

# Starting with Git

## 1) Sign up to GitHub

<https://github.com/join>

The screenshot shows the GitHub 'Join GitHub' page. At the top, there's a navigation bar with 'GitHub', 'Explore', 'Features', 'Enterprise', and 'Pricing'. Below this, the main heading is 'Join GitHub' with the tagline 'The best way to design, build, and ship software.' The page is divided into three steps: 'Step 1: Set up a personal account', 'Step 2: Choose your plan', and 'Step 3: Go to your dashboard'. Under 'Step 1', there's a form to 'Create your personal account' with fields for 'Username', 'Email Address', and 'Password'. To the right, there's a section 'You'll love GitHub' listing benefits like 'Unlimited collaborators', 'Unlimited public repositories', 'Great communication', 'Friction-less development', and 'Open source community'. At the bottom, there's a 'Create an account' button.

## 2) LAM git repository

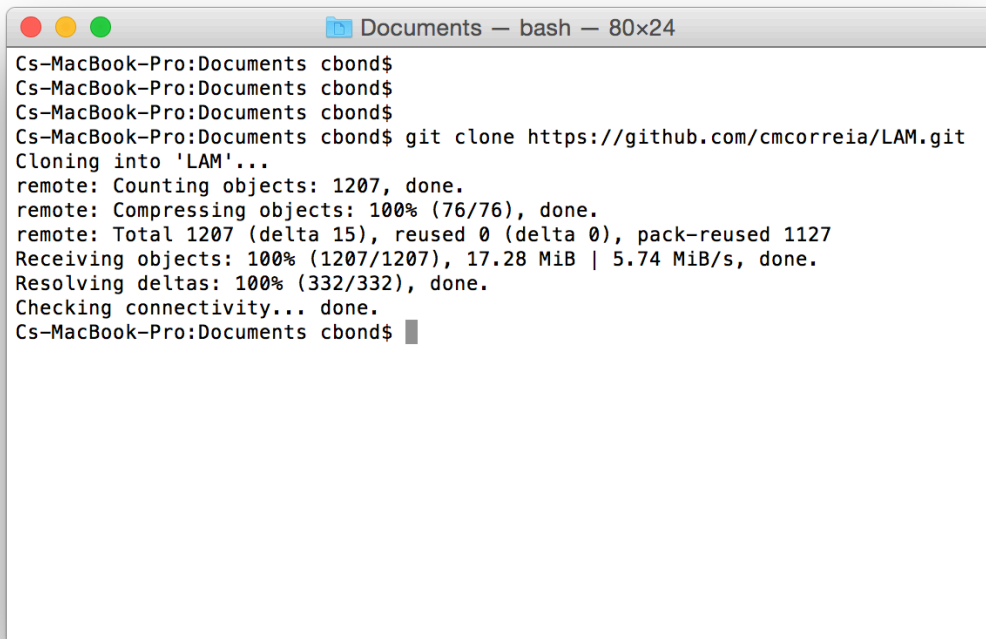
- Overview of repository structure, no. of branches, history etc.
- Watch repository (emails about any updates).

<https://github.com/cmcorreia/LAM>

The screenshot shows the GitHub repository page for 'cmcorreia / LAM'. The repository has 56 commits, 1 branch, 0 releases, and 1 contributor. The 'Code' tab is selected, showing a list of files and folders. The files include: 'cmcorreia template SCAO SH and PYR', '.HARMONI', '.RAVEN', '.Sept15', '\_libOomao', 'cbond', 'ccorreia', 'docs', 'mikonnik', 'scripts', 'DS\_Store', 'Doxfile', and 'README.md'. Each file entry shows the commit message and the time since the last commit. For example, 'cmcorreia template SCAO SH and PYR' was committed 2 days ago, and 'README.md' was committed 2 months ago.

### 3) Clone `git clone https://github.com/cmcorreia/LAM.git`

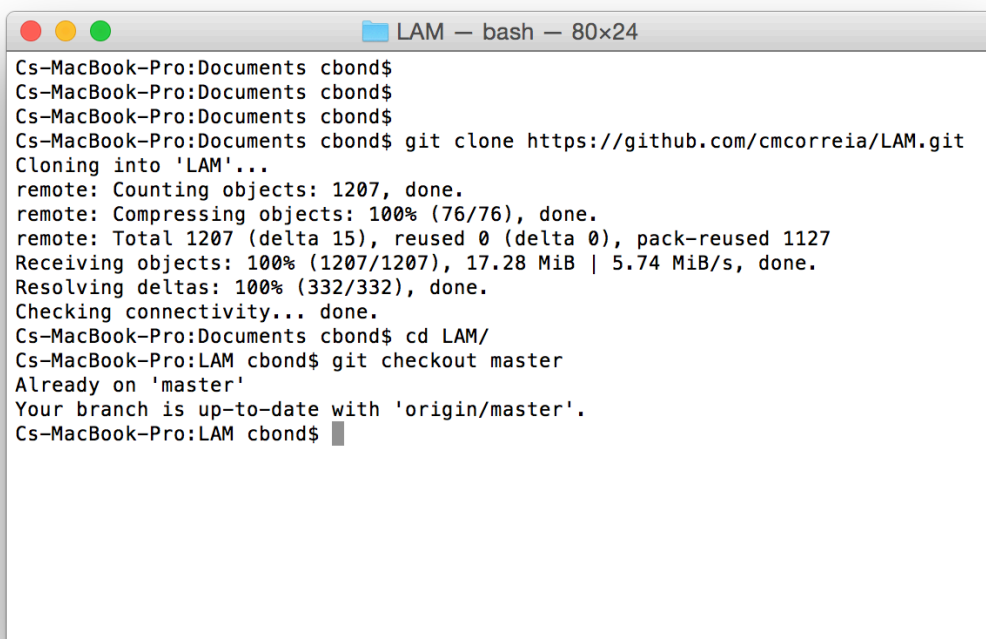
- Clone the repository onto your computer.



```
Documents — bash — 80x24
Cs-MacBook-Pro:Documents cbond$
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Cs-MacBook-Pro:Documents cbond$
Cs-MacBook-Pro:Documents cbond$ git clone https://github.com/cmcorreia/LAM.git
Cloning into 'LAM'...
remote: Counting objects: 1207, done.
remote: Compressing objects: 100% (76/76), done.
remote: Total 1207 (delta 15), reused 0 (delta 0), pack-reused 1127
Receiving objects: 100% (1207/1207), 17.28 MiB | 5.74 MiB/s, done.
Resolving deltas: 100% (332/332), done.
Checking connectivity... done.
Cs-MacBook-Pro:Documents cbond$
```

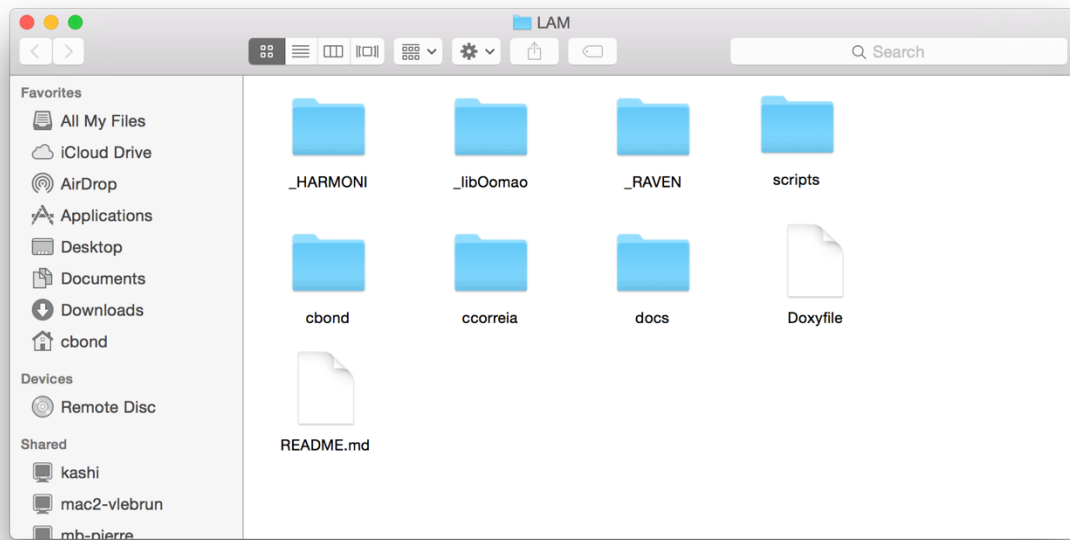
### Checkout `git checkout master`

- One repository, potentially many possible branches.
- Checkout your chosen branch.



```
LAM — bash — 80x24
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Cs-MacBook-Pro:Documents cbond$ git clone https://github.com/cmcorreia/LAM.git
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Receiving objects: 100% (1207/1207), 17.28 MiB | 5.74 MiB/s, done.
Resolving deltas: 100% (332/332), done.
Checking connectivity... done.
Cs-MacBook-Pro:Documents cbond$ cd LAM/
Cs-MacBook-Pro:LAM cbond$ git checkout master
Already on 'master'
Your branch is up-to-date with 'origin/master'.
Cs-MacBook-Pro:LAM cbond$
```

- Now you have a local version of the git repository: LAM



## Git cheat sheet

Command	Description
git clone <a href="https://github.com/cmcorreia/LAM.git">https://github.com/cmcorreia/LAM.git</a>	Clone given repository from git server
git checkout <b>master</b>	Checkout your chosen branch (or change branch), in this case the 'master' branch.
git branch <b>branch_name</b>	Create new branch of the current git repository named 'branch_name'. If the branch already exists this will change your current branch to 'branch_name'.
git pull	Get any changes to your current branch (pull changes from the git server).
git add <b>filename</b>	Add files to the git. The add command is only required when the file is new to the repository, not for changes to the file.
git commit -m " <b>commit message</b> "	Commit any changes to the git repository. Commit must be used for any changes to files and after add to upload new files to the server.
git status	Check the status of your working copy against the current git repository. Will list any changes staged/unstaged for upload to the repository.
git push	Uploads you changes staged by commit to the git repository.
git fetch -all git reset --hard origin/ <b>branch_name</b>	If you want to return your working copy to the current status of the repository. WARNING: this will overwrite all your local changes.
git rm <b>filename</b>	Remove file from repository. Will only be removed from the git repo after commit and push.

# Git help

<https://git-scm.com/docs>

