**Git & GitHub**

- VCS is basically some software designed to record changes made to a file or set of files overtime.

- Git  
Graphical user interface, text

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- GitHub is a collaboration platform built on top of Git.

Graphical user interface, text, application, chat or text message

Description automatically generated

* The GitHub workflow

Timeline

Description automatically generated

Why use Command-line

Graphical user interface, application

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some commands on windows:

Graphical user interface, text, application

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**These are common Git commands used in various situations:**

start a working area (see also: git help tutorial)

clone Clone a repository into a new directory

init Create an empty Git repository or reinitialize an existing one

work on the current change (see also: git help everyday)

add Add file contents to the index

mv Move or rename a file, a directory, or a symlink

restore Restore working tree files

rm Remove files from the working tree and from the index

examine the history and state (see also: git help revisions)

bisect Use binary search to find the commit that introduced a bug

diff Show changes between commits, commit and working tree, etc

grep Print lines matching a pattern

log Show commit logs

show Show various types of objects

status Show the working tree status

grow, mark and tweak your common history

branch List, create, or delete branches

commit Record changes to the repository

merge Join two or more development histories together

rebase Reapply commits on top of another base tip

reset Reset current HEAD to the specified state

switch Switch branches

tag Create, list, delete or verify a tag object signed with GPG

collaborate (see also: git help workflows)

fetch Download objects and refs from another repository

pull Fetch from and integrate with another repository or a local branch

push Update remote refs along with associated objects

Graphical user interface, application

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