Working Solo with GitHub

Instructions

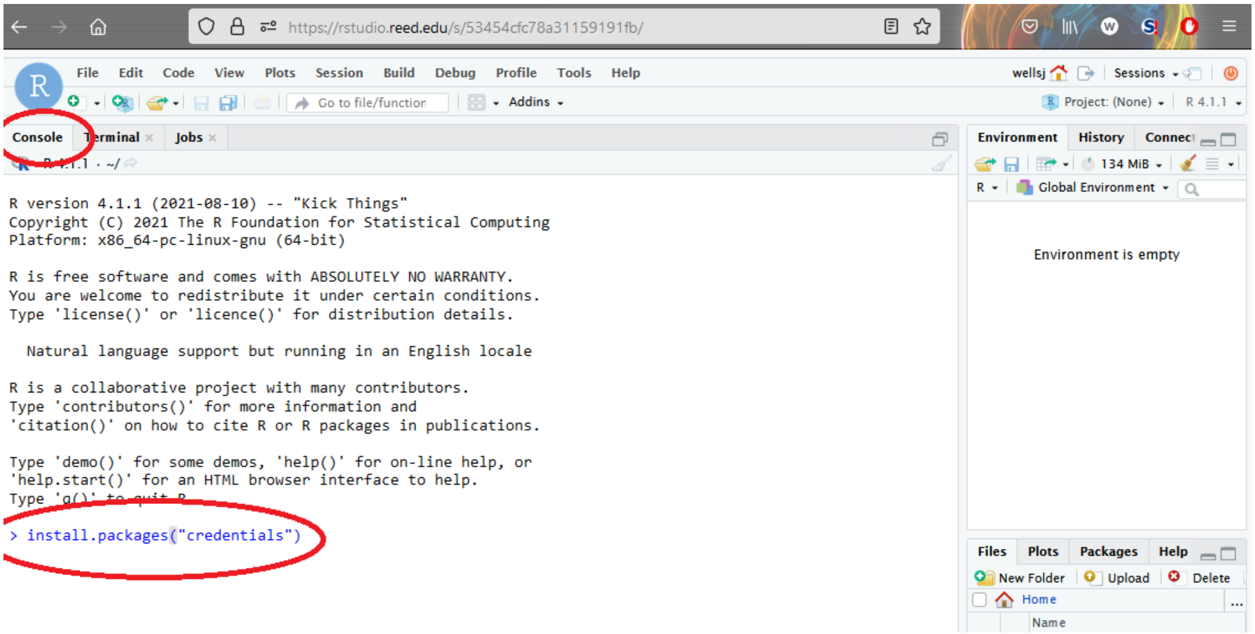
1. Introduce yourself to your group members and exchange GitHub user names. Then, work through the following steps (feel talk with your group members as you go through this).

These instructions assume you will access GitHub primarily via RStudio. If you wish to use GitHub Desktop instead, talk to me after class.

Part 1: Cache Credentials

2. Navigate to your personal GitHub page, and in the upper-right corner, click your photo and click Settings.
3. In the left sidebar, find **Developer Settings**, then **Personal access tokens**, and click **Generate new token**.
4. Give your token a name like `my token 295` (or whatever else you want), select an expiration time (recommended 6 months), then select **all** permissions, and the click **Generate token**.
5. Copy the token to a new text document and save somewhere on your computer. *Once you leave the current page, you will not be able to see your token again. (If you lose the token, you can delete it and create a new one, but it is inconvenient)*
6. Open RStudio. (If you are using the server, navigate to rstudio.grinnell.edu and login.)
7. In the console pane (lower left window), install the `credentials` package by typing

```
install.packages("credentials")
```



```
R version 4.1.1 (2021-08-10) -- "Kick Things"
Copyright (C) 2021 The R Foundation for Statistical Computing
Platform: x86_64-pc-linux-gnu (64-bit)

R is free software and comes with ABSOLUTELY NO WARRANTY.
You are welcome to redistribute it under certain conditions.
Type 'license()' or 'licence()' for distribution details.

  Natural language support but running in an English locale

R is a collaborative project with many contributors.
Type 'contributors()' for more information and
'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

> install.packages("credentials")
```

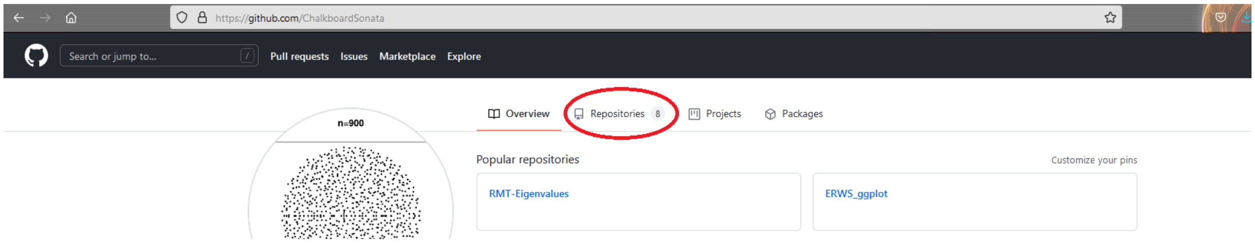
8. In the same pane, load the package `credentials` package and call the `git_credentials_ask()` function (as shown in code below):

```
library(credentials)
git_credentials_ask()
```

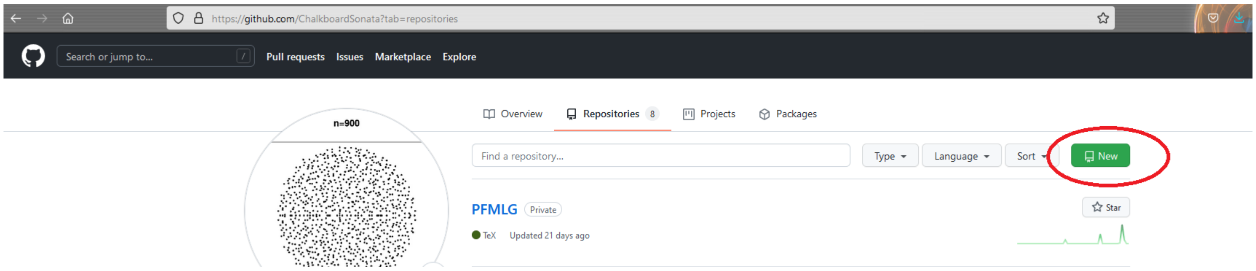
9. Enter your GitHub username in the prompt that appears on your screen.
10. Enter the token that you saved in step 5 (Note: This is NOT your GitHub account password).
11. You've saved your credentials in RStudio! You should not need to repeat these steps until your token expires.

Part 2: Create a Repo

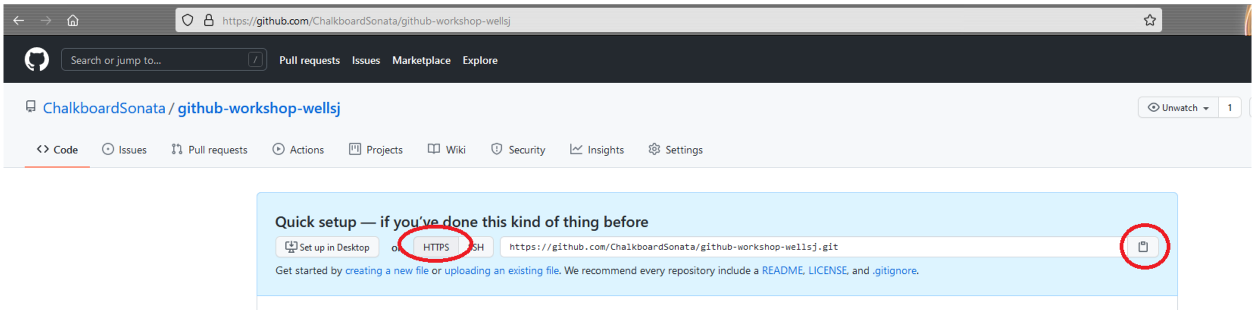
12. Return to your personal github page and click the Repository tab along the top menu.



13. Click the green New Repository button along the right side.



14. Fill in the name of your repository using `github-workshop-wells` (but with your own name), leave the description blank, choose private, and then click the green Create Repository button.
15. Be sure the grey HTTPS button is selected, then click the clipboard icon at the right to copy this URL to your clipboard.



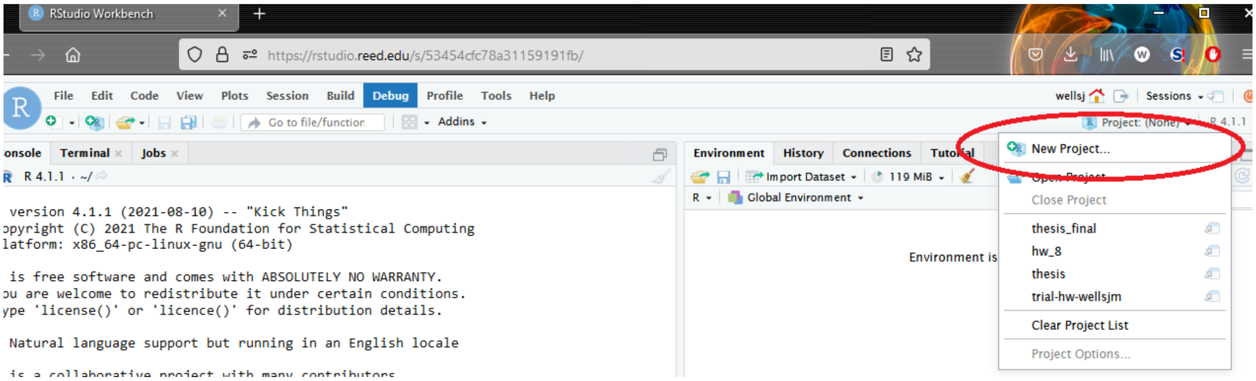
Quick setup — if you've done this kind of thing before

https://github.com/ChalkboardSonata/github-workshop-wellsj.git

Get started by creating a new file or uploading an existing file. We recommend every repository include a README, LICENSE, and .gitignore.

Part 3: Cloning Repos

16. Open RStudio (If you are using the server, navigate to rstudio.grinnell.edu and login.)
17. At the upper-right corner, click the Project tab and select New Project.



```
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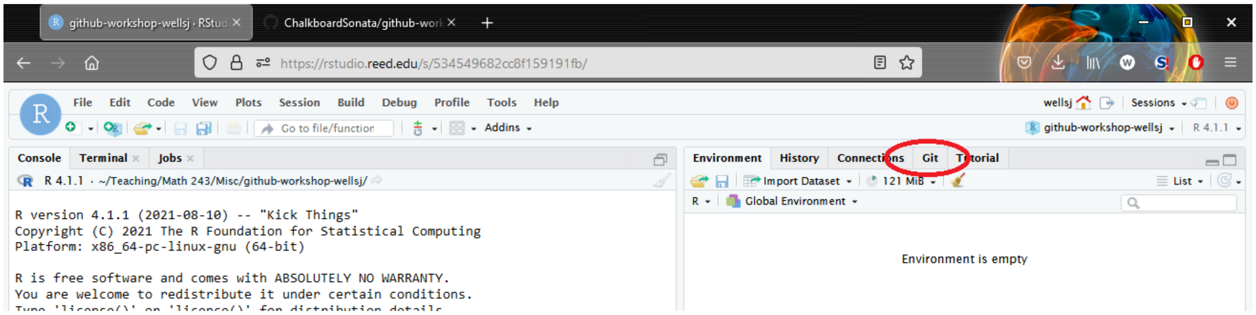
18. Click Version Control > Git > then paste your repository URL into the first field and click Create Project.
19. In the far upper left corner, click File > New File > Markdown File.
20. Immediately click the Save icon at the top of the file and name it `README`.
21. Click over to the Git tab in the upper-right quadrant of the screen and check that your new file appears there (it should say `README.md`).



```
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```

Part 4: Connect RStudio, Git and GitHub

22. Click the check box next to `GHDoc.Rmd` and click the Commit button (on some versions of RStudio, it might look like a page with a green check).
23. On the next screen, enter `initial commit` into the text field, click Commit. This takes a snapshot of your changes.
24. Now click the Push button (Green Up Arrow). This sends your commits to the main repo stored on GitHub.
25. Back in your web browser, click over to your GitHub repo and check that it now contains the file `README.md`.
26. Back in RStudio, add the following lines to the top of your `README.md` (except use your name) and click the Save button.

```
# Welcome to my repository

Authors: Prof Wells
```

27. Over in the git pane, click the check box next to `README.md` and click the commit button. On the next screen, enter `added title and name` into the text field, click Commit, then click the Push button.
28. Return to your README.md file, add the line `DONE` at the end, save and commit the change, then push to GitHub.

Part 5: Typical Workflow (for now)

- Get in the habit of making frequent commits on your project (at least once per work session, or even more often!). The more often you make commits, the more easily you can track changes (and revert to an earlier version if necessary).
- All commits are stored locally until you **push** them to github. Once you are done with a work session, always **push** all commits.
- At the beginning of a new work session, **pull** your repo from github to ensure your local files are synced with the repo on Github.