Git Tutorial

Building Modern Web Applications - VSP2025

Git Tutorial

1. Install Git / Create accounts on GitHub
2. Setup SSH Keys for Git
3. Clone repository, Commit changes, Push/Pull from repository
4. Branching

Step 1 - Git Setup

- Download and Install Git

  https://git-scm.com/downloads

- Use “Git bash” command line window to write git commands
- Create accounts on GitHub (if not already done)

Step 2 - How to setup SSH Keys for Git - Part A

https://docs.github.com/en/authentication/connecting-to-github-with-ssh/generating-a-new-ssh-key-and-adding-it-to-the-ssh-agent

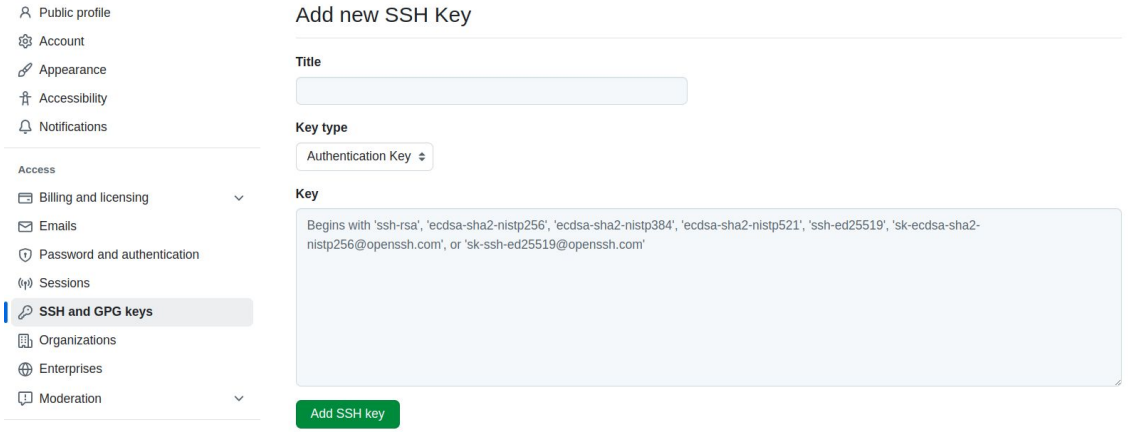
1. Open Terminal
2. ssh-keygen -t ed25519 -C "your_email@example.com"
3. Setup passphrase
4. eval "$(ssh-agent -s)"
5. ssh-add ~/.ssh/id_ed25519

Disclaimer: Instructions may differ slightly depending on your OS!!!

Step 2 - How to setup SSH Keys for Git - Part B

https://docs.github.com/en/authentication/connecting-to-github-with-ssh/adding-a-new-ssh-key-to-your-github-account

1. Type on your terminal: cat ~/.ssh/id_ed25519.pub
2. Copy the output to your clipboard. Then, go to GitHub Profile / Settings / SSH and GPG Keys. Enter the SSH Key that was just generated locally.



Step 3 - Git Commands: Clone, Commit, Pull, Push

git clone

git pull origin main

git status

git diff

git add .

git commit -m “Some Commit message”

git push origin main

Step 4 - Creating Branches

git branch assignment-X

git checkout assignment-X

git push -u origin assignment-X

git checkout main

git branch

git branch -r