



FACULTÉ DES SCIENCES ET DES TECHNOLOGIES(FST)

RAPPORT SUR LE TRAVAIL DE LABORATOIRE N°_1

COURS: Systèmes

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NOM: PÉTIOTE

NIVEAU: L3

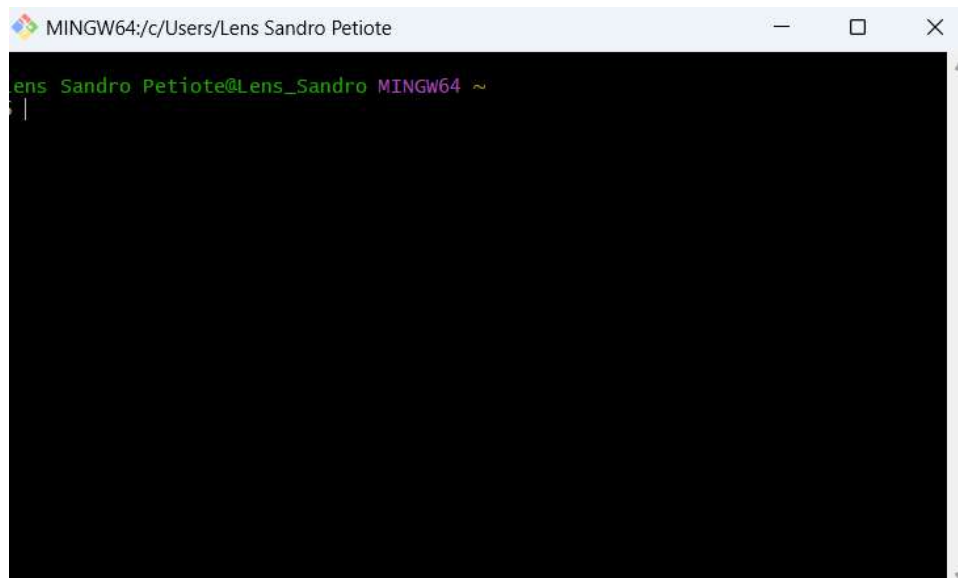
DATE: 22/10/2024

L'objectif de ce TD est de:

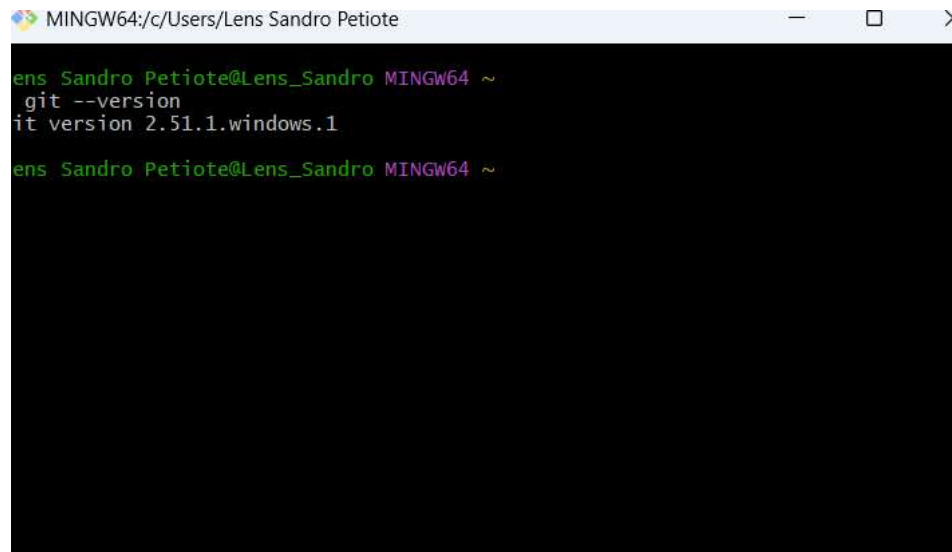
1. Comprendre les concepts de base de Git (système de gestion de versions).
2. Savoir utiliser Git pour gérer un projet localement.
3. Découvrir GitHub et apprendre à collaborer sur un dépôt distant.

PREMIÈRE PARTIE.

1.Installation de Git sur Windows.



2. Vérifier l'installation.

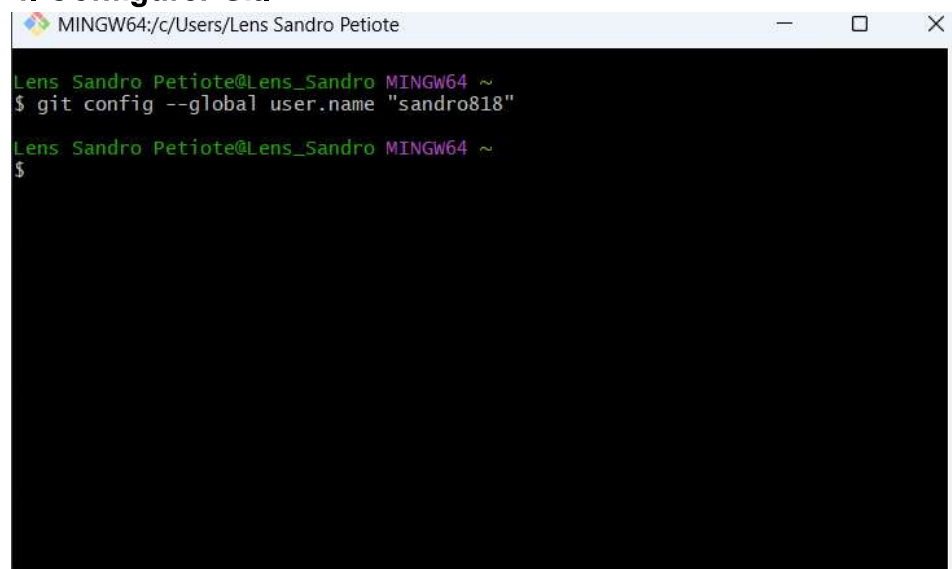
A terminal window titled 'MINGW64:/c/Users/Lens Sandro Petiote' with standard window controls. The prompt is 'ens Sandro Petiote@Lens_Sandro MINGW64 ~'. The command 'git --version' is entered and executed, resulting in the output 'it version 2.51.1.windows.1'.

```
ens Sandro Petiote@Lens_Sandro MINGW64 ~  
git --version  
it version 2.51.1.windows.1  
  
ens Sandro Petiote@Lens_Sandro MINGW64 ~
```

3. Création d'un compte GitHub.

R/ Mon compte GitHub est déjà crée.

4. Configurer Git.

A terminal window titled 'MINGW64:/c/Users/Lens Sandro Petiote' with standard window controls. The prompt is 'Lens Sandro Petiote@Lens_Sandro MINGW64 ~'. The command '\$ git config --global user.name "sandro818"' is entered and executed. The prompt returns to '\$'.

```
Lens Sandro Petiote@Lens_Sandro MINGW64 ~  
$ git config --global user.name "sandro818"  
  
Lens Sandro Petiote@Lens_Sandro MINGW64 ~  
$
```

-Vérifions:

```
MINGW64:/c/Users/Lens Sandro Petiote
Lens Sandro Petiote@Lens_Sandro MINGW64 ~
$ git config --global user.name "sandro818"

Lens Sandro Petiote@Lens_Sandro MINGW64 ~
$ git config --list
diff.astextplain.textconv=astextplain
filter.lfs.clean=git-lfs clean -- %f
filter.lfs.smudge=git-lfs smudge -- %f
filter.lfs.process=git-lfs filter-process
filter.lfs.required=true
http.sslbackend=schannel
core.autocrlf=true
core.fscache=true
core.symlinks=false
pull.rebase=false
credential.helper=manager
credential.https://dev.azure.com.usehttppath=true
init.defaultbranch=master
user.email=petiotelens@gmail.com
user.name=sandro818

Lens Sandro Petiote@Lens_Sandro MINGW64 ~
```

5. Tester Git avec PowerShell.

- Créer un dossier test:

```
MINGW64:/c/Users/Lens Sandro Petiote
NetHood@
OneDrive/
PrintHood@
PyCharmMiscProject/
Recent@
'Saved Games' /
Searches/
SendTo@
'Start Menu'@
Templates@
Videos/
'WPS Cloud Files' /
dddddd
desktop/
eclipse/
eclipse-workspace/
h4/
l2/
ntuser.dat.LOG1
ntuser.dat.LOG2
ntuser.ini

Lens Sandro Petiote@Lens_Sandro MINGW64 ~
$
```

```
MINGW64:/c/Users/Lens Sandro Petiote/Desktop
Searches/
SendTo@
'Start Menu'@
Templates@
Videos/
'WPS Cloud Files'/
dddd
desktop/
eclipse/
eclipse-workspace/
h4/
l2/
ntuser.dat.LOG1
ntuser.dat.LOG2
ntuser.ini

Lens Sandro Petiote@Lens_Sandro MINGW64 ~
$ cd Desktop

Lens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop
$ mkdir projet-git

Lens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop
```



-Initialiser un dépôt :

```
MINGW64:/c/Users/Lens Sandro Petiote/Desktop/projet-git

Lens Sandro Petiote@Lens_Sandro MINGW64 ~
$ cd Desktop

Lens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop
$ mkdir projet-git

Lens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop
$ cd projet-git

Lens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/projet-git
$ git init
Initialized empty Git repository in C:/Users/Lens Sandro Petiote/desktop/projet-git/.git/

Lens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/projet-git (master)
$ echo "Bonsoir" > README.md

Lens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/projet-git (master)
$ git add .
warning: in the working copy of 'README.md', LF will be replaced by CRLF the next time Git touches it

Lens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/projet-git (master)
$ git commit -m "premier commit"
```

```

MINGW64:/c/Users/Lens Sandro Petiot/Desktop/projet-git
Initialized empty Git repository in C:/Users/Lens Sandro Petiot/Desktop/projet-git/.git/

Lens Sandro Petiot@Lens_Sandro MINGW64 ~/Desktop/projet-git (master)
$ echo "Bonsoir" > README.md

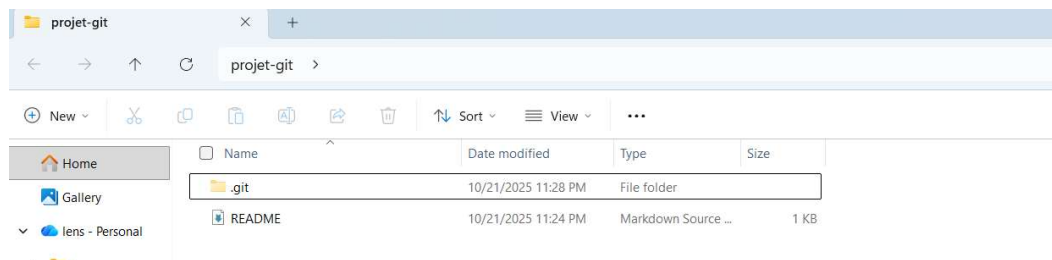
Lens Sandro Petiot@Lens_Sandro MINGW64 ~/Desktop/projet-git (master)
$ git add .
warning: in the working copy of 'README.md', LF will be replaced by CRLF the next time Git touches it

Lens Sandro Petiot@Lens_Sandro MINGW64 ~/Desktop/projet-git (master)
$ git commit -m "premier commit"
[master (root-commit) 68bd7ff] premier commit
1 file changed, 1 insertion(+)
create mode 100644 README.md

Lens Sandro Petiot@Lens_Sandro MINGW64 ~/Desktop/projet-git (master)
$ git status
On branch master
nothing to commit, working tree clean

Lens Sandro Petiot@Lens_Sandro MINGW64 ~/Desktop/projet-git (master)

```



-Historique des Commits:

```

Lens Sandro Petiot@Lens_Sandro MINGW64 ~/Desktop/projet-git (master)
$ git log
commit 68bd7ff8d070cac8c3c2dcebf4ada0844ff35f8f (HEAD -> master)
Author: sandro818 <petiotelens@gmail.com>
Date: Tue Oct 21 23:28:20 2025 -0400

    premier commit

Lens Sandro Petiot@Lens_Sandro MINGW64 ~/Desktop/projet-git (master)
$

```


6. Générer une nouvelle clé SSH.

```
MINGW64:/
Lens Sandro Petiotte@Lens_Sandro MINGW64 /
$ ssh-keygen -t rsa -b 4096 -C "petiottelens@gmail.com"
Generating public/private rsa key pair.
Enter file in which to save the key (/c/Users/Lens Sandro Petiotte/.ssh/id_rsa):
Created directory '/c/Users/Lens Sandro Petiotte/.ssh'.
Enter passphrase for "/c/Users/Lens Sandro Petiotte/.ssh/id_rsa" (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /c/Users/Lens Sandro Petiotte/.ssh/id_rsa
Your public key has been saved in /c/Users/Lens Sandro Petiotte/.ssh/id_rsa.pub
The key fingerprint is:
SHA256:nzUWRvo9P01SVre7i9ciKwGWiNYWRTyDUB3vj5sxoQ petiottelens@gmail.com
The key's randomart image is:
+---[RSA 4096]---+
|.oBo. .
|.= o
|o.OO.. o o|
|o +.+ o + oo|
|.E.S. = O.|
| = ..+ = O.|
| B o.. ...|
| o .. ..O.O|
|..+..+
+---[SHA256]-----+
```

-Affichons la clé publique générée:

```
Lens Sandro Petiotte@Lens_Sandro MINGW64 /
$ cat ~/.ssh/id_rsa.pub
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQCAQDwXut33UtQhxX40KWJzjDXujd10lEww7kfFbUXd41/
SE50+7zNwQt8UmYgRsfaqMrNGd3PtsfZ8BiIeIJ680sJicCK1k9X4ZLEEcJ6XmNet1iVfCky28+ws/oz
g0dsP0b9CIm6mgisw56ep/k5RkdfTyvMq2MogVCZXw9WODiZ8xdQd+uoD9pIrjC6nhOA0kTq85j+uAs
UYxcb2ojT18o8fwG5wiJ9bkWN0uL/qD67BF5E2KDDRJK9k2PGDrZvSaor+bpgTmPTgSoC+A3I1p6k417
I4G6H5htYE1Tt29J+Zy2VN56aXsfTE7/4LM4YzxT9KYhN0HtmUUG2qjdvQx8NCCdCqCm+6LUg17dAQ5Z
yEpnJGputVW1bo19xhIpy2WwJFS3jfkDlqgIp5DvOEWA+k8+mrAeygxyBe5UFnE5eVGeqV3bTpmAvEOV
jHEpvk4X50SReus7/2Et65NY/pfi3ktFtfMXxEmyB5ApLnV6HcVMj5J0zeavXjVcateDdiXsBXKQVnuv
4K3RG3DQJpaeG+d2NqnHQbd6aadXjAXmKn71rJyqLghA13N6oFJ00m9Y+ZKyqTdqC7qzGBYEwfUjdrzd
NtEw1U9HN6wuuZ1hYv+9V3Ghcu+e4k/sJ13135o23IHZDieQM6br7e4xJemspM9bz1ez0NI60Hq5/oT8
gw== petiottelens@gmail.com

Lens Sandro Petiotte@Lens_Sandro MINGW64 /
$
```



Sandro818 (Sandro818)
Your personal account

[Public profile](#)
[Account](#)
[Appearance](#)
[Accessibility](#)
[Notifications](#)


[Access](#)
[Billing and licensing](#)
[Emails](#)
[Password and authentication](#)

SSH keys

New SSH key

This is a list of SSH keys associated with your account. Remove any keys that you do not recognize.

Authentication keys

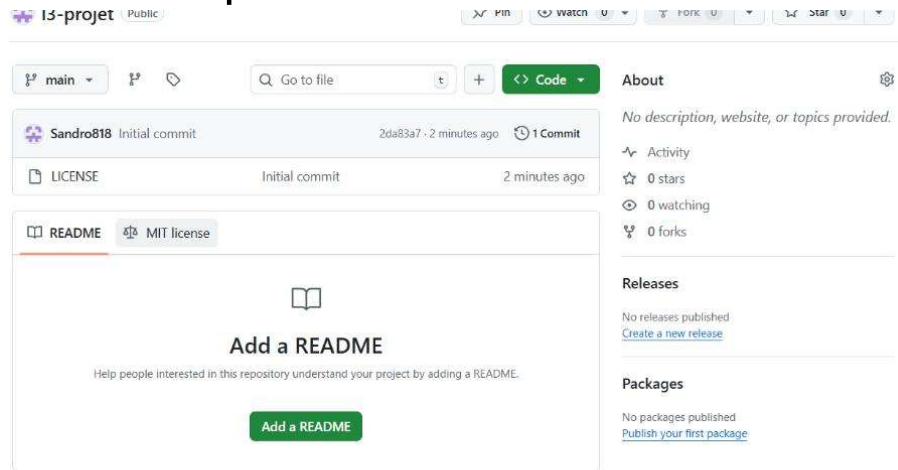


key Win
SHA256:nzUWRvo9P01SVre7i9ciKwGWiNYWRTyDUB3vj5sxoQ
Added on Oct 22, 2025
Never used — Read/write

Delete

Check out our guide to [connecting to GitHub using SSH keys](#) or troubleshoot [common SSH problems](#).

7. Créer un dépôt GitHub.



8. Cloner un dépôt GitHub via SSH.

```
MINGW64:/c/Users/Lens Sandro Petiot/Desktop/l3-projet
Lens Sandro Petiot@Lens_Sandro MINGW64 ~
$ cd Desktop

Lens Sandro Petiot@Lens_Sandro MINGW64 ~/Desktop
$ git clone https://github.com/Sandro818/l3-projet.git
Cloning into 'l3-projet'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
receiving objects: 100% (3/3), done.
```



```
MINGW64:/c/Users/Lens Sandro Petiote/Desktop/l3-projet
Lens Sandro Petiote@Lens_Sandro MINGW64 ~
$ cd Desktop

Lens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop
$ ls
Canva.lnk*
CodeBlocks.lnk*
'Eclipse IDE for Java Developers - 2025-09.lnk'*
'Microsoft Edge.lnk'*
'Movavi Video Editor 26.lnk'*
'New Microsoft Excel Worksheet.xlsx'
'New Microsoft Publisher Document.pub'
'New Microsoft Word Document.docx'
'New WinRAR ZIP archive.zip'
'Opera Browser.lnk'*
'Visual Studio Code.lnk'*
'WPS Office.lnk'*
cmd.lnk*
desktop.ini
l3-projet/
'les indicateurs du marketing numerique.pdf'
'projet pro.pdf'
projet-git/
```

```
MINGW64:/c/Users/Lens Sandro Petiote/Desktop/l3-projet
Lens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop
$ cd l3-projet

Lens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/l3-projet (main)
$ echo "Systeme d'exploitation!" > Module.txt

Lens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/l3-projet (main)
$ git add .
warning: in the working copy of 'Module.txt', LF will be replaced by CRLF the ne
xt time Git touches it

Lens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/l3-projet (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   Module.txt

Lens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/l3-projet (main)
```

```
MINGW64:/c/Users/Lens Sandro Petiote/Desktop/l3-projet

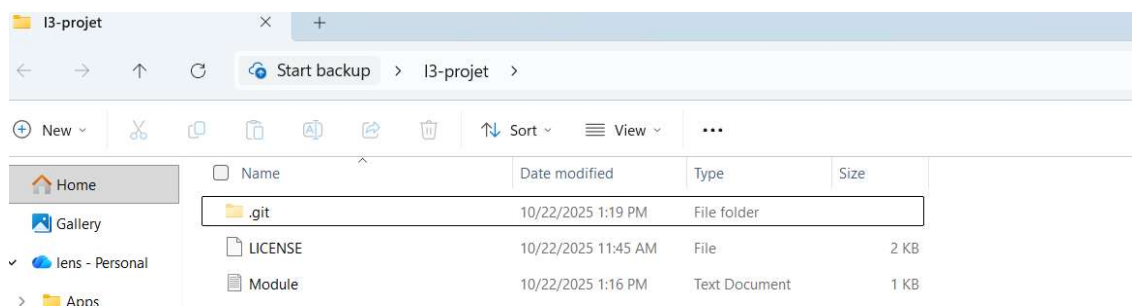
Lens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/l3-projet (main)
$ git add .
warning: in the working copy of 'Module.txt', LF will be replaced by CRLF the next time Git touches it

Lens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/l3-projet (main)
$ git commit -m "Ajout Module"
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

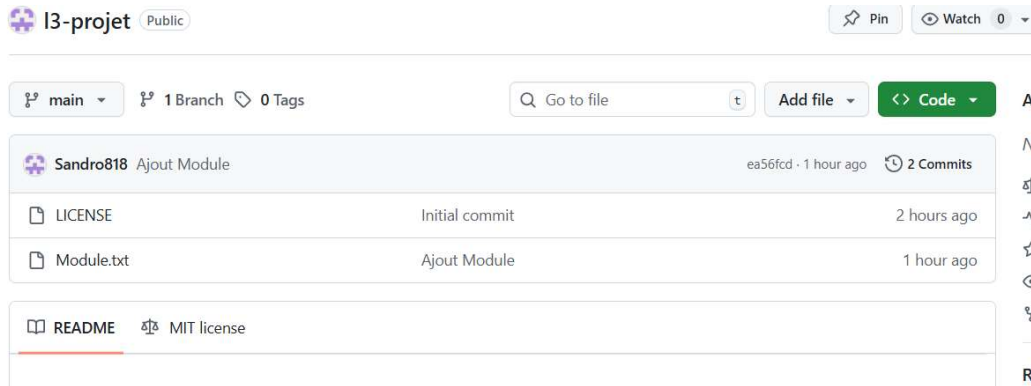
Lens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/l3-projet (main)
$ git branch -M main

Lens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/l3-projet (main)
```



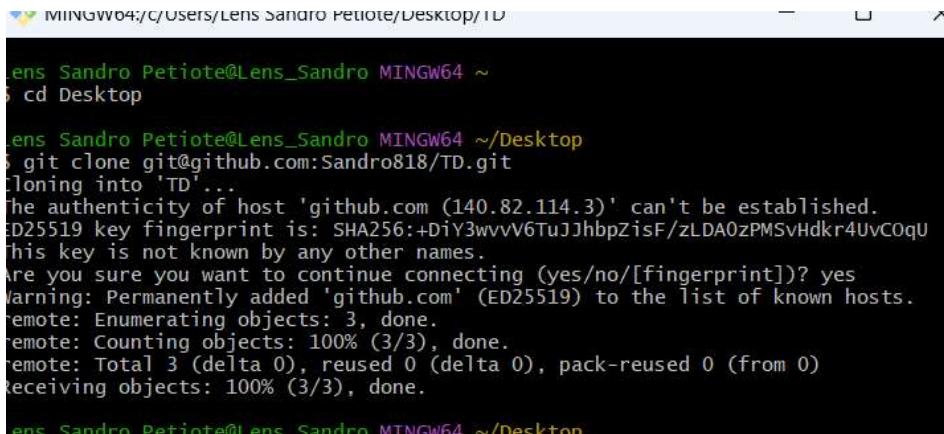
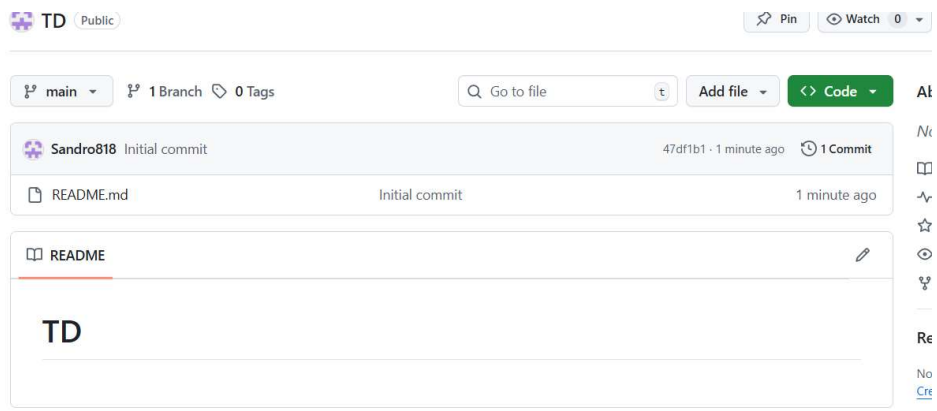
```
Lens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/l3-projet (main)
$ git push -u origin main
info: please complete authentication in your browser...
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 16 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 301 bytes | 301.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Sandro818/l3-projet.git
   2da83a7..ea56fcd main -> main
branch 'main' set up to track 'origin/main'.

Lens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/l3-projet (main)
$
```

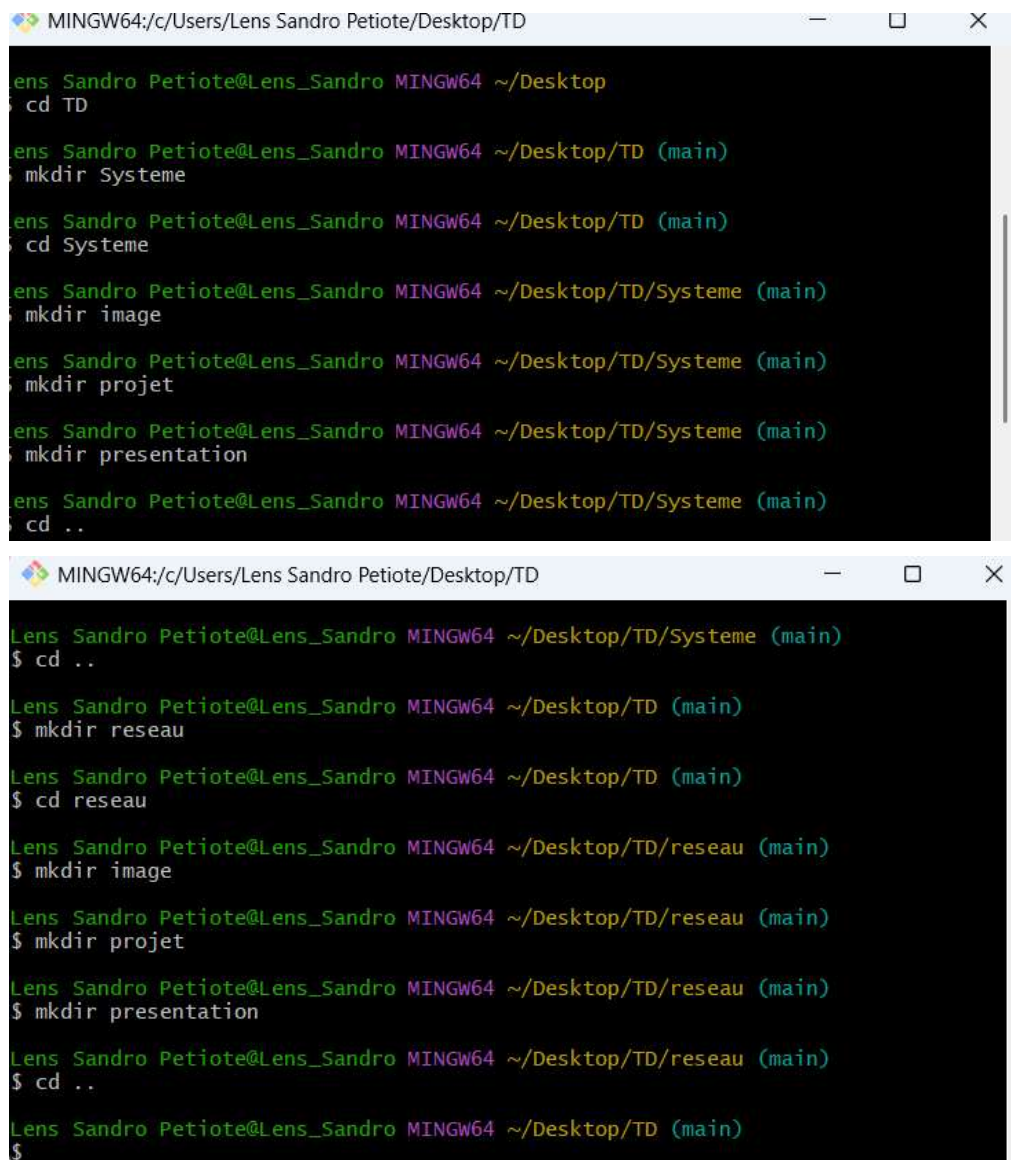


DEUXIÈME PARTIE.

2- Créer le dépôt TD sur GitHub, puis cloner-le sur Desktop.



3- à l'intérieur de TD, créer les dossiers: systeme (image, projet, presentstion) et reseau (image, projet , presentation).



```
MINGW64:/c/Users/Lens Sandro Petiote/Desktop/TD
ens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop
$ cd TD

ens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/TD (main)
$ mkdir Systeme

ens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/TD (main)
$ cd Systeme

ens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/TD/Systeme (main)
$ mkdir image

ens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/TD/Systeme (main)
$ mkdir projet

ens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/TD/Systeme (main)
$ mkdir presentation

ens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/TD/Systeme (main)
$ cd ..

MINGW64:/c/Users/Lens Sandro Petiote/Desktop/TD
ens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/TD/Systeme (main)
$ cd ..

ens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/TD (main)
$ mkdir reseau

ens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/TD (main)
$ cd reseau

ens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/TD/reseau (main)
$ mkdir image

ens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/TD/reseau (main)
$ mkdir projet

ens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/TD/reseau (main)
$ mkdir presentation

ens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/TD/reseau (main)
$ cd ..

ens Sandro Petiote@Lens_Sandro MINGW64 ~/Desktop/TD (main)
$
```

Conclusion.

Grace à ce travail j'ai appris à utiliser le logiciel Git, j'ai pu comprendre les concepts de base de Git et aussi j'ai pu découvrir GitHub. Maintenant je peut créer un depot public ou privé, en gros je peut réaliser des projets en collaboration avec d'autre personnes grâce aux outils Git ou Powershell et GitHub.

