

Sure! I can help you make your notes concise and organized into a clean **Git & GitHub Cheat Sheet**. Here's a polished version of your learning notes:

Git & GitHub Cheat Sheet

Date: 16.1.2026

Why Git?

- Enables collaboration from anywhere.
- Tracks full history of code.
- Easy to fix mistakes or revert changes.

What is Git?

- Distributed Version Control System (DVCS).
- Open-source tool for tracking code and changes in projects.

What is GitHub?

- Git is the tool; GitHub is a cloud-based hosting service for Git repositories.
-

SSH Key Concept

- Provides secure, password-less authentication.
 - After generating SSH key, add it to GitHub to clone private repos locally.
-

Basic Git Commands

Command	Purpose
<code>git --version</code>	Check installed Git version

Command	Purpose
<code>git config --global user.name "name" git config --global user.email "email"</code>	Set author info for commits
<code>git init</code>	Initialize a Git repository in the current folder
<code>git status</code>	View untracked, modified, and staged files
<code>git add .</code>	Stage all changes for commit
<code>git commit -m "message"</code>	Create a snapshot of the project
<code>git checkout -b branch_name</code>	Create & switch to a new branch
<code>git merge branch_name</code>	Merge another branch into current branch
<code>git push</code>	Send local commits to remote repository
<code>git pull</code>	Update local branch with changes from remote
<code>git restore <file></code>	Undo changes in a file or unstage it

Advanced Git Commands

Command	Purpose
<code>git cherry-pick <commit></code>	Apply a specific commit from one branch to another
<code>git rebase <branch></code>	Move your branch's commits on top of another branch
Merge vs Rebase	Merge: Creates a merge commit, branched history Rebase: No merge commit, linear history

Handling Merge Conflicts

- Create two branches (e.g., `dev` & `dev2`).
- Edit same file in both branches.

- When merging, Git will show conflicts to resolve manually.

GIT CLONE ...