

- Make a list of links to other blog posts, articles, or studies that you like, and write brief summaries or highlight what you particularly like about them.
- Summarize what you learned at a conference you attended, or in a class you are taking.
- Don't be a perfectionist (write quickly and often).
- You are best positioned to help people one step behind you. The material is still fresh in your mind. Many experts have forgotten what it was like to be a beginner (or an intermediate) and have forgotten why the topic is hard to understand when you first hear it. The context of your particular background, your particular style, and your knowledge level will give a different twist to what you're writing about.
- What would have helped you a year ago? What would have helped you a week ago?

(Based on a blog post by Rachel Thomson @math_rachel: <http://www.fast.ai/2017/04/06/alternatives/>)



1.

Old-fashion STATIC SITE

A static site is a collection of pages contained in basic HTML files. You could hand-write these in a text editor, but managing assets and repeated elements such as navigation can become problematic.



1.

Old-fashioned WE

A static site is a collection of pages stored in basic HTML files. You could hand-write these files, or use a static site generator to create them. Static sites are fast and easy to deploy, but they lack the flexibility of dynamic sites. They are not suitable for applications that require frequent updates or complex user interactions.



2. WORDPRESS

This is a content management system (CMS) that stores page content in a database and provides facilities to edit and apply themes. Management becomes easier at the expense of flexibility, performance, server requirements, security and backups.

<https://wordpress.com>

Or alternatively: <https://medium.com>, <https://www.blogger.com>, etc.



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<https://wordpress.com>

Or alternatively: <https://medium.com>, <https://www.blogger.com>





3.

JEKYLL and HUGO

These are static site generators (SSG), a compromise between using a hand-coded static site and a full CMS. You generate an HTML-only website using raw data (such as Markdown files) and templates. The resulting build is transferred to your live server.

<https://jekyllrb.com/>

<https://gohugo.io/>



3. JEKYLL and HUGO

These are static site generators (SSG), a compromise between using a hand-coded static site and a full CMS. You generate an HTML-only website using raw data (such as Markdown files) and templates. The resulting build is transferred to your live server.

<https://jekyllrb.com/> (lots of beautiful free template, easy github interaction, Rmarkdown is not supported!)

<https://gohugo.io/> (some nice free templates, github interaction is a bit annoying, Rmarkdown is supported)



Building a site with Jekyll is easy



First

Look for a nice theme
and test it for
responsiveness



Second

Fork the theme on
GitHub and make
GitHub pages



Third

Clone the repo,
make changes,
commit and push
to GitHub

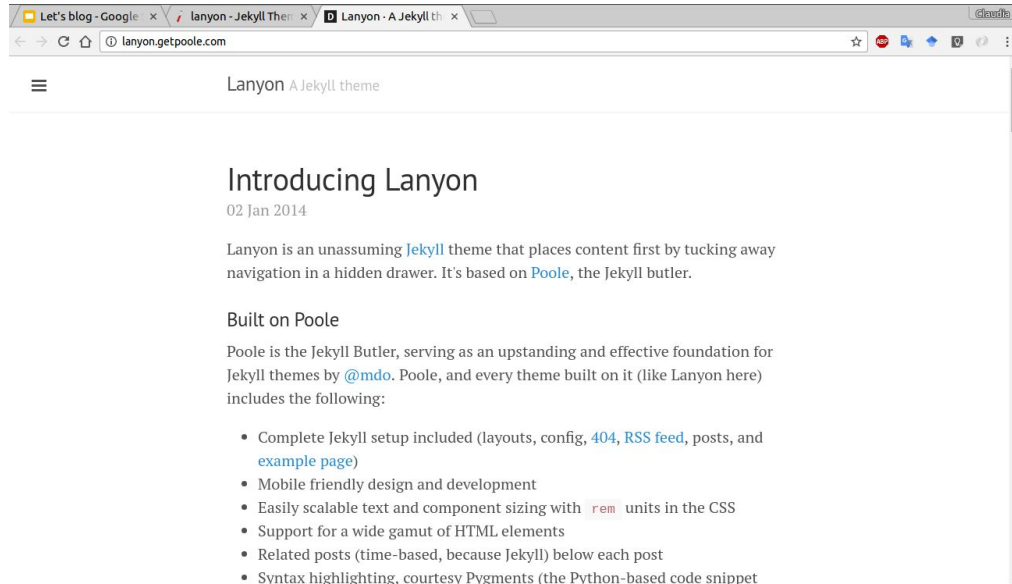


First: look for a nice theme

And test responsiveness

Go to <https://jekyllthemes.io/theme>, select FREE themes and click on lanyon

Or go directly to <https://jekyllthemes.io/theme/15489219/lanyon>



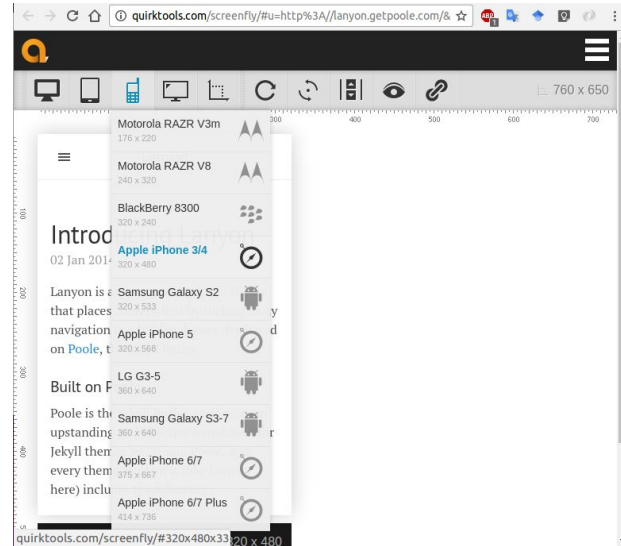
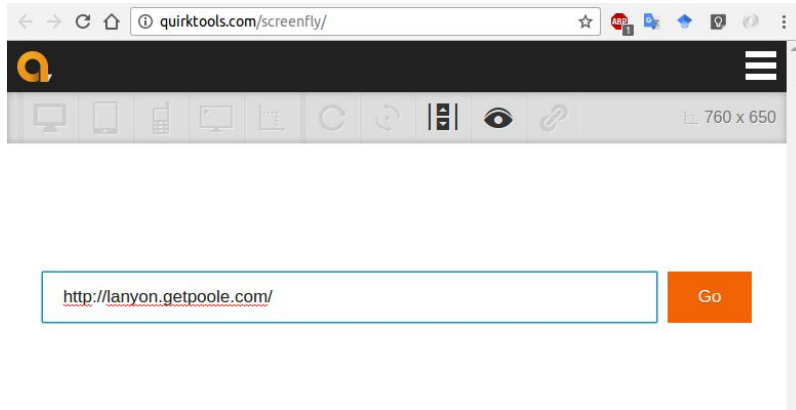


First: look for a nice theme

And test responsiveness

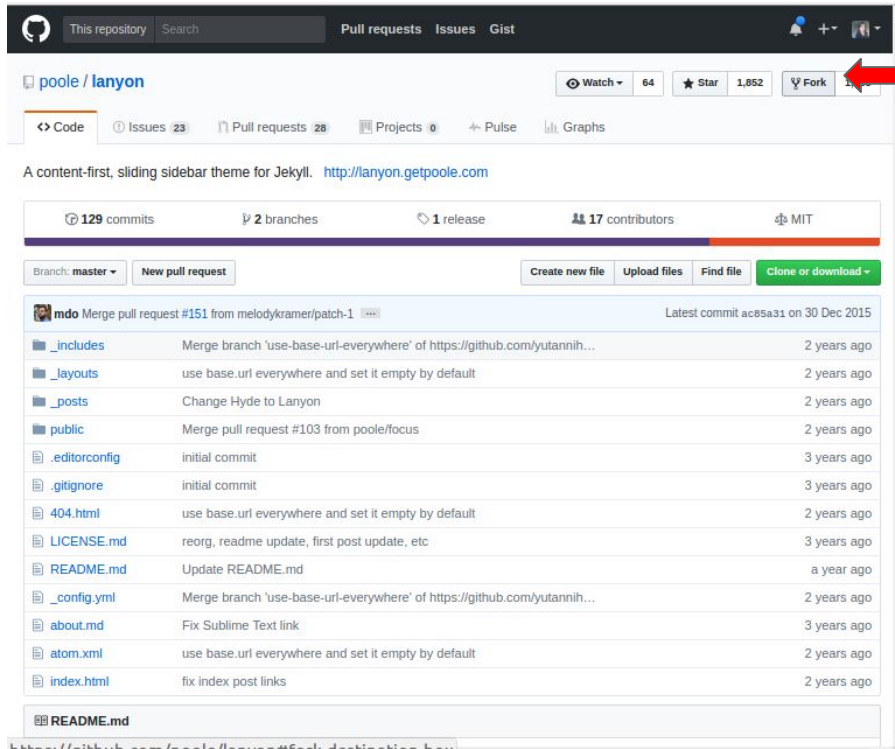
Test how this looks like on other devices:

<http://quirktools.com/screenfly/>





Second: fork the github repository <https://github.com/poole/lanyon>

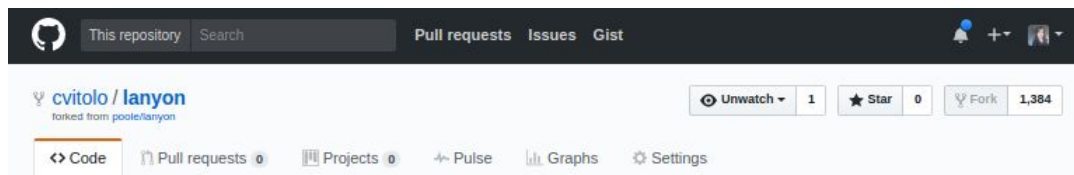


Do not download the template but fork it!

Forking is a form of acknowledgement.

Like a citation, it allows the author to keep a record of all the times his/her work was used.

Second: fork the github repository



Forking poole/lanyon

It should only take a few seconds.

Refresh





Second: fork the github repository

Edit the file `_config.yml` (remove lines 1-6)

BEFORE

The screenshot shows the GitHub repository page for `cvitolito / lanyon`. The file `_config.yml` is selected, and the code editor displays the full content of the file. Lines 1 through 6 are highlighted in yellow, indicating they are the target for removal. The code includes setup information, a description, and author details.

```
1 # Permalinks
2 #
3 # Use of 'relative_permlinks' ensures post links from the index work properly.
4 permalink: pretty
5 relative_permlinks: true
6
7 # Setup
8 title: Lanyon
9 tagline: 'A Jekyll theme'
10 description: 'A reserved <a href="http://jekyllrb.com" target="_blank">Jekyll</a> theme that places the utmost gra
11 url: http://lanyon.getpoole.com
12 baseurl: ''
13 paginate: 5
14
15 # About/contact
16 author:
17   name: Mark Otto
18   url: https://twitter.com/mdo
19   email: markdotto@gmail.com
20
21 # Custom vars
22 version: 1.0.0
```

AFTER

The screenshot shows the same GitHub repository page, but the code editor now displays only the content of `_config.yml` after removing lines 1 through 6. The code starts with the setup section and ends with the custom vars section.

```
1 # Setup
2 title: Lanyon
3 tagline: 'A Jekyll theme'
4 description: 'A reserved <a href="http://jekyllrb.com" target="_blank">Jekyll</a> theme that places the utmost gra
5 url: http://lanyon.getpoole.com
6
7 paginate: 5
8
9 # About/contact
10 author:
11   name: Mark Otto
12   url: https://twitter.com/mdo
13   email: markdotto@gmail.com
14
15 # Custom vars
16 version: 1.0.0
17
```



Second: fork the github repository

Remove additional branches - leave only the master

The screenshot shows the GitHub interface for the repository 'cvitol / lanyon', which was forked from 'poole/lanyon'. The repository has 129 commits, 2 branches, 1 release, and 17 contributors. A red arrow points to the '2 branches' link. Below the repository information, there are buttons for 'Branch: master', 'New pull request', 'Create new file', 'Upload files', 'Find file', and 'Clone or download'. The commit history is visible, showing a merge of pull request #151 from 'melodykramer/patch-1' and several other commits.

129 commits 2 branches 1 release 17 contributors

Branch: master New pull request Create new file Upload files Find file Clone or download

This branch is even with poole:master. Pull request Compare

Commit	Message	Time
mdo	Merge pull request #151 from melodykramer/patch-1	Latest commit ac85a31 on 30 Dec 2015
	Merge branch 'use-base-url-everywhere' of https://github.com/yutannih...	2 years ago
	use base.url everywhere and set it empty by default	2 years ago
	Change Hyde to Lanyon	2 years ago
	Merge pull request #103 from poole/focus	2 years ago
	initial commit	2 years ago

Second: fork the github repository

Remove additional branches - leave only the master



The screenshot shows the GitHub interface for a repository named 'lanyon' by user 'cvitolo', which was forked from 'poole/lanyon'. The repository has 1 pull request, 0 stars, and 1,384 forks. The 'Code' tab is selected, showing options for Pull requests (0), Projects (0), Pulse, Graphs, and Settings. Below this, the 'Overview' tab is active, displaying the 'Default branch' as 'master' (updated a year ago by mdo) and a list of 'Stale branches' including 'gh-pages' (updated 3 years ago by mdo). A red arrow points to the 'Delete this branch' button next to the 'gh-pages' branch.

GitHub repository page for **cvitolo / lanyon** (forked from poole/lanyon).

Repository statistics: 1 Pull request, 0 Stars, 1,384 Forks.

Navigation tabs: Overview (selected), Yours, Active, Stale, All branches.

Default branch: **master** (Updated a year ago by mdo). Status: Default. Action: Change default branch.

Stale branches: **gh-pages** (Updated 3 years ago by mdo). Status: 57 / 5. Action: Delete this branch (highlighted by a red arrow).

Second: fork the github repository

And make GitHub pages



The screenshot shows the GitHub repository page for **cvitolo / lanyon**, which is a fork of **poole/lanyon**. The repository is described as "A content-first, sliding sidebar theme for Jekyll" with a link to <http://lanyon.getpoole.com>. The repository statistics show 129 commits, 2 branches, 1 release, and 17 contributors. The "Settings" tab is highlighted with a red arrow. The repository is currently on the **master** branch, and the latest commit is **ac85a31** on 30 Dec 2015. The commit history shows a merge of pull request #151 from **melodykramer/patch-1** and a commit by **yutannih...** to update the base URL everywhere.

Repository: **cvitolo / lanyon**
forked from **poole/lanyon**

Unwatch 1 Star 0 Fork 1,384

Code Pull requests 0 Projects 0 Pulse Graphs **Settings**

A content-first, sliding sidebar theme for Jekyll. <http://lanyon.getpoole.com> Edit

Add topics

129 commits 2 branches 1 release 17 contributors

Branch: **master** New pull request Create new file Upload files Find file Clone or download

This branch is even with poole:master. Pull request Compare

mdo Merge pull request #151 from melodykramer/patch-1 Latest commit ac85a31 on 30 Dec 2015

_includes	Merge branch 'use-base-url-everywhere' of https://github.com/yutannih...	2 years ago
_layouts	use base.url everywhere and set it empty by default	2 years ago



Second: fork the github repository

Change the name to <username>.github.io

cvitolo / cvitolo.github.io

Unwatch 1 Star 0 Fork 0

Code Issues 0 Pull requests 0 Projects 0 Wiki Pulse Graphs Settings

Options

- Collaborators
- Branches
- Webhooks
- Integrations & services
- Deploy keys

Settings

Repository name

cvitolo.github.io **Rename**

Features

- ☒ **Wikis**
GitHub Wikis is a simple way to let others contribute content. Any GitHub user can create and edit pages to use for documentation, examples, support, or anything you wish.
- ☒ **Restrict editing to collaborators only**
Public wikis will still be readable by everyone.



Second: fork the github repository

And make GitHub pages

GitHub Pages

GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository.

Source

Your GitHub Pages site is currently being built from the `gh-pages` branch. [Learn more.](#)

gh-pages branch ▾

Save

Select source

✕

✓ gh-pages branch

Use the `gh-pages` branch for GitHub Pages.

master branch

Use the `master` branch for GitHub Pages.

master branch /docs folder

Use only the `/docs` folder for GitHub Pages.

None

Disable GitHub Pages.

Make private

duplicate the repository.



Second: fork the github repository

Save and wait few seconds ...

GitHub Pages

GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository.

Source

Your GitHub Pages site is currently being built from the `gh-pages` branch. [Learn more.](#)

master branch ▾

Save

Theme chooser

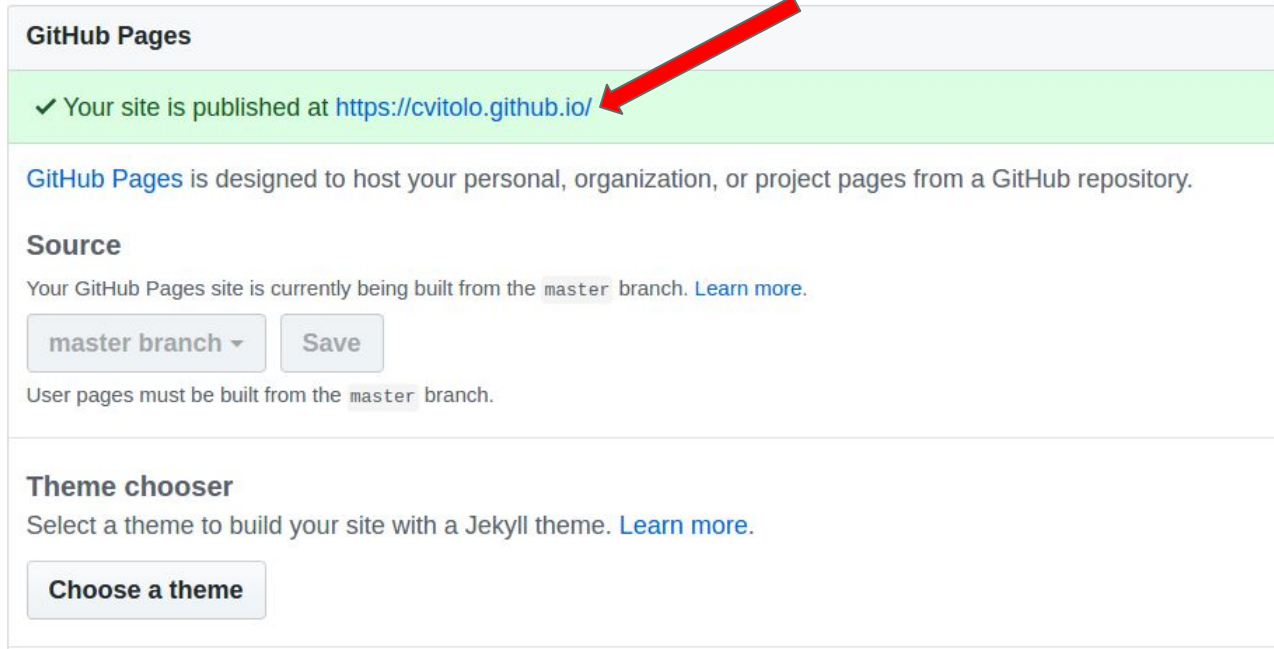
Select a theme to build your site with a Jekyll theme using the `master` branch. [Learn more.](#)

Choose a theme



Second: fork the github repository

Et voilà, your blog is published...now let's customise the content!



GitHub Pages

✓ Your site is published at <https://cvitolo.github.io/>

GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository.

Source

Your GitHub Pages site is currently being built from the `master` branch. [Learn more.](#)

`master branch`

User pages must be built from the `master` branch.

Theme chooser

Select a theme to build your site with a Jekyll theme. [Learn more.](#)

Third: clone



cvitolo / cvitolo.github.io

Unwatch 1 Star 0 Fork 0

Code Issues 0 Pull requests 0 Projects 0 Wiki Pulse Graphs Settings

A content-first, sliding sidebar theme for Jekyll. <http://lanyon.getpoole.com> Edit

Add topics

140 commits 1 branch 1 release 18 contributors

Branch: master New pull request Create new file Upload files Find file Clone or download

This branch is 11 commits ahead of poole:master.

cvitolo committed on GitHub Update _config.yml

_includes Merge branch 'use-base-url-everywhere' of https://github.com/yutannih

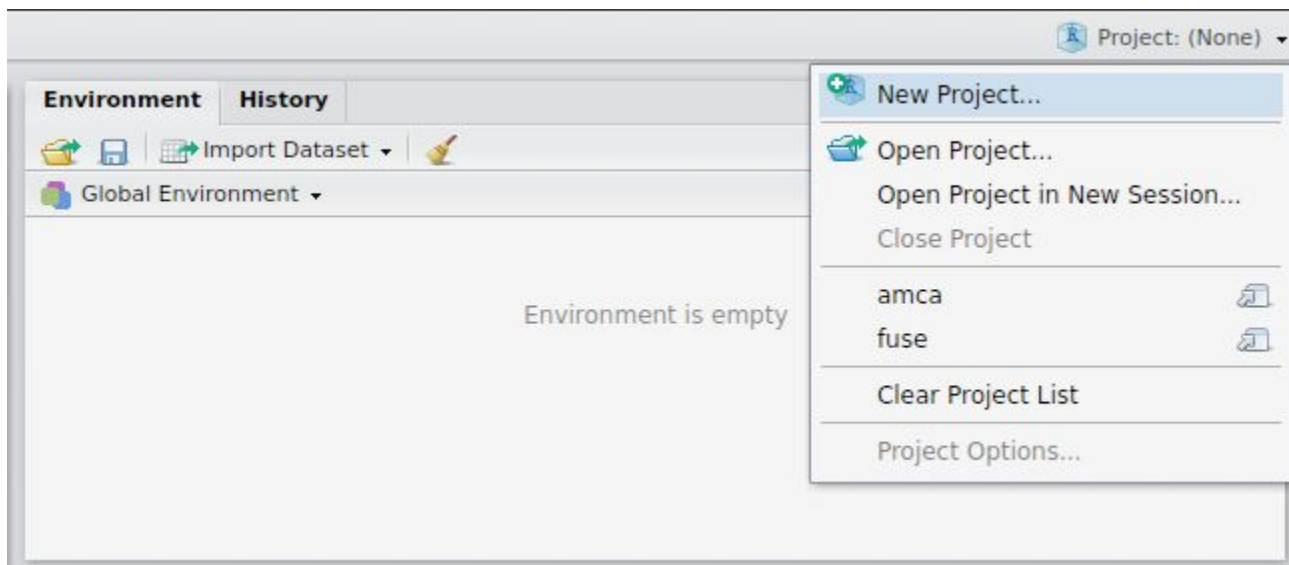
_layouts use base.url everywhere and set it empty by default

_posts Change Hyde to Lanyon 2 years ago

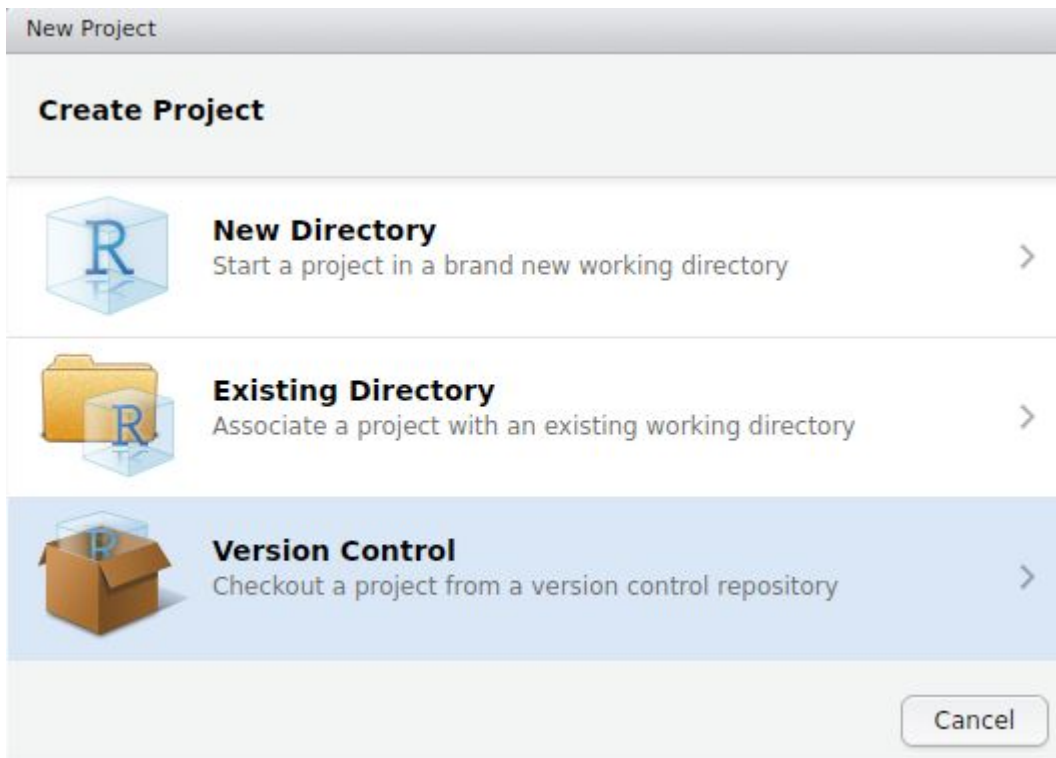
Clone with SSH Use an SSH key and passphrase from account. `git@github.com:cvitolo/cvitolo.github.io` Use HTTPS

Download ZIP

Third: clone Using RStudio

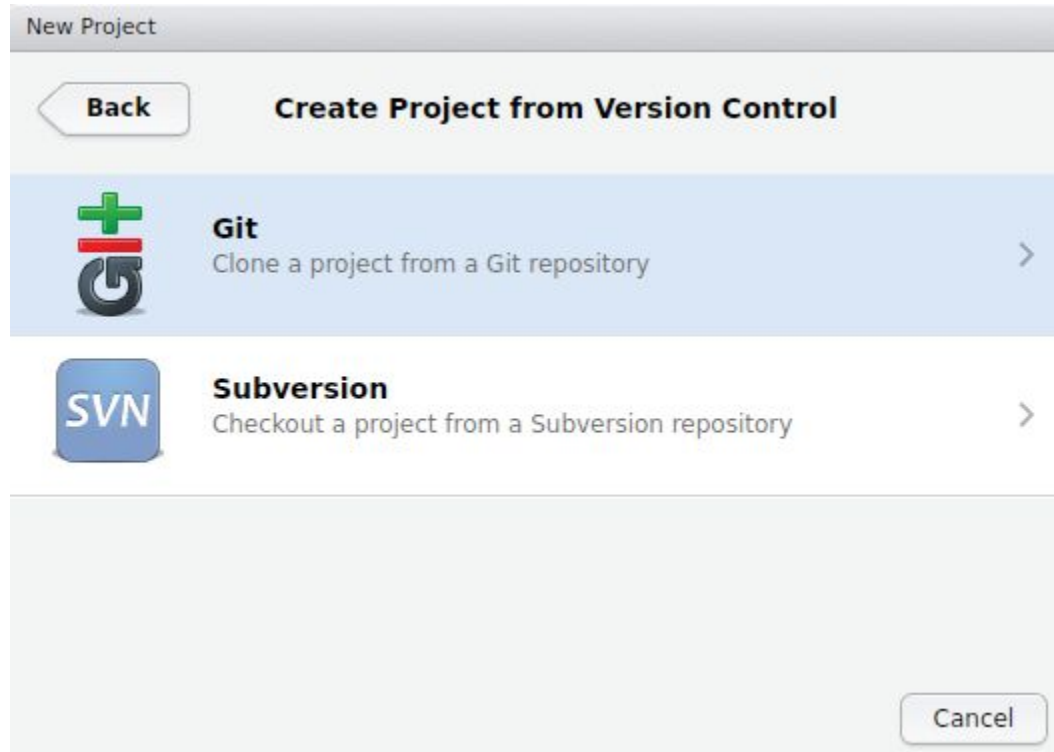


Third: clone Using RStudio





Third: clone Using RStudio




Third: clone Using RStudio



New Project

[Back](#) **Clone Git Repository**



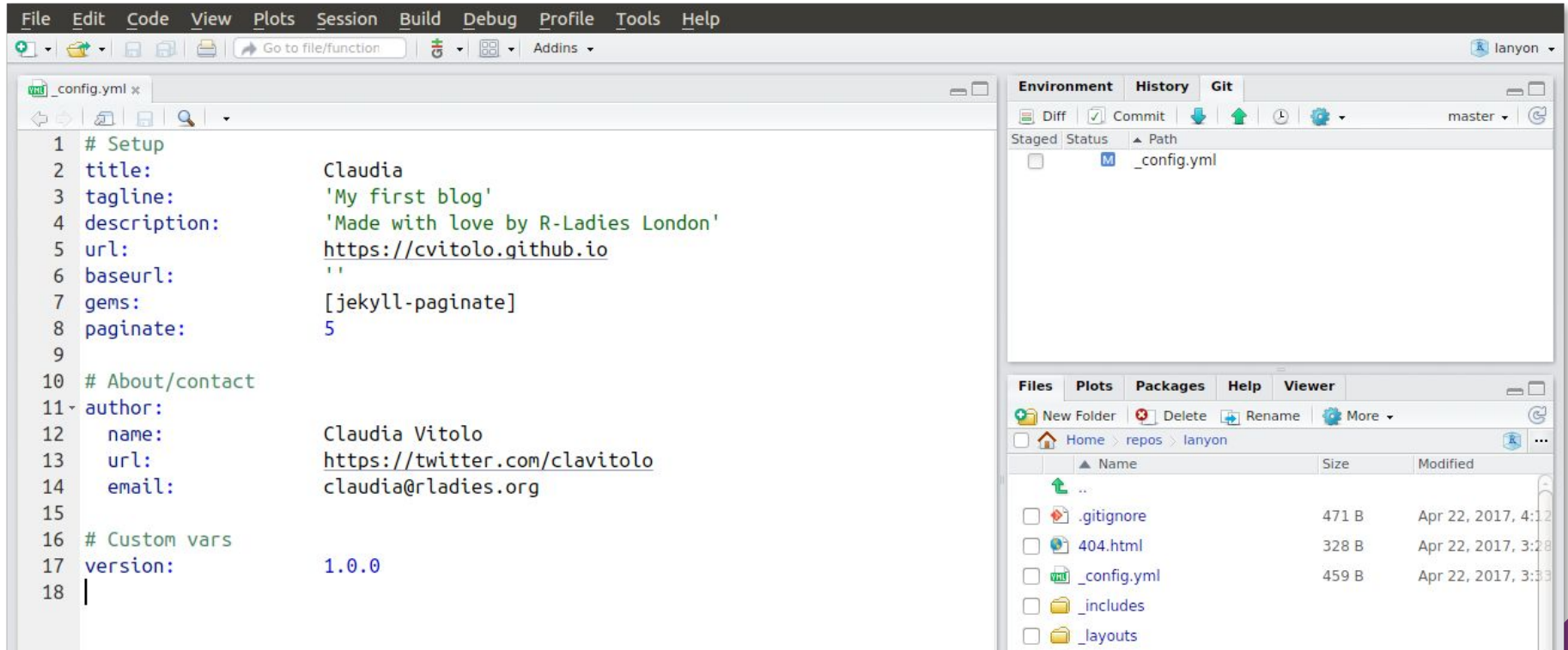
Repository URL:

Project directory name:

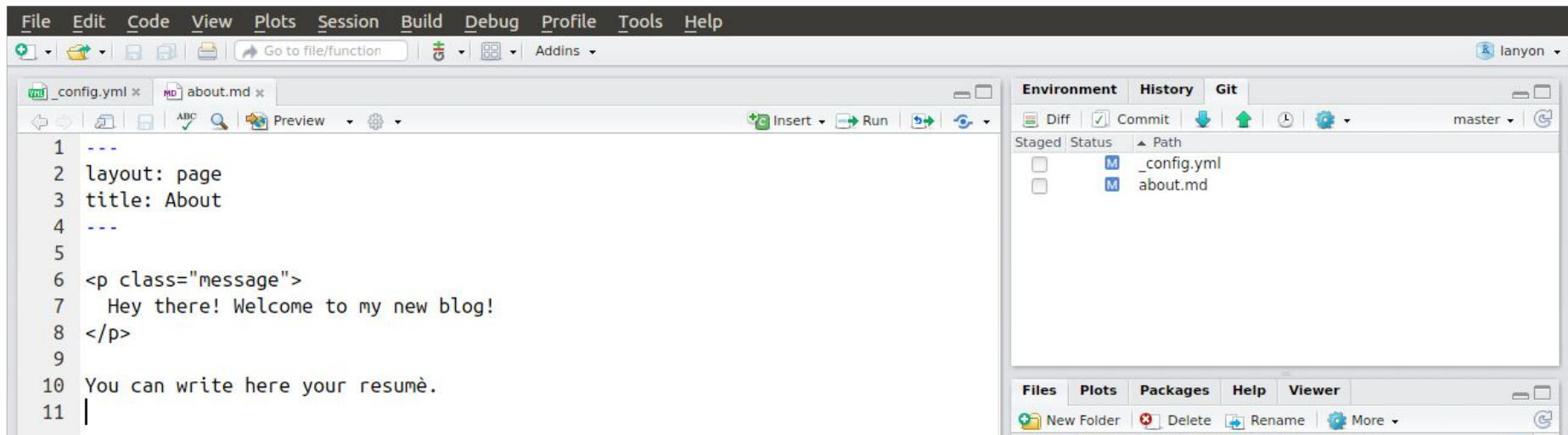
Create project as subdirectory of:
 [Browse...](#)

☐ Open in new session

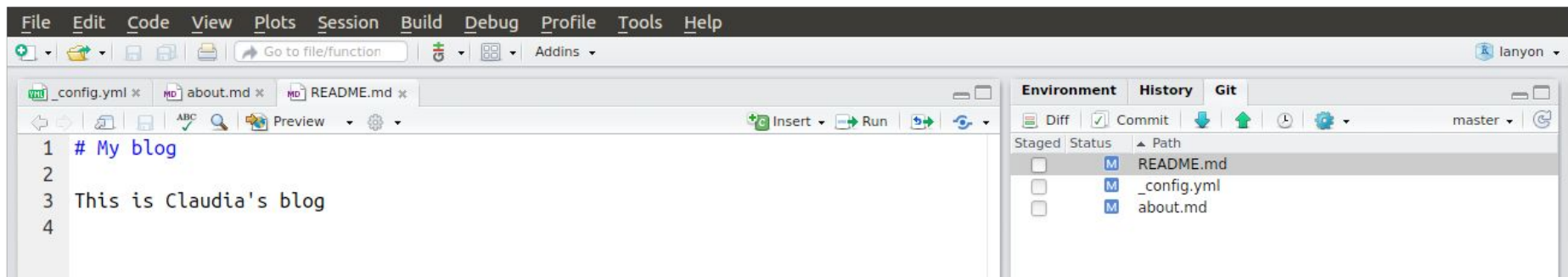
[Create Project](#) [Cancel](#)



Third: clone, change about.md



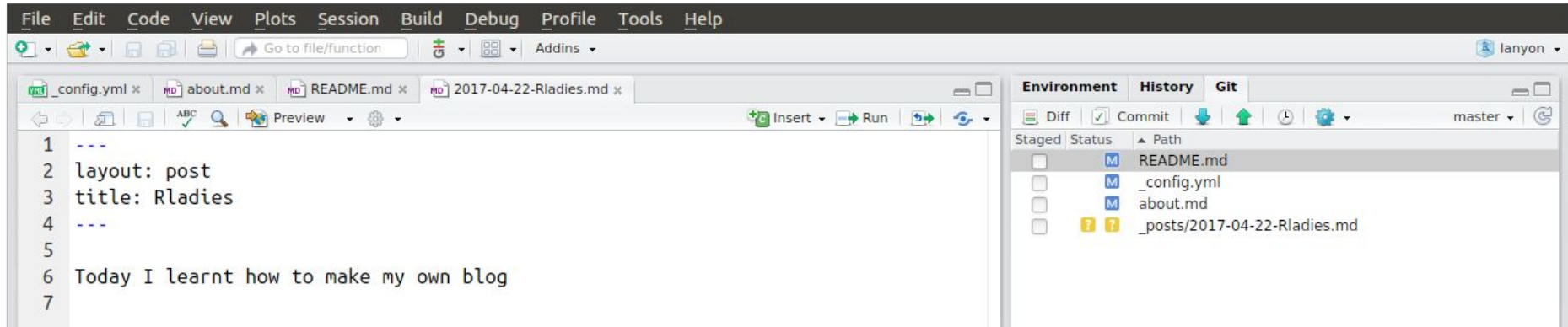
Third: clone, change README.md





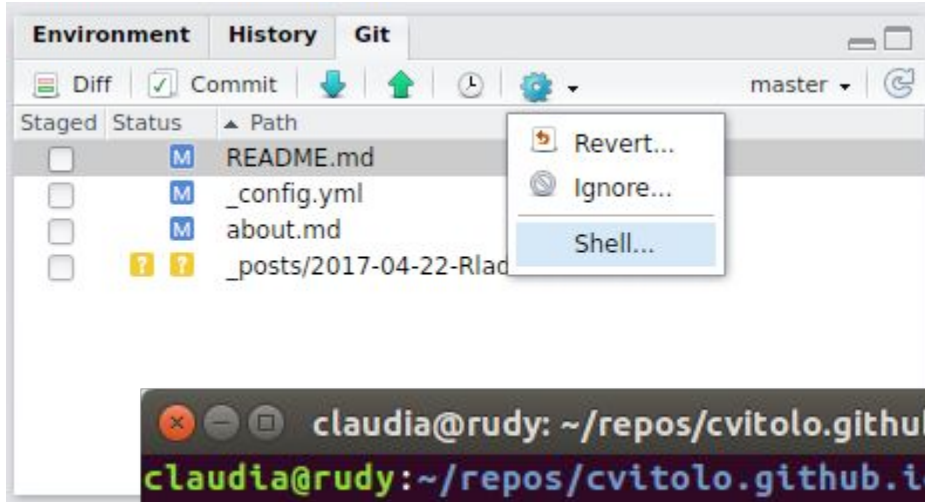
Third: clone, change/add

Create a new post: `_posts/2017-04-22-Rladies.md`



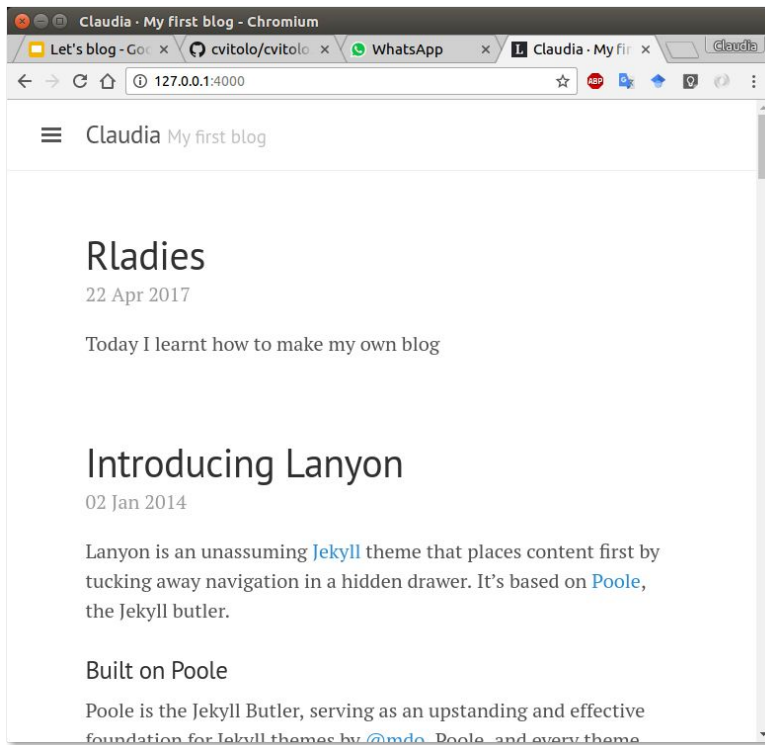


Third: clone, change/add, build Using jekyll

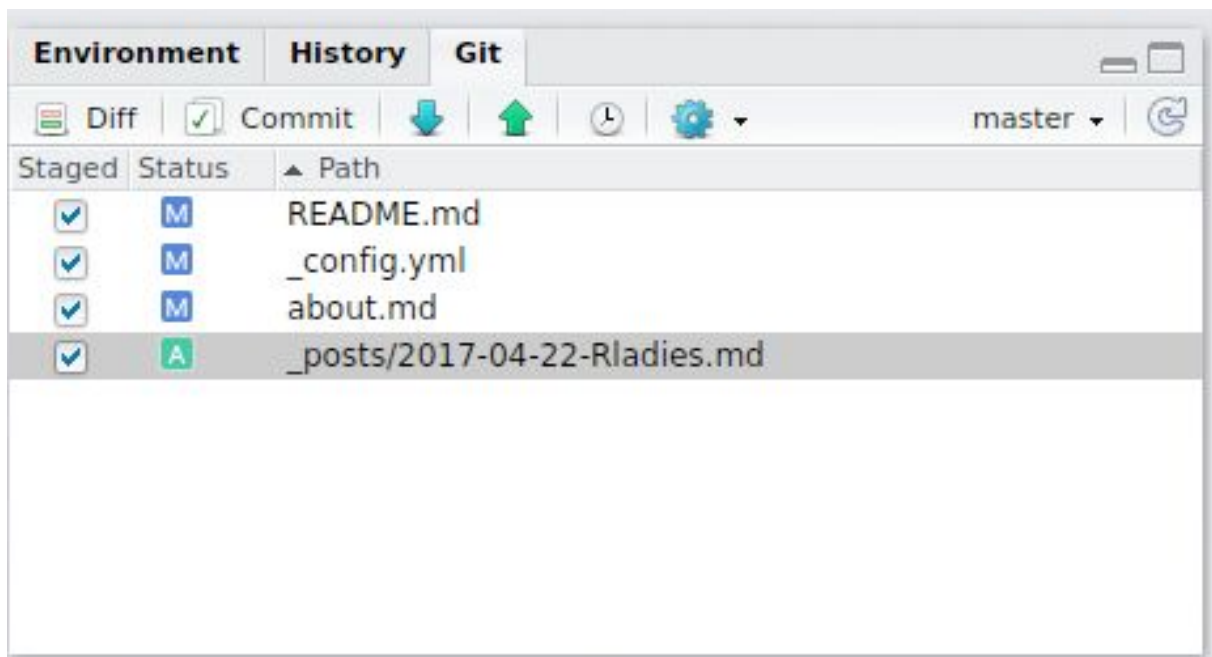


Third: clone, change/add, build

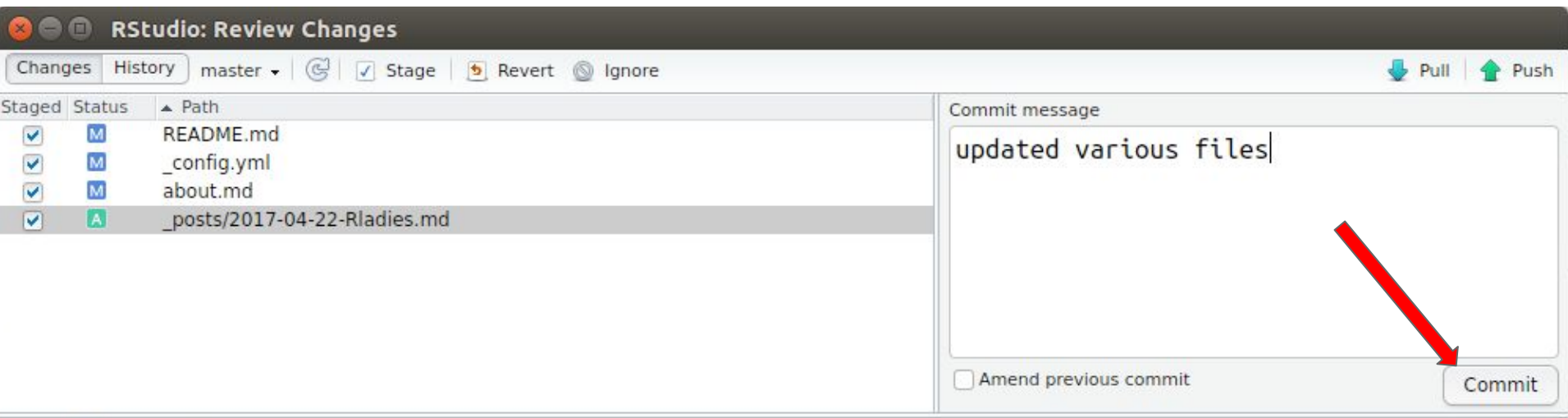
Using jekyll



Third: clone, change/add, build, commit



Third: clone, change/add, build, commit



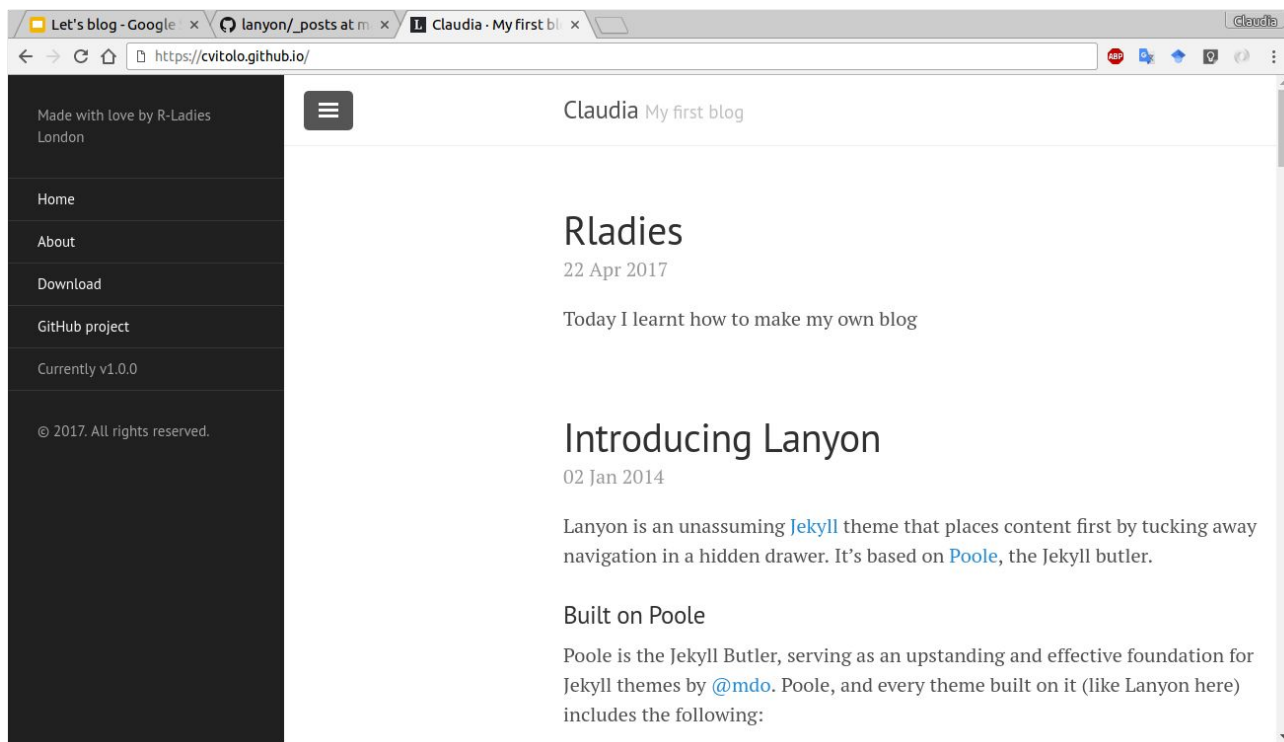
Third: clone, change/add, build, commit&push



A screenshot of a Git commit and push dialog box. The dialog has a title bar with a 'Pull' button (downward arrow) and a 'Push' button (upward arrow). Below the title bar is a large text area labeled 'Commit message'. At the bottom left, there is a checkbox labeled 'Amend previous commit'. At the bottom right, there is a 'Commit' button. A red arrow points to the 'Push' button.

Third: clone, change/add, build, commit&push

And enjoy your new Blog!





Bloggging is not enough for you and want to build a full website?

Try using more complex but well documented templates, some examples:

<https://jekyllthemes.io/theme/23038198/feeling-responsive>

<https://jekyllthemes.io/theme/20925877/JekyllMetro>

<https://volny.github.io/stylish-portfolio-jekyll/>



Building a site with Blogdown is even easier than with jekyll



First

Create a GitHub repo and clone it locally



Second

Generate a default blog, then apply theme (via R)

<https://bookdown.org/yihui/blogdown/>



Third

Make changes, commit and push to GitHub

First: create a new repo On GitHub



The screenshot shows the GitHub homepage with the following elements:

- Header:** Search bar, navigation links for Pull requests, Issues, and Gist, and user profile icons.
- Activity Feed:**
 - 2 hours ago:** HajkD commented on issue ropensci/onboarding#93. Comment: "Dear @sckott I now also ran an r-hub check and everything seems to pass: https://builder.r-hub.io/status/biomartr_0.5.0.tar.gz-e5116cc3ef554c2db801..."
 - 23 hours ago:** blue-moon22 pushed to master at rladies/meetup-presentations_london. Commits: 4a03501 Update README.md.
 - 23 hours ago:** blue-moon22 pushed to master at rladies/meetup-presentations_london. Commits: 6cf01e3 Merge pull request #2 from blue-moon22/feature/researchers-slides, 3ca7687 upload slides. Link: View comparison for these 2 commits »
 - 23 hours ago:** blue-moon22 merged pull request rladies/meetup-presentations_london#2.
- Right Sidebar:**
 - Notifications:** "The GitHub Satellite schedule is here: save your seat. Save your seat for GitHub Satellite. View 8 new broadcasts."
 - Repositories you contribute to (16):**

Repository	Stars
ropensci/rdefra	9
ecmwf/caliver	0
ropensci/hddtools	17
kehraProject/kehra	0
ropensci/roweb	15

[Show 11 more repositories...](#)
 - Your repositories (18):** Includes a "New repository" button and a search bar labeled "Find a repository..."



First: create a new GitHub repo

<https://<username>.github.io/>

The screenshot shows the GitHub 'Create a new repository' page. The browser address bar displays 'https://github.com/new'. The page header includes the GitHub logo, a search bar, and links for 'Pull requests', 'Issues', and 'Gist'. The main heading is 'Create a new repository', followed by a subtext: 'A repository contains all the files for your project, including the revision history.' The form fields include: 'Owner' (a dropdown menu showing 'cvitolo'), 'Repository name' (a text box containing 'cvitolo.github.io' with a green checkmark), 'Description (optional)' (a text area), 'Public' (selected radio button with a lock icon, text: 'Anyone can see this repository. You choose who can commit.'), 'Private' (unselected radio button with a lock icon, text: 'You choose who can see and commit to this repository.'), 'Initialize this repository with a README' (checkbox, text: 'This will let you immediately clone the repository to your computer. Skip this step if you're importing an existing repository.'), 'Add .gitignore: None' (dropdown menu), and 'Add a license: None' (dropdown menu with an info icon). A green 'Create repository' button is at the bottom. The footer contains copyright information '© 2017 GitHub, Inc.', links for 'Terms', 'Privacy', 'Security', 'Status', 'Help', 'Contact GitHub', 'API', and 'Training'.

GitHub, Inc. [US] | <https://github.com/new>

Search GitHub Pull requests Issues Gist

Create a new repository

A repository contains all the files for your project, including the revision history.

Owner Repository name

cvitolo / cvitolo.github.io ✓

Great repository names are short and memorable. Need inspiration? How about [psychic-chainsaw](#).

Description (optional)

☒ **Public**
Anyone can see this repository. You choose who can commit.

☐ **Private**
You choose who can see and commit to this repository.

☐ **Initialize this repository with a README**
This will let you immediately clone the repository to your computer. Skip this step if you're importing an existing repository.

Add .gitignore: **None** Add a license: **None** ⓘ

Create repository

© 2017 GitHub, Inc. [Terms](#) [Privacy](#) [Security](#) [Status](#) [Help](#) [Contact GitHub](#) [API](#) [Training](#)



First: clone the new repo Locally (on your machine)

cvitolo / cvitolo.github.io

Unwatch 1 Star 0 Fork 0

Code Issues 0 Pull requests 0 Projects 0 Wiki Pulse Graphs Settings

No description, website, or topics provided. [Add topics](#) [Edit](#)

1 commit 1 branch 0 releases 1 contributor

Branch: master New pull request Create new file Upload files Find file Clone or download

cvitolo Initial commit

README.md Initial commit

README.md

cvitolo.github.io

Clone with SSH Use HTTPS

Use an SSH key and passphrase from account.

`git@github.com:cvitolo/cvitolo.github.io`

Download ZIP


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First: clone the new repo Locally (on your machine)

New Project

[Back](#) **Clone Git Repository**



Repository URL:

Project directory name:

Create project as subdirectory of:
 [Browse...](#)

☐ Open in new session

[Create Project](#) [Cancel](#)



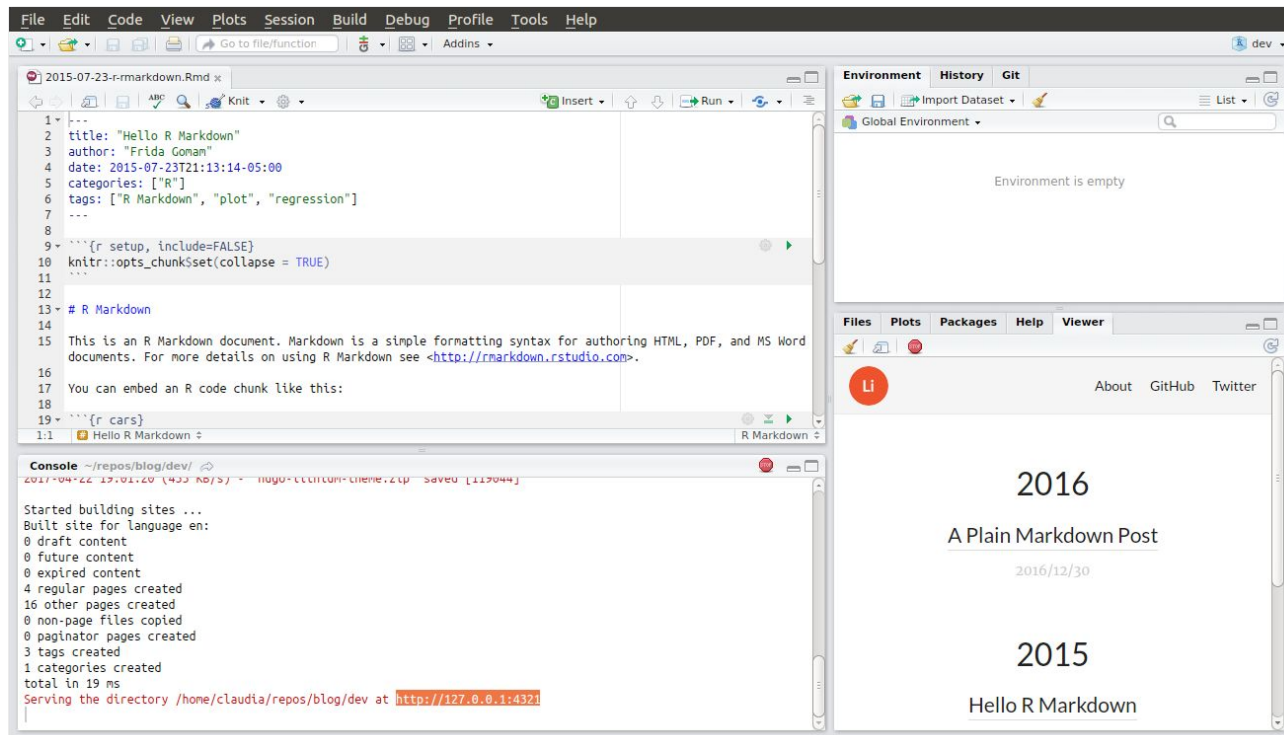
Second: install blogdown+HUGO In R/RStudio

```
if (!requireNamespace("devtools")) install.packages("devtools")  
devtools::install_github("rstudio/blogdown")  
  
blogdown::install_hugo()
```

Second: generate default blog In R/RStudio

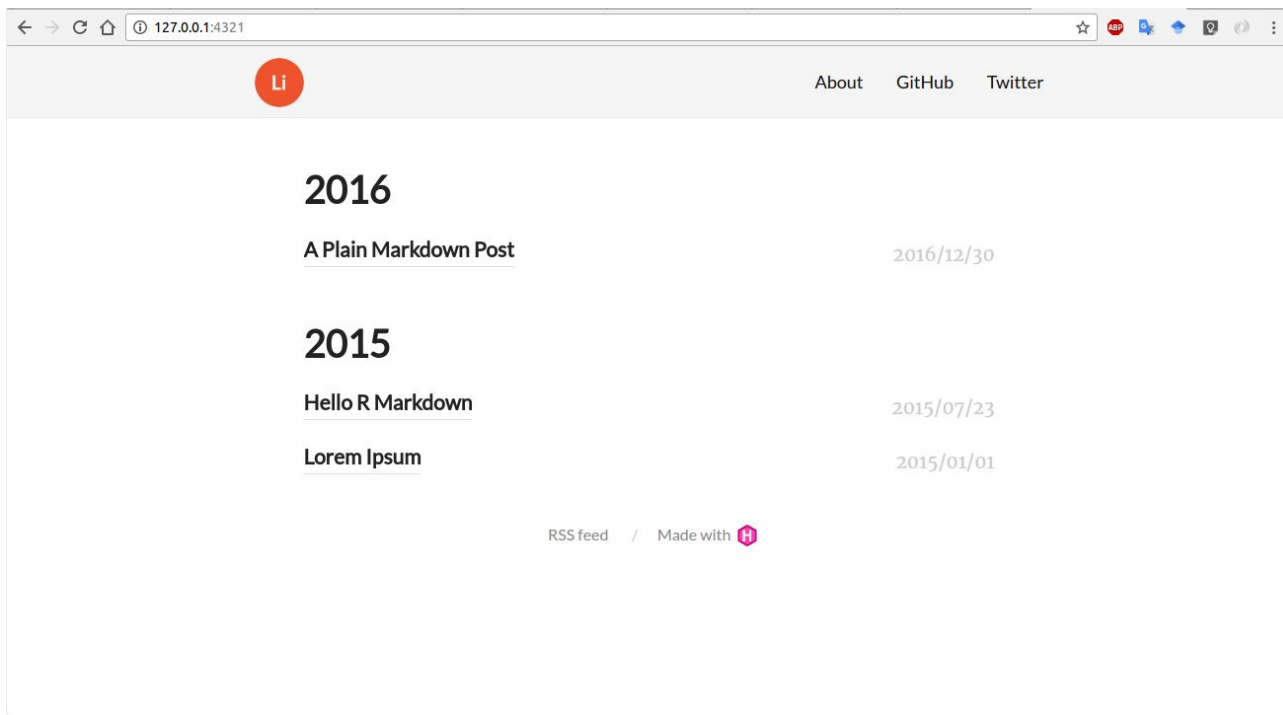


```
blogdown::new_site()
```



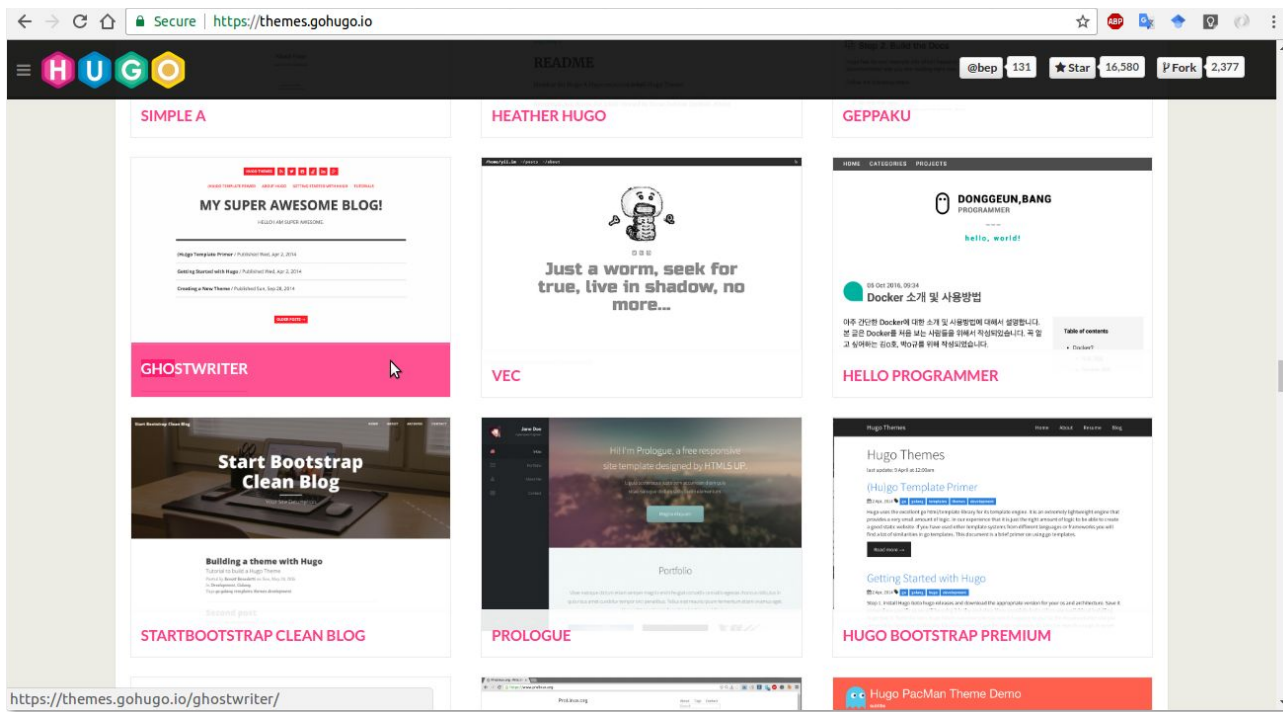
Second: generate default blog

In your browser



Second: apply a theme (optional)

<http://themes.gohugo.io/>





Second: apply a theme (optional)

<http://themes.gohugo.io/ghostwriter/>

The screenshot shows the web page for the Ghostwriter theme on the themes.gohugo.io website. The page has a dark header with the Hugo logo and navigation links. Below the header, there's a light blue section with the theme's name 'ghostwriter' and a description: 'A fork of simple AJAX driven theme for the Ghost blogging platform ported to Hugo.' It also lists the author 'Juraj Bubniak', the minimum Hugo version '0.15', the update date '2017-02-12', the license 'MIT', and tags 'blog', 'technical', and 'personal'. There are buttons for 'DOWNLOAD', 'DEMO', and 'HOMEPAGE'. To the right, there's a preview of the theme's content, showing a 'HUGO GO TEMPLATE PRIMER' document. The preview includes sections like 'Introduction to Go Templates' and 'Basic Syntax'.

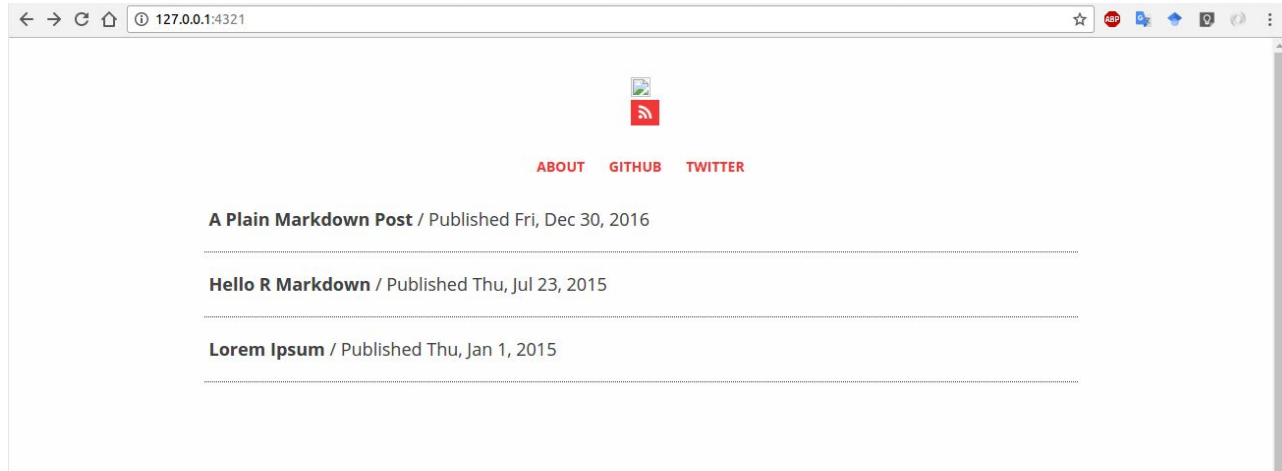
If you want to use a different theme, remember to check the **responsiveness** (as we did with the jekyll site)!



Second: install and apply a theme In R/RStudio

```
blogdown::install_theme('jrbub/ghostwriter')
```

```
blogdown::serve_site()
```





Third: add your content config.toml

```
2015-07-23-rmarkdown.Rmd * config.toml *
1 baseurl = "/"
2 relativeurls = true
3 languageCode = "en-us"
4 title = "My Hugo website"
5 theme = "ghostwriter"
6 googleAnalytics = ""
7 DisqusShortname = ""
8 ignoreFiles = [".Rmd$", "_files$", "_cache$"]
9
10 [permalinks]
11   post = "/:year/:month/:day/:slug/"
12
13 [[menu.main]]
14   name = "Claudia Vitolo"
15   url = "/about/"
16 [[menu.main]]
17   name = "GitHub"
18   url = "https://github.com/cvitolo"
19 [[menu.main]]
20   name = "Twitter"
21   url = "https://twitter.com/clavitolo"
22
23 [params]
24   description = "A website built through Hugo and blogdown."
25
26   # options for highlight.js (version, additional languages, and theme)
27   highlightjsVersion = "9.10.0"
28   highlightCDN = "https://cdn.bootcss.com"
29   highlightjsLang = ["r", "yaml"]
30   highlightjsTheme = "github"
31
32 [params.logo]
33   url = "logo.png"
34   width = 50
35   height = 50
36   alt = "Logo"
```

Add here your details and
add the following line:

publishDir = "docs"





Third: commit and push

Last step: go to your repo on GitHub -> Settings

GitHub Pages

✓ Your site is published at <https://cvitolio.github.io/test2/>

GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository.

Source

Your GitHub Pages site is currently being built from the `/docs` folder in the `master` branch. [Learn more.](#)

master branch /docs folder **Save**

Theme chooser

Select a theme to build your site with a Jekyll theme. [Learn more.](#)

Choose a theme

Custom domain

Custom domains allow you to serve your site from a domain other than `cvitolio.github.io`. [Learn more.](#)

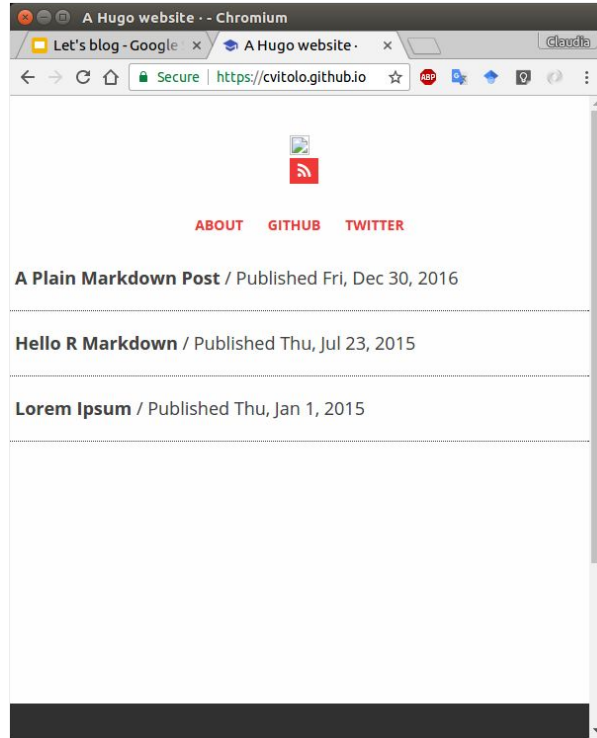
Save

☒ **Enforce HTTPS** — Required for your site because you are using the default domain (`cvitolio.github.io`)
HTTPS provides a layer of encryption that prevents others from snooping on or tampering with traffic to your site.
When HTTPS is enforced, your site will only be served over HTTPS. [Learn more.](#)



Well done!

Your blog is now live at <https://<username>.github.io/>





**Happy
blogging!**