

Git / GitHub

↳ VCS - Version Control System
↳ internal working (.git) folder

commit | stash ... all commands!

@thatbeautifuldream
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* Playstore / Appstore → downloads (versions) eg: v 9.30.3
versioning .

first launch for app" → MVP (imp). → iterative process ...

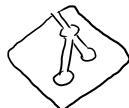
* Milestone → { multiple milestones } → NEW VERSION!
↑ { fixes, improvements, code changes, deprecations ... }
manage versions!

so, during a catastrophe we can ROLLBACK !

✓ Manage collaborative coding environment. } Leveraged
✓ Manage version (Version Management). } w/ Git.

Standard!

↑ But there are companies that implement their own VCS.



Git / GitHub

Open src. distributed

VCS =
(Version Control System)

wcs

eg: Google uses different VCS "monolithic" → critic.
↑ which has totally different architecture.

also has a Research Paper about how code stored as Monolith.



merge.

✓ Git :- tool. for VCS (version management)

Download & Setup.

<https://git-scm.com>

Linux - (knowledge is appreciated)

* Bash commands:

grep, ls, pwd, ifconfig etc...

tail, cat, (you get the idea) ...

process management, monit ...

comes w/ Bash:

(Born Again Shell)

Windows - MinGW

Mac - already comes installed

Linux - package manager

specific.

✓ GitHub - git provider.

↳ tool that harnesses power of VCS of git (underlying uses git)
gives GUI & remote copy of the files.

Designed for collaboration. + some more (issues), interface for
feature request
+ Project Board.
etc ...

SIDE NOTE:
(Mercurial ≈ git)

GitHub (competitor). GitLab, Bitbucket
(Atlassian)



help Open Source projects... contribute to other's OS. projects ...
* create forks, make PRs (pull requests)

Git cheatsheets by "bitbucket", "GitHub" ✓ (must check)

for Windows → GitBash ✓ all commands works in that!
\$ git init.

\$ git --version (to check git installation & ver.)

\$ git config --list (prints git credentials)

git config --name --email

available on internet!

* after configure ... setup
* GitHub Desktop helps to ease the process.
important to setup yourself. ✓
as you might not get something when GitHub Desktop can't be installed.

* Refer, "docs" to setup, learn about SSH & token login (use CLI). ★★★

* make GitHub account, read Research paper... Google's VCS
Setup Git @ local system.

GitBash → helps you get a BASH interface @ windows.

also WSL (Windows Subsystem for Linux) - 2
can be used for Linux. ✓

To enable a project with git :-

Ex: \$ mkdir git_proj

\$ cd git_proj

git_proj \$ git init

helps to setup the project
enabled with git. functionalities.



initialised empty Git Repository

git_proj \$ ls -a

.git

(shows all files in current dir)
★ along with hidden files

git directory has been made after \$git init

\$ cd .git
hidden folder
• git \$ ls

HEAD config description hooks info objects refs

← internal git files!

↑ relevant to maintain all the versions up!

ofc, it does not copy versions its smart!

understanding about its inner working should make us appreciate about this piece of tech.

git init : powers the folder with features of git.
initializes empty git repository.
creates a .git folder that comprises of
all required files to manage the VCS operations.

ls : list files from current working directory

touch : create new file (Linux bash commands)

\$ touch new.txt

Equivalent
Windows command
(pwd) ↴
(dir ↔ ls)
can be googled!

Lots to learn @ Linux → new Lecture, latter.

SIDENOTE

* To reinitialize existing repository : \$ git init

* To delete git repository : delete .git directory



\$ rm -rf .git/ ↑

removes the
repository with
all git functionalities!

recursively delete all files

(i guess.)