

Version control

[GitHub]

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Introduction

What is GitHub?

- GitHub is a web-based Git repository hosting service (Wikipedia).
- Directed to hosts open source projects
- Social network functionality (fork/clone projects)
- Other main competitor: Bitbucket



Why publish on GitHub?

- You can easily share everything that is related to your paper
 - Text
 - Code
 - Figures/Tables
- Could serve as supplementary repository to articles
- Cooperate with others using Git and GitHub
- Timestamp your work
- Github can host static webpages (in combination with, e.g., Jekyll)
 - In fact, all these workshop materials and this website is just one repository on GitHub ERSA-WooW

How to publish on GitHub?

- You **pull** material from GitHub and you **push** material to Github
- Typical workflow:
 - 1 *Pull* changes from Github
 - 2 Work
 - 3 Commit your changes to your *local* repository
 - 4 Work
 - 5 Commit your changes to your *local* repository
 - 6 etc.
 - 7 Push all changes to Github
 - Possibly solve conflicts when cooperating

With GitHub Desktop push/pull is replace by sync (initial one is publish)

Assignments: Working with GitHub and GitHub desktop

Assingment 1:

- 1 Open ERSA-WooW in GitHub desktop
- 2 Commit changes of your Markdown paper to GitHub desktop
- 3 Sync your Markdown paper to your GitHub account

Assignment 2:

- 1 Create new project folder MyPaper
- 2 Copy the html result of the Markdown assignment in MyPaper
- 3 Rename Assingment1.html in index.html
- 4 Initialise a Git repository in Github desktop (with Create)
- 5 Add and commit your paper
- 6 Create a new branch called gh-pages
- 7 And publish all to Github
- 8 Look at the website

`http://_YourGitHubname_.github.io/MyPaper`

In conclusion

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- Markdown is easy to learn and incredibly useful
 - blogs/website
 - to-do lists
 - slides
 - papers
- Versioning is **very** important but often forgotten
- Open repositories are becoming incredibly useful (if not only to provide background material to your papers)
- Do not be afraid to open up your research
 - large benefits for the scientific community at large
 - large benefits for the individual researcher