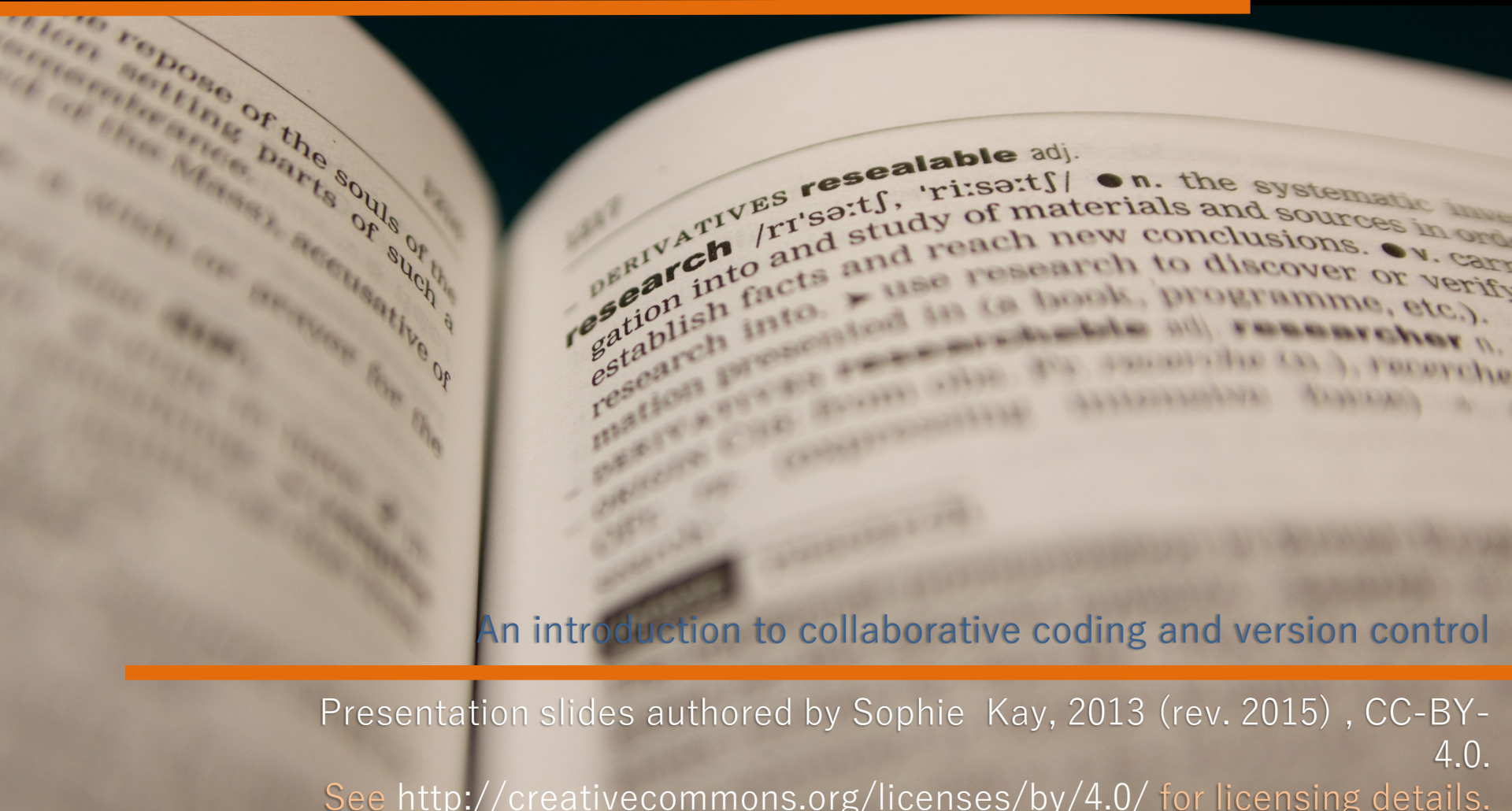
Managing Your Code Using GitHub



An introduction to collaborative coding and version control

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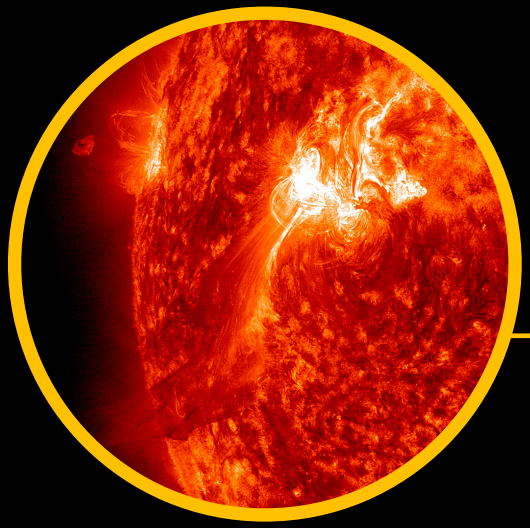
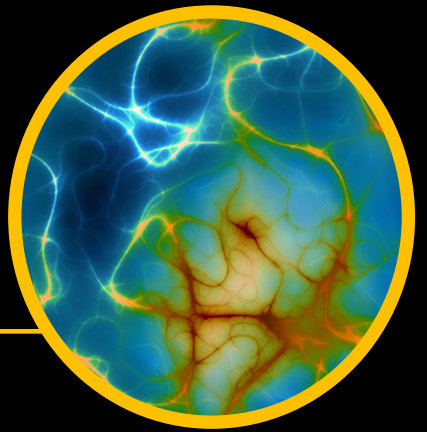
Why Use Version Control?

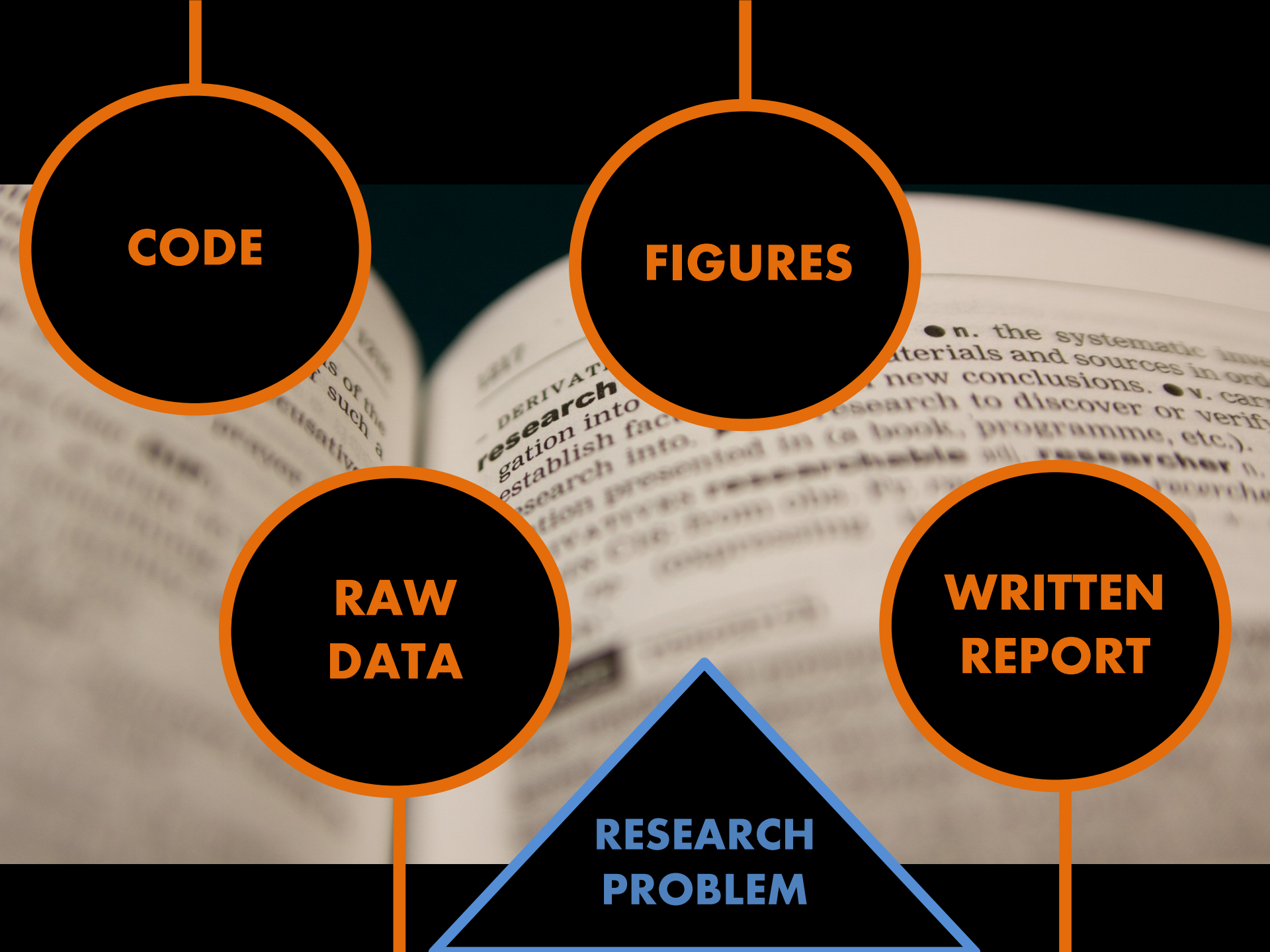


Introduction to GitHub



GitHub Demo

Image credits: Sun by Nasa Goddard, CC-BY-2.0; Silicon Chip by Jannes Pockele, CC-BY-2.0; Neurons by Patrick Hoesly, CC-BY-2.0.


CODE
FIGURES
RAW DATA
WRITTEN REPORT
RESEARCH PROBLEM

Users of these slides should embed the YouTube video, “What Is VCS?” here, from the following address: http://www.youtube.com/watch?v=8oRjP8yj2Wo

Why Use Version Control?

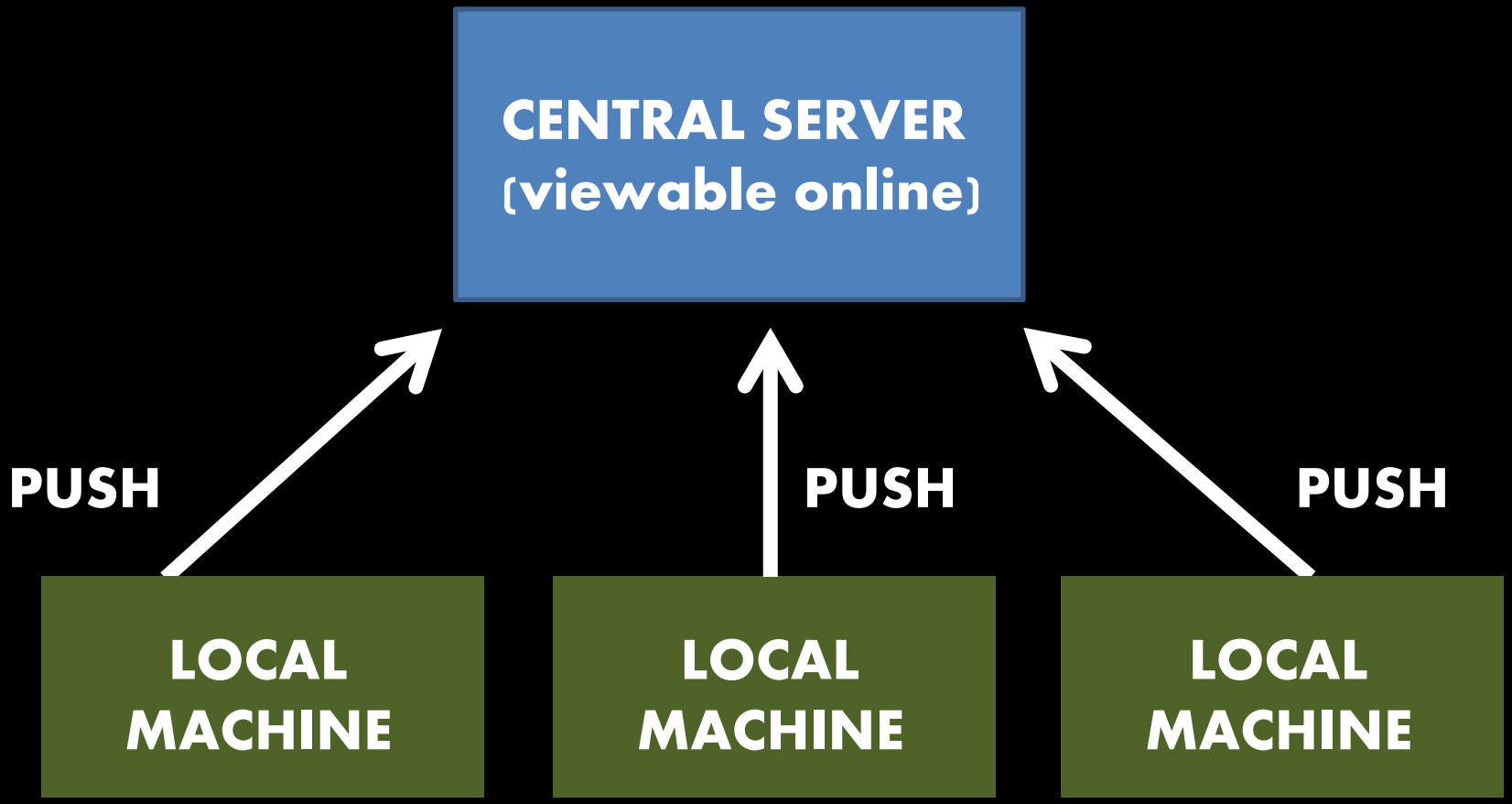
Why Use Version Control?

Maintain a **HISTORY** of your work as it progresses

Facilitate **COLLABORATION** when working as part of a big team

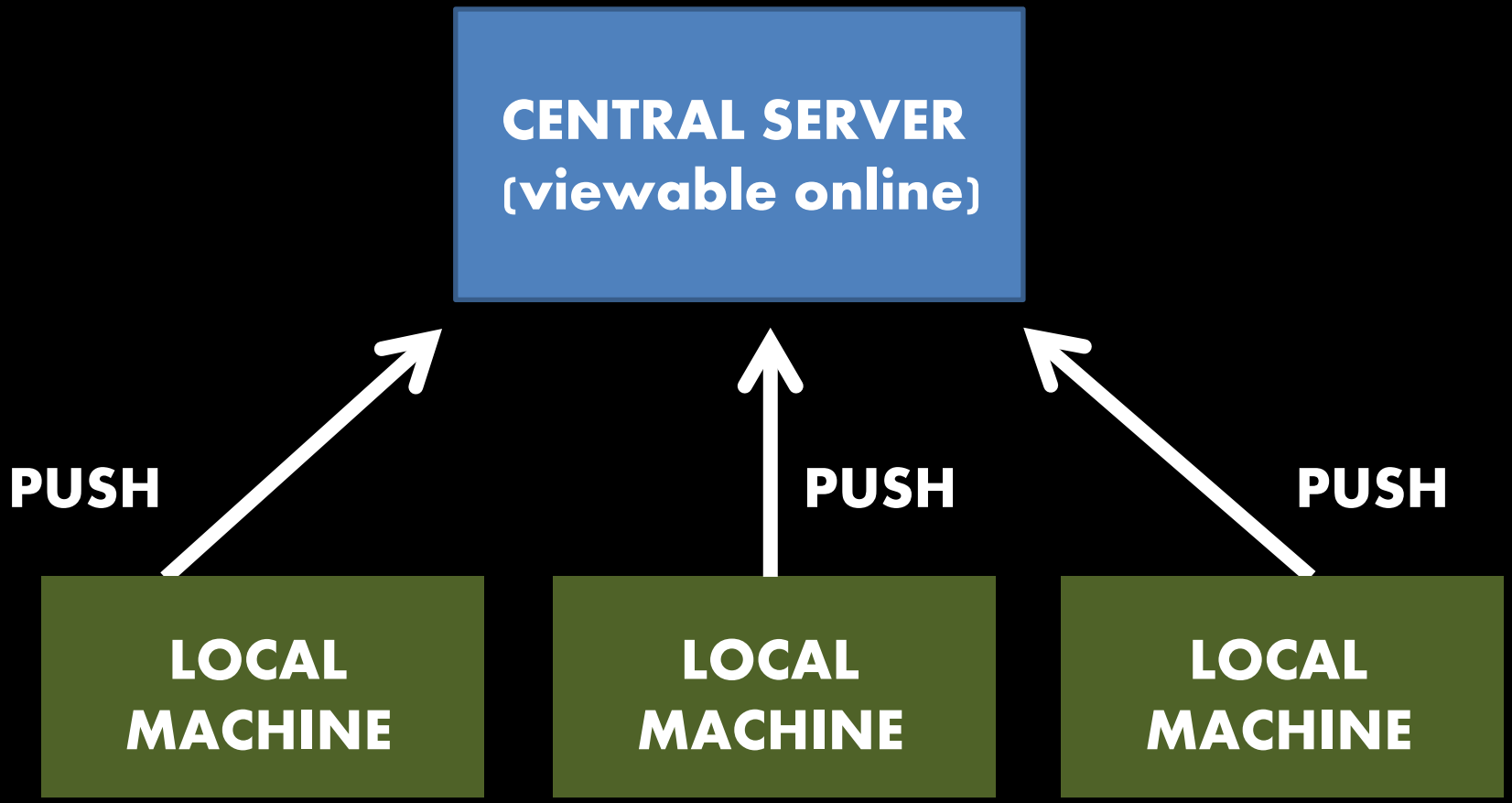
Track not only the **CHANGES** to files, but the **AUTHORS** of, and **REASONS** for, those changes

Version Control in GitHub

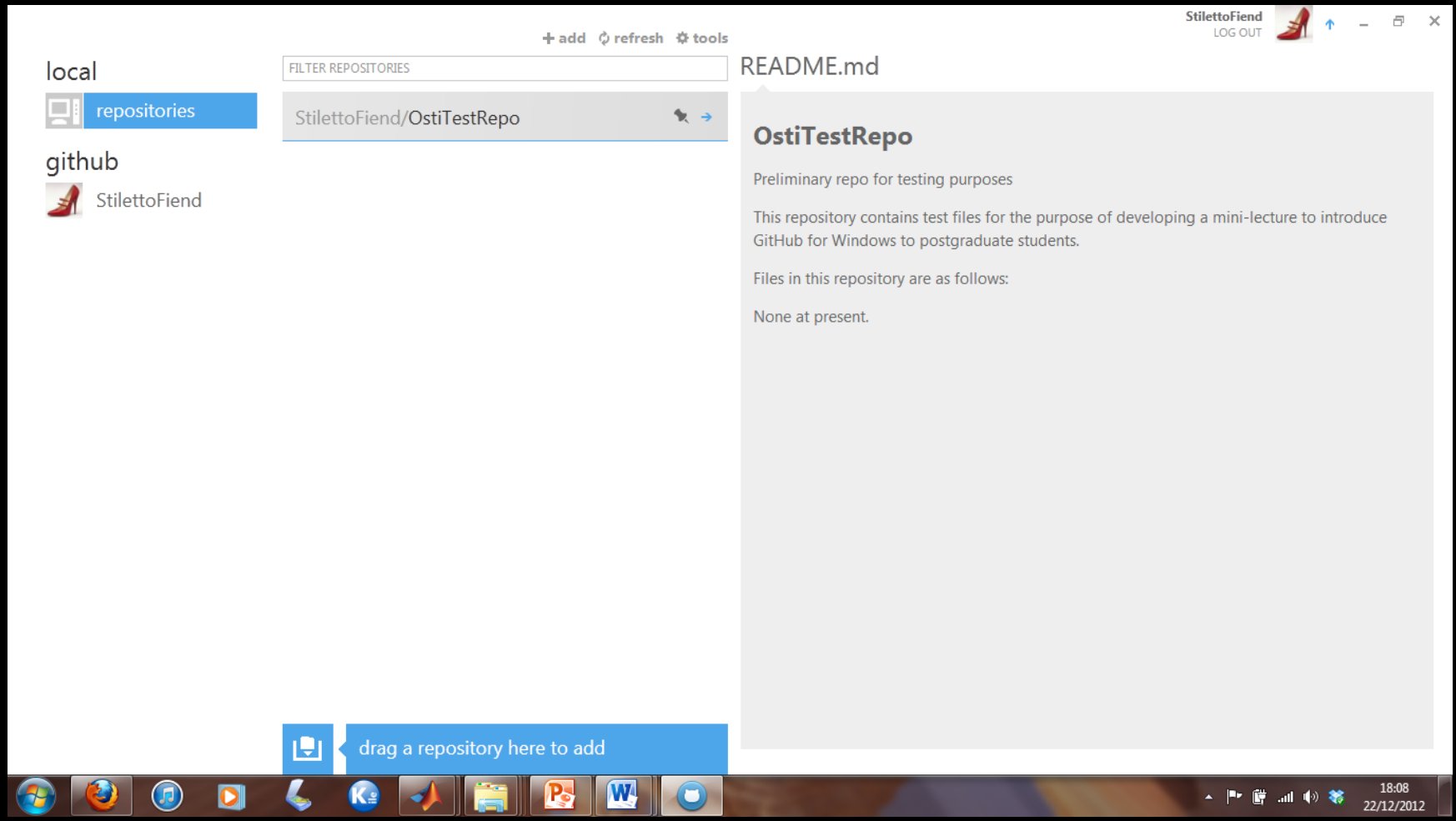


The majority of operations are **LOCAL**
Work from a local directory on your machine before pushing changes to the central server

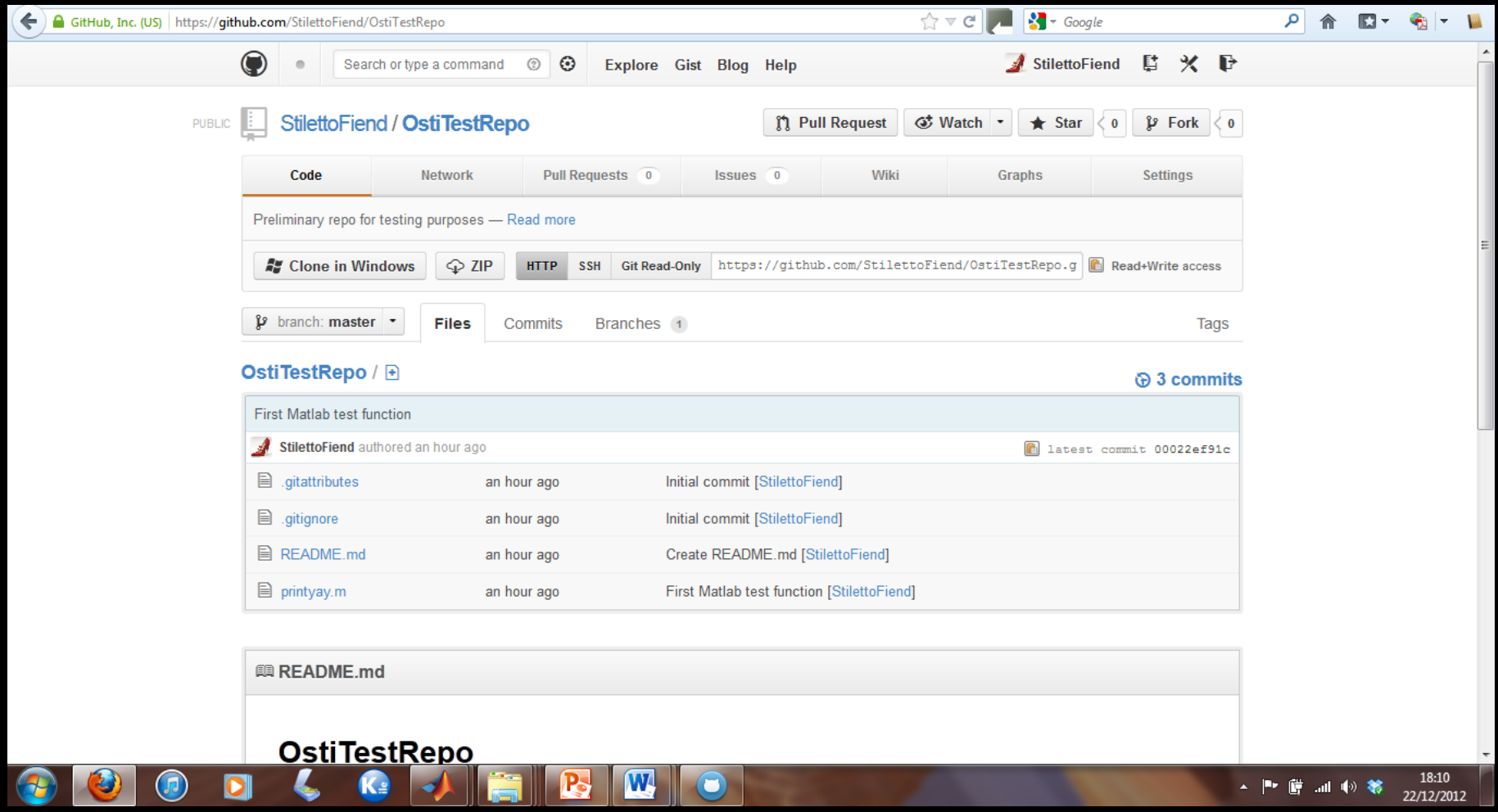
GitHub Structure



MODIFY your files in the local directory for your repo
COMMIT these changes to your local repo
Then **PUSH** them to the central server



GHfW Repo Overview



Online Repo View

ALWAYS check the terms of the system you're using and whether it's public or not

If working with industry, you may be bound by a **Material Transfer Agreement** – not ideal, but you should be aware of potential conflicts

You will also want to consider **LICENSING** your code/data/writing – we'll cover this tomorrow!

Caveats