#### Introduction to GitHub

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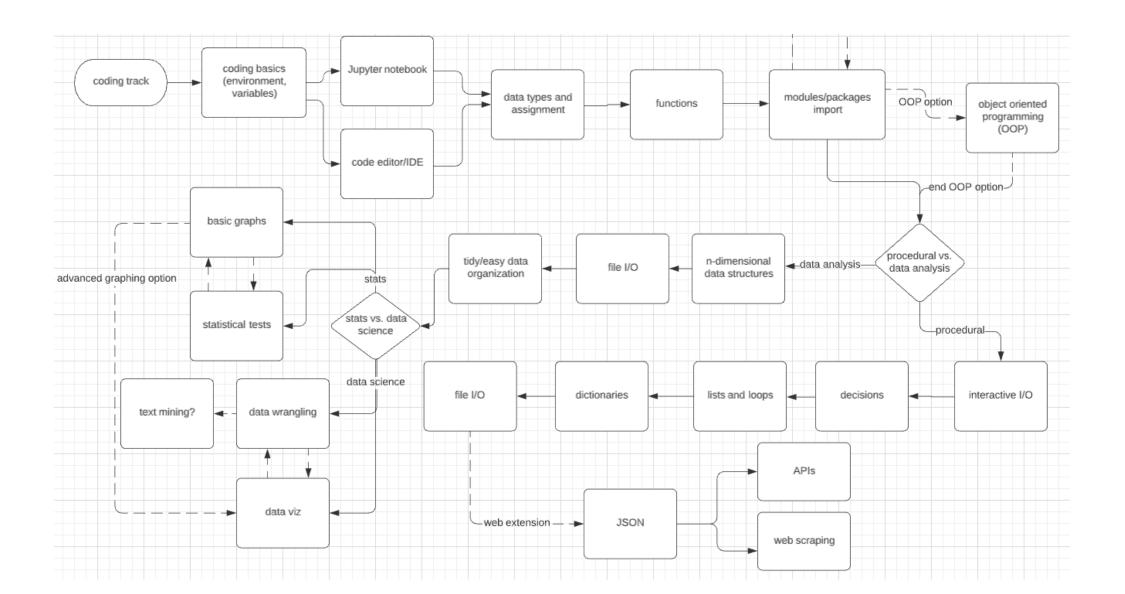


# Digital Scholarship and Communications Office (DiSC)

- Unit of the Vanderbilt Libraries
- Support for data best practices (DMP tool, repositories), GIS, copyright, Linked Data (including Wikidata), tools (GitHub, ORCID, Open Science Framework, etc.), and Open Access publishing.
- Offers on-demand educational programming, consultations, web resources
- Typically offering lessons on Python, R, and GIS
- More online at: vanderbi.lt/disc
- Email: disc@vanderbilt.edu

#### vanderbi.lt/codegraf

#### What is CodeGraf?

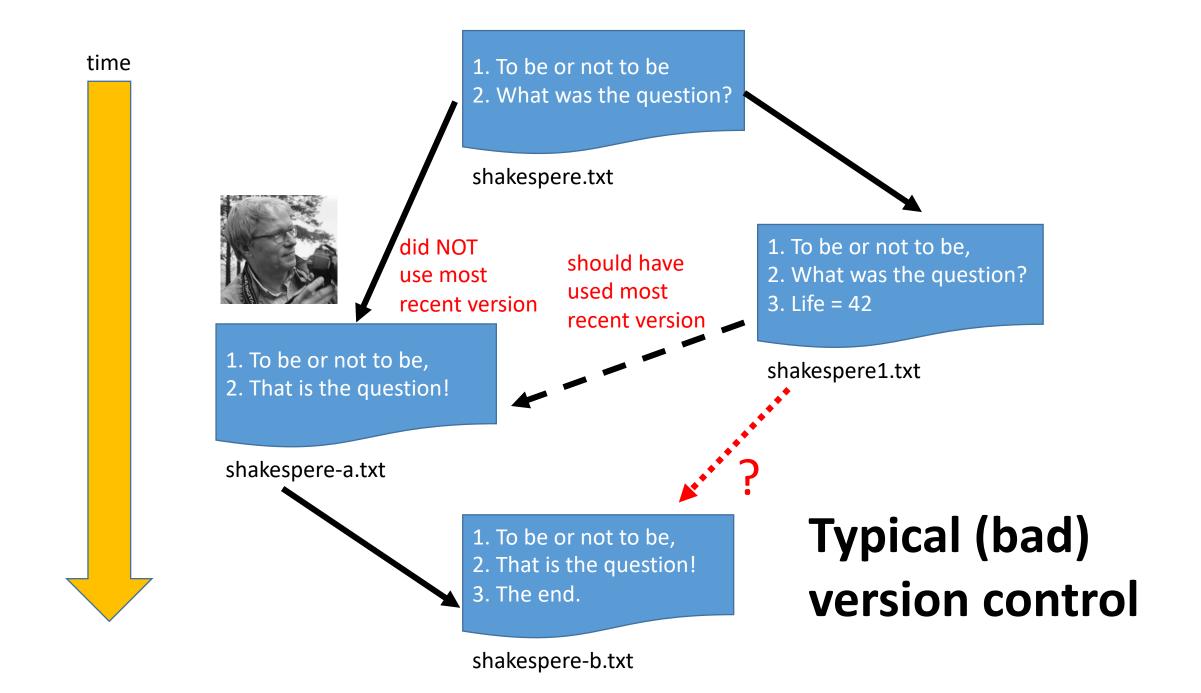


#### What is version control?



#### Version control

- a.k.a. source control
- A system to record changes to files over time.
- Allows you to track changes
- Allows you to revert to earlier versions if a disaster happens.
- Prevents version conflicts when collaborating.



time



To be or not to be
that is the question

shakespere-2019-01-25.txt

To be or not to be,
That is the question!

shakespere-2019-02-08.txt

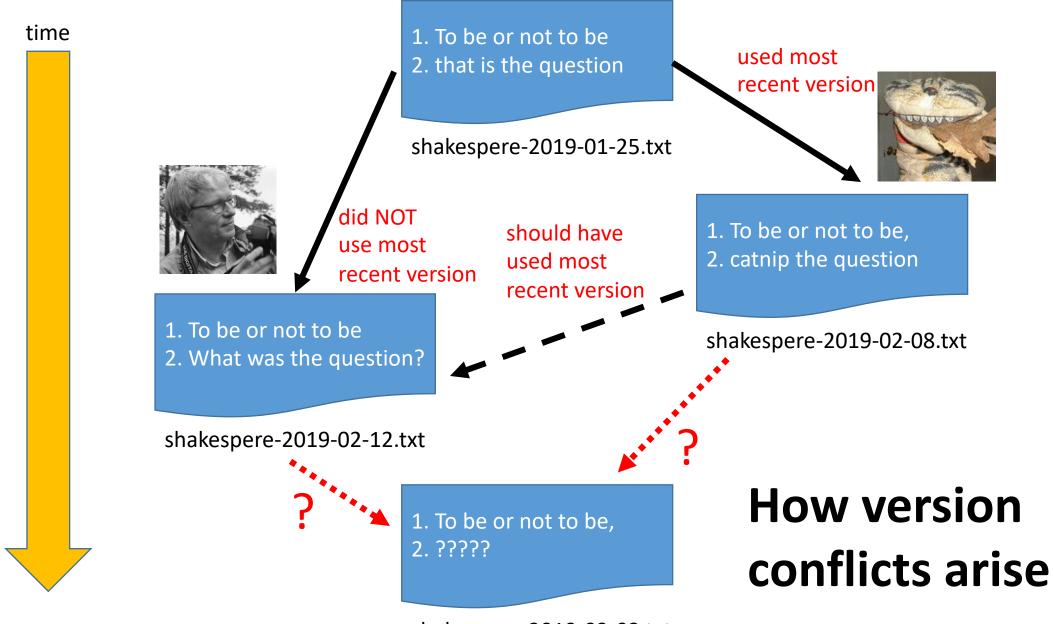
To be or not to be
That is the question!
Life = 42

shakespere-2019-02-12.txt

To be or not to be
That is the question!
Life = 42
The end.

shakespere-2019-03-02.txt

# Simple version control system



shakespere-2019-03-02.txt

#### Git vs. GitHub



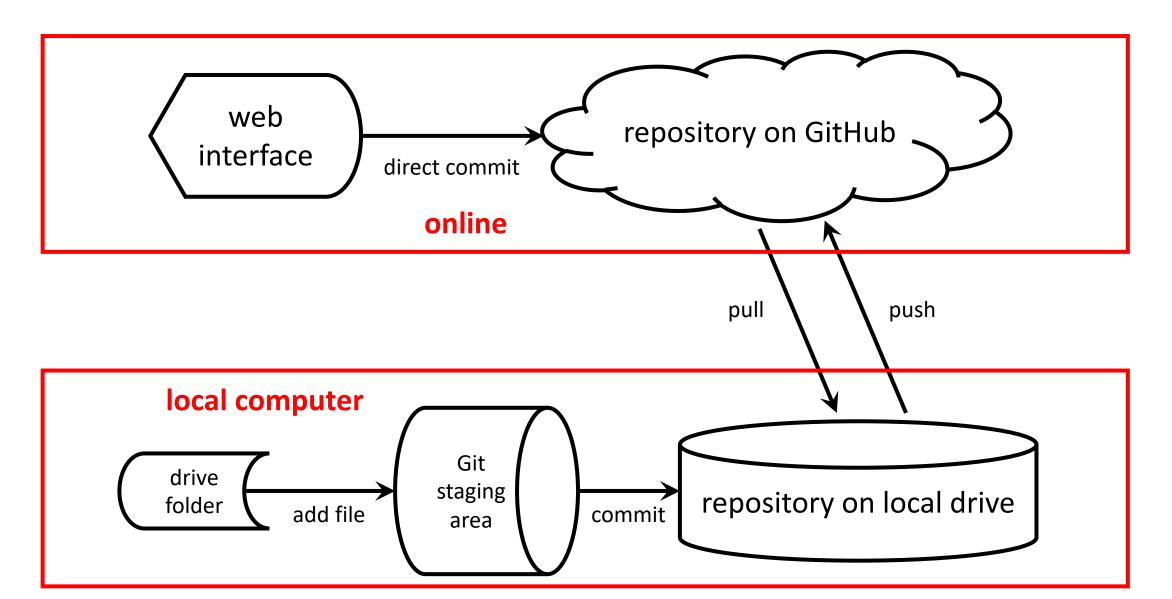
# What is Git?

- Git is a free, open source tool for version control.
- It is often used in a command line interface (terminal)
- It can be used only on your local computer or with a remote system
- Other alternatives to Git:
  - Subversion -> supported by Jira
  - Mercurial

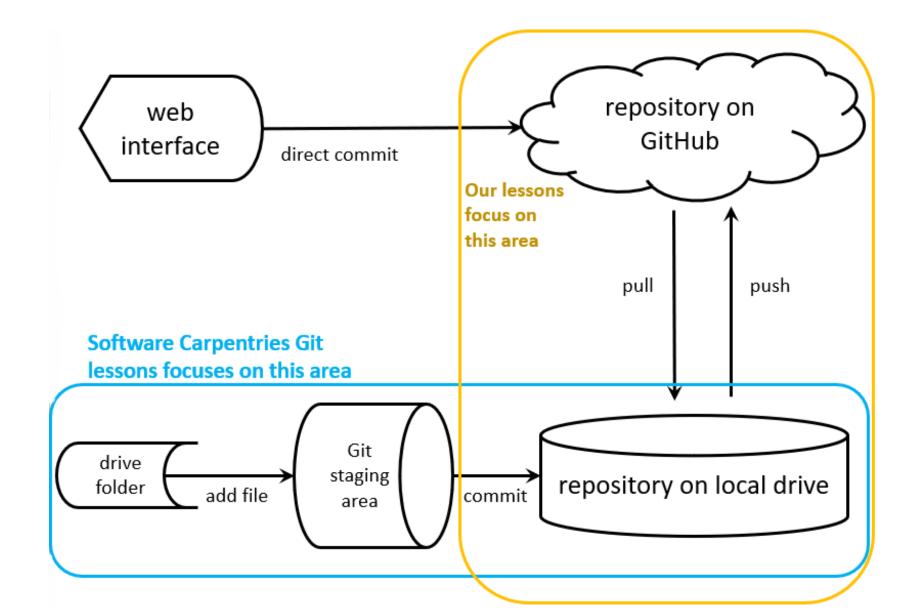
## What is GitHub?

- GitHub is a commercial website (now owned by Microsoft)
- Hosts projects by individuals and organizations.
- Free tier offers many services.
- Paid tier offers additional capabilities.
- GitHub uses Git to manage projects in the cloud.

# The World of Git and GitHub



## Learning command line Git via Software Carpentries



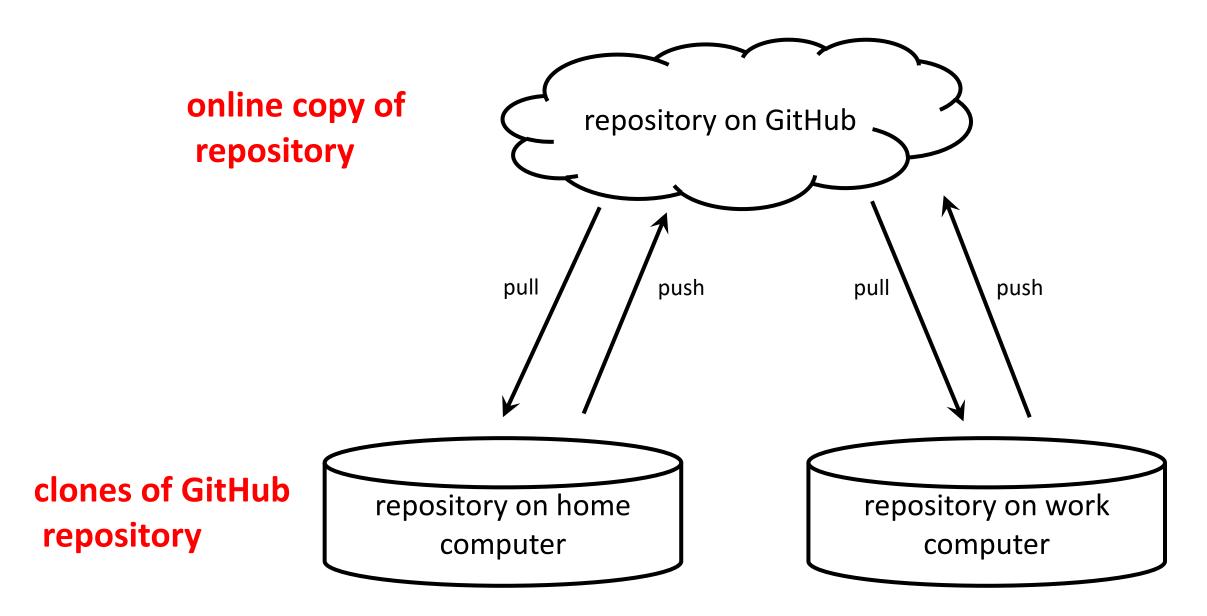
#### Goals



# Problems to solve in this module

- Where are my files?
- Aaak! I just deleted my project!
- Gulp! I just deleted most of the document and clicked save.
- The stuff I wrote last week is better than the revisions I made yesterday.
- EEEEK! My computer is missing/stolen/smashed/burned up/drive crash...

Disaster prevention: personal version control



# Problems to be solved in later modules

- Dividing a large project among several collaborators
- Contributing to open source projects
- Tracking issues and collaboration management
- Building a website using GitHub Pages



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