

# Managing Your Code Using GitHub

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An introduction to collaborative coding and version control

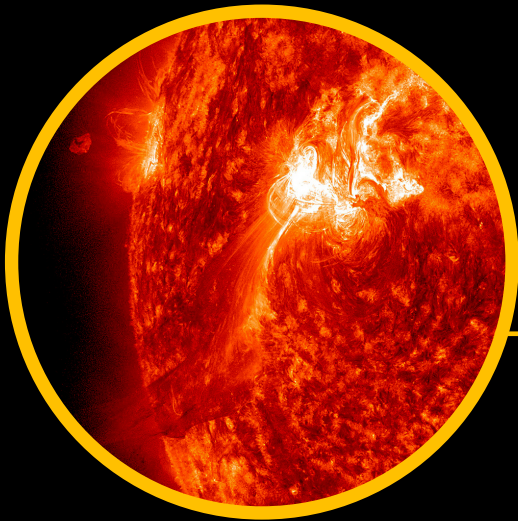
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# Why Use Version Control?

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## Introduction to GitHub

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### GitHub Demo

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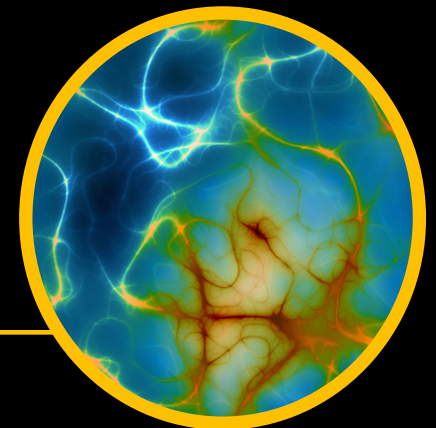


Image credits: Sun by Nasa Goddard, CC-BY-2.0; Silicon Chip by Jannes Pockele, CC-BY-2.0; Neurons by Patrick Hoesly, CC-BY-2.0.

**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?

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

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

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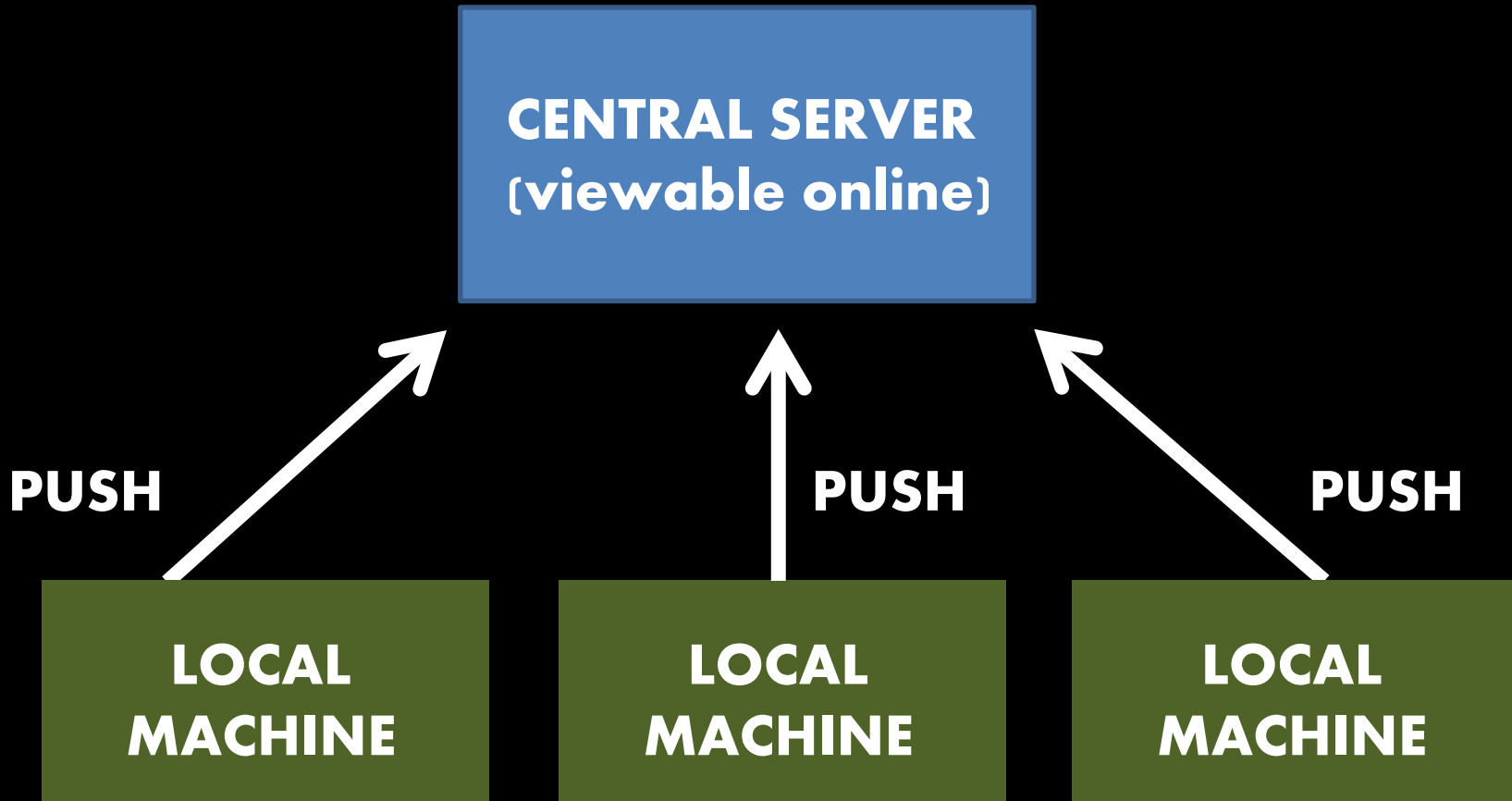
Track not only the **CHANGES** to files, but the **AUTHORS** of, and **REASONS** for, those changes

**Why Use Version Control?**

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# Version Control in GitHub

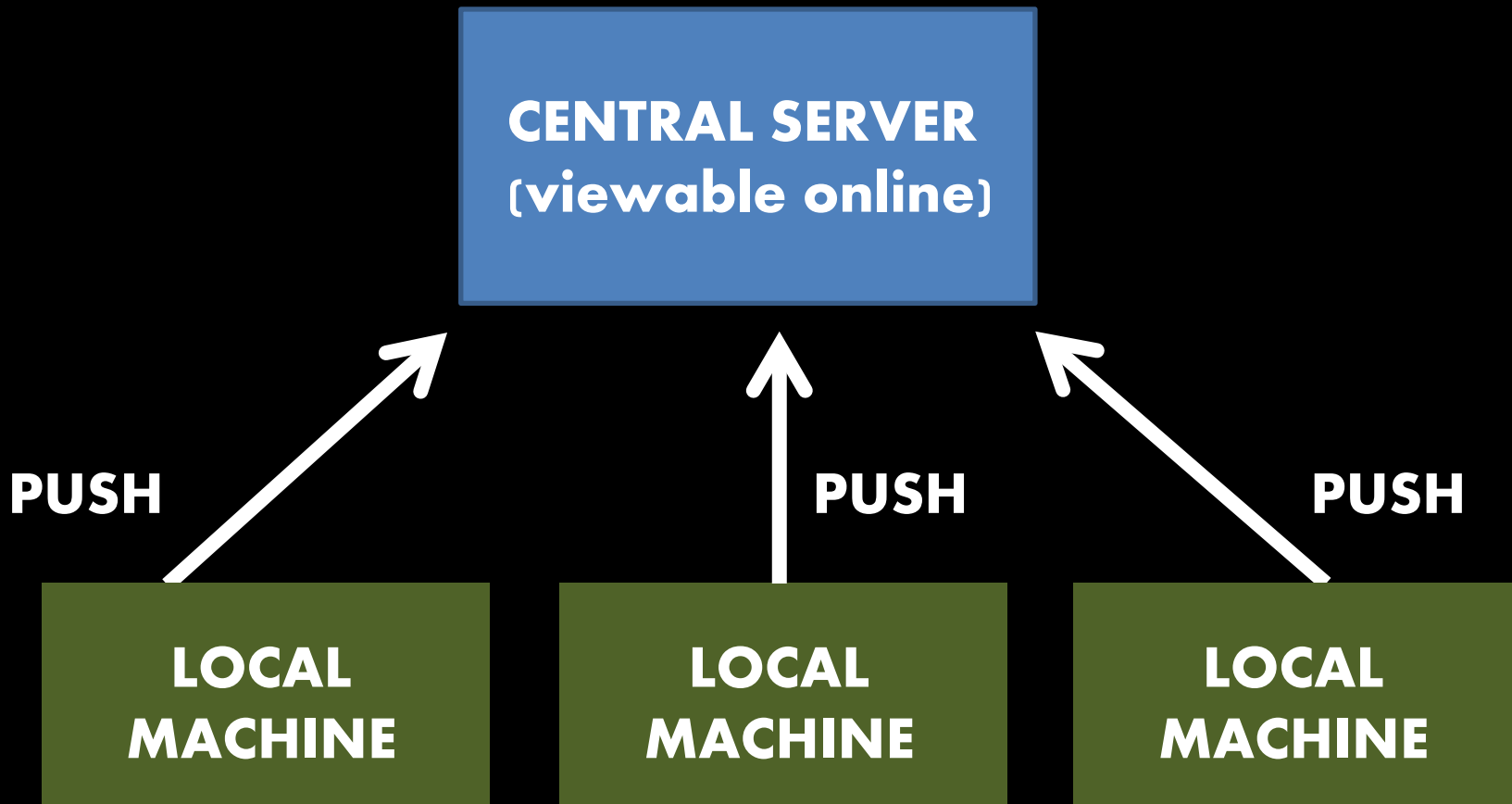
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The majority of operations are **LOCAL**  
Work from a local directory on your machine before  
pushing changes to the central server

# GitHub Structure

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

StilettoFiend  
LOG OUT

+ add refresh tools

local

repositories

StilettoFiend/OstiTestRepo

github

StilettoFiend

## README.md

### OstiTestRepo

Preliminary repo for testing purposes

This repository contains test files for the purpose of developing a mini-lecture to introduce GitHub for Windows to postgraduate students.

Files in this repository are as follows:

None at present.

drag a repository here to add

18:08  
22/12/2012

# GHfW Repo Overview



GitHub, Inc. (US) | <https://github.com/StilettoFiend/OstiTestRepo> | Search or type a command | Explore Gist Blog Help | StilettoFiend

PUBLIC **StilettoFiend / OstiTestRepo** | Pull Request | Watch | Star 0 | Fork 0

Code | Network | Pull Requests 0 | Issues 0 | Wiki | Graphs | Settings

Preliminary repo for testing purposes — [Read more](#)

Clone in Windows | ZIP | HTTP | SSH | Git Read-Only | <https://github.com/StilettoFiend/OstiTestRepo.g> | Read+Write access

branch: master | Files | Commits | Branches 1 | Tags

**OstiTestRepo** | 3 commits

First Matlab test function

**StilettoFiend** authored an hour ago | latest commit 00022ef91c

<a href="#">.gitattributes</a>	an hour ago	Initial commit [StilettoFiend]
<a href="#">.gitignore</a>	an hour ago	Initial commit [StilettoFiend]
<a href="#">README.md</a>	an hour ago	Create README.md [StilettoFiend]
<a href="#">printyay.m</a>	an hour ago	First Matlab test function [StilettoFiend]

README.md

**OstiTestRepo**

Windows taskbar: 18:10 22/12/2012

# Online Repo View

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

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

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

**Caveats**

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