



Hello!

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```
library(dplyr)
```

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



| Introduction to Git with Studio®



What is Git?

Git is a Version Control System (VCS). It basically helps you keep track of different versions of your files: data, figures, reports, and, yes, source code.

- Free and open source software
- It runs on every (relevant) platform in the market: Unix, Windows and OS X
- It is integrated with remote hosting services (like DropBox with a twist) that offer you a really user friendly and secure way to distribute your code in order to collaborate with your team.



What is GitHub?

GitHub is Git on steroids :)

Remember when I said DropBox with a twist?

- GitHub is a home for your Git-based projects on the internet
- It allows other people to see your stuff, sync up with you, and perhaps even make changes.
- It has a really cool interface that also integrates tools that help you be more organized



What about RStudio?

RStudio integrates a nice interface for Git (so that you don't have to bother with git command line) and can connect directly to your Github account.



**1. So why would you
like to use Git and
Github?**

"FINAL".doc



FINAL.doc!



FINAL_rev.2.doc



FINAL_rev.6.COMMENTS.doc



FINAL_rev.8.comments5.
CORRECTIONS.doc



FINAL_rev.18.comments7.
corrections9.MORE.30.doc



FINAL_rev.22.comments49.
corrections.10. #@\$%WHYDID
ICOMETOGRADSCHOOL????.doc

JORGE CUAM © 2012

Advantages of working with Git&GitHub

If you work with a team:

- Collaborative development
- Backup
- Organize and delegate
- See who is responsible for what





Advantages of working with Git&GitHub

If you are a lone she-wolf:

- Exposure
- Backup
- Keep track of your progress
- Organize yourself
- Build up your skills for when you will work with a team and you will eventually need Git

It also has disadvantages...

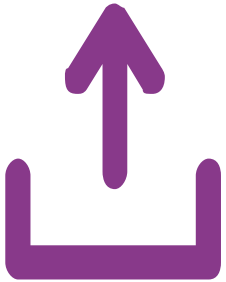
- Difficult setup at first
- It has a very specific vocabulary that has to be first understood
- More complicated actions may require knowledge of git command line
- Ahh...and the beauty of **merge conflicts** :)



Basic Git vocabulary

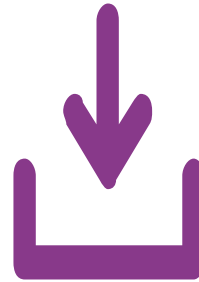
- **Repository:** a project (folder) that is Git-aware
- **Branch:** a duplicate version of your existing repository
- **Commit :** (taking) a snapshot of a project version that is significant to you and that you might want to inspect or revert to later.
- **Push:** (to Github): make your work (**commits**) visible to others and invite comment or edits.
- **Fetch:** grabs all the new remote-tracking branches and tags without merging those changes into your own branches
- **Pull:** merges remote changes after they have been fetched
- **Pull request:** lets you tell others about changes you've pushed to a branch in a repository on GitHub.

Basic actions



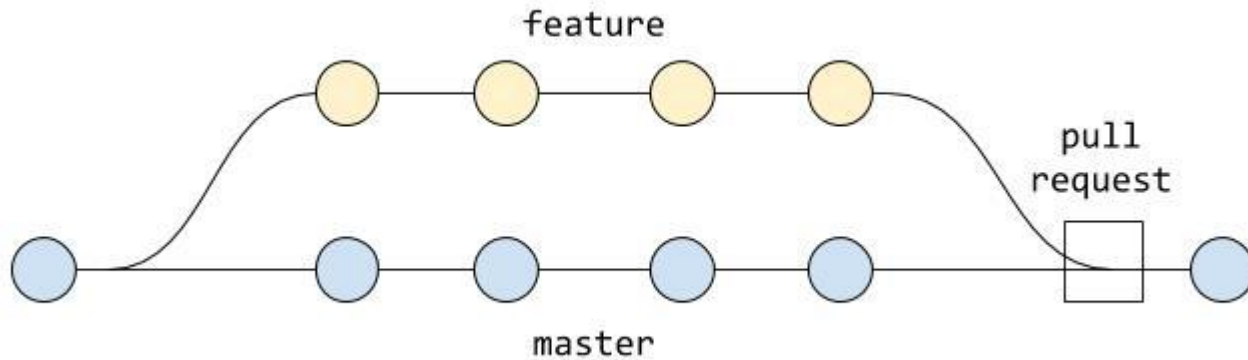
“Upload”

- Git add
- Git commit (message)
- Git Push

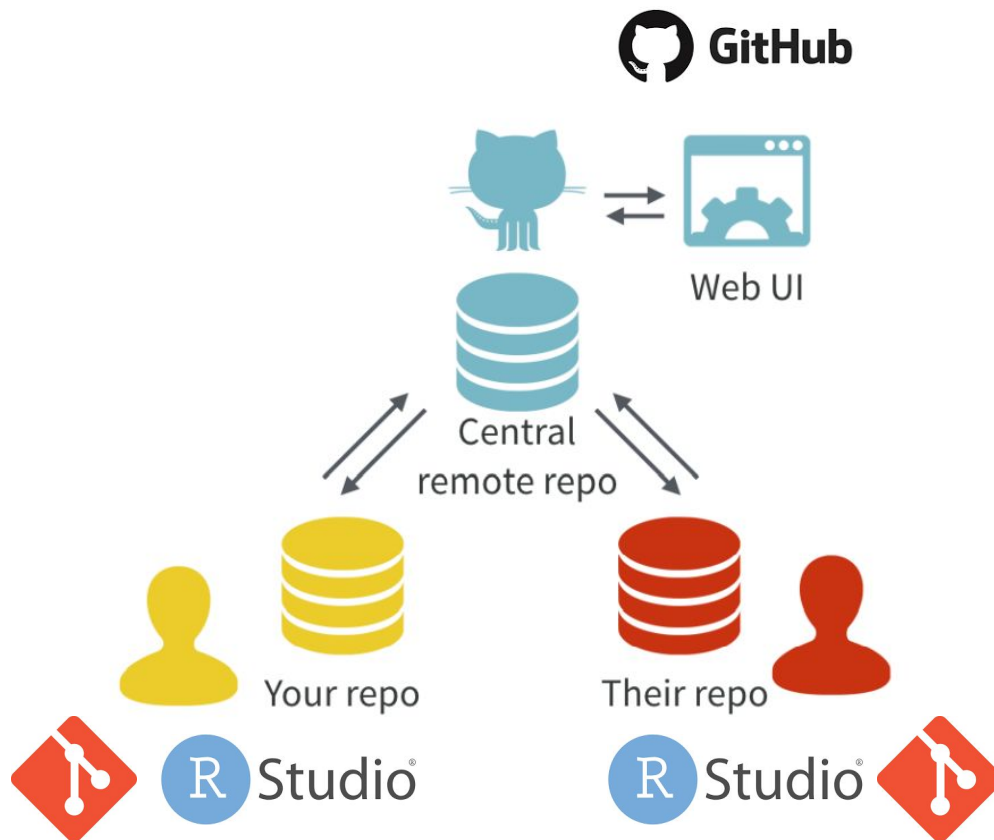


“Download”

- Git clone
- Git fetch
- Git pull



Big Picture



RStudio, Git and Github Tutorial

Create an RStudio project repo

Git commit changes

See how GitHub looks



Support a great cause!

The association “La primul bebe” is renovating the pediatric section in my hometown public hospital.

More about this here:

<https://www.facebook.com/watch/?v=418913729109905>

<https://www.laprimulbebe.ro/categorii/cazuri-umanitare>





Thank you!

Any questions?



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- Install Git: <https://happygitwithr.com/install-git.html>
- How to connect to Github: <https://happygitwithr.com/push-pull-github.html>
- Configure ssh key:
<https://docs.github.com/en/free-pro-team@latest/github/authenticating-to-github/generating-a-new-ssh-key-and-adding-it-to-the-ssh-agent>
- Basic Git workflow: https://jennybc.github.io/2014-05-12-ubc/ubc-r/session03_git.html
- Git Fundamentals: <https://happygitwithr.com/git-intro.html>
- <https://r-bio.github.io/intro-git-rstudio/>

#resources

Image sources

- Phdcomics.com
- <http://www.smcampulung.ro/images/m2.jpg>
- https://image.freepik.com/free-photo/silhouette-woman-beach_34543-99.jpg