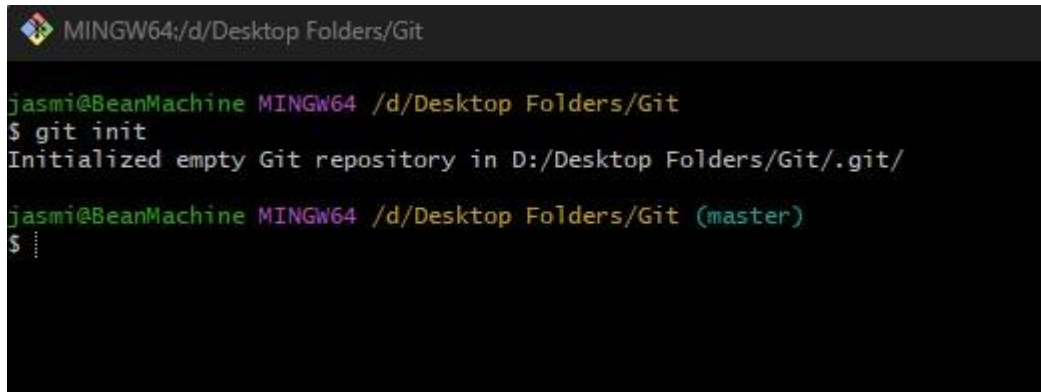


Git Lab Assignment One

Init

Git init initialized an empty repository in the folder where git bash is launched in. Meaning it tells git bash that this folder on my pc will be used for a repository for git hub (or other git server).

Syntax: git init

A screenshot of a terminal window with a dark background. The title bar at the top reads 'MINGW64; d:/Desktop Folders/Git'. The terminal shows the following commands and output:

```
jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git
$ git init
Initialized empty Git repository in D:/Desktop Folders/Git/.git/

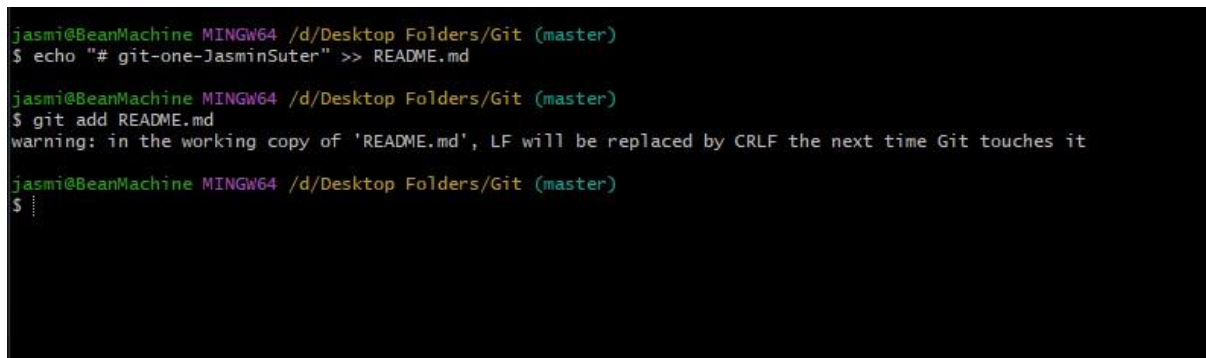
jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git (master)
$
```

Add

Git add tells git bash to be aware of added files or any changes (eg. An uploaded file was deleted) in the local folder we initialized, so it can be uploaded to git hub later with the commit and push commands.

Syntax: git add filename (to add a specific file)

git add . (to add all files in a folder)

A screenshot of a terminal window with a dark background. The title bar at the top reads 'MINGW64; d:/Desktop Folders/Git (master)'. The terminal shows the following commands and output:

```
jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git (master)
$ echo "# git-one-JasminSuter" >> README.md

jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git (master)
$ git add README.md
warning: in the working copy of 'README.md', LF will be replaced by CRLF the next time Git touches it

jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git (master)
$
```

Status

Git status asks git bash to list all the files currently in the folder where the repository is that are not yet committed to git hub. It will list files already added but not committed in green and files that have not been added yet in red.

Syntax: git status

```

jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git (main)
$ git status
On branch main
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        Git Branch.png
        Git Commit.png
        Git Init .png
        Git Remote.png
        Git add.png

nothing added to commit but untracked files present (use "git add" to track)
jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git (main)
$

```

Commit

Git commit readies the added files to be pushed (uploaded) with git push. It also lets the user add a comment to the commit which is very useful for information tracking. Usually, it explains the purpose of the push. The comment needs to be in quotation marks.

Syntax: git commit -m "comment"

```

jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git (master)
$ git config --global user.email "C00301545@setu.ie"

jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git (master)
$ git config --global user.name "JasminSuter"

jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git (master)
$ git commit -m "first commit"
[master (root-commit) de504b6] first commit
1 file changed, 1 insertion(+)
create mode 100644 README.md

```

Remote

Git remote tells git bash which git hub url (or other git server) the folder I am currently working on is linked to and should be uploaded to with push.

Syntax: git remote add origin url

```

jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git (main)
$ git remote add origin https://github.com/PeterLowe/git-one-JasminSuter.git

jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git (main)
$

```

Push

Git push uploads all committed files and changes from the folder I am currently working on to the url added with git remote. This saves the work to git hub and should always be done before closing a project. It should be done frequently in small chunks.

Syntax: git push -u origin branch

With origin being the folder I am currently working on and branch being the branch I want to push it to.

```
jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git (main)
$ git push -u origin main
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 236 bytes | 236.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/PeterLowe/git-one-JasminSuter.git
 * [new branch]      main -> main
branch 'main' set up to track 'origin/main'.

jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git (main)
$
```

Branch

Git branch creates a sub category that will appear on git hub as a branch once pushed. This tells git bash this is the section I am working on and will make changes to.

Syntax: git branch -M branch name

```
jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git (master)
$ git branch -M main

jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git (main)
$
```

Clone

Git clone downloads a copy of a project (repository) specified by the url from git hub into the local folder specified in git bash along with all the git hub settings already applied to it (eg. Git remote).

Syntax: git clone url

```
jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git Projects/Git Clone Example
$ git clone https://github.com/PeterLowe/git-one-JasminSuter.git
Cloning into 'git-one-JasminSuter'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 3 (delta 0), pack-reused 0
Receiving objects: 100% (3/3), done.

jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git Projects/Git Clone Example
$
```

Pull

Git pull updates my project in my local folder with any changes done to the project in git hub (if any). It only pulls from the current branch. It also tells me what changes were done (files changed, added or removed)

Syntax: git pull

```

jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git Projects/Git Clone Example/git-one-JasminSuter (main)
$ git pull
remote: Enumerating objects: 11, done.
remote: Counting objects: 100% (11/11), done.
remote: Compressing objects: 100% (10/10), done.
remote: Total 10 (delta 0), reused 10 (delta 0), pack-reused 0
Unpacking objects: 100% (10/10), 107.40 KiB | 332.00 KiB/s, done.
From https://github.com/PeterLowe/git-one-JasminSuter
   de504b6..0c3f034  main       -> origin/main
Updating de504b6..0c3f034
Fast-forward
  Git Branch.png | Bin 0 -> 8429 bytes
  Git Clone.png | Bin 0 -> 15725 bytes
  Git Commit.png | Bin 0 -> 18376 bytes
  Git Init .png | Bin 0 -> 11933 bytes
  Git Push.png | Bin 0 -> 18853 bytes
  Git Remote.png | Bin 0 -> 9623 bytes
  Git Status.png | Bin 0 -> 17477 bytes
  Git add.png | Bin 0 -> 17306 bytes
  8 files changed, 0 insertions(+), 0 deletions(-)
  create mode 100644 Git Branch.png
  create mode 100644 Git Clone.png
  create mode 100644 Git Commit.png
  create mode 100644 Git Init .png
  create mode 100644 Git Push.png
  create mode 100644 Git Remote.png
  create mode 100644 Git Status.png
  create mode 100644 Git add.png
jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git Projects/Git Clone Example/git-one-JasminSuter (main)
$

```

Rm

Git rm deletes the specified file in the local folder. To update git hub we need to use git add, git commit and git push again to apply the changes made in the local folder to the git hub repository.

Syntax: git rm filename

```
jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git Projects/Git (main)
$ git add .

jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git Projects/Git (main)
$ git commit -m "adding files for rm test"
[main 51b977a] adding files for rm test
 2 files changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 Git Pull.png
 create mode 100644 rmtest.txt

jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git Projects/Git (main)
$ git push -u origin main
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 16 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 47.72 KiB | 23.86 MiB/s, done.
Total 4 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/PeterLowe/git-one-JasminSuter.git
   0c3f034..51b977a  main -> main
branch 'main' set up to track 'origin/main'.

jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git Projects/Git (main)
$ git rm rmtest
fatal: pathspec 'rmtest' did not match any files

jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git Projects/Git (main)
$ git rm rmtest.txt
rm 'rmtest.txt'

jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git Projects/Git (main)
$ git add .

jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git Projects/Git (main)
$ git commit -m "rm test completed, file removed"
[main 915aa34] rm test completed, file removed
 1 file changed, 0 insertions(+), 0 deletions(-)
 delete mode 100644 rmtest.txt

jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git Projects/Git (main)
$ git push -u origin main
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 16 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 235 bytes | 235.00 KiB/s, done.
Total 2 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/PeterLowe/git-one-JasminSuter.git
   51b977a..915aa34  main -> main
branch 'main' set up to track 'origin/main'.

jasmi@BeanMachine MINGW64 /d/Desktop Folders/Git Projects/Git (main)
$ !
```

Image of Git repository on Git Hub

