

# ■ Git Mastery Bootcamp – CLOUD Team

**Organization:** Vynedam Sophrion

**Week 1 — Git Mastery & Collaboration Workflow**

## ■ Overview

Welcome to the Git Mastery Bootcamp. This document is specifically designed for the **CLOUD** team. Even if you're new to computers, follow these steps exactly as written and you'll be able to work in a professional Git environment.

## ■ Day 1 — Git Setup & Core Commands (Common)

- 1 Step 1: Install Git — Go to <https://git-scm.com> and download Git. During installation, just press 'Next' on all steps.
- 2 Step 2: Open Terminal (Mac/Linux) or Git Bash (Windows).
- 3 Step 3: Run these commands one by one (replace placeholders):
- 4 • `git config --global user.name "Your Full Name"` • `git config --global user.email "your@email.com"`
- 5 Step 4: Generate SSH Key — Run ``ssh-keygen`` and keep pressing Enter. Then copy the key from ``~/.ssh/id_rsa.pub``.
- 6 Step 5: Add your SSH key to your GitHub account (Settings → SSH and GPG keys → New SSH Key).
- 7 Step 6: Clone your team repo (link will be shared). Example:
- 8 • `git clone git@github.com:vynedamsophrion/team-repo.git`
- 9 Step 7: Create your personal branch:
- 10 • `git checkout -b interns/`
- 11 Step 8: Create a folder with your name inside ``interns/`` and add a simple text file.
- 12 Step 9: Add and commit your file:
- 13 • `git add .` • `git commit -m "Added my folder"`
- 14 Step 10: Push your branch:
- 15 • `git push origin interns/`
- 16 Step 11: Open GitHub → Click 'Compare & pull request' → Create your PR.
- 17 Step 12: Pull latest main, rebase and resolve conflicts if needed.

## ■ Day 2 — Branch Strategy & Feature Development

■ **Team Task:** Create a Dockerfile or infrastructure script with step-by-step commits.

■ **Tip:** Make multiple small commits instead of one big commit. Push each branch separately and open a clean PR.

## ■ Day 3 — Conflict Resolution & Collaboration Simulation

- 1 Step 1: Ask your peer to edit the same file as you.
- 2 Step 2: Pull their branch using ``git fetch`` and ``git checkout branch-name``.
- 3 Step 3: Make small changes and push.
- 4 Step 4: Try to merge your branch — this should cause a merge conflict.
- 5 Step 5: Open the file, look for ``<<<<<<``, ``=====``, and ``>>>>>>`` markers.
- 6 Step 6: Decide which content to keep, edit manually, then run:
- 7 • `git add .` • `git commit`
- 8 Step 7: Push the resolved branch and merge the PR cleanly.
- 9 Step 8: Clean up merged branches with ``git branch -d`` (local) and ``git push origin --delete`` (remote).

## ■ Final Outcome

By the end of Day 3, you will be able to: • Work in a Git team repo confidently • Create and merge branches • Handle merge conflicts like a pro • Maintain repo hygiene • Collaborate with your peers

## ■ Reference Links

- <https://docs.github.com/en/get-started/using-git/about-git> •
- [https://www.youtube.com/watch?v=SWYqp7iY\\_Tc](https://www.youtube.com/watch?v=SWYqp7iY_Tc) •
- <https://www.freecodecamp.org/news/git-cheat-sheet/> • <https://learngitbranching.js.org>

■ Pro Tip: Every command can be Googled. If something doesn't work, don't panic — ask your mentor or teammates. Everyone starts somewhere.