

GitHub

A short introduction

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Example

Imagine you work **together with a colleague** on one script. You decide for the following workflow: Your colleague writes some new code in the script and send it via mail to you and you do the same. You do this for a few rounds and after a while you recognise that the code does not work anymore and you are not able to get the current script running again. If you thought about such a scenario before, you might have saved every **version** of this file. In this case you would have to check the changes made in every single file to find the error. If not you need to remember all the **changes** which have been made.

- ▶ You might want to use GitHub to avoid problems like these.

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- ▶ it tracks changes made to e.g. R code

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- ▶ can also be used to backup and document your work

How to use it?

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- ▶ directly on <https://github.com/>
- ▶ with a graphical user interface (GUI) on your computer e.g. <https://www.sourcetreeapp.com/>

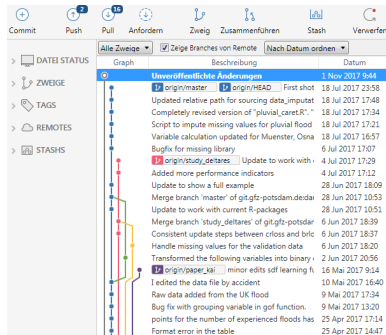


Figure 1: Example of source tree

Some Vocabulary

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Repository

- ▶ This is more or less a folder which is (version) controlled by GitHub

Clone

- ▶ get a remote repository and your local machine (computer)

Commit

- ▶ Commit changes made to a file to the repository

Some Vocabulary

Push

- ▶ Local commits are getting uploaded to the remote repository

Pull

- ▶ Remote commits are getting downloaded loaded to your local machine (computer)

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- ▶ solve the following question and document your solution in the .md file: **What can we say about the probabilities of observing multiple 1,000-year tornadoes in thousand years?**

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- ▶ solve the following question and document your solution in the .md file: **What can we say about the probabilities of observing multiple 1,000-year tornadoes in thousand years?**
- ▶ push the changes on the remote repository

A few more links

- ▶ <https://rogerdudler.github.io/git-guide/index.de.html>
- ▶ <https://book.git-scm.com/>
- ▶ <http://marklodato.github.io/visual-git-guide/index-en.html>