```r
library(blogdown)

rladies_global %>%
  filter(city == 'Tbilisi')
```

Creating a website / blog

Steps to take

1. Install blogdown package
2. Choose a Hugo (site generator) theme
3. Customise your site
4. Serve site
5. Publish your site, eg through Github Pages or Netlify (not covered in this meetup)

Blogdown + Hugo

Creating a website/ blog has been made relatively easy with *blogdown* package (using rmarkdown) and Hugo site generator.

rmarkdown
www.rstudio.com
+
HUGO
A Fast & Modern Static Website Engine
= blogdown

Awesome blogdown

Full list and how to add own blog to the list on the Awesome Blogdown site and its github

Blogdown demo site

Blogdown + Hugo

- Building a static website - website only consists of static files such as HTML, CSS, JavaScript, and images, etc
- Host on any website (does not require PHP)
- Generated from (R) Markdown documents - can turn posts into PDF, easily reproducible, etc.
- Different ways to generate the site (Hugo, Jekyll)

Read more here: https://bookdown.org/yihui/blogdown/

Install blogdown

```
install.packages("blogdown")
```

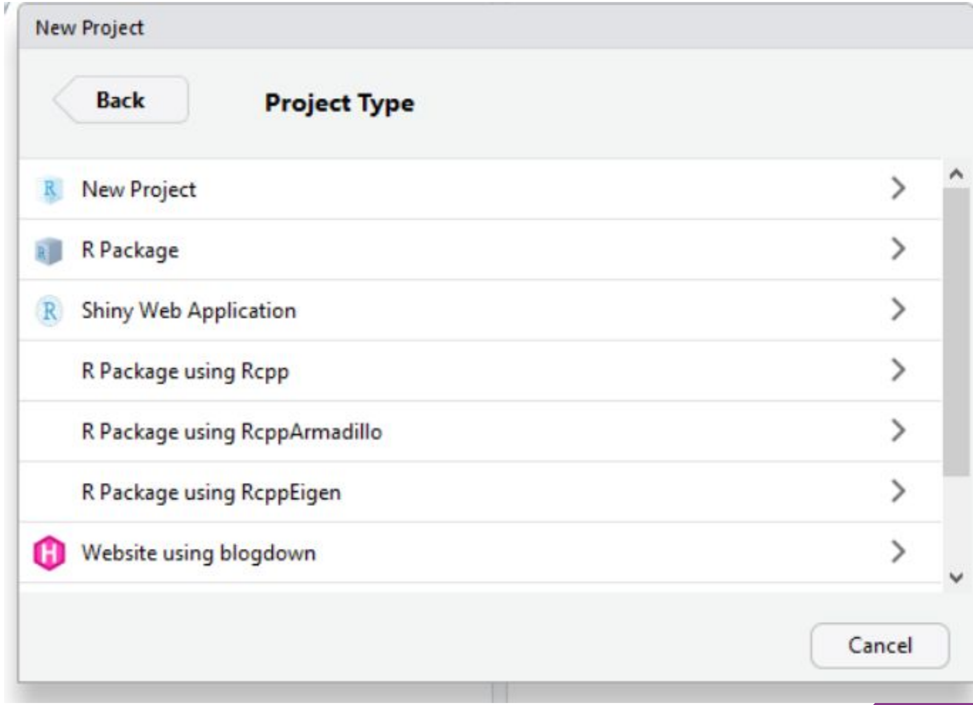
```
library(blogdown)
```

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

Or:

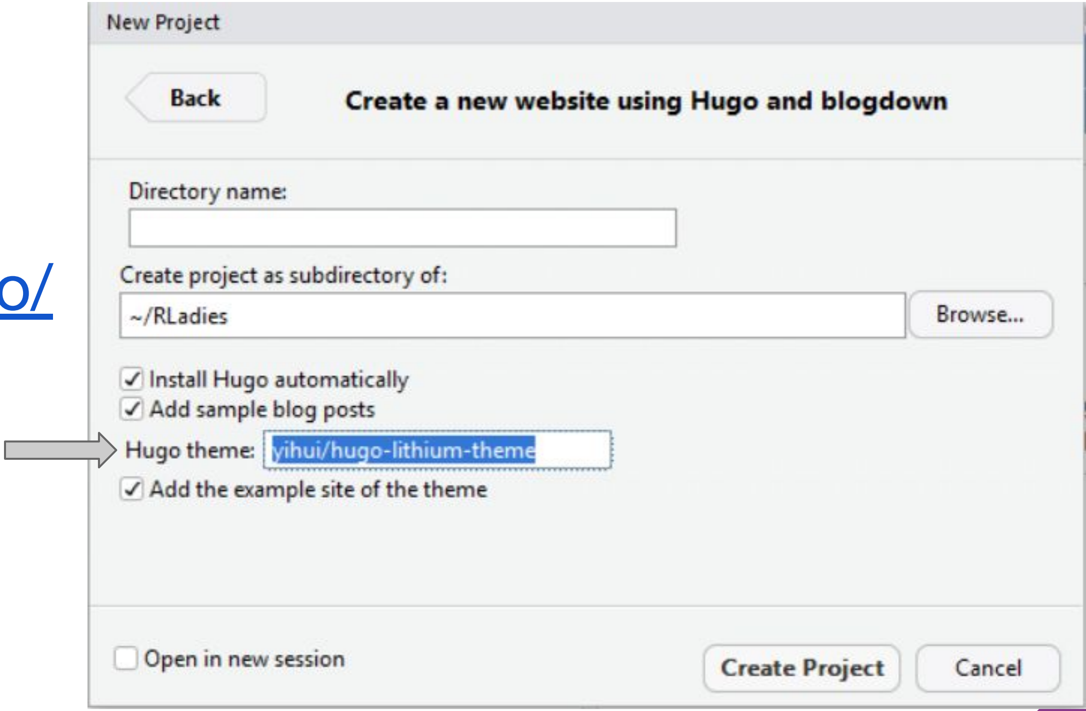
1) File → New Project → New Directory → New project
2) → Website using blogdown

(if have blogdown installed)



Choose the design or layout (Hugo theme)

1. Blogdown automatically installs Hugo
2. Choose a Hugo theme: https://themes.gohugo.io/ (default: Lithium)
3. To insert the chosen theme in RStudio, copy the respective link, e.g. “gcushen/hugo-academic”



New Project

Create a new website using Hugo and blogdown

Directory name:

Create project as subdirectory of: ~/RLadies

☑ Install Hugo automatically

☑ Add sample blog posts

Hugo theme: yihui/hugo-lithium-theme

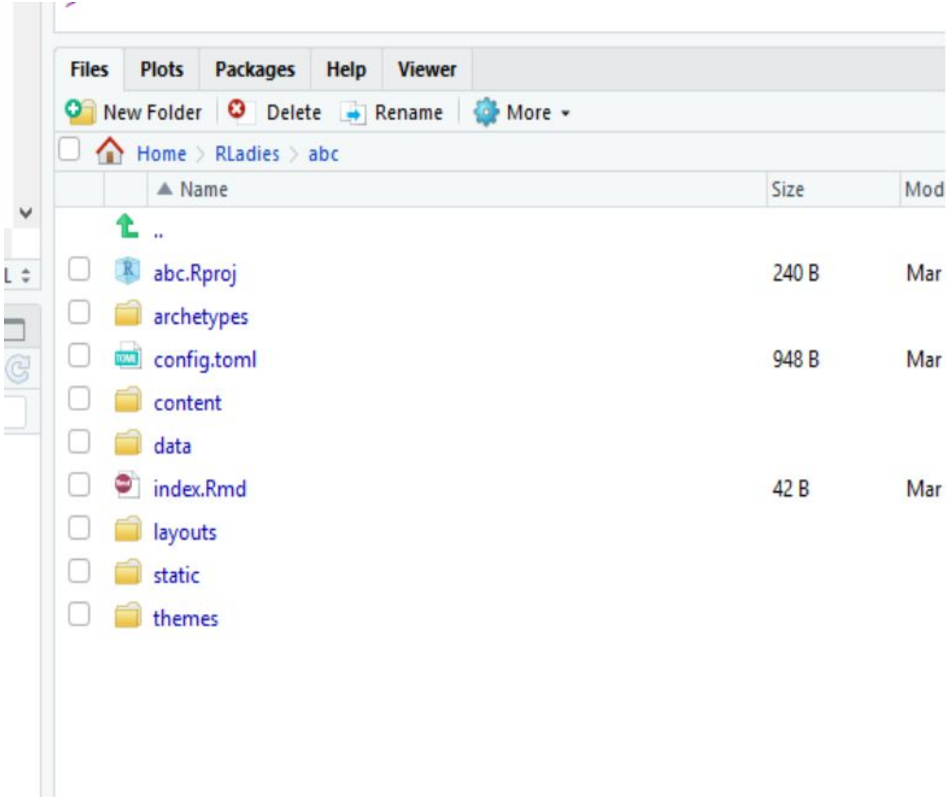
☑ Add the example site of the theme

☐ Open in new session

Structure of the site

- Content of the website is created in the files of the project. The structure of each theme may vary.
- If using a theme connected to a github repo → don’t edit the theme folder directly.

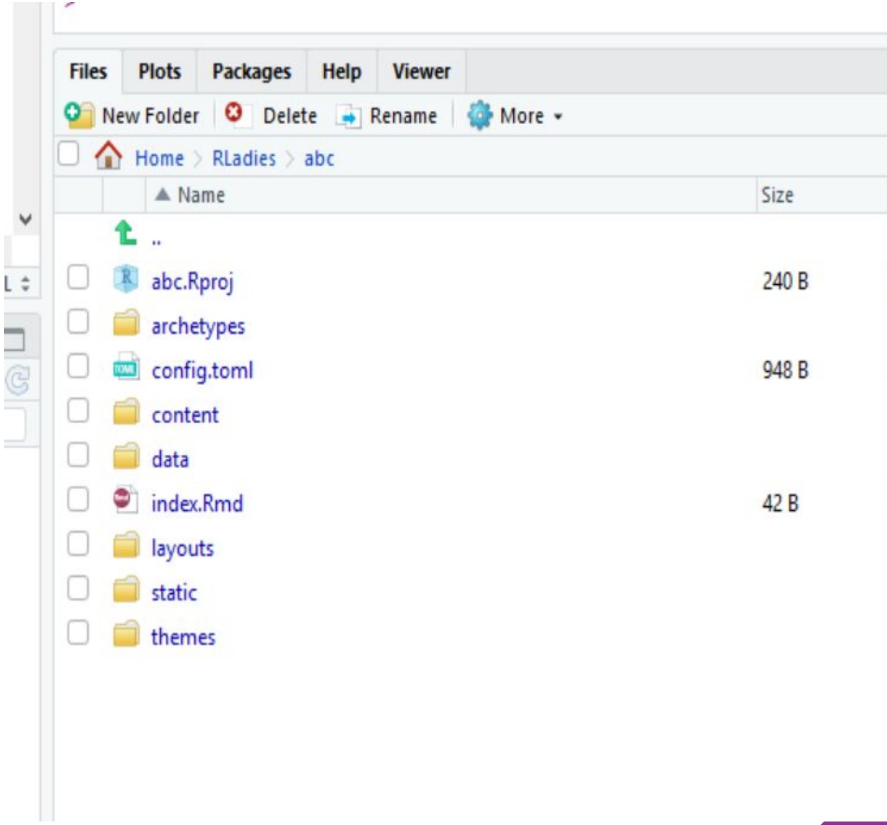
Take a look into the folders!



Name	Size	Mod
..		
abc.Rproj	240 B	Mar
archetypes		
config.toml	948 B	Mar
content		
data		
index.Rmd	42 B	Mar
layouts		
static		
themes		

Customise your site

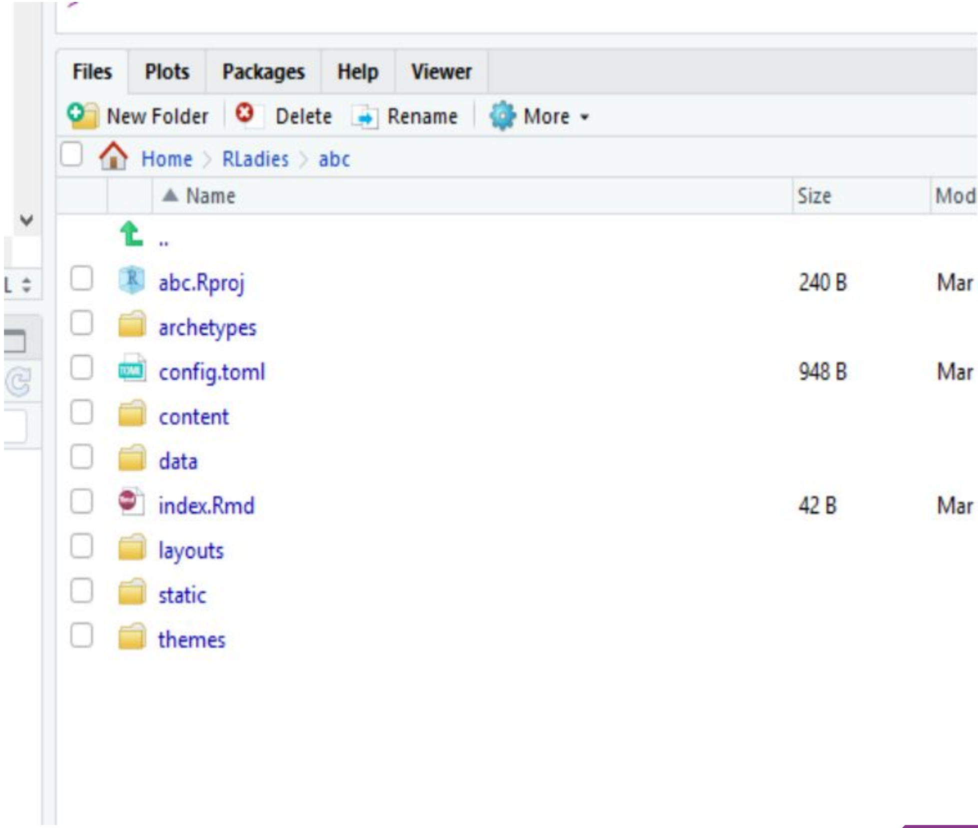
1. *config.toml* - the main structure of your site
2. *Content* folder includes your posts
3. Everything in the *public* folder will be published on the site
4. *Static* - the core of your site, preserves static content (images, CSS, JavaScript)
5. *Themes* - replicates files in the project root



Name	Size
..	
abc.Rproj	240 B
archetypes	
config.toml	948 B
content	
data	
index.Rmd	42 B
layouts	
static	
themes	

Empty folders in the root

1. *archetypes*
2. *data*
3. *layouts*
4. *static*



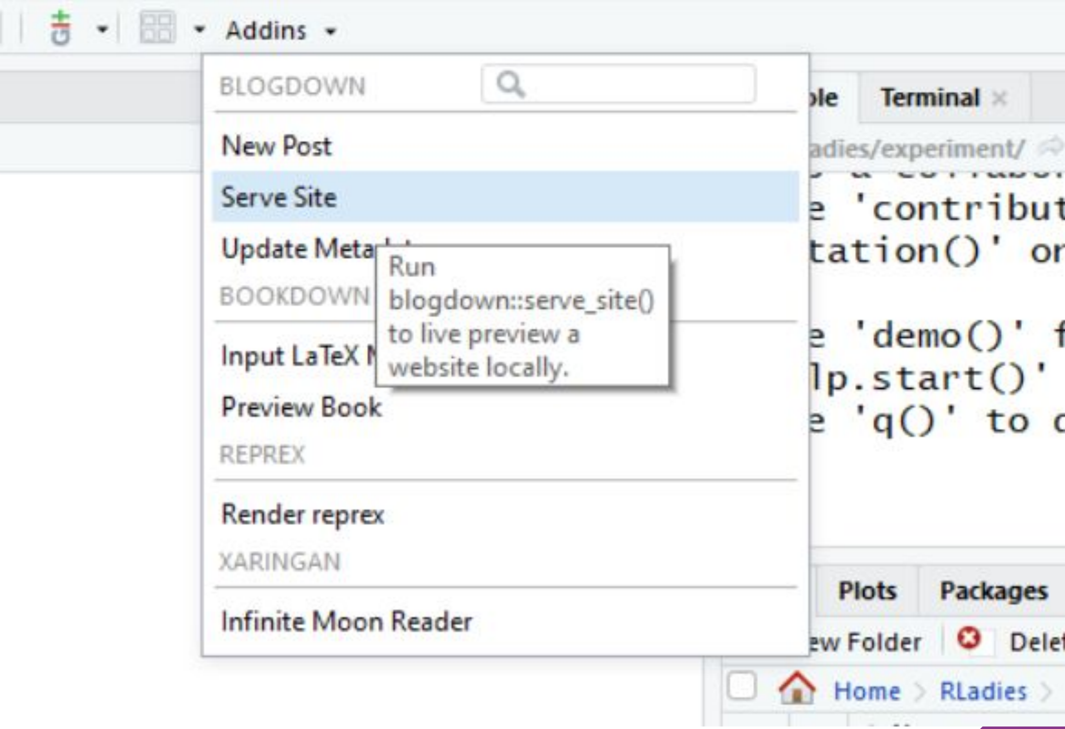
	▲ Name	Size	Mod
	..		
□	abc.Rproj	240 B	Mar
□	archetypes		
□	config.toml	948 B	Mar
□	content		
□	data		
□	index.Rmd	42 B	Mar
□	layouts		
□	static		
□	themes		

Serve site (Addins)

Choose the serve site option from the drop-down menu of Addins.

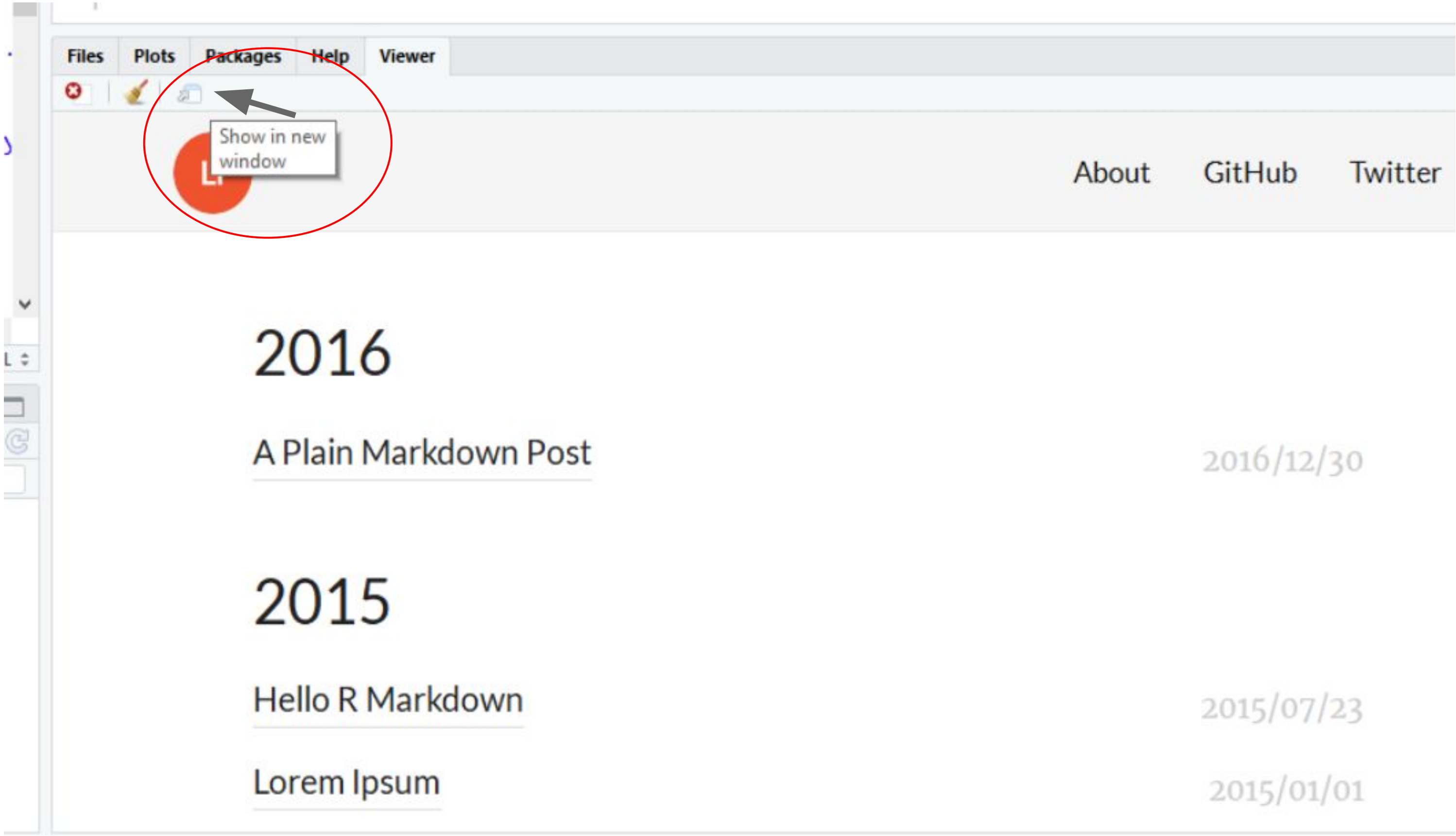
Or:

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



Run blogdown::serve_site() to live preview a website locally.

View your site (RStudio Viewer)



2016

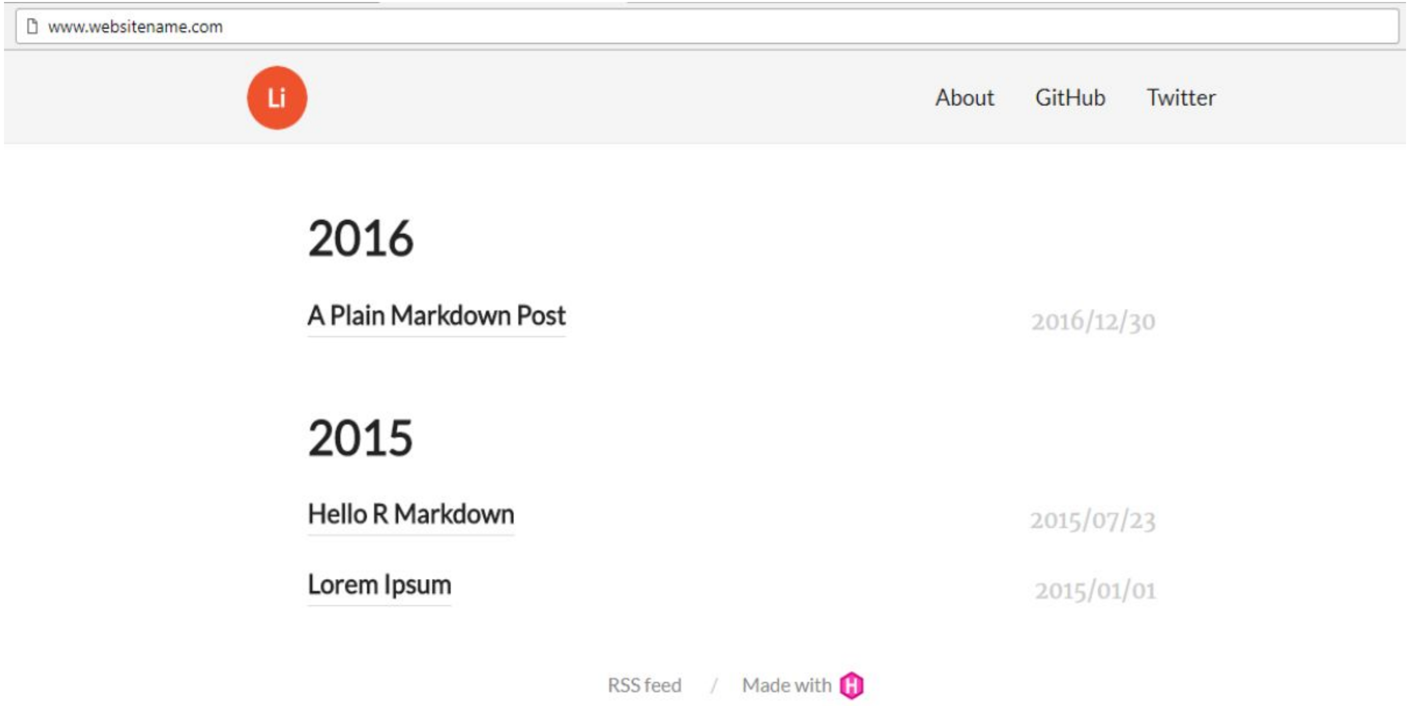
A Plain Markdown Post 2016/12/30

2015

Hello R Markdown 2015/07/23

Lorem Ipsum 2015/01/01

View your site (browser)



www.websitename.com

Li

About GitHub Twitter

2016

A Plain Markdown Post 2016/12/30

2015

Hello R Markdown 2015/07/23

Lorem Ipsum 2015/01/01

RSS feed / Made with H

Download files for today's meetup

https://github.com/liili/blogdown_meetup

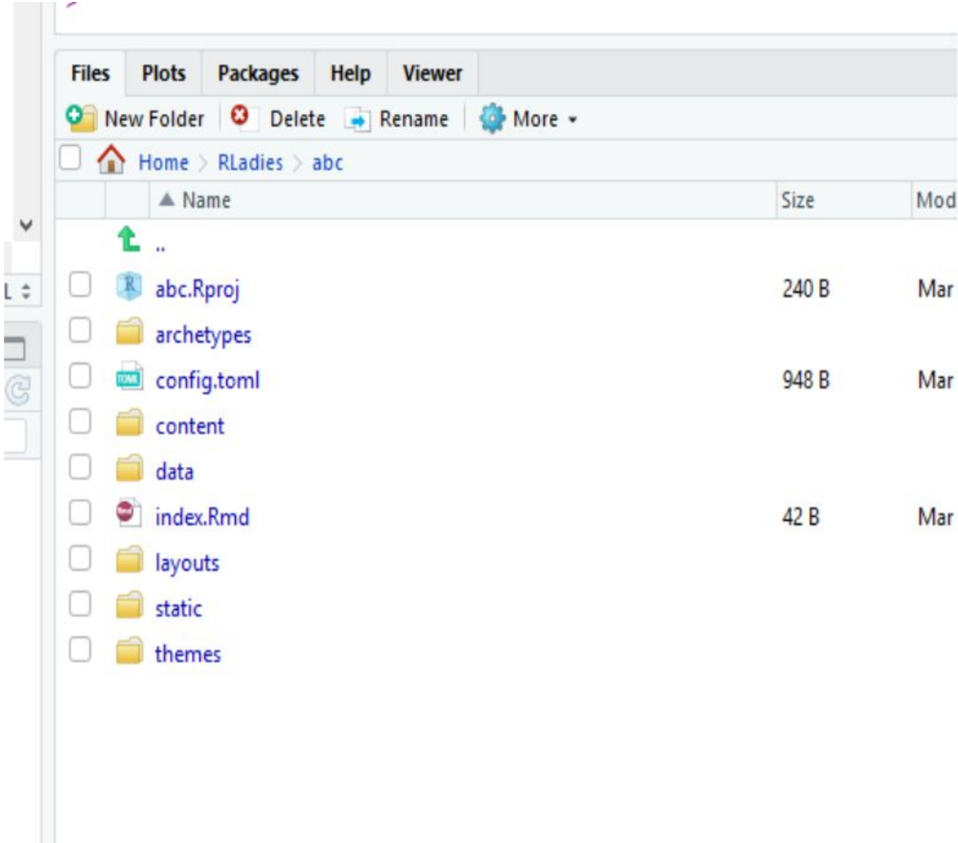
(They are also at:
https://github.com/rladies/meetup-presentations_tbilisi
/tree/master/Website)

Let’s create a website for R-Ladies Tbilisi

1. File → New Project → New Directory → Website using blogdown
2. Name and choose the directory (folder), eg “rladiestbilisi”
3. Keep the default Lithium theme
4. Create website

Relying very much on Alison Hills’ code and video

Take a look into the folders



Name	Size	Mod
..		
abc.Rproj	240 B	Mar
archetypes		
config.toml	948 B	Mar
content		
data		
index.Rmd	42 B	Mar
layouts		
static		
themes		

Open the config.toml file from RStudio project files (½)

1. Baseurl = “/ ” → will have the link of your website
2. Title = “Give your website a title here”
3. Theme → keep the name of the theme you chose to use (the structure of the config.toml would be different for another theme)
4. enableEmoji = true (you will see emojis ❤ on your site!)
5. Under [params.logo] can specify the file of the logo you want to use for your site. This logo file has to be located in the static/ images folder.

config.toml file (2/2)

```
[[menu.main]]
    name = "ჩვენს შესახებ"
    pre = ""
    url = "/about/"
    weight = 1
```

name of the specific page (visible in the header)

“pre” specifies the symbol/ icon associated with page (e.g Twitter ; from https://fontawesome.com/)

“url” specifies the folder where content is taken from

“Weight” indicates the order of appearance of page (1st, 3rd) in the header

Getting font awesome

- Create a folder called “css” in your project’s “static” folder
- Copy-paste the file “font-awesome.css” from the shared materials to your project’s “static/css” folder
- Create a folder in your “layouts” folder called “partials”
- Move “head_custom.html” and “nav.html” files to “partials” folder
- Under `[params]` in config.toml file, add a line:

```
customCSS = ["css/font-awesome.min.css"]
```

- Fill the “pre” - field with respective icon code

“fa-music” ♫ “fa-envelope-o” ✉ “fa-user” 👤

Adding a logo

1. Copy jpg/png file “rlogo” from the shared materials to your project’s “static/images” folder
2. Under `[params.logo]` in config.toml file change the “url”:

   ```
   url = "rlogo.jpg" / url = "rlogo.png"
   ```

Adding site content (1)

1. Change the “About” page content
   a. Go to the “/content” folder in your project
   b. Open “about.md” file in R
   c. Edit the file by adding the following info:

```
# About this site
This site was created based on Alison P. Hill's
[**materials**]
(https://github.com/apreshill/blogdown-workshop)
```

Adding site content (2)

1. Copy file “2018-03-05-r-markdown.rmd” from the shared materials to your project’s “content/post” folder
2. Delete the default r-markdown post file
3. (We keep the other default posts in here for now)

Adding site content (3)

1. Add one `[[menu.main]]` to get posts back
2. Copy the “index.html” file from the shared materials to your project’s “layout” folder
3. Let’s have a look at what is in there - open the index file through RStudio
   a. It specifies a new variable called “chapter” (not part of Hugo, created by a user there)

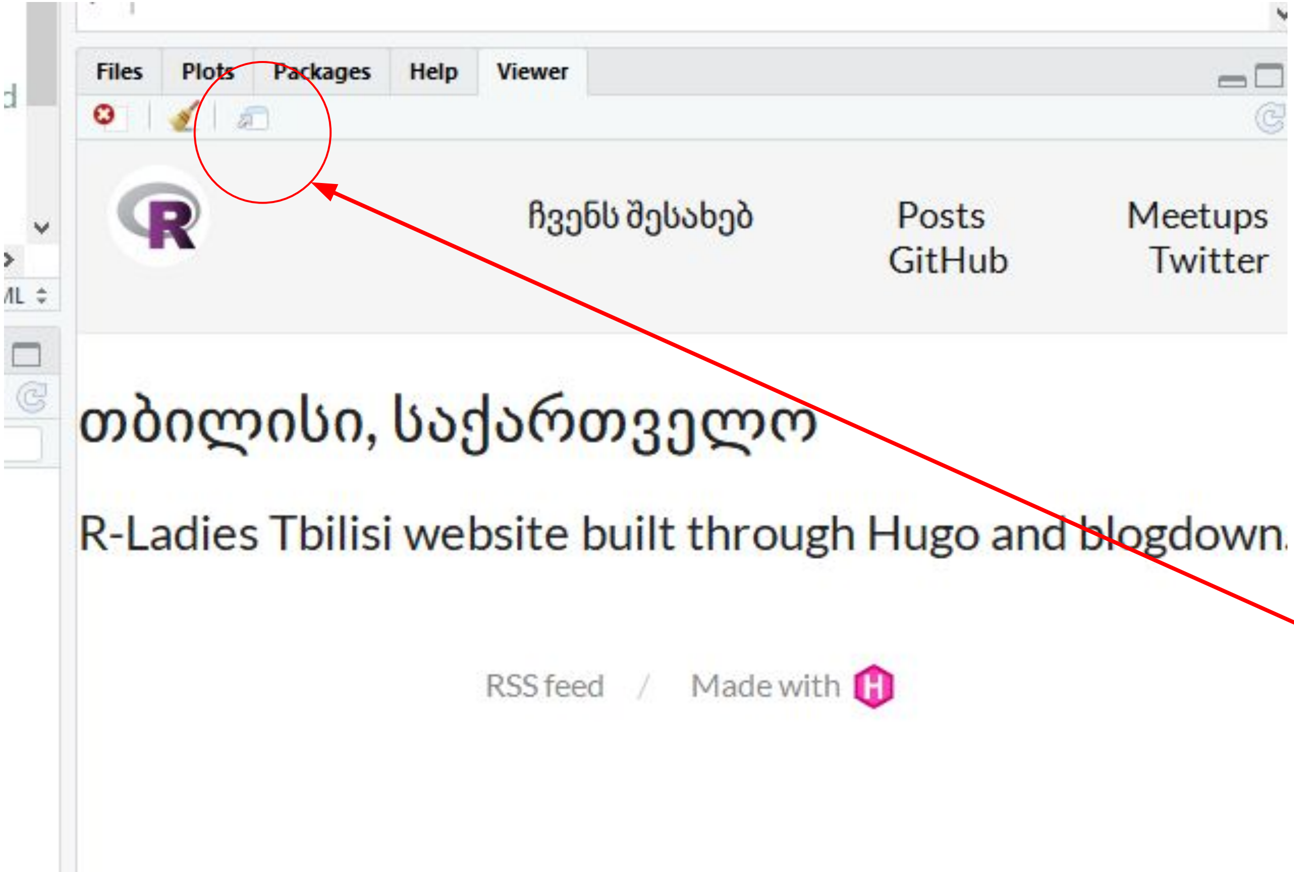
Last touches

- Change the “About” to “ჩვენს შესახებ” in `[[menu.main]]`
  - If it won’t work just by typing so, type it elsewhere (Notepad) and then copy paste to config.toml file
- Under `[params]` in config.toml file add:

```
chapter = "თბილისი, საქართველო"
```

This is possible thanks to creating a “chapter” variable in the index file (located in the layout folder)

Show in new window (RStudio Viewer)



ჩვენს შესახებ

Posts
GitHub

Meetups
Twitter

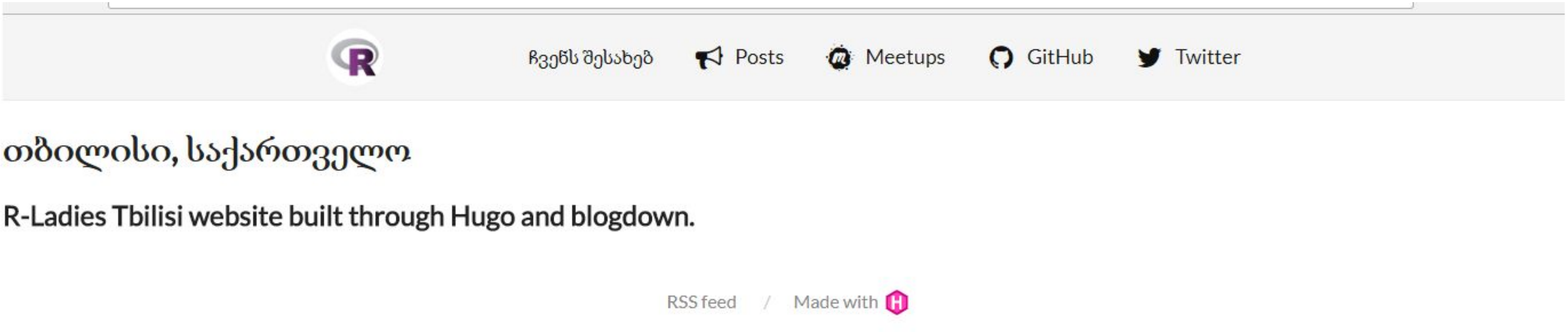
თბილისი, საქართველო

R-Ladies Tbilisi website built through Hugo and blogdown.

RSS feed / Made with

View bigger!

End-result in a browser



ჩვენს შესახებ Posts Meetups GitHub Twitter

თბილისი, საქართველო

R-Ladies Tbilisi website built through Hugo and blogdown.

RSS feed / Made with

Publishing online

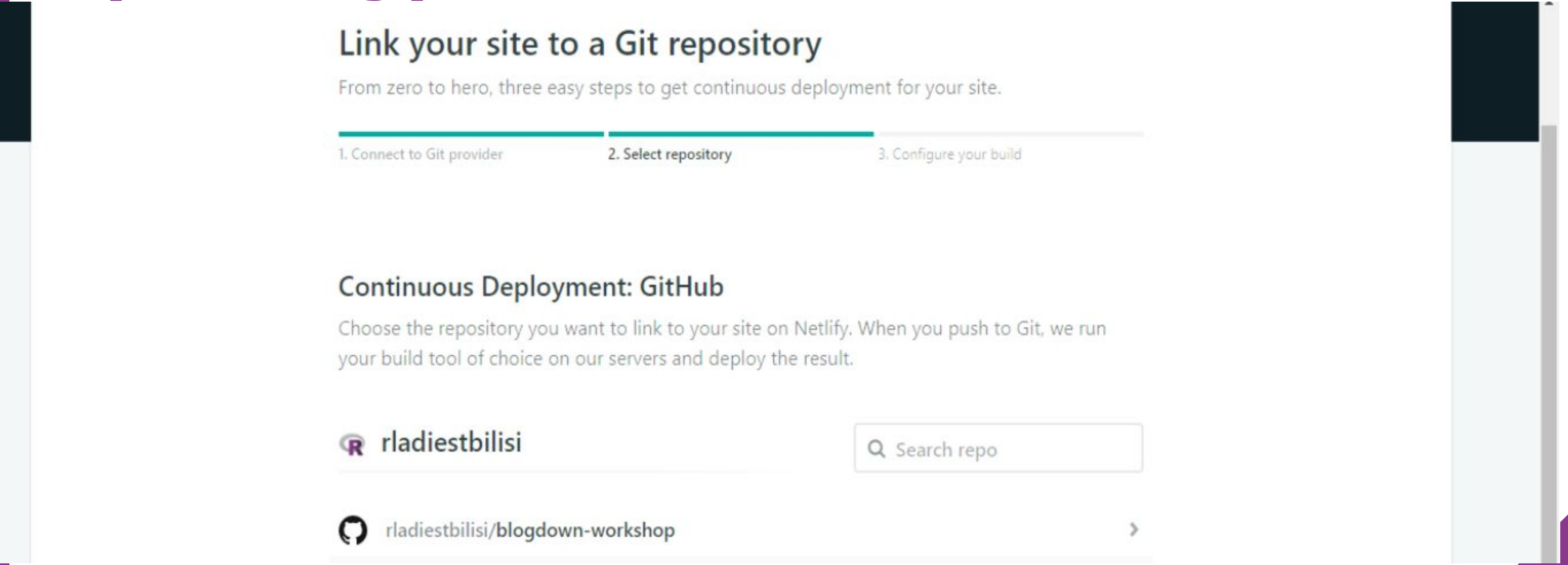
1. Connect your RStudio to Github first (1 x per computer).

   You can read how to do that *here*.

2. Commit and push to Git
3. Deploy through Netlify or Github Pages (must have an account first).

   Read about deployment *here*.

Continuous deployment (Netlify)



Link your site to a Git repository

From zero to hero, three easy steps to get continuous deployment for your site.

Continuous Deployment: GitHub

Choose the repository you want to link to your site on Netlify. When you push to Git, we run your build tool of choice on our servers and deploy the result.

rladiestbilisi

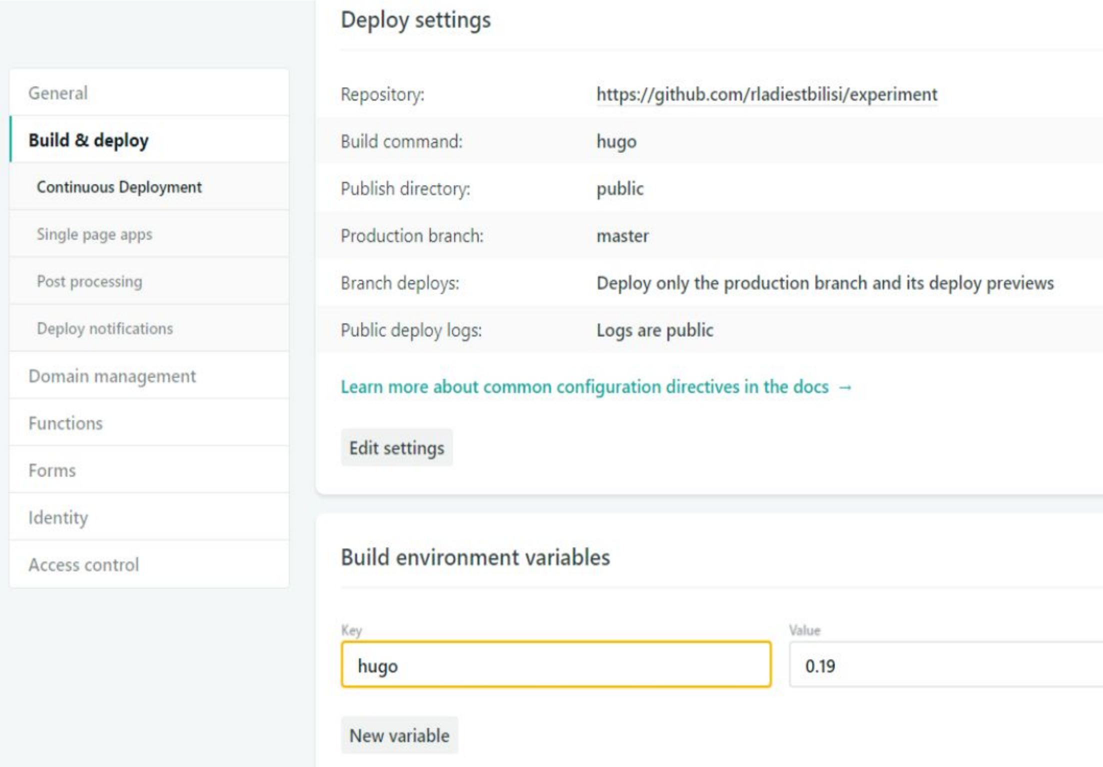
rladiestbilisi/blogdown-workshop

Specify Hugo variable

1. Find out the latest Hugo version

```
blogdown::hugo_version()
```

2. Enter hugo build variable (in Netlify)



Deploy settings

Repository: https://github.com/rladiestbilisi/experiment

Build command: hugo

Publish directory: public

Production branch: master

Branch deploys: Deploy only the production branch and its deploy previews

Public deploy logs: Logs are public

Learn more about common configuration directives in the docs →

Build environment variables

Key: hugo

Value: 0.19

Deploy website

More sources

blogdown: Creating Websites with R Markdown - book by Yihui Xie, Amber Thomas, Alison Presmanes Hill

Alison Hill blogdown workshop and video

Emily Zabor tutorial “Creating websites in R”

Mara Averick “Keeping up with blogdown”

Claudia Vitolo “Make your own blog”

Marie Dussault “Building your blog using blogdown”

Netlify and Hugo

Thank you!