

Rapport de TP 2 : Git

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- **Partie 0: prise en main:**

- **Étape 1 : Configuration de Git:**

- **Installation de Git :**

- Téléchargé depuis [Git SCM](#).
 - Vérification via la commande : `git --version`.

- **Configuration de l'identité :**

- Définition du nom et de l'email :

bash:

```
git config --global user.name "Shahdamine"
```

```
git config --global user.email "Am.ounnar15@gmail.com"
```

- Vérification : `git config --global --list`.

- **Étape 2: Création d'un dépôt local et initialisation de Git**

- 1. création d'un dépôt local**

- Dossier créé avec : `mkdir MonProjet`.
 - Initialisation : `git init`.
 - Fichier **README.md** créé avec le contenu :

Ceci est mon premier dépôt Git !

- Ajout et commit :

bash:

```
git add README.md
```

```
git commit -m "Ajout du fichier README.md"
```

- **Étape 3: Connexion au dépôt GitHub :**

- Dépôt distant nommé **MonProjet** créé sur GitHub.
 - Connexion :

bash:

```
git remote add origin https://github.com/AMInho15/MonProjetdeveops
```

- Push :

bash:

```
git branch -M main
```

```
git push -u origin main
```

-Vérification :
Le fichier **README.md** est visible sur GitHub.

- Collaboration :

Un second développeur a cloné le projet pour y contribuer:

`git clone` <https://github.com/Shahd/MonProjet.git>

Partie 1 : Création du projet et configuration du dépôt:

- Création de branches pour des fonctionnalités :
 - Branche **feature-menu** créée pour ajouter un menu :

```
bash
```

```
git checkout -b feature-menu
```

- Menu ajouté et commité dans **index.html** :

html:

```
<nav>
```

```
<ul>
```

```
<li><a href="#">Accueil</a></li>
```

```
<li><a href="#">Contact</a></li>
```

```
</ul>
```

```
</nav>
```

bash:

```
git add index.html
```

```
git commit -m "Ajout du menu"
```

```
git push -u origin feature-menu
```

- Branche **feature-footer** pour le pied de page :

bash:

```
git checkout -b feature-footer
```

html:

```
<footer>
```

```
<p>© 2024 Mon Site Collaboratif</p>
```

```
</footer>
```

bash:

```
git add index.html
```

```
git commit -m "Ajout du pied de page"
```

```
git push -u origin feature-footer
```

- Résolution de conflits :
 - Un conflit est apparu lors du merge des branches **feature-menu** et **feature-footer** dans **main**.
 - Conflit résolu manuellement en fusionnant le contenu des deux branches dans **index.html**.
- Rebase pour garder un historique propre :
 - Utilisation de **git rebase** pour intégrer les modifications de **main** dans **feature-footer**.

```

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (master)
$ git remote -v
origin https://github.com/AMInho15/MonProjetdeveops.git (fetch)
origin https://github.com/AMInho15/MonProjetdeveops.git (push)

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (master)
$ git push -u origin main
error: src refspec main does not match any
error: failed to push some refs to 'https://github.com/AMInho15/MonProjetdeveops.git'

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (master)
$ ^C

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (master)
$ git branch
* master

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (master)
$ git push -u origin master
info: please complete authentication in your browser...
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 276 bytes | 92.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/AMInho15/MonProjetdeveops.git
 * [new branch]      master -> master
branch 'master' set up to track 'origin/master'.

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (master)
$ git add index.html
git commit -m "Ajout du fichier index.html avec le contenu de base"
fatal: pathspec 'index.html' did not match any files
On branch master
Your branch is up to date with 'origin/master'.

nothing to commit, working tree clean

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (master)
$ git add index.html
fatal: pathspec 'index.html' did not match any files

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (master)
$ ^C

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (master)
$ git pull origin main
fatal: couldn't find remote ref main

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (master)
$ git pull origin master
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (3/3), 1.00 KiB | 68.00 KiB/s, done.
From https://github.com/AMInho15/MonProjetdeveops

```

```
TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (master)
$ ls
README.md  index.html

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (master)
$ git pull origin master
From https://github.com/AMInho15/MonProjetdeveops
* branch      master      -> FETCH_HEAD
Already up to date.

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (master)
$ ls
README.md  index.html

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (master)
$ git checkout -b feature-menu
Switched to a new branch 'feature-menu'

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (feature-menu)
$ git add index.html

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (feature-menu)
$ git commit -m "Ajout du menu de navigation dans index.html"
On branch feature-menu
nothing to commit, working tree clean

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (feature-menu)
$ git push origin feature-menu
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 12 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (6/6), 1.26 KiB | 431.00 KiB/s, done.
Total 6 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'feature-menu' on GitHub by visiting:
remote:   https://github.com/AMInho15/MonProjetdeveops/pull/new/feature-menu
remote:
To https://github.com/AMInho15/MonProjetdeveops.git
 * [new branch]      feature-menu -> feature-menu

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (feature-menu)
$ git checkout main
error: pathspec 'main' did not match any file(s) known to git

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (feature-menu)
$ git checkout master
Switched to branch 'master'
Your branch is up to date with 'origin/master'.

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (master)
$ git merge feature-menu
Already up to date.
```

```

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (feature-menu)
$ git checkout master
Switched to branch 'master'
Your branch is up to date with 'origin/master'.

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (master)
$ git merge feature-menu
Already up to date.

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (master)
$ git push origin master
To https://github.com/AMInho15/MonProjetdeveops.git
 ! [rejected]        master -> master (fetch first)
error: failed to push some refs to 'https://github.com/AMInho15/MonProjetdeveops.git'
hint: Updates were rejected because the remote contains work that you do not
hint: have locally. This is usually caused by another repository pushing to
hint: the same ref. If you want to integrate the remote changes, use
hint: 'git pull' before pushing again.
hint: See the 'Note about fast-forwards' in 'git push --help' for details.

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (master)
$ git add index.html

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (master)
$ git commit -m "Résolution des conflits entre feature-menu et feature-footer"
On branch master
Your branch is up to date with 'origin/master'.

nothing to commit, working tree clean

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (master)
$ git push origin master
To https://github.com/AMInho15/MonProjetdeveops.git
 ! [rejected]        master -> master (fetch first)
error: failed to push some refs to 'https://github.com/AMInho15/MonProjetdeveops.git'
hint: Updates were rejected because the remote contains work that you do not
hint: have locally. This is usually caused by another repository pushing to
hint: the same ref. If you want to integrate the remote changes, use
hint: 'git pull' before pushing again.
hint: See the 'Note about fast-forwards' in 'git push --help' for details.

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (master)
$ git checkout feature-footer
error: pathspec 'feature-footer' did not match any file(s) known to git

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (master)
$ git rebase master
Current branch master is up to date.

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (master)
$ git rebase --continue
fatal: no rebase in progress

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/mon-premier-projet/mon-premier-projet (master)
$

```


Partie 2 : Contribuer à un projet open source

- Fork et clonage :
 - Le projet **Open Transport** a été forké depuis GitHub.
 - Projet cloné localement :

bash:

```
git clone https://github.com/Shahd/OpenTransport.git
```

- Traitement d'une issue :
 - Issue : Correction d'une erreur dans **README.md**.
 - Correction effectuée localement, commitée et pushée avec une référence à l'issue

bash:

```
git commit -m "Fix #1: Correction d'une erreur de texte dans README.md"
```

```
git push
```

- Création d'une pull request :
 - Pull request ouverte sur GitHub pour soumettre la modification.
- Simulation de conflit :
 - Conflit simulé en modifiant la même ligne dans **README.md** localement et sur GitHub.

- Conflit résolu en choisissant une version hybride.

```
TRETEC@DESKTOP-2RBCNA4 MINGW64 ~
$ git clone https://github.com/AMInho15/7688581-Expert-Git-GitHub
Cloning into '7688581-Expert-Git-GitHub'...
remote: Enumerating objects: 15, done.
remote: Total 15 (delta 0), reused 0 (delta 0), pack-reused 15 (from 1)
Receiving objects: 100% (15/15), 17.66 KiB | 2.52 MiB/s, done.
Resolving deltas: 100% (6/6), done.

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~
$ cd 7688581-Expert-Git-GitHub

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/7688581-Expert-Git-GitHub (main)
$ git add .

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/7688581-Expert-Git-GitHub (main)
$ git commit -m "Description de vos modifications"
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/7688581-Expert-Git-GitHub (main)
$ git push origin main
Everything up-to-date

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/7688581-Expert-Git-GitHub (main)
$ git fetch upstream
fatal: 'upstream' does not appear to be a git repository
fatal: Could not read from remote repository.

Please make sure you have the correct access rights
and the repository exists.

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/7688581-Expert-Git-GitHub (main)
$ git checkout main
git merge upstream/main
Already on 'main'
Your branch is up to date with 'origin/main'.
merge: upstream/main - not something we can merge

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/7688581-Expert-Git-GitHub (main)
$ git push origin main
Everything up-to-date

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/7688581-Expert-Git-GitHub (main)
$ git add README.md

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/7688581-Expert-Git-GitHub (main)
$ git commit -m "Correction de l'erreur de texte dans README.md (#1)"
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/7688581-Expert-Git-GitHub (main)
$ git push origin main
```



```
TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/7688581-Expert-Git-GitHub
$ git push origin main
Everything up-to-date
```

```
TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/7688581-Expert-Git-GitHub
$ git pull origin main
From https://github.com/AMInho15/7688581-Expert-Git-GitHub
* branch          main          -> FETCH_HEAD
Already up to date.
```

```
TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/7688581-Expert-Git-GitHub
$ git add README.md
git commit -m "Modification locale de la ligne 20"
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean
```

```
TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/7688581-Expert-Git-GitHub
$ git push origin main
Everything up-to-date
```

```
TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/7688581-Expert-Git-GitHub
$ git pull origin main
From https://github.com/AMInho15/7688581-Expert-Git-GitHub
* branch          main          -> FETCH_HEAD
Already up to date.
```

```
TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/7688581-Expert-Git-GitHub
$ git add README.md
git commit -m "Résolution du conflit dans README.md"
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean
```

```
TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/7688581-Expert-Git-GitHub
$ git push origin main
Everything up-to-date
```

```
TRETEC@DESKTOP-2RBCNA4 MINGW64 ~/7688581-Expert-Git-GitHub
$ git push origin main
```

