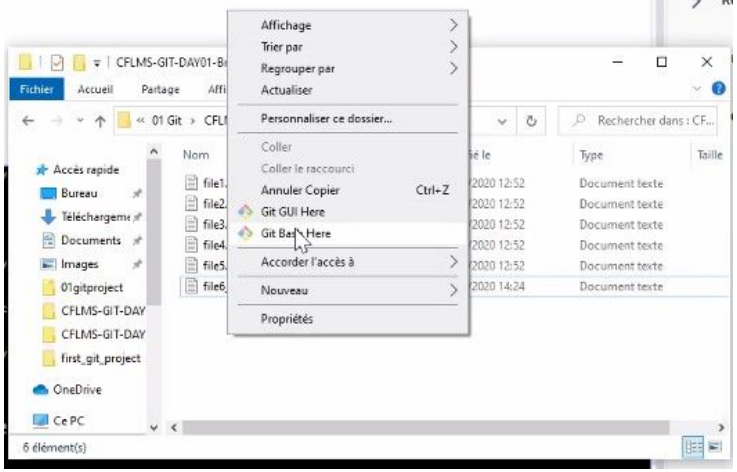
How to go through the git learning experience

- ➔ Basic Command
- ➔ Collaborate with your peer
- ➔ Manage conflict

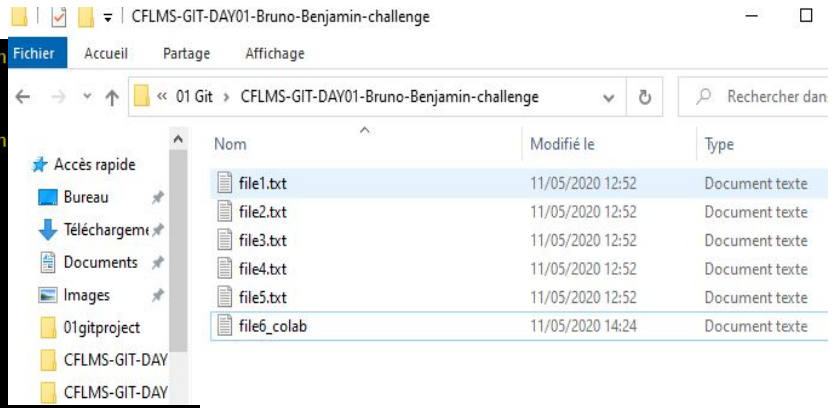
To start with git




```
bruno@LAPTOP-OIU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Brun
o-Benjamin-challenge
$ git config --global user.name "brunomairey"

bruno@LAPTOP-OIU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Bruno-
Benjamin-challenge
$ git config --global user.email bruno.mairey@yahoo.fr

bruno@LAPTOP-OIU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Bruno-
Benjamin-challenge
$ git init
Initialized empty Git repository in C:/Users/bruno/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Bruno-Benj
amin-challenge/.git/
```

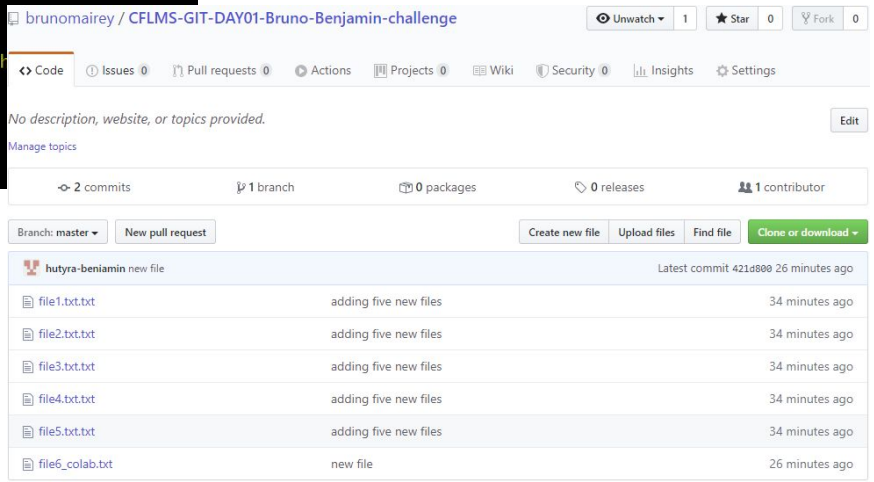
Add new files on git

```
bruno@LAPTOP-OIU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Bruno-Benjamin-ch
ter)
$ git add .

bruno@LAPTOP-OIU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Bruno-Benjamin-ch
ter)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   file1.txt.txt
        new file:   file2.txt.txt
        new file:   file3.txt.txt
        new file:   file4.txt.txt
        new file:   file5.txt.txt


bruno@LAPTOP-OIU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Bruno-Benjamin-challenge (mas
ter)
$ git commit -m "adding five new files"
[master (root-commit) ca0a628] adding five new files
 5 files changed, 5 insertions(+)
 create mode 100644 file1.txt.txt
 create mode 100644 file2.txt.txt
 create mode 100644 file3.txt.txt
 create mode 100644 file4.txt.txt
 create mode 100644 file5.txt.txt

bruno@LAPTOP-OIU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Bruno-Benjamin-challenge (master)
$ git status
On branch master
nothing to commit, working tree clean
```

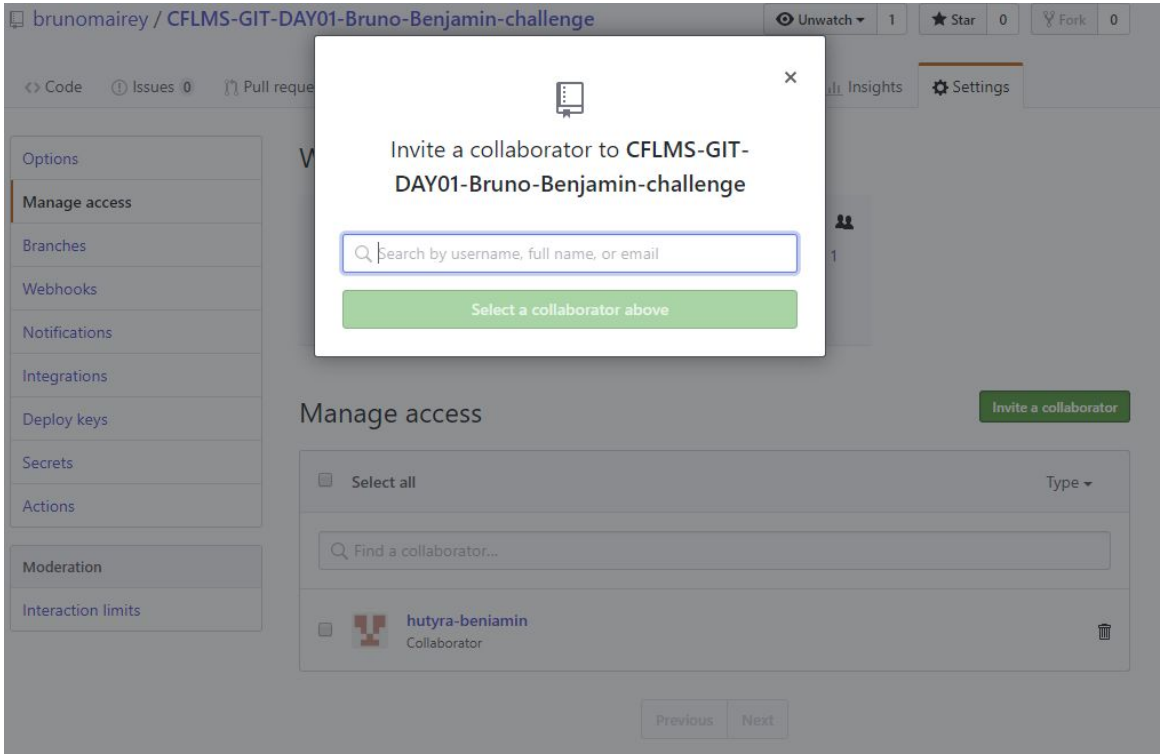


Create a repository on github

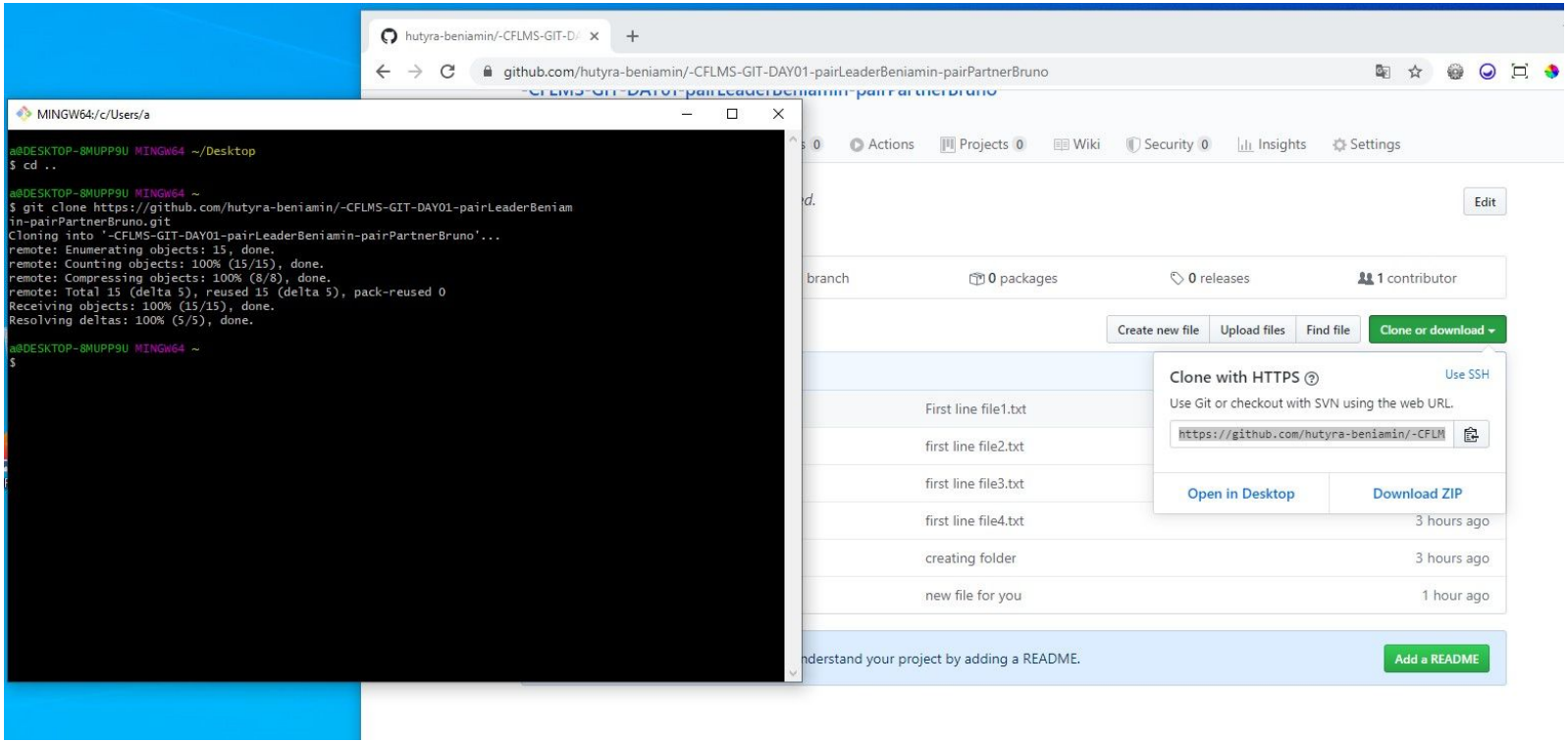
```
bruno@LAPTOP-OIU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Bruno-Benjamin-challenge (master)
$ git remote add origin https://github.com/brunomairey/CFLMS-GIT-DAY01-Bruno-Benjamin-challenge.git

bruno@LAPTOP-OIU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Bruno-Benjamin-challenge (master)
$ git push -u origin master
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (7/7), 437 bytes | 218.00 KiB/s, done.
Total 7 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/brunomairey/CFLMS-GIT-DAY01-Bruno-Benjamin-challenge.git
 * [new branch]      master -> master
Branch 'master' set up to track remote branch 'master' from 'origin'.

bruno@LAPTOP-OIU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Bruno-Benjamin-ch
$ git status
On branch master
Your branch is up to date with 'origin/master'.

nothing to commit, working tree clean
```



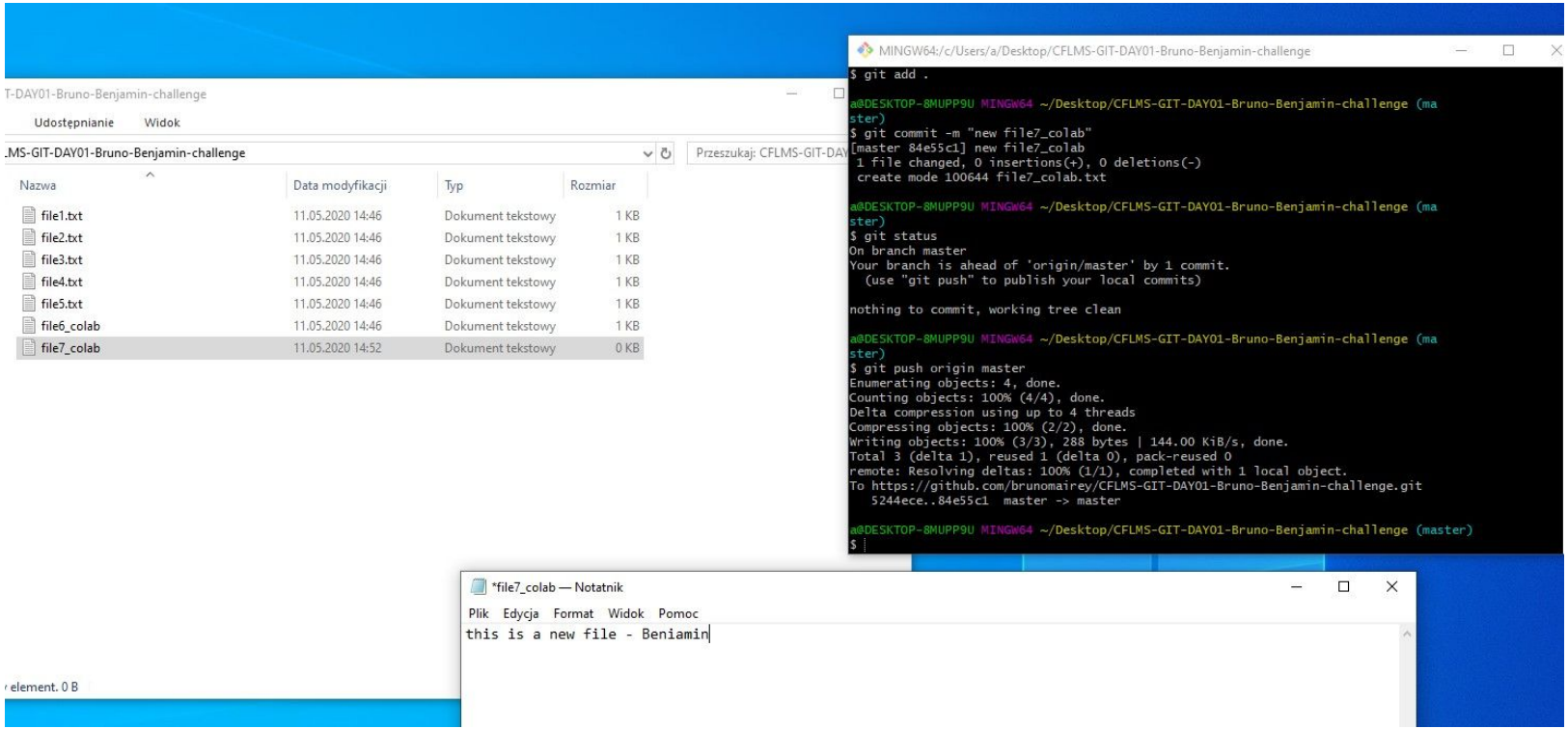
Send the repository on github to the partner



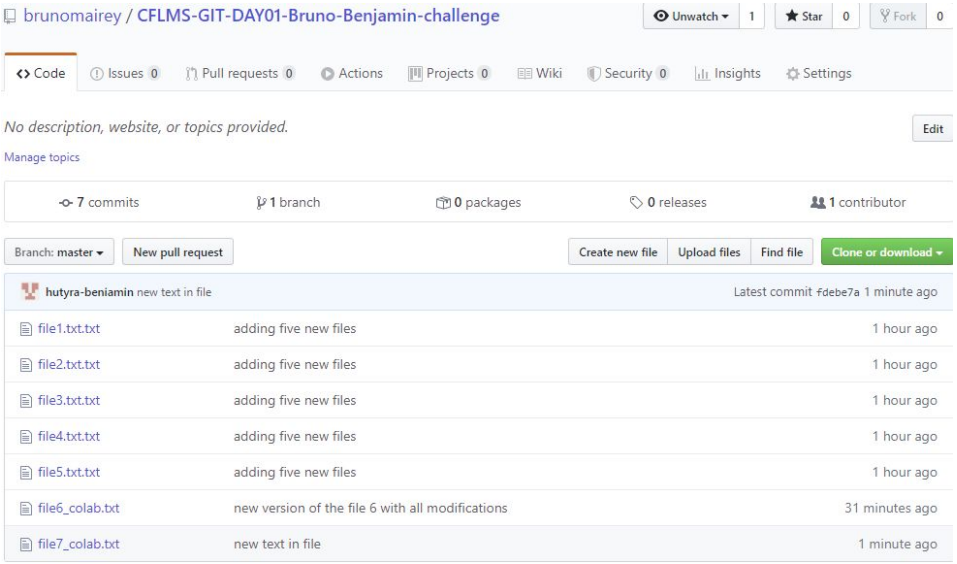
Download the repository on github by the partner



Create a new file by the partner



The leader checks the Github repository

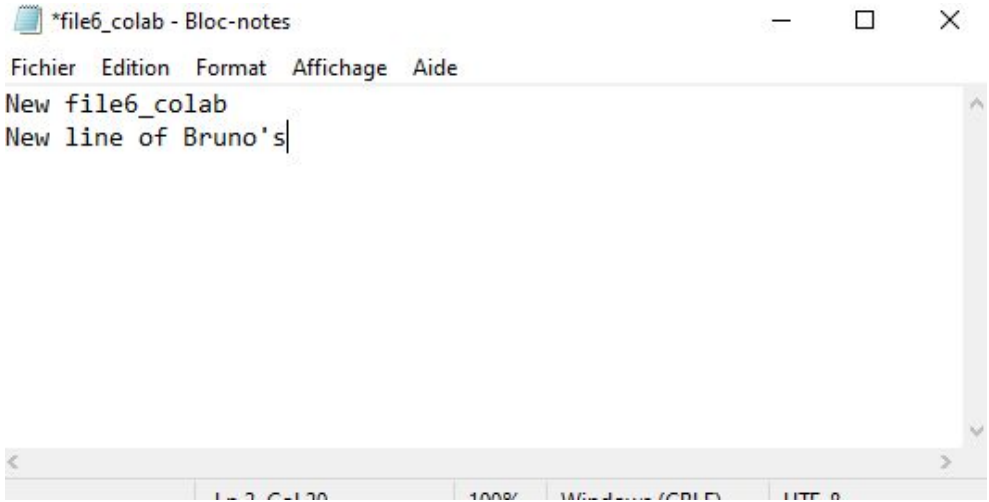


The leader is downloading the file to his local repository

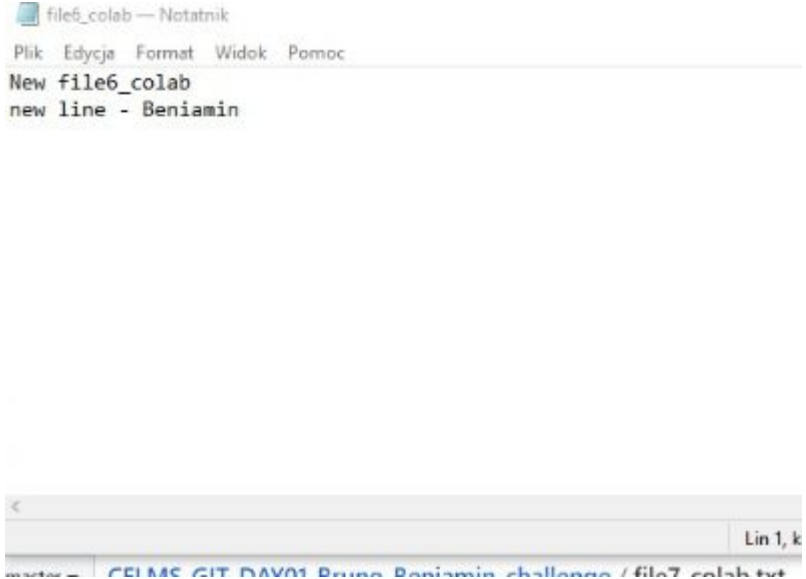
```
bruno@LAPTOP-OIU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Bruno-Benjamin-challenge (master)
$ git pull origin master
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (1/1), done.
remote: Total 3 (delta 1), reused 3 (delta 1), pack-reused 0
Unpacking objects: 100% (3/3), 263 bytes | 11.00 KiB/s, done.
From https://github.com/brunomairey/CFLMS-GIT-DAY01-Bruno-Benjamin-challenge
 * branch            master     -> FETCH_HEAD
   ca0a628..421d800  master     -> origin/master
Updating ca0a628..421d800
Fast-forward
 file6_colab.txt | 0
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 file6_colab.txt
```

Create a conflict in the same file

Bruno's Version

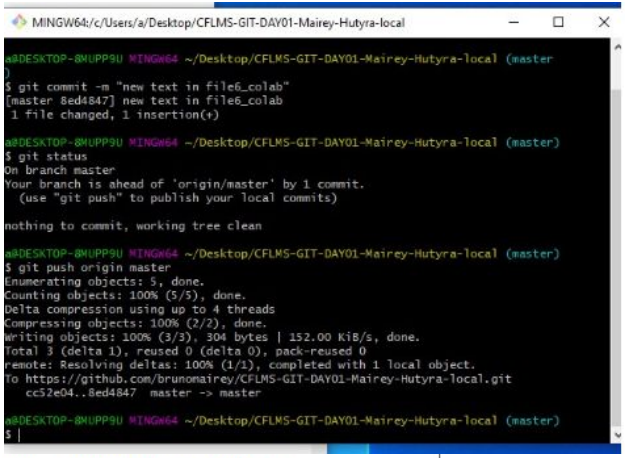


Beniamin's Version

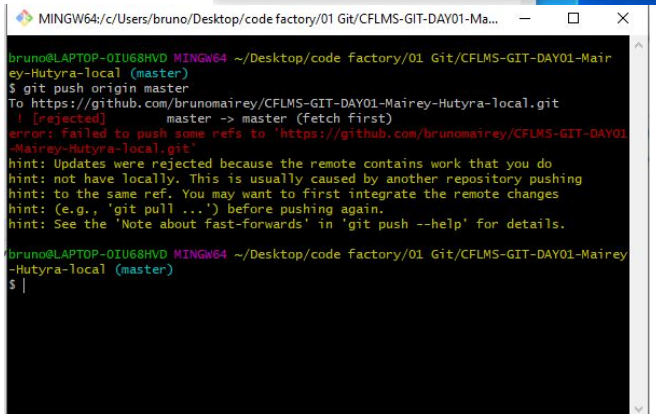


Pushing the same file at different time without checking

Beniamin's Version



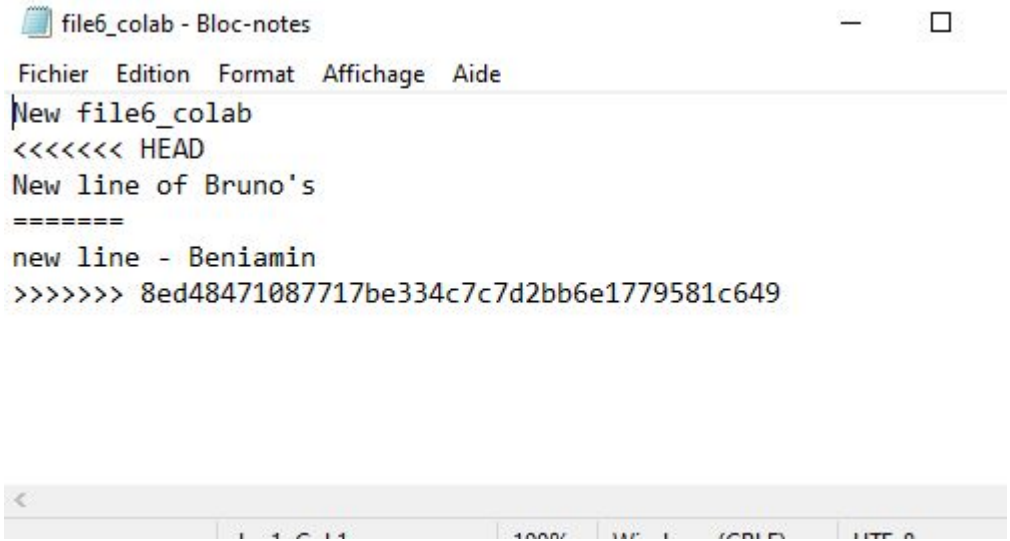
Bruno's Version

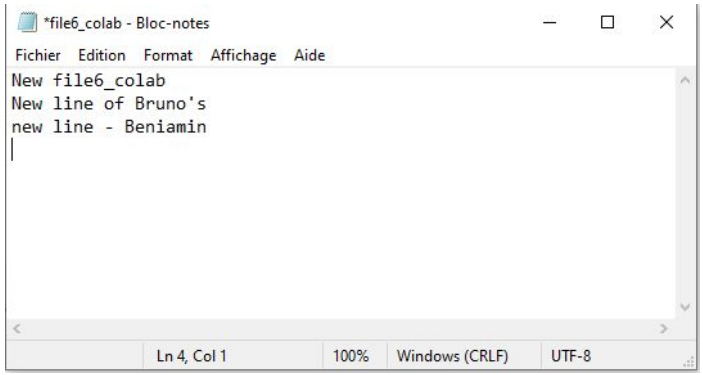


Solving the conflict’s issue : pull the file.

```
bruno@LAPTOP-OIU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Mairey
-Hutyra-local (master)
$ git add .

bruno@LAPTOP-OIU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Mairey
-Hutyra-local (master)
$ git commit -m "New Versions"
[master deec1f9] New Versions
 1 file changed, 1 insertion(+)

bruno@LAPTOP-OIU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Mairey
-Hutyra-local (master)
$ git push
To https://github.com/brunomairey/CFLMS-GIT-DAY01-Mairey-Hutyra-local.git
 ! [rejected]        master -> master (non-fast-forward)
error: failed to push some refs to 'https://github.com/brunomairey/CFLMS-GIT-DAY01
-Mairey-Hutyra-local.git'
hint: Updates were rejected because the tip of your current branch is behind
hint: its remote counterpart. Integrate the remote changes (e.g.
hint: 'git pull ...') before pushing again.
hint: See the 'Note about fast-forwards' in 'git push --help' for details.

bruno@LAPTOP-OIU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Mairey
-Hutyra-local (master)
$ git push origin master
To https://github.com/brunomairey/CFLMS-GIT-DAY01-Mairey-Hutyra-local.git
 ! [rejected]        master -> master (non-fast-forward)
error: failed to push some refs to 'https://github.com/brunomairey/CFLMS-GIT-DAY01
-Mairey-Hutyra-local.git'
hint: Updates were rejected because the tip of your current branch is behind
hint: its remote counterpart. Integrate the remote changes (e.g.
hint: 'git pull ...') before pushing again.
hint: See the 'Note about fast-forwards' in 'git push --help' for details.

bruno@LAPTOP-OIU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Mairey
-Hutyra-local (master)
$ git pull origin master
From https://github.com/brunomairey/CFLMS-GIT-DAY01-Mairey-Hutyra-local
 * branch            master     -> FETCH_HEAD
Auto-merging file6_colab.txt
CONFLICT (content): Merge conflict in file6_colab.txt
Automatic merge failed; fix conflicts and then commit the result.
```

Solving the conflict's issue : modify hte file to contain both version





Solving the conflict's issue : push the new version of the file to the repository

```
bruno@LAPTOP-OIU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Mairey-Hutyra-local (master|MERGING)
$ git add .

bruno@LAPTOP-OIU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Mairey-Hutyra-local (master|MERGING)
$ git status
On branch master
Your branch and 'origin/master' have diverged,
and have 3 and 1 different commits each, respectively.
  (use "git pull" to merge the remote branch into yours)

All conflicts fixed but you are still merging.
  (use "git commit" to conclude merge)

Changes to be committed:
        modified:   file6_colab.txt


bruno@LAPTOP-OIU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Mairey-Hutyra-local (master|MERGING)
$ git commit -m "new version of file 6"
[master 410108b] new version of file 6

bruno@LAPTOP-OIU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Mairey-Hutyra-local (master)
$ git push origin master
Enumerating objects: 19, done.
Counting objects: 100% (17/17), done.
Delta compression using up to 8 threads
Compressing objects: 100% (9/9), done.
Writing objects: 100% (11/11), 1.12 KiB | 382.00 KiB/s, done.
Total 11 (delta 4), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (4/4), completed with 1 local object.
To https://github.com/brunomairey/CFLMS-GIT-DAY01-Mairey-Hutyra-local.git
   8ed4847..410108b  master -> master

bruno@LAPTOP-OIU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Mairey-Hutyra-local (master)
$
```