



Using Git from RStudio

git Through April
R-Ladies Seattle

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Photo
by
Ultra
Tuna
Fish

Introduction

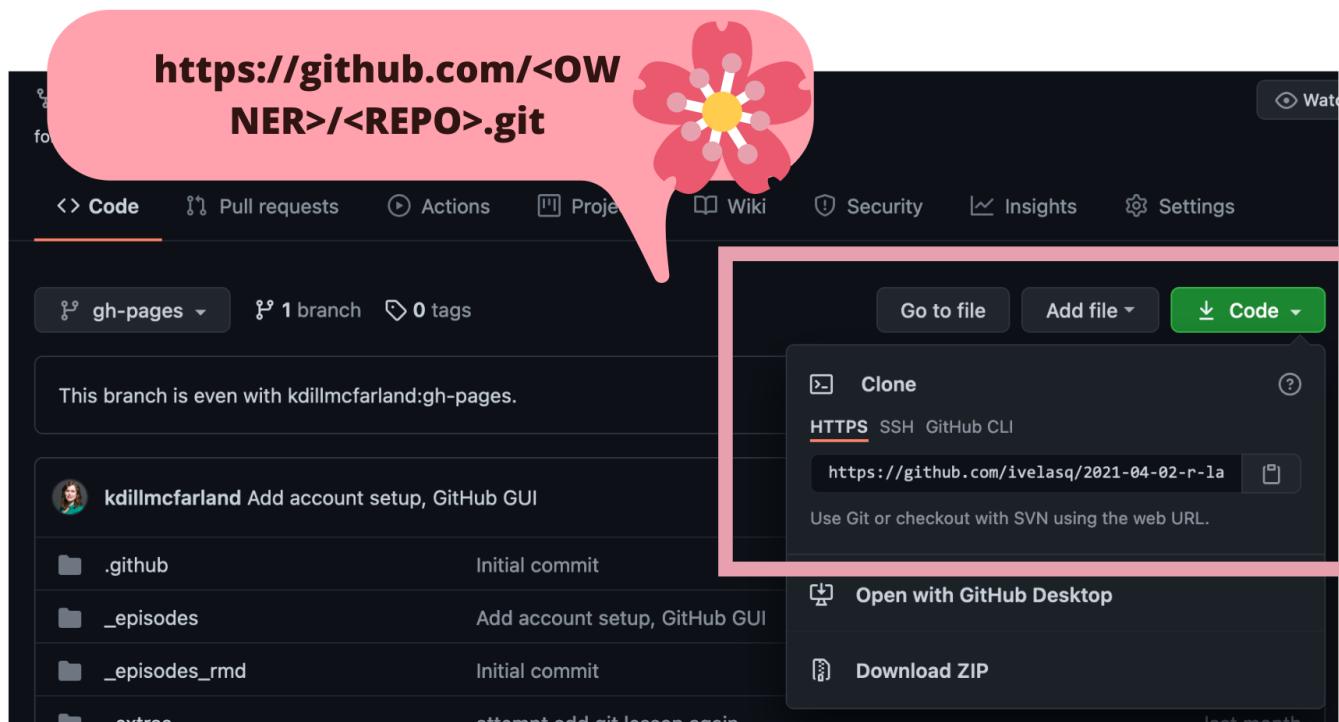
Objectives

Understand how to use Git from RStudio.

Topics Introduced

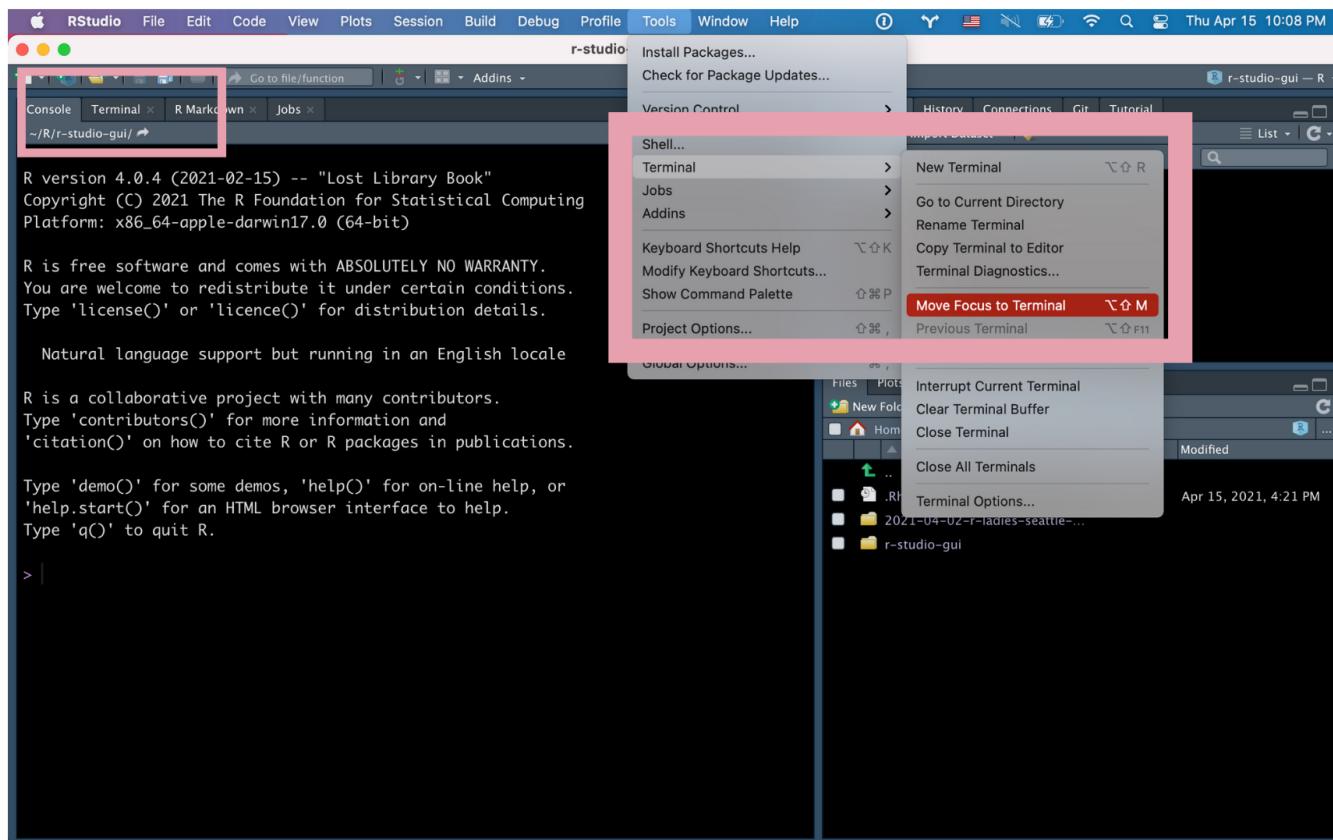
- Using Terminal in RStudio
- "Finding" Git in RStudio
- Creating or opening a project
- Working with RStudio's tools
- Linking your project to GitHub
- Committing and pushing up changes

Quick recap: finding the GitHub repository URL



Shell ... in RStudio?!

R Studio has a shell in the IDE in the Terminal tab.



Using Git from RStudio prerequisites



you've registered for GitHub



you've installed or updated RStudio



you've installed Git



you've introduced yourself to Git



you can push to/pull from GitHub from the command line

Where's your Git?

Check if it is installed

Check where it is

Check it is enabled

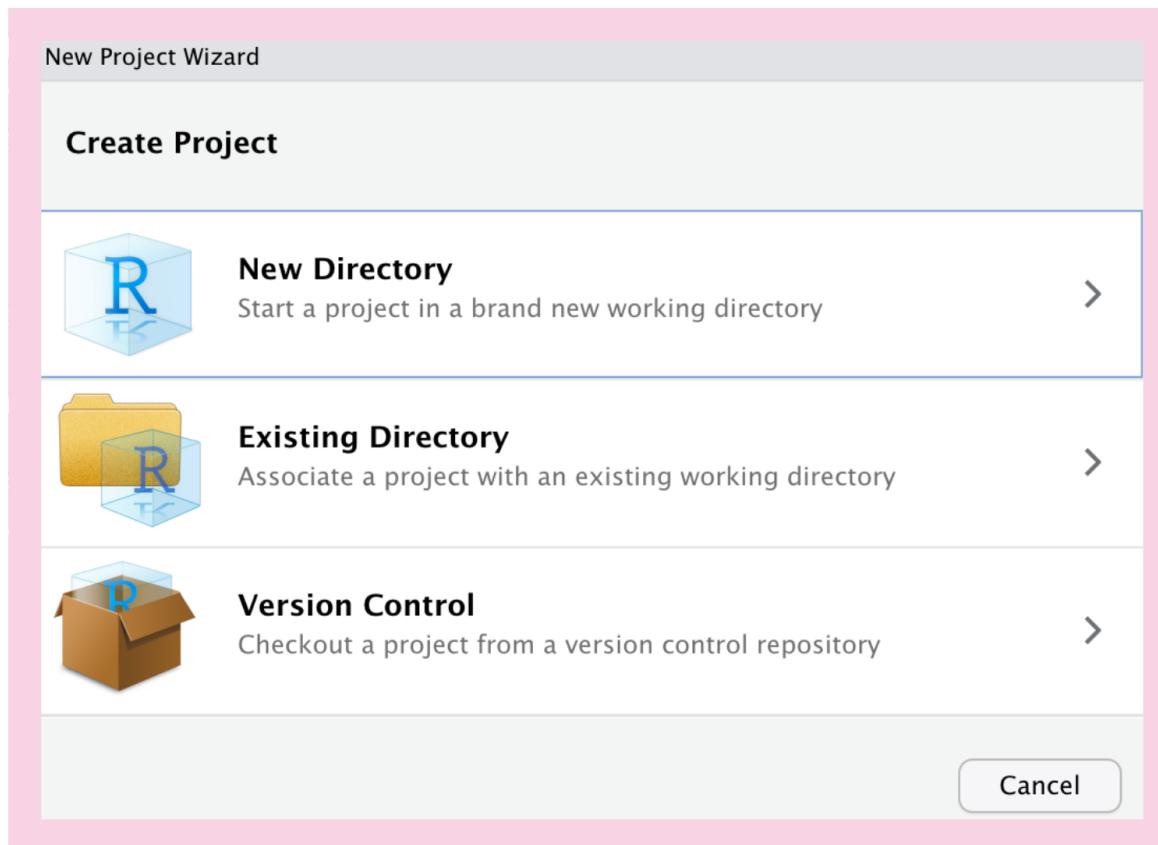
To see if Git is installed:

```
git
```

Creating a project

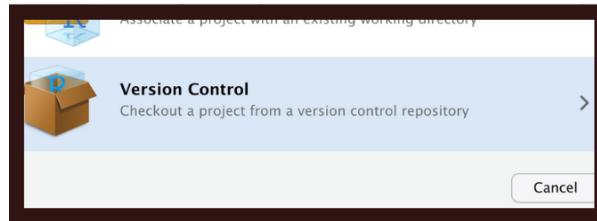
Once we know that Git is installed correctly and RStudio knows where it is, create a new project.

- File > New Project

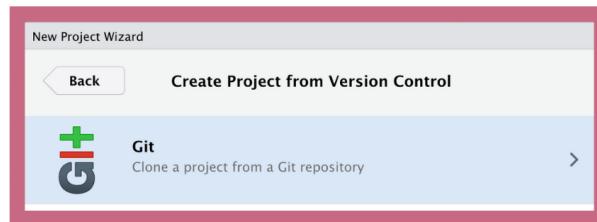


Version Control

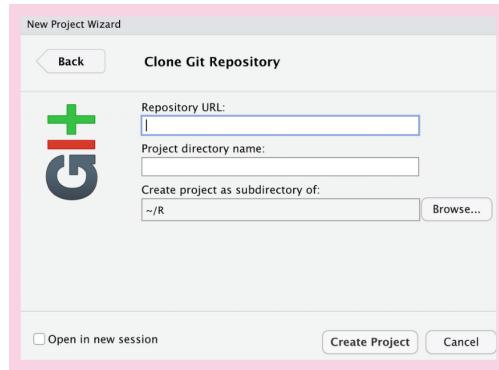
Select Version Control



Select Git

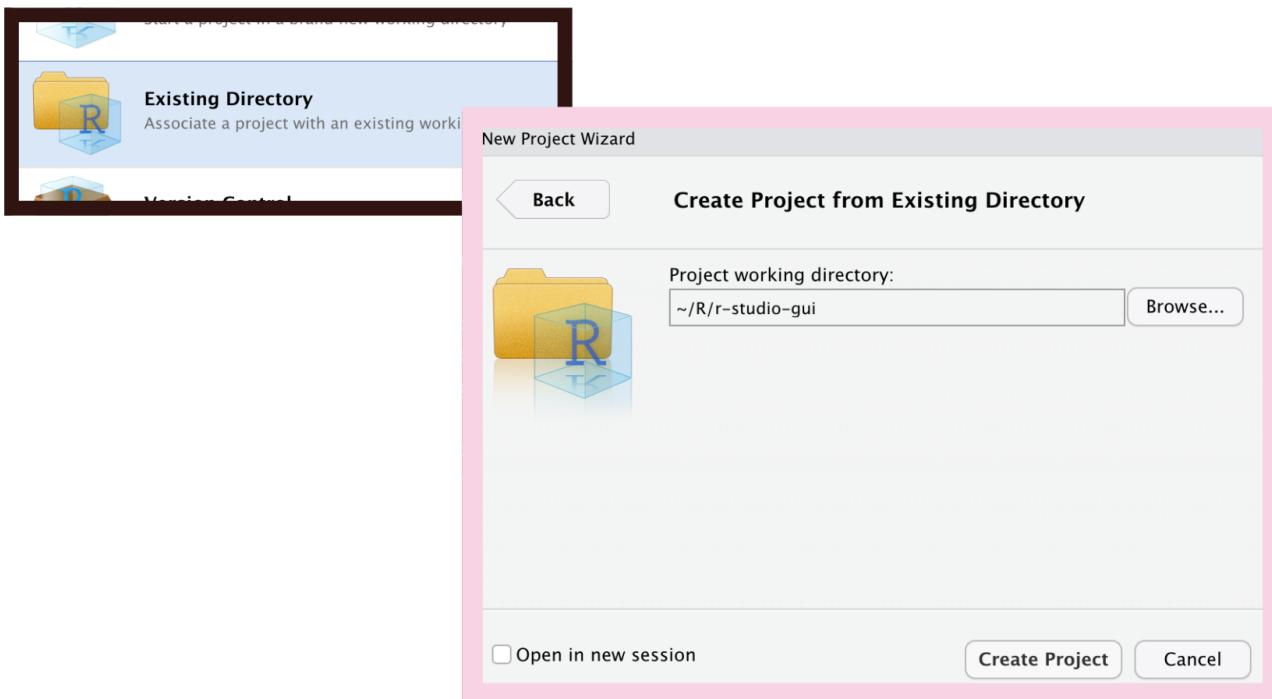


Clone Repository



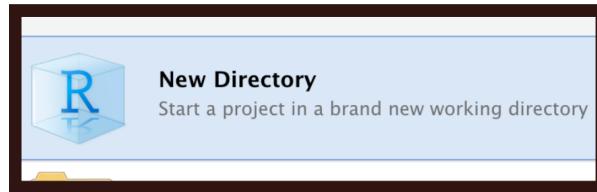
Existing Directory

1. Click Existing Directory
2. Browse to the project working directory



New Directory

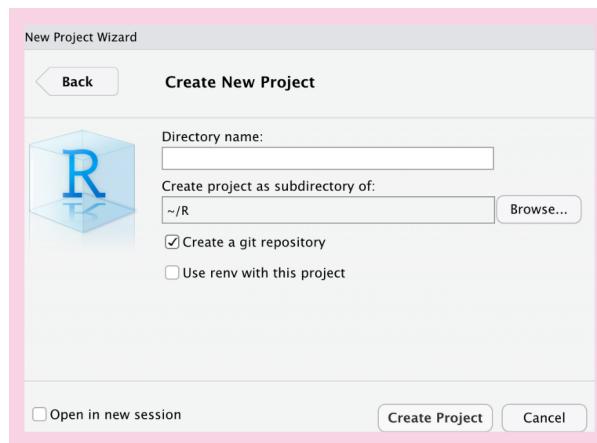
Click New
Directory



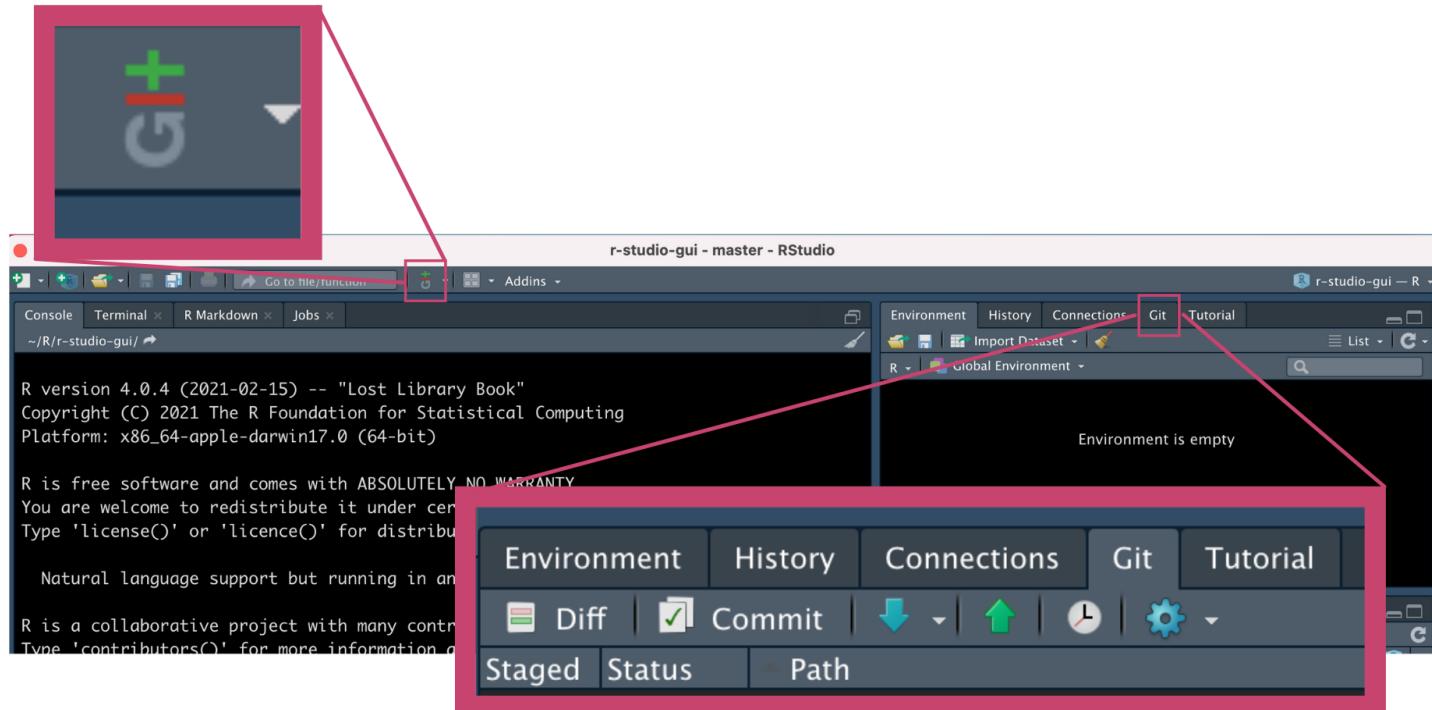
Select New
Project



Give the project
directory a name
and check
"create a git
repository"



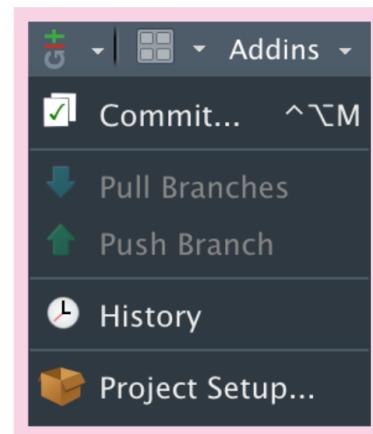
Checking out the Git tools in RStudio



Linking your project to GitHub

See if project is linked

If not, link project



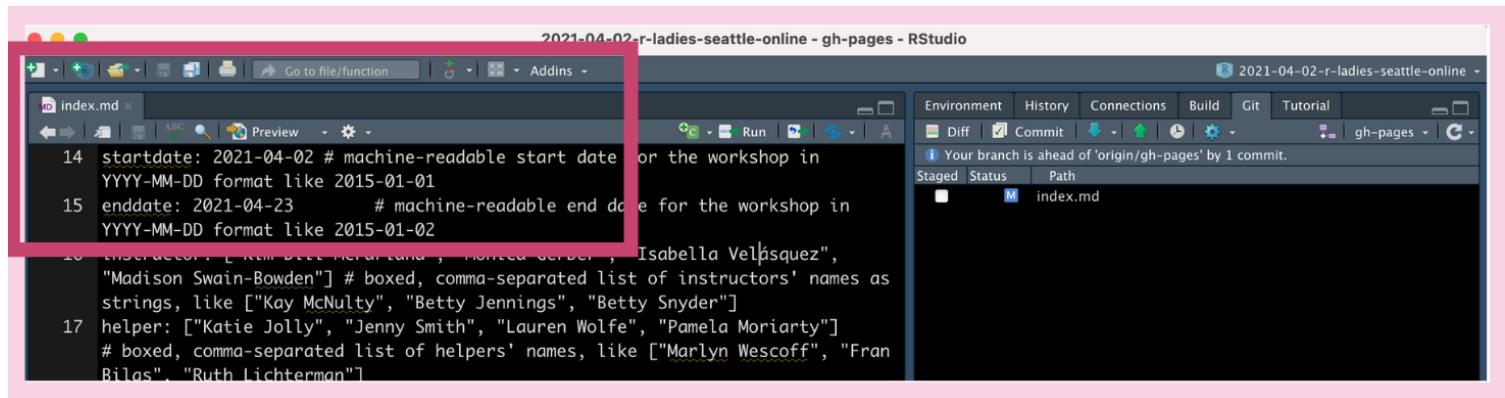
Committing changes

- Open up a file (e.g., index.md):

Edit a File

See Changes

Click Commit

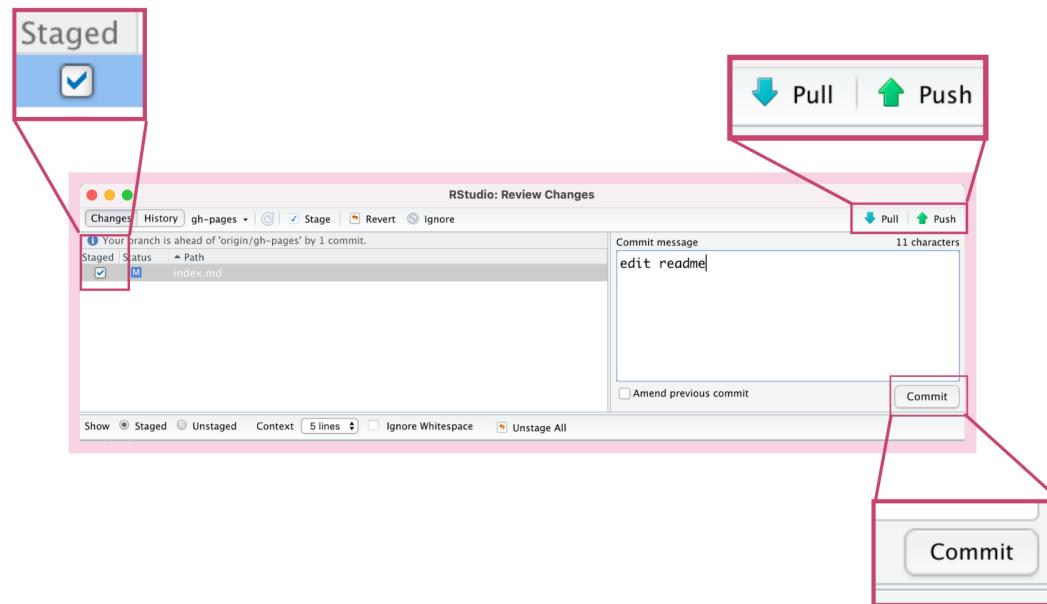


The screenshot shows the RStudio interface with the title bar "2021-04-02-r-ladies-seattle-online - gh-pages - RStudio". The left pane displays the code for "index.md" with several lines of R Markdown syntax. The right pane shows the "Git" tab, which indicates that the branch is ahead of "origin/gh-pages" by 1 commit. A status bar at the bottom shows "index.md".

```
14 startdate: 2021-04-02 # machine-readable start date or the workshop in  
YYYY-MM-DD format like 2015-01-01  
15 enddate: 2021-04-23      # machine-readable end date for the workshop in  
YYYY-MM-DD format like 2015-01-02  
16 instructors: [ "Kim Bell Harland", "Monica Berger", "Isabella Velásquez",  
  "Madison Swain-Bowden" ] # boxed, comma-separated list of instructors' names as  
  strings, like ["Kay McNulty", "Betty Jennings", "Betty Snyder"]  
17 helpers: [ "Katie Jolly", "Jenny Smith", "Lauren Wolfe", "Pamela Moriarty" ]  
  # boxed, comma-separated list of helpers' names, like ["Marlyn Wescoff", "Fran  
  Bilas", "Ruth Lichtenman"]
```

Committing changes

- Stage your change
- Write a commit message
- Click "Commit"
- Push up changes



Cache credentials

Get PAT

Save in R Environment

- GitHub > Settings > Developer Settings > Personal access tokens > Generate new tokens
- <https://github.com/settings/tokens>

Editing .gitignore

Say you want to create a directory called `graphs` and have Git ignore the files in the folder.

```
dir.create("./graphs")
```

In `.gitignore`:

```
.Rproj.user  
.Rhistory  
.RData  
graphs/
```

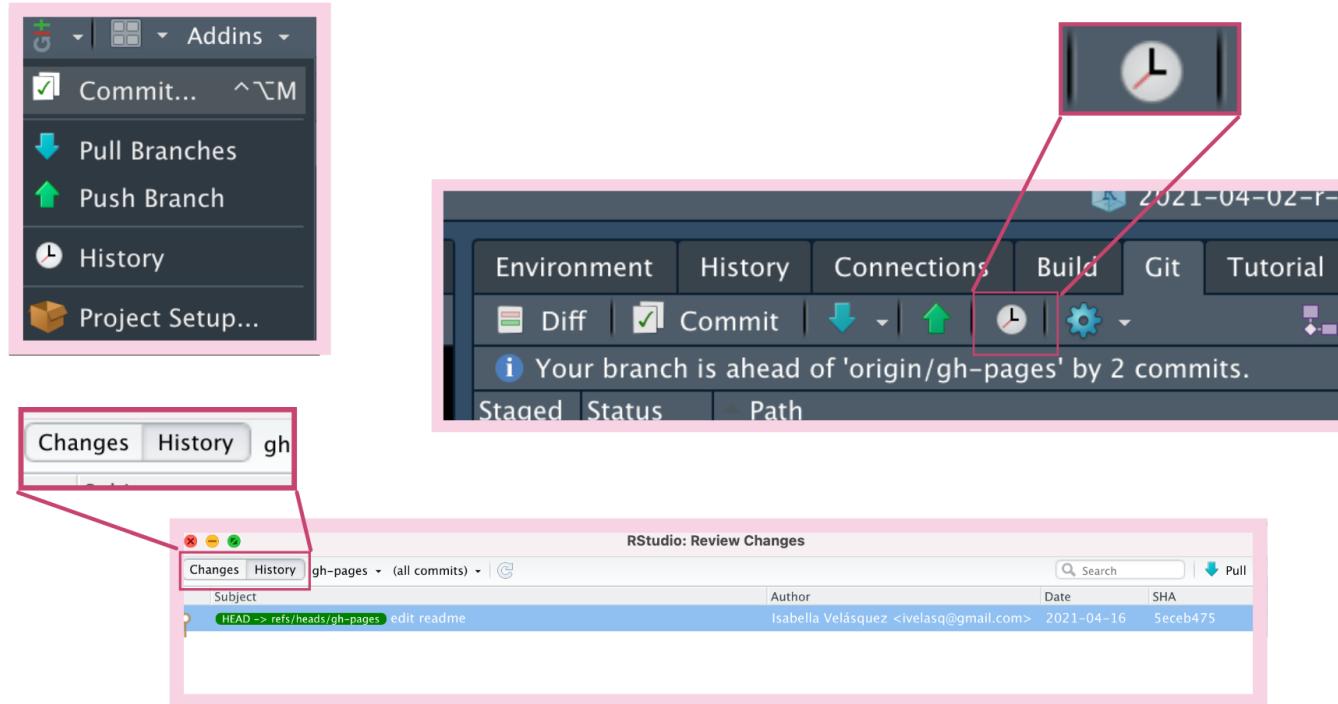
Other Git processes

Check History

Ignore and Revert

Create Branches

Switch Branches



Thank you!

Here's where you can find me...

ivelasq.rbind.io 

[@ivelasq3](https://twitter.com/ivelasq3) 

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



Resources

Git

- Carpentries Walkthrough of Version Control with Git: Setup

Git & RStudio

- Happy Git with R
- Version Control with Git and SVN from RStudio

Xaringan

- Sharing Your Work with Xaringan by Dr. Silvia Canelón