

# GIT Summary

Part 1: From blank page to deployed website

*Tools and git*

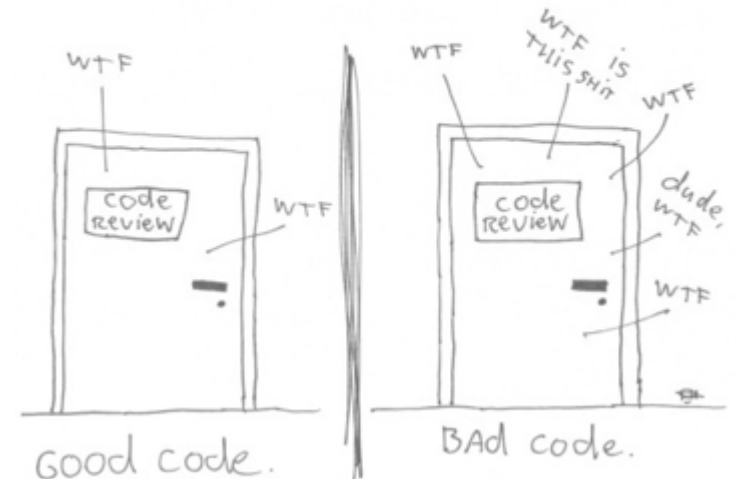
[Boris.Fritscher@he-arc.ch](mailto:Boris.Fritscher@he-arc.ch)

# New problems

- Editing code and making backups
- Commenting out code

-> Need for a version control system

The ONLY valid measurement  
of code quality: WTFs/minute

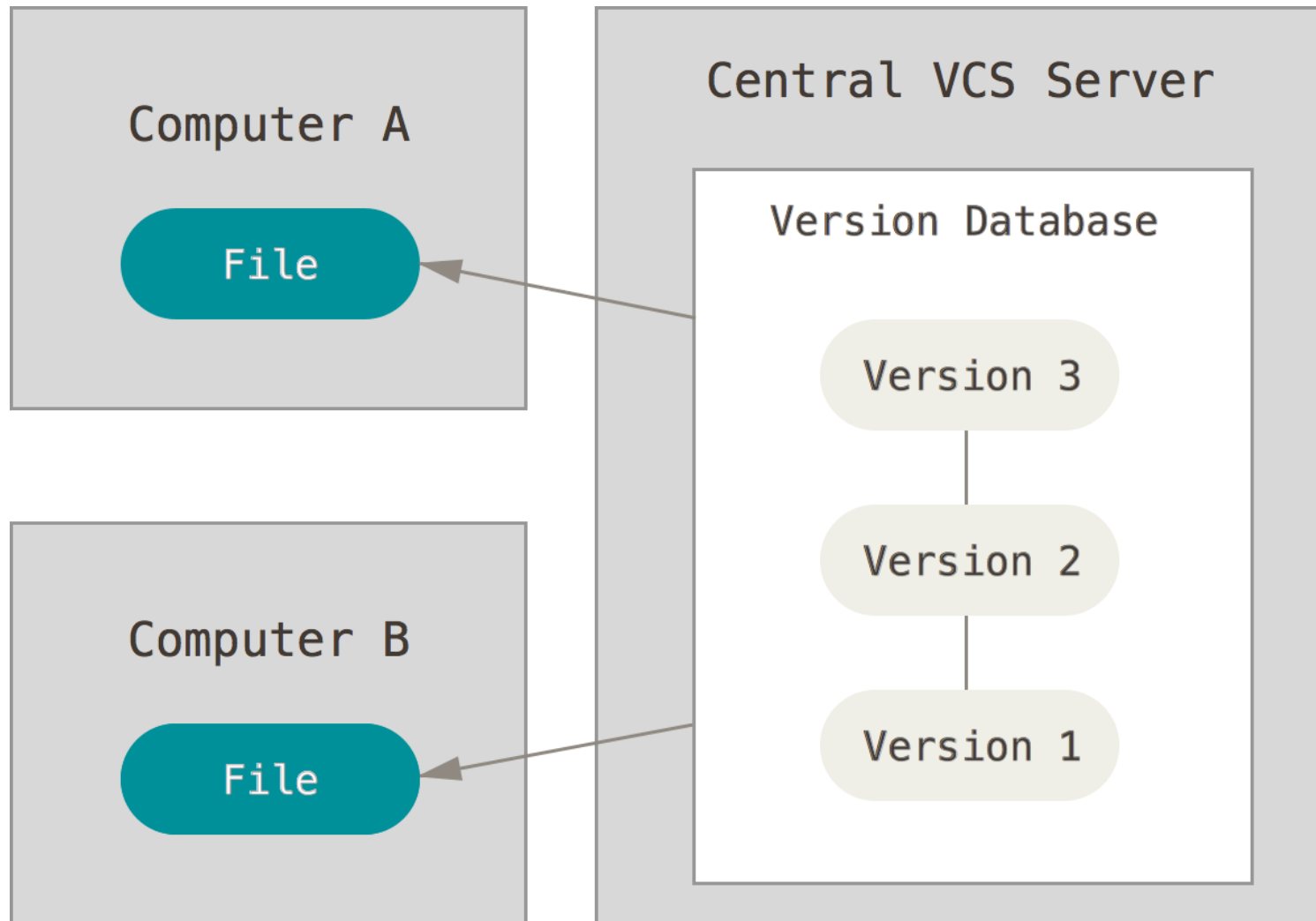


# Git

Git is a free and open source distributed version control system designed to handle everything from small to very large projects with speed and efficiency.

Download on [git-scm.com](https://git-scm.com)

# Centralized VCS



# Distributed VCS like Git

# Distributed VCS Advantages

- FAST
- OFFLINE (fix/commit multiple operations)
- Geography
- Flexible Workflows
- Easier Merging
- Implicit Backup
- Scale out, not just up

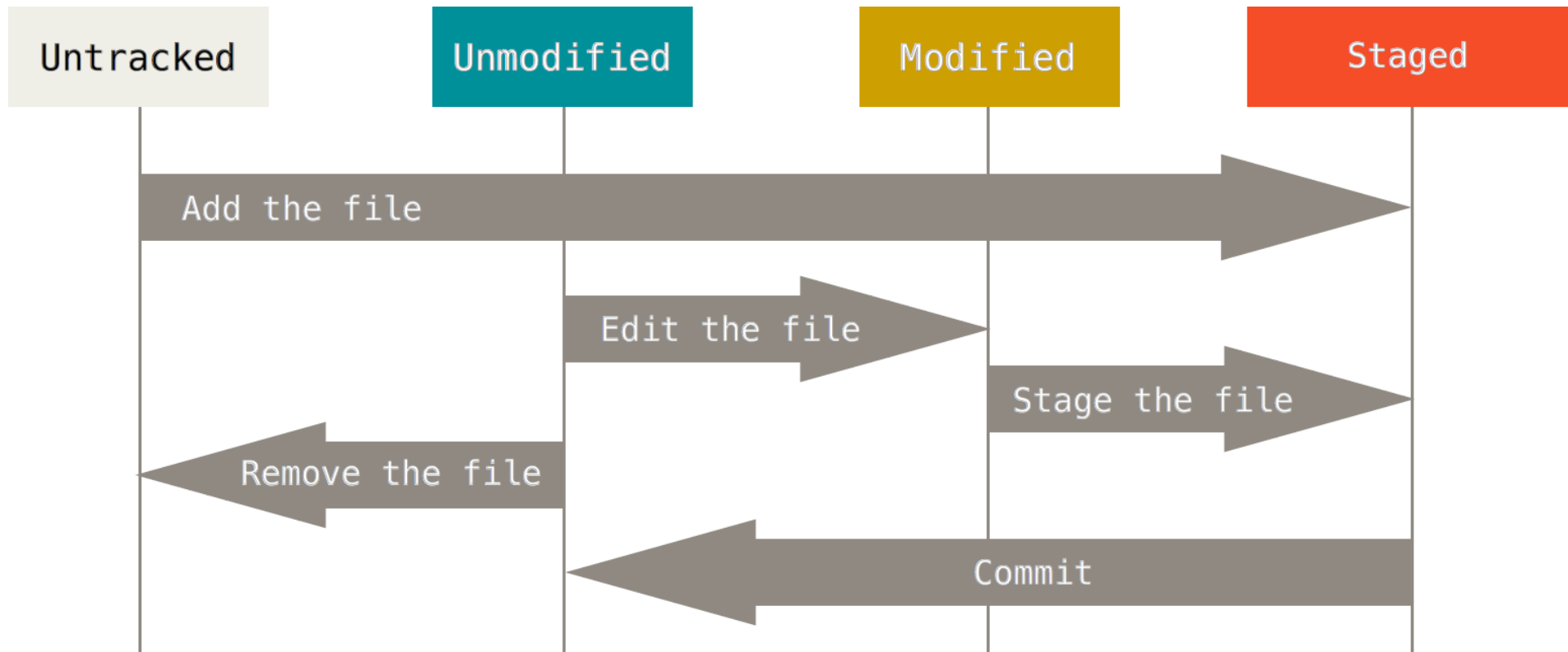
*Disadvantages: no Locks, Disk space*

[http://ericsink.com/vcbe/html/dvcs\\_advantages.html](http://ericsink.com/vcbe/html/dvcs_advantages.html)

# Git basics

- **git init** create a new local git repository
- **git add .** add all modified and new files to stage
- **git commit -m 'msg'** commit staged files with msg
- **git push** send commits to remote server
- **git pull** download remote commits
- **git clone** copy a remote repository
- **.gitignore** ignore files or folders

# Git lifecycle



<http://git-scm.com/book/en/v2/Git-Basics-Recording-Changes-to-the-Repository>



# Ressources

- <http://git-scm.com/book/en/v2/Getting-Started-About-Version-Control>
- <http://rogerdudler.github.io/git-guide/>
- <http://onlywei.github.io/explain-git-with-d3/#freeplay>
- <http://pcottle.github.io/learnGitBranching/>
- <http://git-scm.com/book/en/v2/Git-Basics-Recording-Changes-to-the-Repository>

# GitHub

**GitHub** is a web-based Git repository hosting service, adding its own features:

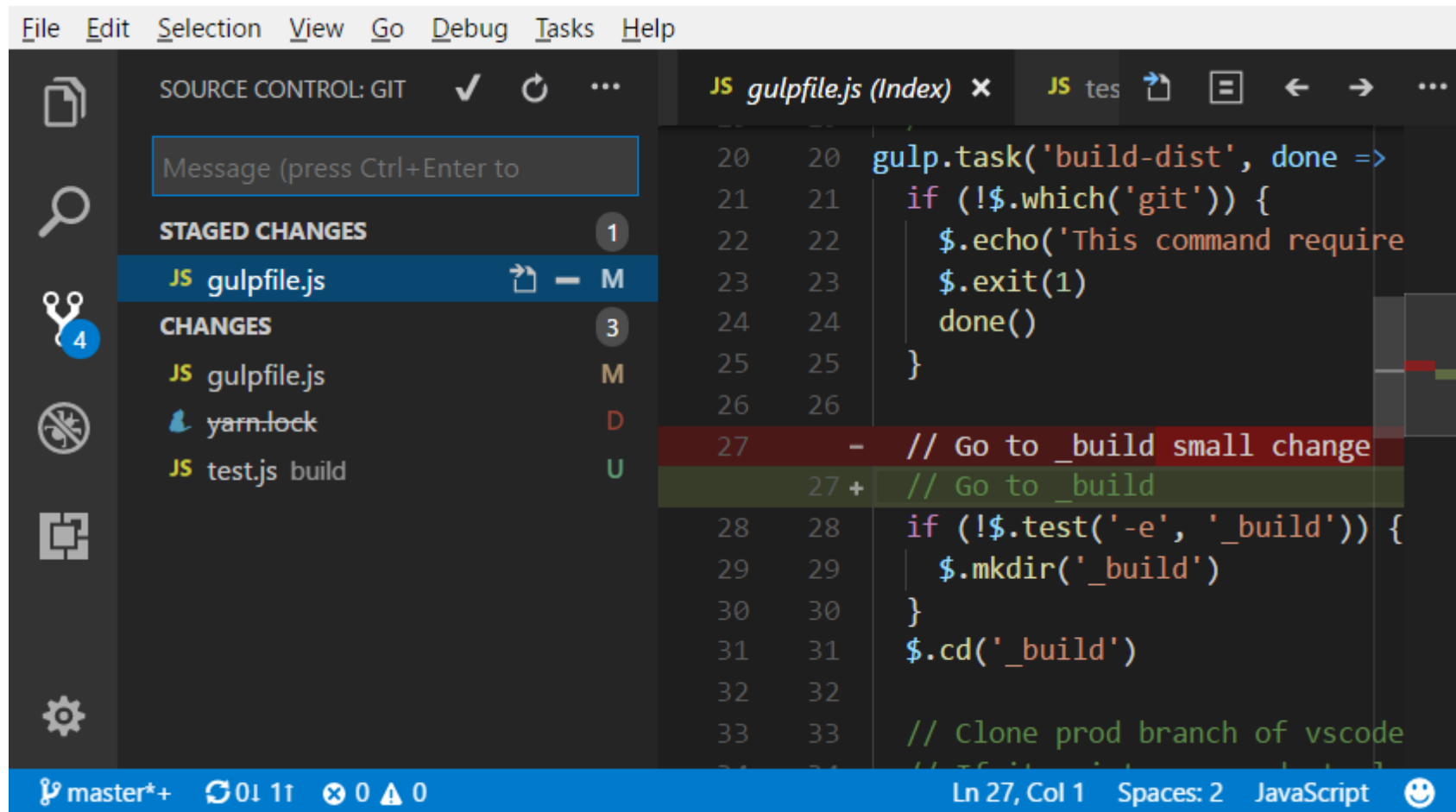
Wikis, bug tracking, **Markdown** rendering and static page hosting.

Unlike Git, which is strictly a command-line tool, GitHub provides a web-based **graphical interface**

# Github Web

Browse commits, issues, fork, pull requests, wiki, Readme.md

# Visual Studio Code Git Support



[Documentation](#)

# Do Your Commit Messages Suck?

<https://www.youtube.com/watch?v=8YjSty6bfog>

## Rocky Mountain Ruby 2011 - Lightning Talk: Do Your Commit Messag...



# Conventional Commits

<https://www.conventionalcommits.org/fr/v1.0.0/>

- Automatically generating CHANGELOGs.
- Automatically determining a semantic version bump (based on the types of commits landed).
- Communicating the nature of changes to teammates, the public, and other stakeholders.
- Triggering build and publish processes.
- Making it easier for people to contribute to your projects, by allowing them to explore a more structured commit history.

[https://github.com/vuejs/vue/blob/dev/.github/COMMIT\\_CONVENTION.md](https://github.com/vuejs/vue/blob/dev/.github/COMMIT_CONVENTION.md)

# Markdown

From text to HTML



# Markdown Basics

**Markdown** allows you to write using an easy-to-**read**, easy-to-**write** plain **text format**, which then converts to valid HTML.

```
**bold**
```

# Markdown List and Table

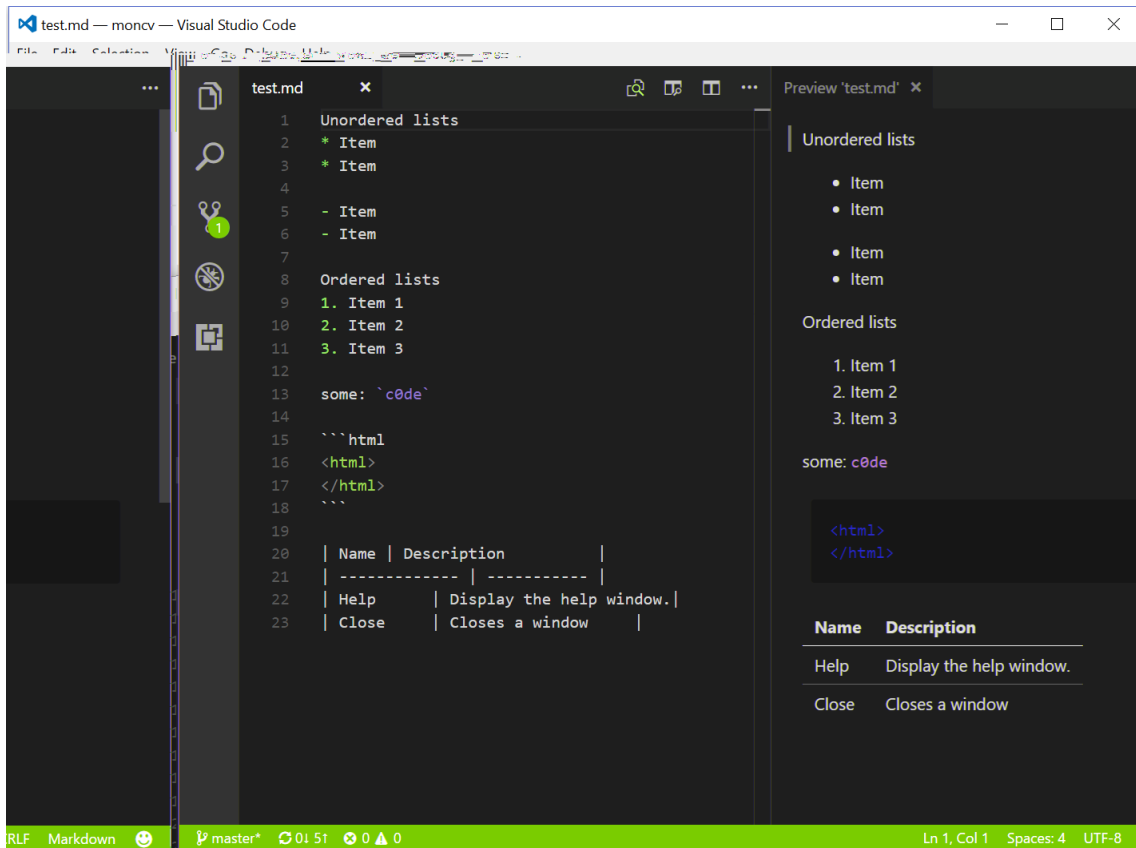
- Item
  - Item
1. Item 1
  2. Item 2

some:

Name	Description
Help	Display the help window.
Close	Closes a window

# Visual Studio Code

Can preview markdown in realtime.



Warning: markdown on github is a special variant!