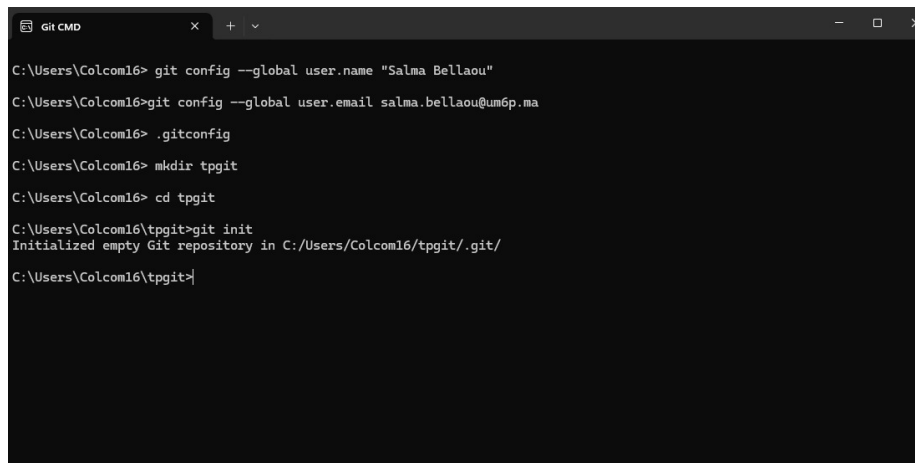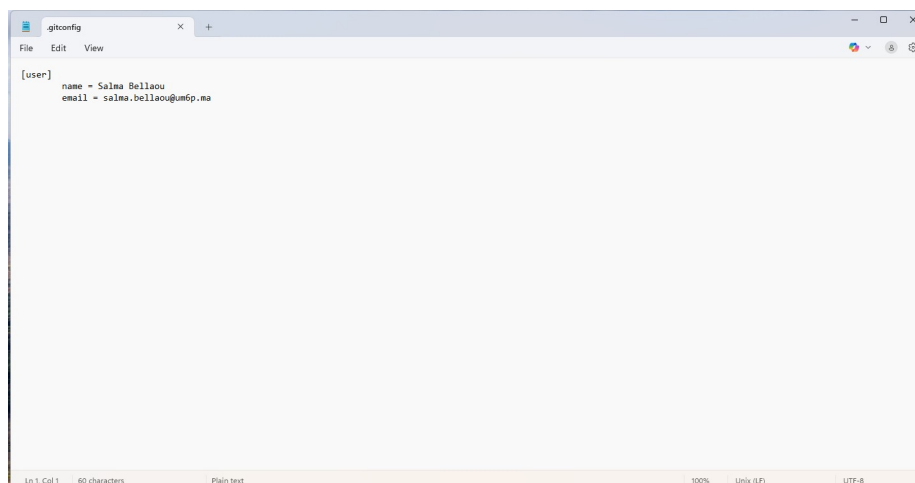# TP 1

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25 September 2025

1 Introduction

In this project, we practiced the basics of Git by creating files, merging branches, and collaborating with classmates. We also learned how to push our work and pull updates, which helped us understand teamwork and problem-solving with Git.

Figure 1: configuration of my git account, I created a folder to work on it

Figure 2: A file was created with the information that I entered

```
C:\Users\Colcom16> .gitconfig

C:\Users\Colcom16> mkdir tpgit

C:\Users\Colcom16> cd tpgit

C:\Users\Colcom16\tpgit>git init
Initialized empty Git repository in C:/Users/Colcom16/tpgit/.git/

C:\Users\Colcom16\tpgit> echo mango
mango

C:\Users\Colcom16\tpgit> echo mango >> fruits.txt

C:\Users\Colcom16\tpgit> git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        fruits.txt

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

C:\Users\Colcom16\tpgit> git add fruits.txt

C:\Users\Colcom16\tpgit> git commit - " Added mango to fruit list"
error: pathspec '-' did not match any file(s) known to git
error: pathspec ' Added mango to fruit list' did not match any file(s) known to git

C:\Users\Colcom16\tpgit> git commit -m " Added mango to fruits list"
[master (root-commit) 80fc065]  Added mango to fruits list
 1 file changed, 1 insertion(+)
 create mode 100644 fruits.txt

C:\Users\Colcom16\tpgit>git status
On branch master
nothing to commit, working tree clean

C:\Users\Colcom16\tpgit>
```

Figure 3: a file named fruits.txt was created and a fruite was added an each time I type git status to know the current status
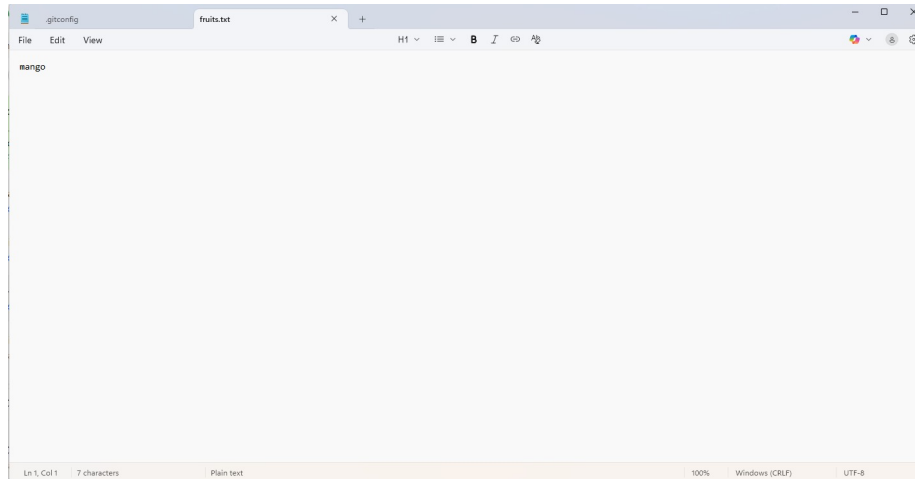
3

Figure 4: the fruit appeared on the notes

Figure 5: Other fruits were added and each time we write a commit saying that it was added so people can understand what was going on.

```
1 file changed, 1 insertion(+)

C:\Users\Colcom16\tpgit>git log --graph --oneline --decorate --all
* 05d0f48 (HEAD -> master)  Added apple to the fruits
* da5e6df  Added pear to the fruits
* c6011c7  Added grape to fruits
* 80fc065  Added mango to fruits list

C:\Users\Colcom16\tpgit>
```

Figure 6: Each time we check the detailed global history we type what appears in this figure

```
C:\Users\Colcom16\tpgit> echo banana >> fruits.txt

C:\Users\Colcom16\tpgit>git add fruits.txt

C:\Users\Colcom16\tpgit> git commit -m " Added banana to fruits"
[master dd60aa5]  Added banana to fruits
 1 file changed, 1 insertion(+)

C:\Users\Colcom16\tpgit> git status
On branch master
nothing to commit, working tree clean

C:\Users\Colcom16\tpgit> git log --graph --oneline --decorate --all
* dd60aa5 (HEAD -> master)  Added banana to fruits
* 05d0f48  Added apple to the fruits
* da5e6df  Added pear to the fruits
* c6011c7  Added grape to fruits
* 80fc065  Added mango to fruits list

C:\Users\Colcom16\tpgit>
```

Figure 7: another fruit was added and the detailed history was checked again

```
C:\Users\Colcom16\tpgit> git branch vegetables

C:\Users\Colcom16\tpgit>git checkout vegetables
Switched to branch 'vegetables'

C:\Users\Colcom16\tpgit>
```

Figure 8: we created a branch named vegetables

Figure 9: we verified the existence of vegetables

Figure 10: I created a file named "vegetables.txt" and i added some vegetables to the file

Figure 11: more vegetables were added and we keep checking the detailed history

Figure 12: Another branch named "sauces" was created

```
C:\Users\Colcom16\tpgit> echo mayo >> sauces.txt

C:\Users\Colcom16\tpgit> git add sauces.txt

C:\Users\Colcom16\tpgit>git status
On branch sauces
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   sauces.txt


C:\Users\Colcom16\tpgit> git commit -m "Added mayo to sauces list"
[sauces d6ac3f5] Added mayo to sauces list
 1 file changed, 2 insertions(+)
 create mode 100644 sauces.txt

C:\Users\Colcom16\tpgit> git log --graph --oneline --decorate --all
* d6ac3f5 (HEAD -> sauces) Added mayo to sauces list
* 296eee7 (vegetables)  added lettuce to vegetables
* 8728f5d Added tomato to vegetable list
* 03a8983  added potato to vegies
* dd60aa5 (master)  Added banana to fruits
* 05d0f48  Added apple to the fruits
* da5e6df  Added pear to the fruits
* c6011c7  Added grape to fruits
* 80fc065  Added mango to fruits list

C:\Users\Colcom16\tpgit> echo biggy >> sauces.txt

C:\Users\Colcom16\tpgit> git add sauces.txt

C:\Users\Colcom16\tpgit> git commit -m "Added biggy to sauces list"
[sauces 152b0f9] Added biggy to sauces list
 1 file changed, 1 insertion(+)

C:\Users\Colcom16\tpgit> git log --graph --oneline --decorate --all
* 152b0f9 (HEAD -> sauces) Added biggy to sauces list
* d6ac3f5 Added mayo to sauces list
* 296eee7 (vegetables)  added lettuce to vegetables
* 8728f5d Added tomato to vegetable list
* 03a8983  added potato to vegies
* dd60aa5 (master)  Added banana to fruits
* 05d0f48  Added apple to the fruits
* da5e6df  Added pear to the fruits
* c6011c7  Added grape to fruits
* 80fc065  Added mango to fruits list

C:\Users\Colcom16\tpgit>
```

Figure 13: Two elements were added to sauce file and no the "head" is now on sauces

```
C:\Users\Colcom16\tpgit> git log
commit dd60aa5c60aa7052ea73a103bca3b953092ce4fa (HEAD -> master)
Author: Salma Bellaou <salma.bellaou@um6p.ma>
Date:   Wed Sep 24 11:48:25 2025 +0100

    Added banana to fruits

commit 05d0f4894c45848400cc2443d4fbabc63f6f5c15
Author: Salma Bellaou <salma.bellaou@um6p.ma>
Date:   Wed Sep 24 11:44:38 2025 +0100

    Added apple to the fruits

commit da5e6dfeda30bd9ccfad9cd17ab5ead68dc287a7
Author: Salma Bellaou <salma.bellaou@um6p.ma>
Date:   Wed Sep 24 11:40:39 2025 +0100

    Added pear to the fruits

commit c6011c7e08f17d30feef2f1d39a71b6be3fd985d
Author: Salma Bellaou <salma.bellaou@um6p.ma>
Date:   Wed Sep 24 11:35:39 2025 +0100

    Added grape to fruits

commit 80fc065133038113e39bc449377a5133b76e0ec9
Author: Salma Bellaou <salma.bellaou@um6p.ma>
Date:   Wed Sep 24 11:30:07 2025 +0100

    Added mango to fruits list

C:\Users\Colcom16\tpgit>
```

Figure 14: we used "git log" to understand the state of our repository

Figure 15: Merging master to vegetables and merging vegetables back to master, and it was done successfully.

Figure 16: Here we merged master to sauces and merged back sauces to master, and once again it was done successfully as it appears in the figures

Figure 17: created an account in Github

Figure 18: added my teammeat to my Github account

Figure 19: a new folder was created and it contains my teammate's information

Figure 20: a new file called herbs was created

Figure 21: merging herbs to master and vice versa and i pushed it to my teammate's account

Figure 22: herbs appeared in her teammate's account

Figure 23: I added a fruit and then I pulled and pushed

Figure 24: the added fruit appeared in my teammate's account

Figure 25: we had an error, and then we used chatgpt to know how to solve it and we managed to solve it

Figure 26: we managed to add fruits into my account

(a) my terminal

(b) my teammate's terminal

Figure 27: we did the same thing as fruits but here we switched the roles

(a) the change appeared in my teammate's account

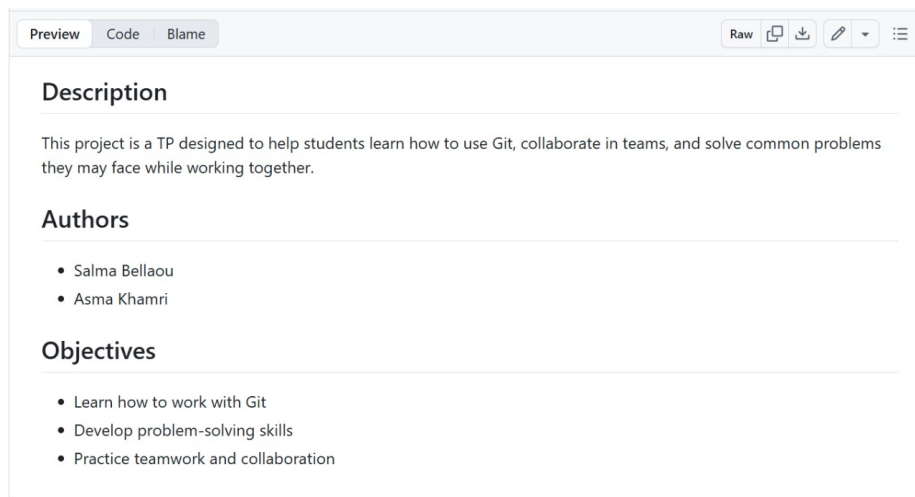(b) the change appeared in my account
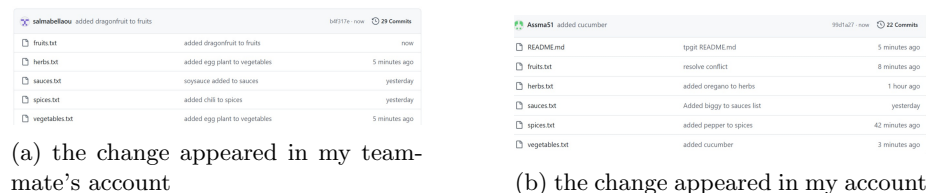
```
# Git Learning Project

## Description
This project is a TP designed to help students learn how to use Git, collaborate in teams, and solve common problems they may face while working together

## Authors
- Salma Bellaou
- Asma Khamri

## Objectives
- Learn how to work with Git
- Develop problem-solving skills
- Practice teamwork and collaboration
```

Figure 29: documenting my project using markdown

Figure 30: final result