



VERBVM VITÆ ET LVMEN SCIENTIÆ

git Flash Cards

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(yes, that's Lawson-1)



GitHub

- ❖ A website for “git-stuff.”
- ❖ You can have a free account there (I do)
 - ❖ Free accounts are public, and can be downloaded (but not changed) by anyone.
- ❖ You can have a paid account there for \$7 / month (I do)
 - ❖ Paid accounts are private.

git

- ❖ A program / a family of programs.
- ❖ All platforms, GUI and command line versions.
- ❖ Written by Linus Torvalds (“Linux”).
- ❖ Keeps your stuff in a database.
- ❖ Allows you to revisit old versions and share your work.

repo

- ❖ **Repository** — a collection of files and revisions to them.
- ❖ Each repo is generally associated with one directory
 - ❖ And all its files
 - ❖ And all its sub directories
- ❖ **IMPORTANT:** Any type of file may be in a repo.

commit

- ❖ Git is all about commit-ment. Repos contain commits.
- ❖ **commit** is a noun and a verb.
 - ❖ “My repo has 700 commits in it.”
 - ❖ “I committed five times yesterday.”
- ❖ A commit is a bookmark, a stopping point, a place you might want to go back to.
- ❖ A commit applies to everything in the repo, not just the files that have changed.

commit ID

- ❖ A (short) commit ID is the first seven hex-digits of a hash of all your work at that point.
 - ❖ 90cf8ac, 08eb119, 074903a, 859c534, ...
 - ❖ The first one is really
90cf8acf4718cbb6332781920be51dba1d92c775 (ugh)
- ❖ **commit** is a noun and a verb.
 - ❖ “My repo has 700 commits in it.”
 - ❖ “I committed five times yesterday.”

tag

- ❖ 90cf8acf4718cbb6332781920be51dba1d92c775
 - ❖ Not sexy (unless you are a hash function).
 - ❖ Not memorable.
- ❖ **tags are the personalized license plates of git.**
 - ❖ Just a memorable (to you) name
 - ❖ Spaces are not allowed in tags

branch

- ❖ A branch is a name for a collection of related commits.
- ❖ Should be meaningful to you.
- ❖ Spaces are not allowed in branch names.
- ❖ Every repo has at least one branch, and its name is **master**.

merge

- ❖ Merge is a reconciliation process.
- ❖ Between two commits.
- ❖ Almost always the commits are on different branches.

Let's get started

- ❖ Visit github.com
- ❖ Setup an account.
- ❖ Create a repo.
- ❖ Get committed.
- ❖ Make some mistakes.
- ❖ Learn to fix them.