Some exercises with GitHub (day 1)

- *To start with, GIT's configuration did not work!*
- *Now add my private key:*
  1. First time round (it fails!): mperez2023@DESKTOP-UGTH925:~$ cd ~/.ssh mperez2023@DESKTOP-UGTH925:~/.ssh$ ls id_ed25519_github id_ed25519_github.pub id_rsa id_rsa.pub known_hosts mperez2023@DESKTOP-UGTH925:~/.ssh$ ssh-add id_ed25519_github Could not open a connection to your authentication agent.
  2. Try to add a different private key (AGAIN UNSUCCESSFULLY!): mperez2023@DESKTOP-UGTH925:~$ ssh-add ~/.ssh/mperez2023/id_ed25519_github Could not open a connection to your authentication agent. mperez2023@DESKTOP-UGTH925:~$ ssh-add ~/.ssh/mperez2023/id_rsa Could not open a connection to your authentication agent.
  3. Try once more: mperez2023@DESKTOP-UGTH925:~$ ssh-add .ssh/mperez2023/ id_ed25519_github Could not open a connection to your authentication agent. mperez2023@DESKTOP-UGTH925:~$ ssh-add .ssh/mperez2023/id_rsa Could not open a connection to your authentication agent.
- *After creating on the GitHub website a repository named "hello-world", I proceed to cloning it to my local machine.*

  1. In ubuntu, type: cd tmp git clone https://github.com/mperezjigato/hello-world with the following outcome: Cloning into 'hello-world'... remote: Enumerating objects: 43, done. remote: Counting objects: 100% (43/43), done. remote: Compressing objects: 100% (38/38), done. remote: Total 43 (delta 2), reused 0 (delta 0), pack-reused 0 Receiving objects: 100% (43/43), 8.66 MiB | 2.02 MiB/s, done. Resolving deltas: 100% (2/2), done.
  2. Check for the newly created local directory mperez2023@DESKTOP-UGTH925:~/GitHub/ tmp$ ls hello-world
  3. I enter the new local directory: $cd hello-world
  4. And now print out the full history of my repository: ``` mperez2023@DESKTOP-UGTH925:~/GitHub/tmp/hello-world$ git log commit fbf794f767835c8d1b167d33e794424d3b72887e (HEAD -> main, origin/main, origin/ HEAD) Author: mperezjigato 137489281+mperezjigato@users.noreply.github.com Date: Mon Jun 26 12:28:01 2023 +0200

     computer screenshots of the HPC application at VSC

     a collection of screenshots and a file containing a website address

     commit b96ac08db223d870426519049fb10d39b97dca5c
     Merge: 0354a51 52e7c0b
     Author: mperezjigato <137489281+mperezjigato@users.noreply.github.com>
     Date: Mon Jun 26 12:03:39 2023 +0200

     Merge pull request #1 from mperezjigato/readme-edits

     Readme edits

     commit 52e7c0bae3593ca2c4e259aa2bb3c28f52b51971 (origin/readme-edits)
     Author: mperezjigato <137489281+mperezjigato@users.noreply.github.com>
     Date: Mon Jun 26 11:08:32 2023 +0200

     Update README.md

     I need to introduce myself

     commit 7f215705beb1c55fd19ecc08e327edc7bfc7b0be
     Author: mperezjigato <137489281+mperezjigato@users.noreply.github.com>
     Date: Mon Jun 26 11:04:34 2023 +0200

     Update README.md

     commit 0354a51ed96019ea5272aff30846adf8112978d3
     Author: mperezjigato <137489281+mperezjigato@users.noreply.github.com>
     Date: Mon Jun 26 10:11:18 2023 +0200

```
        Update README.md

        commit e384b48b51f463d262740a2e3901f8779e2f008d
        Author: mperezjigato <137489281+mperezjigato@users.noreply.github.com>
        Date:   Mon Jun 26 10:08:14 2023 +0200

        Initial commit
           ```
        1. Look at the repository configuration in .git/config
```

mperez2023@DESKTOP-UGTH925:~/GitHub/tmp/hello-world$ more .git/config [core]
repositoryformatversion = 0 filemode = true bare = false logallrefupdates = true [remote "origin"]
url = https://github.com/mperezjigato/hello-world fetch = +refs/heads/*:refs/remotes/origin/* [branch
"main"] remote = origin merge = refs/heads/main

# Let us clone another repository, one that had been previously forked from GJB: to_remove

1. Type in ubuntu:

mperez2023@DESKTOP-UGTH925:~$ cd GitHub/ mperez2023@DESKTOP-UGTH925:~/GitHub$ cd
tmp2/ mperez2023@DESKTOP-UGTH925:~/GitHub/tmp2$ ls mperez2023@DESKTOP-UGTH925:~/
GitHub/tmp2$ git clone https://github.com/mperezjigato/to_remove Cloning into 'to_remove'...
remote: Enumerating objects: 57, done. remote: Counting objects: 100% (57/57), done. remote:
Compressing objects: 100% (32/32), done. remote: Total 57 (delta 25), reused 44 (delta 19), pack-
reused 0 Receiving objects: 100% (57/57), 6.15 KiB | 6.15 MiB/s, done. Resolving deltas: 100%
(25/25), done.

1. Let us look at the newly cloned repository: to_remove

mperez2023@DESKTOP-UGTH925:~/GitHub/tmp2$ ls -alt total 12 drwxr-xr-x 3 mperez2023
mperez2023 4096 Jun 26 13:36 to_remove drwxr-xr-x 3 mperez2023 mperez2023 4096 Jun 26 13:36
. drwxr-xr-x 6 mperez2023 mperez2023 4096 Jun 26 13:33 .. mperez2023@DESKTOP-UGTH925:~/
GitHub/tmp2$ cd to_remove/ mperez2023@DESKTOP-UGTH925:~/GitHub/tmp2/to_remove$ ls -alt
total 40 drwxr-xr-x 3 mperez2023 mperez2023 4096 Jun 26 13:36 . drwxr-xr-x 8 mperez2023
mperez2023 4096 Jun 26 13:36 .git -rw-r--r-- 1 mperez2023 mperez2023 64 Jun 26 13:36 .gitignore -
rw-r--r-- 1 mperez2023 mperez2023 127 Jun 26 13:36 Makefile -rw-r--r-- 1 mperez2023 mperez2023
23 Jun 26 13:36 README.md -rw-r--r-- 1 mperez2023 mperez2023 85 Jun 26 13:36 main.c -rw-r--r-- 1
mperez2023 mperez2023 86 Jun 26 13:36 to_do.md -rw-r--r-- 1 mperez2023 mperez2023 144 Jun 26
13:36 util.c -rw-r--r-- 1 mperez2023 mperez2023 77 Jun 26 13:36 util.h drwxr-xr-x 3 mperez2023
mperez2023 4096 Jun 26 13:36 ..

1. And look at its history: git log (in this case, since it had been forked from gjbex, we have:
   UPSTREAM ---> ORIGIN

mperez2023@DESKTOP-UGTH925:~/GitHub/tmp2/to_remove$ git log commit
9265f4a57224bb164435a8d310686543cbb20eea (HEAD -> main, origin/main, orig in/HEAD) Merge:
f2741dd 2de41cb Author: Geert Jan Bex geertjan.bex@uhasselt.be Date: Thu Jun 22 15:34:22 2023
+0200

Merge branch 'main' of github.com:gjbex/to_remove


commit 2de41cbca6d5179d237ef1fb17f978f0ad3a6e5a Author: Geert Jan Bex
geertjan.bex@uhasselt.be Date: Thu Jun 22 15:30:36 2023 +0200

Emphasize message


commit f2741dd8d7157aa4456a63a372ea7bc4d1b6f964 Author: Geert Jan Bex
geertjan.bex@uhasselt.be Date: Thu Jun 22 15:29:43 2023 +0200

Change message format


commit aafb1450f6b505bcf50dba3d8c37c4b619afbad4 Merge: 7138a97 0849f28 Author: Geert Jan

Bex [geertjan.bex@uhasselt.be](mailto:geertjan.bex@uhasselt.be) Date: Thu Jun 22 15:25:13 2023 +0200

Merge branch 'main' of github.com:gjbex/to_remove

commit 0849f28873d9f16d5d24271b93dceff95cb9b18a Author: Geert Jan Bex [geertjan.bex@uhasselt.be](mailto:geertjan.bex@uhasselt.be) Date: Thu Jun 22 15:23:07 2023 +0200

Mark item as done

commit 7138a97e10d92dd059729d03b858c2e2355fe387 Author: Geert Jan Bex [geertjan.bex@uhasselt.be](mailto:geertjan.bex@uhasselt.be) Date: Thu Jun 22 15:22:41 2023 +0200

Add important to-do item

commit f0203557a0a270b6411ef159b3af74234fea76b5 Merge: a290ba0 195acfa Author: Geert Jan Bex [gjbex@users.noreply.github.com](mailto:gjbex@users.noreply.github.com) Date: Thu Jun 22 15:09:25 2023 +0200

Merge pull request #1 from gjbex/feature/add_todo

Feature/add todo

commit 195acfac5f70775a8f4a6b5769e17614d16ee9d4 Merge: 6ba8ce7 4eab7bb Author: Geert Jan Bex [geertjan.bex@uhasselt.be](mailto:geertjan.bex@uhasselt.be) Date: Thu Jun 22 14:58:45 2023 +0200

Merge branch 'main' into feature/add_todo

commit 6ba8ce79a73b916fba94d6488968cfe40c3a8f1d Author: Geert Jan Bex [geertjan.bex@uhasselt.be](mailto:geertjan.bex@uhasselt.be) :...skipping... commit 9265f4a57224bb164435a8d310686543cbb20eea (HEAD -> main, origin/main, origin/HEAD) Merge: f2741dd 2de41cb Author: Geert Jan Bex [geertjan.bex@uhasselt.be](mailto:geertjan.bex@uhasselt.be) Date: Thu Jun 22 15:34:22 2023 +0200

Merge branch 'main' of github.com:gjbex/to_remove

commit 2de41cbca6d5179d237ef1fb17f978f0ad3a6e5a Author: Geert Jan Bex [geertjan.bex@uhasselt.be](mailto:geertjan.bex@uhasselt.be) Date: Thu Jun 22 15:30:36 2023 +0200

Emphasize message

commit f2741dd8d7157aa4456a63a372ea7bc4d1b6f964 Author: Geert Jan Bex [geertjan.bex@uhasselt.be](mailto:geertjan.bex@uhasselt.be) Date: Thu Jun 22 15:29:43 2023 +0200

Change message format

commit aafb1450f6b505bcf50dba3d8c37c4b619afbad4 Merge: 7138a97 0849f28 Author: Geert Jan Bex [geertjan.bex@uhasselt.be](mailto:geertjan.bex@uhasselt.be) Date: Thu Jun 22 15:25:13 2023 +0200

Merge branch 'main' of github.com:gjbex/to_remove

commit 0849f28873d9f16d5d24271b93dceff95cb9b18a Author: Geert Jan Bex [geertjan.bex@uhasselt.be](mailto:geertjan.bex@uhasselt.be) Date: Thu Jun 22 15:23:07 2023 +0200

Mark item as done

commit 7138a97e10d92dd059729d03b858c2e2355fe387 Author: Geert Jan Bex [geertjan.bex@uhasselt.be](mailto:geertjan.bex@uhasselt.be) Date: Thu Jun 22 15:22:41 2023 +0200

Add important to-do item

commit f0203557a0a270b6411ef159b3af74234fea76b5 Merge: a290ba0 195acfa Author: Geert Jan

Bex [gjbex@users.noreply.github.com](mailto:gjbex@users.noreply.github.com) Date: Thu Jun 22 15:09:25 2023 +0200

```
Merge pull request #1 from gjbex/feature/add_todo
```

```
Feature/add todo
```

commit 195acfac5f70775a8f4a6b5769e17614d16ee9d4 Merge: 6ba8ce7 4eab7bb Author: Geert Jan Bex geertjan.bex@uhasselt.be Date: Thu Jun 22 14:58:45 2023 +0200

```
Merge branch 'main' into feature/add_todo
```

commit 6ba8ce79a73b916fba94d6488968cfe40c3a8f1d Author: Geert Jan Bex geertjan.bex@uhasselt.be Date: Thu Jun 22 14:54:59 2023 +0200

    1. It is key to look at its .git/config file:

mperez2023@DESKTOP-UGTH925:~/GitHub/tmp2/to_remove$ more .git/config [core] repositoryformatversion = 0 filemode = true bare = false logallrefupdates = true [remote "origin"] url = https://github.com/mperezjigato/to_remove fetch = +refs/heads/*:refs/remotes/origin/* [branch "main"] remote = origin merge = refs/heads/main

    1. Use git status, to check on commits: It is clean!

mperez2023@DESKTOP-UGTH925:~/GitHub/tmp2/to_remove$ git status On branch main Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

    1. There is a .gitignore file with the content below:

mperez2023@DESKTOP-UGTH925:~/GitHub/tmp2/to_remove$ ls -alt total 40 drwxr-xr-x 8 mperez2023 mperez2023 4096 Jun 26 13:54 .git drwxr-xr-x 3 mperez2023 mperez2023 4096 Jun 26 13:36 . -rw-r--r-- 1 mperez2023 mperez2023 64 Jun 26 13:36 .gitignore -rw-r--r-- 1 mperez2023 mperez2023 127 Jun 26 13:36 Makefile -rw-r--r-- 1 mperez2023 mperez2023 23 Jun 26 13:36 README.md -rw-r--r-- 1 mperez2023 mperez2023 85 Jun 26 13:36 main.c -rw-r--r-- 1 mperez2023 mperez2023 86 Jun 26 13:36 to_do.md -rw-r--r-- 1 mperez2023 mperez2023 144 Jun 26 13:36 util.c -rw-r--r-- 1 mperez2023 mperez2023 77 Jun 26 13:36 util.h drwxr-xr-x 3 mperez2023 mperez2023 4096 Jun 26 13:36 .. mperez2023@DESKTOP-UGTH925:~/GitHub/tmp2/to_remove$ more .gitignore

editor backup files

~ .swp *.bak

executables

a.out *.exe

We need another .gitignore at the first repository we cloned: We simply copy this .gitignore to the other directory

    1. Check with git status:

mperez2023@DESKTOP-UGTH925:~/GitHub/tmp/hello-world$ git status On branch main Your branch is up to date with 'origin/main'.

Untracked files: (use "git add ..." to include in what will be committed) .gitignore

nothing added to commit but untracked files present (use "git add" to track)

    1. Stage and Commit (the latter fails!):

mperez2023@DESKTOP-UGTH925:~/GitHub/tmp/hello-world$ git add .gitignore
mperez2023@DESKTOP-UGTH925:~/GitHub/tmp/hello-world$ git commit Author identity unknown

*** Please tell me who you are.

Run

git config --global user.email "you@example.com" git config --global user.name "Your Name"

to set your account's default identity. Omit --global to set the identity only in this repository.

fatal: empty ident name (for mperez2023@DESKTOP-UGTH925.) not allowed

1. Check git status:

mperez2023@DESKTOP-UGTH925:~/GitHub/tmp/hello-world$ git status On branch main Your branch is up to date with 'origin/main'.

Changes to be committed: (use "git restore --staged ..." to unstage) new file: .gitignore

Configure your account properly now!

1. Type in ubuntu:

git config --global user.name "Manuel Perez Jigato"

NO PROBLEM! (do not use the equal sign)

git config --global user.email "manuel.perezjigato@uhasselt.be"

NO PROBLEM! (it works both with and without equal sign)

git config --global core.editor vim

NO PROBLEM!

1. Type now:

mperez2023@DESKTOP-UGTH925:~$ git config -l user.name=Manuel Perez Jigato user.email=manuel.perezjigato@uhasselt.be core.editor=vim

1. The configuration is saved in a file named .gitconfig at my $HOME directory Copy that file (.gitconfig) with a different name to /etc, ie

cp ~/.gitconfig /etc/gitconfig

1. Create the directory git inside $HOME/.config : directory $HOME/.config/git Inside the latter copy the .gitconfig as config

cp ~/.gitconfig $HOME/.config/git/config

1. Set up the environment variable XDG_CONFIG_HOME within .bashrc

export XDG_CONFIG_HOME=$HOME/.config

Working on hello-world again

1. Look at the GitHub/tmp/hello-world repository: modiiy the README.md file (add a small table)

2. Stage the modified file:

git add README.md

1. and look at the current commits to be:

mperez2023@DESKTOP-UGTH925:~/GitHub/tmp/hello-world$ git status On branch main Your branch is up to date with 'origin/main'.

Changes to be committed: (use "git restore --staged ..." to unstage) new file: .gitignore modified: README.md

1. Now, go for the commit:

mperez2023@DESKTOP-UGTH925:~/GitHub/tmp/hello-world$ git commit [main 2d345ce] File .gitignore copied ; Table added 2 files changed, 13 insertions(+) create mode 100644 .gitignore

1. Look at git status (CLEAN!):

mperez2023@DESKTOP-UGTH925:~/GitHub/tmp/hello-world$ git status On branch main Your branch is ahead of 'origin/main' by 1 commit. (use "git push" to publish your local commits)

nothing to commit, working tree clean

1. Look at git log (history):

mperez2023@DESKTOP-UGTH925:~/GitHub/tmp/hello-world$ git log commit 2d345ce7585c998499b6beb4884d8175b2cd5e1d (HEAD -> main) Author: Manuel Perez Jigato manuel.perezjigato@uhasselt.be Date: Mon Jun 26 18:33:20 2023 +0200

```
File .gitignore copied ; Table added
```

commit fbf794f767835c8d1b167d33e794424d3b72887e (origin/main, origin/HEAD) Author: mperezjigato 137489281+mperezjigato@users.noreply.github.com Date: Mon Jun 26 12:28:01 2023 +0200

```
computer screenshots of the HPC application at VSC

a collection of screenshots and a file containing a website address
```

commit b96ac08db223d870426519049fb10d39b97dca5c Merge: 0354a51 52e7c0b Author: mperezjigato 137489281+mperezjigato@users.noreply.github.com Date: Mon Jun 26 12:03:39 2023 +0200

```
Merge pull request #1 from mperezjigato/readme-edits

Readme edits
```

commit 52e7c0bae3593ca2c4e259aa2bb3c28f52b51971 (origin/readme-edits) Author: mperezjigato 137489281+mperezjigato@users.noreply.github.com Date: Mon Jun 26 11:08:32 2023 +0200

```
Update README.md

I need to introduce myself
```

commit 7f215705beb1c55fd19ecc08e327edc7bfc7b0be Author: mperezjigato 137489281+mperezjigato@users.noreply.github.com Date: Mon Jun 26 11:04:34 2023 +0200

```
Update README.md
```

commit 0354a51ed96019ea5272aff30846adf8112978d3 Author: mperezjigato 137489281+mperezjigato@users.noreply.github.com Date: Mon Jun 26 10:11:18 2023 +0200

```
Update README.md
```

commit e384b48b51f463d262740a2e3901f8779e2f008d Author: mperezjigato 137489281+mperezjigato@users.noreply.github.com Date: Mon Jun 26 10:08:14 2023 +0200

```
Initial commit
```

1. Go for the git push (FAILED authentication!):

mperez2023@DESKTOP-UGTH925:~/GitHub/tmp/hello-world$ git push Username for 'https://github.com': mperezjigato Password for 'https://mperezjigato@github.com': remote: Support for password authentication was removed on August 13, 2021. remote: Please see https://

docs.github.com/en/get-started/getting-started-with-git/about-remote-repositories#cloning-with-https-urls for information on currently recommended modes of authentication. fatal: Authentication failed for 'https://github.com/mperezjigato/hello-world/'

1. After push having failed, let us see the last commit: git show HEAD

mperez2023@DESKTOP-UGTH925:~/GitHub/tmp/hello-world$ git show HEAD commit 2d345ce7585c998499b6beb4884d8175b2cd5e1d (HEAD -> main) Author: Manuel Perez Jigato manuel.perezjigato@uhasselt.be Date: Mon Jun 26 18:33:20 2023 +0200

```
File .gitignore copied ; Table added
```

diff --git a/.gitignore b/.gitignore new file mode 100644 index 0000000..a18d948 --- /dev/null +++ b/.gitignore @@ -0,0 +1,8 @@ +# editor backup files +~ +.swp +*.bak + +# executables +a.out +*.exe diff --git a/README.md b/README.md index a15c1e2..e86e6a5 100644 --- a/README.md +++ b/README.md @@ -14,3 +14,8 @@ I am an intern at the University of Hasselt - born in Spain - worked as a reserch scientist - two children + +## software interests +| vasp | gpaw | abinit | quantum espresso | +| ---- | ---- | ------ | --------------- | +| phonons | general | GW | general |