

Eliza Zimmermann git guide

- Init

```
MINGW64:/c:/Users/c00289302/Desktop/GitOne

C00289302@CD-A307-11 MINGW64 /c:/Users/c00289302/Desktop/GitOne
$ git init
Initialized empty Git repository in C:/Users/c00289302/Desktop/GitOne/.git/

C00289302@CD-A307-11 MINGW64 /c:/Users/c00289302/Desktop/GitOne (master)
$ |
```

Git init creates an empty repository in chosen folder.

- Add

```
C00289302@CD-A307-11 MINGW64 /c:/Users/c00289302/Desktop/GitOne (master)
$ git add .
```

Git add adds files to the local branch

- Status

```
C00289302@CD-A307-11 MINGW64 /c:/Users/c00289302/Desktop/GitOne (master)
$ git status
On branch master

No commits yet

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

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

C00289302@CD-A307-11 MINGW64 /c:/Users/c00289302/Desktop/GitOne (master)
$ .....

C00289302@CD-A307-11 MINGW64 /c:/Users/c00289302/Desktop/GitOne (master)
$ git status
On branch master
nothing to commit, working tree clean

C00289302@CD-A307-11 MINGW64 /c:/Users/c00289302/Desktop/GitOne (master)
$ .....
```

Git status tells us what files are in the folder and if they are pushed to branch or no, also it informs us about what branch we are at and if something new was committed.

- Commit

```
C00289302@CD-A307-11 MINGW64 /c/Users/c00289302/Desktop/GitOne (master)
$ git commit -m "First push"
[master (root-commit) b7bef53] First push
Committer: (Student C00289302) Eliza Zimmermann <C00289302@setu.ie>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:

    git config --global --edit

After doing this, you may fix the identity used for this commit with:

    git commit --amend --reset-author

3 files changed, 0 insertions(+), 0 deletions(-)
create mode 100644 GitOne.docx
create mode 100644 GitOne.txt
create mode 100644 ~$GitOne.docx

C00289302@CD-A307-11 MINGW64 /c/Users/c00289302/Desktop/GitOne (master)
$ |
```

Git commit -m commits all new files and new changes into the local branch.

- Remote

```
C00289302@CD-A307-11 MINGW64 /c/Users/c00289302/Desktop/GitOne (master)
$ git remote add origin https://github.com/PeterLowe/git-one-ElizaZimmermann.git
```

Git remote add origin https:// adds chosen project and pulls it into the chosen folder.

- Push

```
C00289302@CD-A307-11 MINGW64 /c/Users/c00289302/Desktop/GitOne (master)
$ git push -u origin master
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% (3/3), 20.69 KiB | 10.34 MiB/s, done.
Total 3 (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-ElizaZimmermann.git
  602d5da..755ab3b master -> master
branch 'master' set up to track 'origin/master'.
```

Pushes all committed files to the github.

- Branch

```
Eldzia@DESKTOP-BLQLOH9 MINGW64 ~/Desktop/GitGuideEliza/git-one-ElizaZimmermann (master)
$ git branch newbranch
```

Git branch creates new separate branch from the main. Which then can be used to create features without breaking main branch.

- Checkout

```
Eldzia@DESKTOP-BLQLOH9 MINGW64 ~/Desktop/GitGuideEliza/git-one-ElizaZimmermann (master)
$ git checkout newbranch
Switched to branch 'newbranch'

Eldzia@DESKTOP-BLQLOH9 MINGW64 ~/Desktop/GitGuideEliza/git-one-ElizaZimmermann (newbranch)
$
```

Git checkout switches branch for chosen one.

- Merge

```
Eldzia@DESKTOP-BLQLOH9 MINGW64 ~/Desktop/GitGuideEliza/git-one-ElizaZimmermann (master)
$ git merge newbranch
Updating 05d65d8..2bcec5d
Fast-forward
 git guide.docx      | Bin 155335 -> 175449 bytes
 newdocforbranchmerge.txt | 1 +
 script.txt          | 35 ++++++
 3 files changed, 36 insertions(+)
 create mode 100644 newdocforbranchmerge.txt
```

Git merge merges branches into one, while it merges it also automatically pushes commits to github.

- Log

```
Eldzia@DESKTOP-BLQLOH9 MINGW64 ~/Desktop/GitGuideEliza/git-one-ElizaZimmermann (master)
$ git log
commit 2bcec5d0a09903f20dc829bf4beee843819c81cc (HEAD -> master, origin/newbranch, origin/master, origin/HEAD, newbranch)
Author: Eliza Zimmermann <C00289302@setu.ie>
Date: Tue Oct 24 00:28:26 2023 +0100

    file for merge

commit 05d65d806847e378a47be25bf01c1a32e69b044b
Author: Eliza Zimmermann <C00289302@setu.ie>
Date: Tue Oct 24 00:04:59 2023 +0100

    change of file names

commit 1ef55b42c4f3ee10fcd7f76c3207f115e55f950e
Author: (Student C00289302) Eliza Zimmermann <C00289302@setu.ie>
Date: Fri Oct 20 10:35:06 2023 +0100

    commitment

commit 755ab3bc03a2e85bac73c643b948cd7f9e00b3f8
Author: (Student C00289302) Eliza Zimmermann <C00289302@setu.ie>
Date: Fri Oct 20 10:26:27 2023 +0100

    commit

commit 602d5da97a212e6872fd00203878751917e15323
Author: (Student C00289302) Eliza Zimmermann <C00289302@setu.ie>
Date: Fri Oct 20 10:16:14 2023 +0100

:
commit 2bcec5d0a09903f20dc829bf4beee843819c81cc (HEAD -> master, origin/newbranch, origin/master, origin/HEAD, newbranch)
Author: Eliza Zimmermann <C00289302@setu.ie>
Date: Tue Oct 24 00:28:26 2023 +0100

    file for merge

commit 05d65d806847e378a47be25bf01c1a32e69b044b
Author: Eliza Zimmermann <C00289302@setu.ie>
Date: Tue Oct 24 00:04:59 2023 +0100

    change of file names

commit 1ef55b42c4f3ee10fcd7f76c3207f115e55f950e
Author: (Student C00289302) Eliza Zimmermann <C00289302@setu.ie>
Date: Fri Oct 20 10:35:06 2023 +0100

    commitment
```

Git log shows you all the commits with authors and dates.

- Clone

```
Eldzia@DESKTOP-BLQLOH9 MINGW64 ~/Desktop/1
$ git clone https://github.com/PeterLowe/git-one-ElizaZimmermann.git
Cloning into 'git-one-ElizaZimmermann'...
remote: Enumerating objects: 23, done.
remote: Counting objects: 100% (23/23), done.
remote: Compressing objects: 100% (17/17), done.
remote: Total 23 (delta 5), reused 21 (delta 3), pack-reused 0
Receiving objects: 100% (23/23), 370.48 KiB | 3.53 MiB/s, done.
Resolving deltas: 100% (5/5), done.

Eldzia@DESKTOP-BLQLOH9 MINGW64 ~/Desktop/1
$
```

Git clone clones the chosen repository from github.

- Pull

```
Eldzia@DESKTOP-BLQLOH9 MINGW64 ~/Desktop/1/git-one-ElizaZimmermann (master)
$ git pull
Already up to date.
```

Git pull pull the updated repository from github.

- Stash

```
Eldzia@DESKTOP-BLQLOH9 MINGW64 ~/Desktop/GitGuideEliza/git-one-ElizaZimmermann (master)
$ git stash
Saved working directory and index state WIP on master: 0af725a updated word doc and script
```

git stash creates local only copy of working directory

- Rm

```
Eldzia@DESKTOP-BLQLOH9 MINGW64 ~/Desktop/GitGuideEliza/git-one-ElizaZimmermann (master)
$ git rm
~$GitOne.docx          git guide.docx          script.txt
~\WRL3850.tmp          newdocforbranchmerge.txt

Eldzia@DESKTOP-BLQLOH9 MINGW64 ~/Desktop/GitGuideEliza/git-one-ElizaZimmermann (master)
$ git rm newdocforbranchmerge.txt
rm 'newdocforbranchmerge.txt'
```

git rm removes the file or files.