

UNIVERSITE DE TECHNOLOGIE D'HAITI SCES INFORMATIQUES

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Niveau III

SECURITE INFORMATIQUE

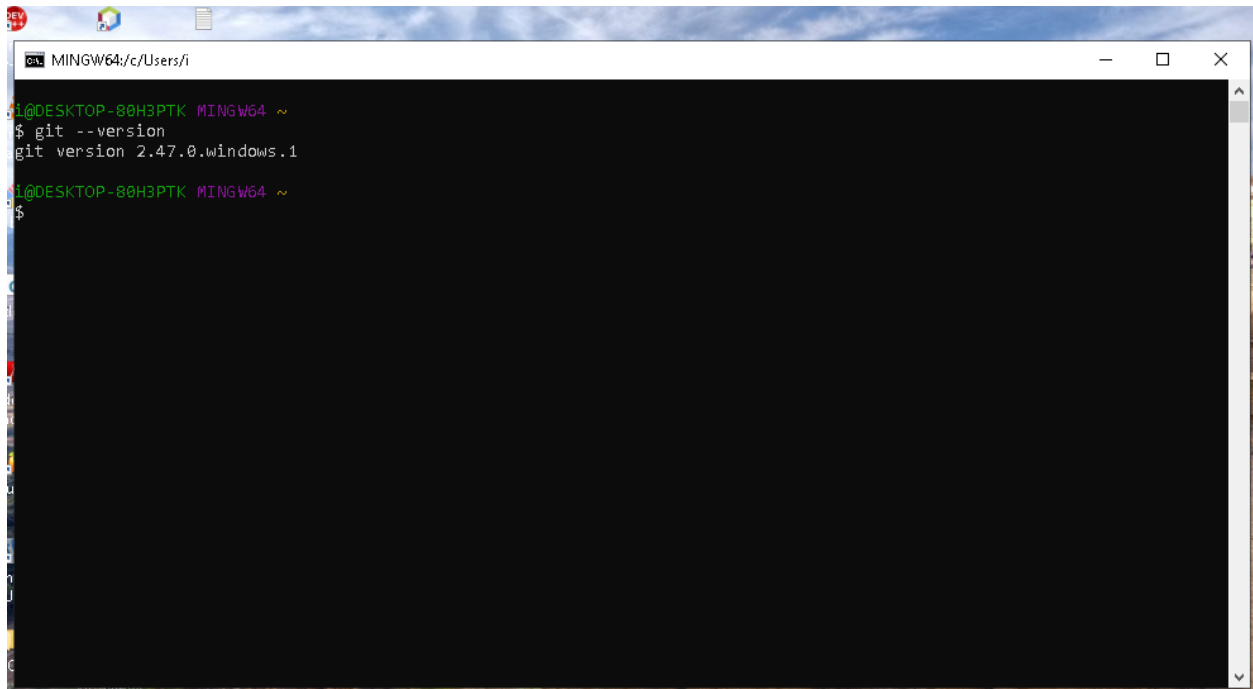
**Présenté par
Maurélus Micaël**

**Sous la direction
Du monsieur Saint Amour Ismael**

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1-Installation de Git



```
MINGW64~/c/Users/i
i@DESKTOP-B0H3PTK MINGW64 ~
$ git --version
git version 2.47.0.windows.1
i@DESKTOP-B0H3PTK MINGW64 ~
$
```

Après installation je vérifie la version de Git .

Pour ce TD j'aurai à manipuler Git, Créer des dossiers, les lire etc...

```
MINGW64/c/Users/i

i@DESKTOP-80H3PTK MINGW64 ~
$ git config --global user.name "micamaurelus-sudo"

i@DESKTOP-80H3PTK MINGW64 ~
$ git config --global user.name "micamaurelus-sudo"

i@DESKTOP-80H3PTK 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=true
pull.rebase=false
credential.helper=manager
credential.https://dev.azure.com.usehttppath=true
init.defaultbranch=master
user.name=micamaurelus-sudo

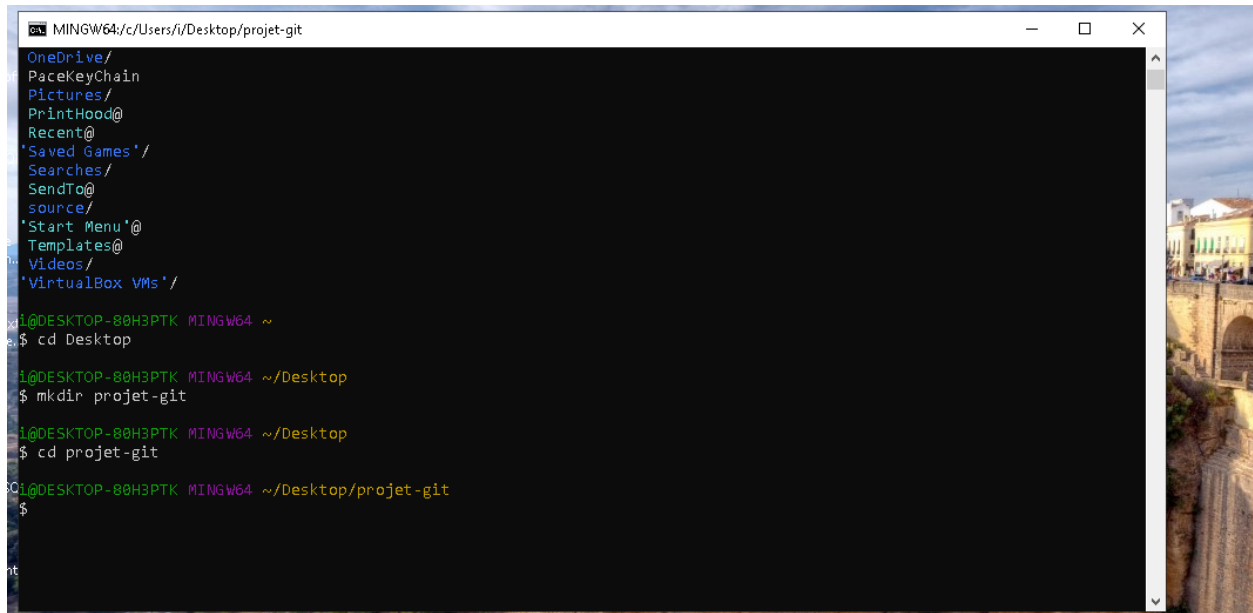
i@DESKTOP-80H3PTK MINGW64 ~
$
```

Puisque j'avais déjà créé un compte sur github donc je m'y connecte

```
MINGW64/c/Users/i

i@DESKTOP-80H3PTK MINGW64 ~
$ ls
'3D Objects'/
'AndroidStudioProjects'/
'AppData'/
'Application Data'@
'Cisco Packet Tracer 8.2.0'/
'Contacts'/
'Cookies'@
'Creative Cloud Files'/
'Desktop'/
'Documents'/
'Downloads'/
'Favorites'/
'Links'/
'Local Settings'@
'Music'/
'My Documents'@
'NetHood'@
'newreactjs.jsx
'NTUSER.DAT
'ntuser.dat.LOG1
'ntuser.dat.LOG2
'NTUSER.DAT{53b39e88-18c4-11ea-a811-000d3aa4692b}.TM.blf
'NTUSER.DAT{53b39e88-18c4-11ea-a811-000d3aa4692b}.TMContainer000000000000000001.regtrans-ms
'NTUSER.DAT{53b39e88-18c4-11ea-a811-000d3aa4692b}.TMContainer000000000000000002.regtrans-ms
'ntuser.ini
'OneDrive'/
'PaceKeyChain'
```

J'utilise la commande ls pour révéler les dossiers se trouvant sur ma machine

A screenshot of a MINGW64 terminal window. The title bar shows the path 'MINGW64/c:/Users/i/Desktop/projet-git'. The terminal displays a list of system directories on the left, including OneDrive/, PaceKeyChain, Pictures/, PrintHood@, Recent@, 'Saved Games'/, Searches/, SendTo@, source/, 'Start Menu'@, Templates@, Videos/, and 'VirtualBox VMS'/. The command prompt shows the user navigating to the Desktop directory with 'cd Desktop', creating a new directory 'projet-git' with 'mkdir projet-git', and then entering the new directory with 'cd projet-git'. The prompt now shows the user is in the 'projet-git' directory.

```
OneDrive/
PaceKeyChain
Pictures/
PrintHood@
Recent@
'Saved Games' /
Searches/
SendTo@
source/
'Start Menu'@
Templates@
Videos/
'VirtualBox VMS' /

i@DESKTOP-80H3PTK MINGW64 ~
$ cd Desktop

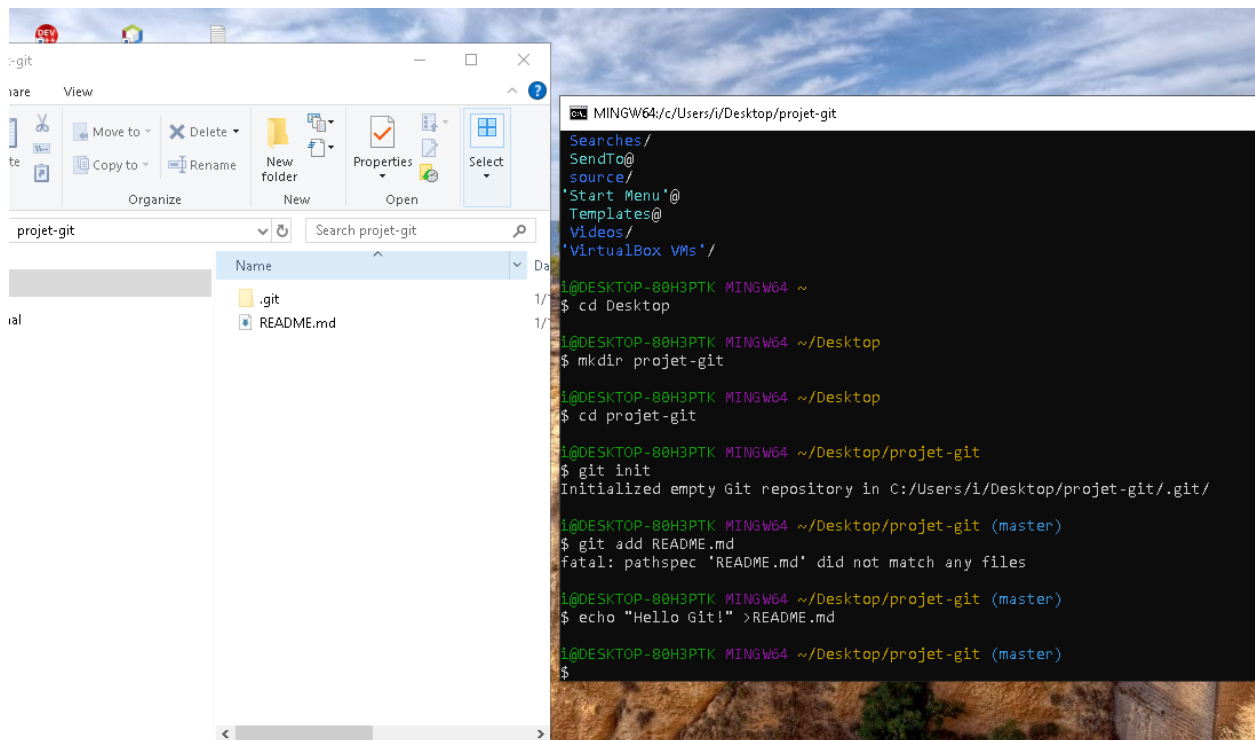
i@DESKTOP-80H3PTK MINGW64 ~/Desktop
$ mkdir projet-git

i@DESKTOP-80H3PTK MINGW64 ~/Desktop
$ cd projet-git

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/projet-git
$
```

Avec cd Desktop je monte sur le dossier Desktop

Et ensuite je passe la commande suivante mkdir projet-git me permettant de créé un dossier du nom de projet-git et ensuite j'ouvre ce dossier



Avec git init,j'initialise le dossier en succedant avec les commandes suivantes git add README.md(pour ajouter un fichier readme)

Et en utilisant la commande echo je peux ecrire dedans.

```
MINGW64:/c/Users/i/Desktop/projet-git
i@DESKTOP-80H3PTK MINGW64 ~/Desktop/projet-git (master)
$ git config --global user.name "micamaurelus-sudo"

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/projet-git (master)
$ git commit -m "Premier commit avec powershell"
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: unable to auto-detect email address (got 'i@DESKTOP-80H3PTK.(none)')

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/projet-git (master)
$ git config --global user.email "micamaurelus@gmail.com"

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/projet-git (master)
$ git commit -m "Premier commit avec powershell"
[master (root-commit) 4fc4192] Premier commit avec powershell
 1 file changed, 1 insertion(+)
 create mode 100644 README.md

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/projet-git (master)
$
```

J'avais rencontré un léger problème et j'ai tout arrange

```
MINGW64~/Desktop/projet-git
to set your account's default identity.
Commit --global to set the identity only in this repository.

fatal: unable to auto-detect email address (got 'i@DESKTOP-80H3PTK.(none)')

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/projet-git (master)
$ git config --global user.email "micamaurelus@gmail.com"

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/projet-git (master)
$ git commit -m "Premier commit avec powershell"
[master (root-commit) 4fc4192] Premier commit avec powershell
1 file changed, 1 insertion(+)
create mode 100644 README.md

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/projet-git (master)
$ git status
On branch master
nothing to commit, working tree clean

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/projet-git (master)
$ git log
commit 4fc419295f87d64229dfd494ee37c9f6be5cfbf4 (HEAD -> master)
Author: micamaurelus-sudo <micamaurelus@gmail.com>
Date: Tue Jan 13 15:08:29 2026 -0500

    Premier commit avec powershell

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/projet-git (master)
$
```

Après avoir passé ces commandes j'ai pu créer un répertoire et le pousser sur github

```
MINGW64~/Users/i
i@DESKTOP-80H3PTK MINGW64 ~
$ ssh -V
OpenSSH_10.2p1, OpenSSL 3.5.4 30 Sep 2025

i@DESKTOP-80H3PTK MINGW64 ~
$ ssh-keygen -t ed25519 -C "micamaurelus@gmail.com"
Generating public/private ed25519 key pair.
Enter file in which to save the key (/c/Users/i/.ssh/id_ed25519):
Created directory '/c/Users/i/.ssh'.
Enter passphrase for "/c/Users/i/.ssh/id_ed25519" (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /c/Users/i/.ssh/id_ed25519
Your public key has been saved in /c/Users/i/.ssh/id_ed25519.pub
The key fingerprint is:
SHA256:JVTjMcixtJWy1jr/93fCdtU34PmHZTtB+n37/CcpNm4 micamaurelus@gmail.com
The key's randomart image is:
+--[ED25519 256]--+
|.++*|.
|o+=.+|
|++o|
|oo. .|
|.S. . =.|
|o + o*|
|o o o=O|
|..E+=O*|
|=+O++%|
+----[SHA256]-----+

i@DESKTOP-80H3PTK MINGW64 ~
To$
```

Cette commande permet de générer une clé ssh sur git


```
MINGW64/c/Users/i
Your identification has been saved in /c/Users/i/.ssh/id_ed25519
Your public key has been saved in /c/Users/i/.ssh/id_ed25519.pub
The key fingerprint is:
SHA256:JVTjMcixtJWyiJr/9JfCdtU34PmHZTtB+n37/CcpNm4 micamaurelus@gmail.com
The key's randomart image is:
+--[ED25519 256]--+
  .+*.
  o+=.+
  ++o
  oo. . .
  .S. . = .
  o   + o*
  o   o o=
  ..E=+o*
  =+o++%
+-----[SHA256]-----+

1@DESKTOP-80H3PTK MINGW64 ~
$ cat ~/.ssh/id_ed25519
-----BEGIN OPENSSH PRIVATE KEY-----
b3B1bnNzaC1rZXktdjEAAAACmFlczI1Ni1jdHIAAAAGYmNyeXB0AAAAGAAAABAUNuvzb5
yDgcUXALig1W3MAAAAGAAAAEAAAAzAAAAC3NzaC1lZDI1NTE5AAAAIJ/niaSPsLg6QrWc
cB9FhX3kVNj7cI0LrQqMSZf1W5UfAAAAoH8VAuvNX4HTE1XQoHpPs5E1PhxFvwydAhSD3a
C58rGxtgpRo4sjsf+9L7ByF+Br9pBG9xH572LVueJMWHSclMdGkXuvPBVGJ3t9dhFiIXO
20nwueTuEl+2lwbHATMKiis+2fpwtqyFbJIv4Q6KdOoQJ2uu0y2bVAYOAhMsWPw5xPogs
CebHzp18oyY3FhQfGZ66Ms07OhCVKFvut75Ow=
-----END OPENSSH PRIVATE KEY-----

1@DESKTOP-80H3PTK MINGW64 ~
$
```

Add new SSH Key

Title

key Win

Key type

Authentication Key

Key

```
-----BEGIN OPENSSH PRIVATE KEY-----
b3B1bnNzaC1rZXktdjEAAAACmFlczI1Ni1jdHIAAAAGYmNyeXB0AAAAGAAAABAUNuvzb5
yDgcUXALig1W3MAAAAGAAAAEAAAAzAAAAC3NzaC1lZDI1NTE5AAAAIJ/niaSPsLg6QrWc
cB9FhX3kVNj7cI0LrQqMSZf1W5UfAAAAoH8VAuvNX4HTE1XQoHpPs5E1PhxFvwydAhSD3a
C58rGxtgpRo4sjsf+9L7ByF+Br9pBG9xH572LVueJMWHSclMdGkXuvPBVGJ3t9dhFiIXO
20nwueTuEl+2lwbHATMKiis+2fpwtqyFbJIv4Q6KdOoQJ2uu0y2bVAYOAhMsWPw5xPogs
CebHzp18oyY3FhQfGZ66Ms07OhCVKFvut75Ow=
-----END OPENSSH PRIVATE KEY-----
```

Add SSH key

Runner

Navbar · Bootstrap v4.6

New repository

+

micamaurelus-sudo

/ mon-projet

mon-projet is available.

Great repository names are short and memorable. How about [turbo-octo-disco](#)?

Description

resume du projet

16 / 350 characters

2 **Configuration**

Choose visibility *
Choose who can see and commit to this repository

Public

Add README
READMEs can be used as longer descriptions. [About READMEs](#)

On ☒

Add .gitignore
.gitignore tells git which files not to track. [About ignoring files](#)

No .gitignore

Add license
Licenses explain how others can use your code. [About licenses](#)

No license

Create repository

On prend la clé on le place dans add ssh key sur github

```

C:\Users\i\\Desktop
Please make sure you have the correct access rights
and the repository exists.

I@DESKTOP-B0H3PTK MINGW64 ~/Desktop
$ ls ~/.ssh
id_ed25519 id_ed25519.pub known_hosts

I@DESKTOP-B0H3PTK MINGW64 ~/Desktop
$ eval "$(ssh-agent -s)"
Agent pid 1538

I@DESKTOP-B0H3PTK MINGW64 ~/Desktop
$ ssh-add ~/.ssh/id_ed25519
Enter passphrase for /c/Users/i/.ssh/id_ed25519:
Identity added: /c/Users/i/.ssh/id_ed25519 (micamaurelus@gmail.com)

I@DESKTOP-B0H3PTK MINGW64 ~/Desktop
$ cat ~/.ssh/id_ed25519.pub
ssh-ed25519 AAAAC3NzaC1lZDI1NTE5AAAAIJ/niaSPsLg6QrWccB9FhX3kVNj7cI0LrQqMSZf1W5Uf micamaurelus@gmail.com

I@DESKTOP-B0H3PTK MINGW64 ~/Desktop
$ git clone git@github.com:micamaurelus-sudo/mon-projet.git
Cloning into 'mon-projet'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (3/3), done.

I@DESKTOP-B0H3PTK MINGW64 ~/Desktop
$
```

Pour générer la clé publique, si nécessaire il faudrait passer par les étapes suivantes et enfin la place dans add ssh key sur github

Etant sur github, après avoir créé un repertoire

la commande git clone permet de cloner ce repertoire sur la machine

ainsi on aura la possibilité d'y porter des changements

```
MINGW64/c/Users/i/Desktop
i@DESKTOP-80H3PTK MINGW64 ~/Desktop
$ cat ~/.ssh/id_ed25519.pub
ssh-ed25519 AAAAC3NzaC1lZDI1NTE5AAAAIJ/niaSPsLg6QrWccB9FhX3kVNj7cI0LnQqMSZfLW5Uf micamaurelus@gmail.com

i@DESKTOP-80H3PTK MINGW64 ~/Desktop
$ git clone git@github.com:micamaurelus-sudo/mon-projet.git
Cloning into 'mon-projet'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (3/3), done.

i@DESKTOP-80H3PTK MINGW64 ~/Desktop
$ ssh -T git@github.com
Hi micamaurelus-sudo! You've successfully authenticated, but GitHub does not provide shell access.

i@DESKTOP-80H3PTK MINGW64 ~/Desktop
$ ls
µTorrent.lnk*      'DEVWA HTML.7z'      MEmu.lnk*          projet-git/
'Adobe Photoshop 2021.lnk'*  DEVWASQL/            'Microsoft Edge.lnk'*  TPBootstrap/
'Android Studio.lnk'*      DEVWASQL.7z          mon-projet/          TPModele/
CC.c                  'Embarcadero Dev-C++.lnk'*  Multi-MEmu.lnk*      Untitled-1.c
'Cisco Packet Tracer.lnk'*  'Git Bash.lnk'*      'New Text Document (2).txt'  'Visual Studio 2022.lnk'*
desktop.ini          icons8_phone_50px_1.png  'New Text Document.txt'    'Visual Studio Code.lnk'*
'devwa calcul.txt'      icons8_whatsapp_32px_5.png  Papa/
'DEVWA HTML/'          'IZotope RX 11 Audio Editor.lnk'*  'Pianoteq STUDIO.lnk'*

i@DESKTOP-80H3PTK MINGW64 ~/Desktop
$
```

Pour verifier si ca a fonctionné je passe les commandes suivantes pour voir si le dossier cloner est réellement la.

```
MINGW64/c/Users/i/Desktop/mon-projet
'Adobe Photoshop 2021.lnk'* DEVMWSQL/ 'Microsoft Edge.lnk'* TPBootstrap/
'Android Studio.lnk'* DEVMWSQL.7z mon-projet/ TPModele/
CC.c 'Embarcadero Dev-C++.lnk'* Multi-MEmu.lnk* Untitled-1.c
'Cisco Packet Tracer.lnk'* 'Git Bash.lnk'* 'New Text Document (2).txt' 'Visual Studio 2022.lnk'*
desktop.ini icons8_phone_50px_1.png 'New Text Document.txt' 'Visual Studio Code.lnk'*
'devwa calcul.txt' icons8_whatsapp_32px_5.png Papa/
'DEVWA HTML/' 'iZotope RX 11 Audio Editor.lnk'* 'Pianoteq STUDIO.lnk'*

i@DESKTOP-80H3PTK MINGW64 ~/Desktop
$ cd mon-projet

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/mon-projet (main)
$ echo "Systeme d'exploitation!" >Module.txt

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/mon-projet (main)
$ git add .
warning: in the working copy of 'Module.txt', LF will be replaced by CRLF the next time Git touches it

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/mon-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

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/mon-projet (main)
$

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/mon-projet (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

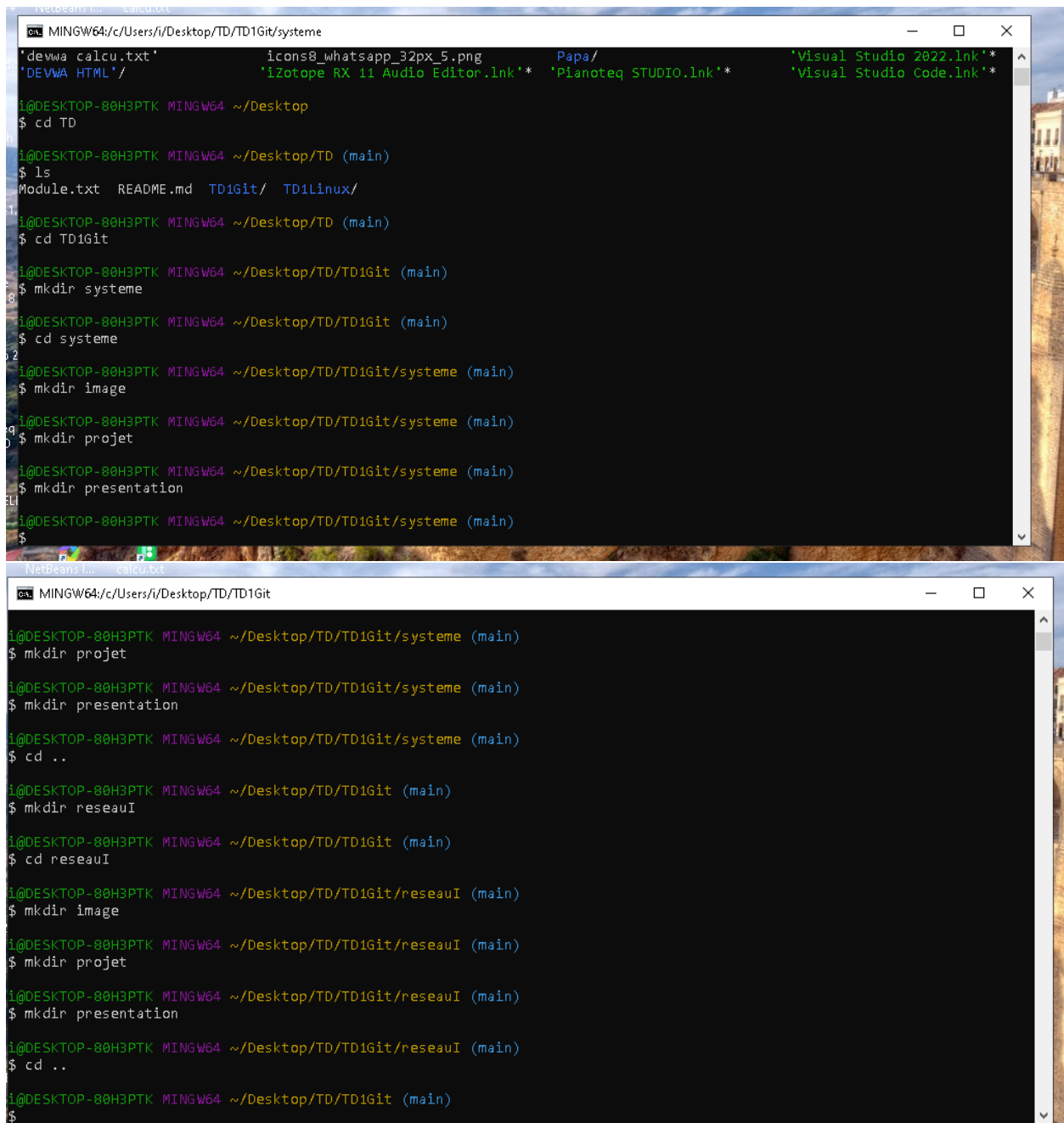
i@DESKTOP-80H3PTK MINGW64 ~/Desktop/mon-projet (main)
$ git commit -m "Ajout Module"
[main 97e0029] Ajout Module
 1 file changed, 1 insertion(+)
 create mode 100644 Module.txt

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/mon-projet (main)
$ git branch -M main

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/mon-projet (main)
$ git push -u origin main
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 303 bytes | 151.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To github.com:micamaurelus-sudo/mon-projet.git
   199f03a..97e0029  main -> main
branch 'main' set up to track 'origin/main'.

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/mon-projet (main)
$
```

J'ai porté quelque changement,et j'ai actualiser pour que les changement soient a jour sur github en pushant le dossier cloner.



The image consists of two screenshots of a Windows command prompt window, showing the creation of a directory structure for a project. The window title is 'MINGW64/c/Users/i/Desktop/TD/TD1Git/systeme'.

Top Screenshot:

```
devwa calcul.txt'          icons8_whatsapp_32px_5.png      Papa/          'Visual Studio 2022.lnk'*
'DEVWA HTML'/'            'Izotope RX 11 Audio Editor.lnk'*  'Pianoteq STUDIO.lnk'*  'Visual Studio Code.lnk'*

i@DESKTOP-80H3PTK MINGW64 ~/Desktop
$ cd TD

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/TD (main)
$ ls
Module.txt  README.md  TD1Git/    TD1Linux/

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/TD (main)
$ cd TD1Git

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/TD/TD1Git (main)
$ mkdir systeme

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/TD/TD1Git (main)
$ cd systeme

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/TD/TD1Git/systeme (main)
$ mkdir image

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/TD/TD1Git/systeme (main)
$ mkdir projet

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/TD/TD1Git/systeme (main)
$ mkdir presentation

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/TD/TD1Git/systeme (main)
$
```

Bottom Screenshot:

```
MINGW64/c/Users/i/Desktop/TD/TD1Git

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/TD/TD1Git/systeme (main)
$ mkdir projet

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/TD/TD1Git/systeme (main)
$ mkdir presentation

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/TD/TD1Git/systeme (main)
$ cd ..

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/TD/TD1Git (main)
$ mkdir reseauI

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/TD/TD1Git (main)
$ cd reseauI

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/TD/TD1Git/reseauI (main)
$ mkdir image

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/TD/TD1Git/reseauI (main)
$ mkdir projet

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/TD/TD1Git/reseauI (main)
$ mkdir presentation

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/TD/TD1Git/reseauI (main)
$ cd ..

i@DESKTOP-80H3PTK MINGW64 ~/Desktop/TD/TD1Git (main)
$
```

Et la je cree les dossiers qui seront necessaire pour l'hebergement du devoir.

PETITE RESUME

Avec ce TD j'ai beaucoup appris ,

Par exemple j'ai appris la base necessaire sur git en parlant de:comment creer un dossier,lire ce dossier .

Comment poster ce dossier sur github.

Sans oublier que j'ai appris a me connecter sur mon compte github de par Gitbash,de generer une cle

Et enfin sur github,j'ai enfin appris a creer un repertoire et a le cloner sur mamachine.

J'ai rencontré des difficultés quant a la connexion de mon compte sur git et l'autre difficulté ca a été d'extraire la clé ssh publique.

J'ai beaucoup aimé.

