

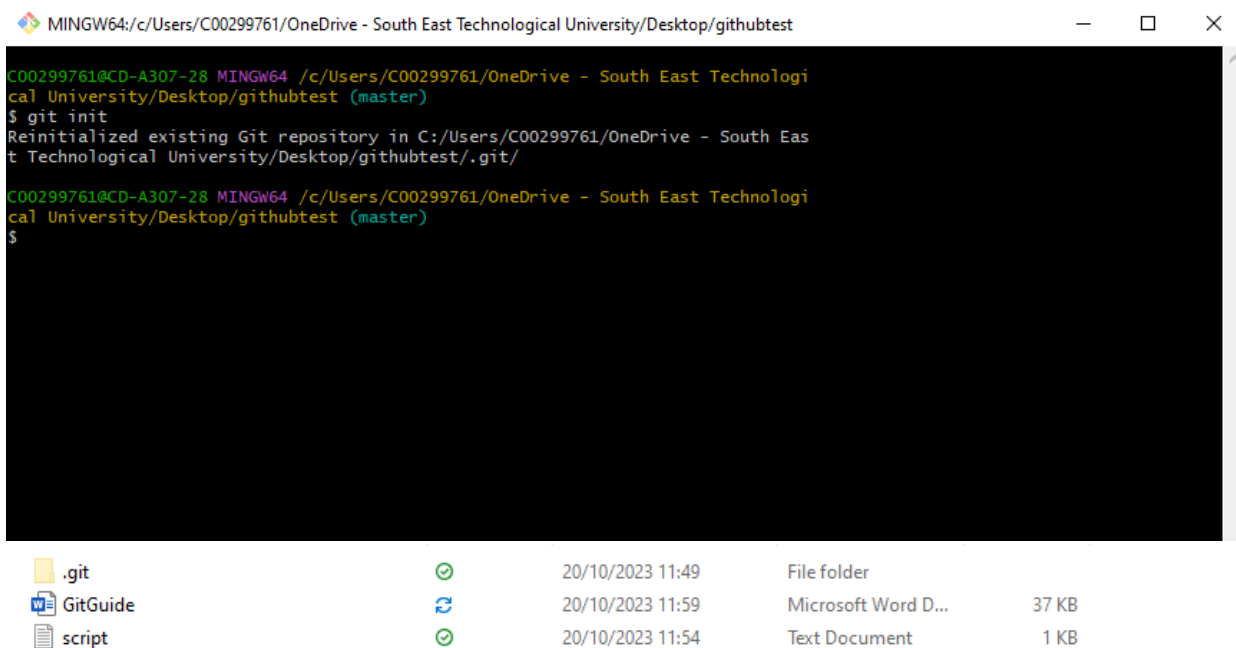
GitHub

Noel Byrne

20/10/23

Init:

git init creates a new repository called .git. It is created locally and not on github.



```
MINGW64:/c:/Users/C00299761/OneDrive - South East Technological University/Desktop/githubtest
C00299761@CD-A307-28 MINGW64 /c:/Users/C00299761/OneDrive - South East Technological University/Desktop/githubtest (master)
$ git init
Reinitialized existing Git repository in C:/Users/C00299761/OneDrive - South East Technological University/Desktop/githubtest/.git/
C00299761@CD-A307-28 MINGW64 /c:/Users/C00299761/OneDrive - South East Technological University/Desktop/githubtest (master)
$
```

File Name	Icon	Status	Date/Time	Type	Size
.git	Folder icon	Green circle	20/10/2023 11:49	File folder	
GitGuide	Word document icon	Blue refresh icon	20/10/2023 11:59	Microsoft Word Document	37 KB
script	Text document icon	Green circle	20/10/2023 11:54	Text Document	1 KB

Status:

Use git status before and after adding files. Git status lists all the files in the current branch. Files in red are dirty files that aren't committed. Once committed the files will be green.

```
C00299761@CD-A307-28 MINGW64 /c:/Users/C00299761/OneDrive - South East Technological University/Desktop/githubtest (master)
$ git status
On branch master

No commits yet

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

nothing added to commit but untracked files present (use "git add" to track)
C00299761@CD-A307-28 MINGW64 /c:/Users/C00299761/OneDrive - South East Technological University/Desktop/githubtest (master)
$ |
```

```

C00299761@CD-A307-28 MINGW64 /c/Users/C00299761/OneDrive - South East Technological University/Desktop/githubtest (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   GitGuide.docx
        new file:   script.txt

```

Add:

Git add . adds all files to the branch. It changes the files colour from red to green that haven't been added yet/ have been changed.

```

$ git status
On branch master

No commits yet

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

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

C00299761@CD-A307-28 MINGW64 /c/Users/C00299761/OneDrive - South East Technological University/Desktop/githubtest (master)
$ git add .

C00299761@CD-A307-28 MINGW64 /c/Users/C00299761/OneDrive - South East Technological University/Desktop/githubtest (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   GitGuide.docx
        new file:   script.txt

```

As you can see the file colour has changed after we added the files.

```

C00299761@CD-A307-28 MINGW64 /c/Users/C00299761/OneDrive - South East Technological University/Desktop/githubtest (master)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   GitGuide.docx
        modified:   script.txt

no changes added to commit (use "git add" and/or "git commit -a")

```

After adding more to the files and saving them they have turned back to red.

Commit:

Git commit adds a new revision point in your work. By doing `git commit -m ""`, you can enter a name for your commit. The name is usually something new you have added into your files/code.

```
$ git commit -m "added in add and commit"
[main 0af8c63] added in add and commit
Committer: (Student C00299761) Noel Byrne <C00299761@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

2 files changed, 7 insertions(+)
```

48 Commits on Oct 20, 2023

added in add and commit (Student C00299761) Noel Byrne authored and (Student C00299761) Noel Byrne committed 2 minutes ago	0af8c63	<>
git status (Student C00299761) Noel Byrne authored and (Student C00299761) Noel Byrne committed 22 minutes ago	2dbd246	<>
First Commit (Student C00299761) Noel Byrne authored and (Student C00299761) Noel Byrne committed 25 minutes ago	db03143	<>

Newer Older

The name I gave the commit has now been added.

Remote:

Git remote can be used to list all the repositories on the server. You can add a remote repository by typing “git remote add <name> <url>”. You can then commit and push to that repository instead of always committing to origin/master.

```
$ git remote -v
origin  https://github.com/PeterLowe/git-one-ByrneNoel.git (fetch)
origin  https://github.com/PeterLowe/git-one-ByrneNoel.git (push)
test    https://github.com/PeterLowe/git-one-ByrneNoel (fetch)
test    https://github.com/PeterLowe/git-one-ByrneNoel (push)
```

I created a repository called test and I committed + pushed to it instead of origin.

```
$ git commit -m "testing remote"
[main 02801d0] testing remote
Committer: (Student C00299761) Noel Byrne <C00299761@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

2 files changed, 1 insertion(+), 1 deletion(-)

C00299761@CD-A307-28 MINGW64 /c/Users/C00299761/OneDrive - South East Technological University/Desktop/github/test
$ git push -u test main
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 16 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 58.71 KiB | 14.68 MiB/s, done.
Total 4 (delta 2), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
To https://github.com/PeterLowe/git-one-ByrneNoel
   0af8c63..02801d0  main -> main
branch 'main' set up to track 'test/main'.
```

testing remote

(Student C00299761) Noel Byrne authored and (Student C00299761) Noel Byrne committed 7 minutes ago

02801d0 <>

Clone:

Git clone allows you to take a copy of your work and clone it to your computer somewhere else. That copy is stored on your computer, and you can send the updated work back when you're done. Here is me cloning my work from Friday.

```
Me@DESKTOP-OIIVE02 MINGW64 /d/SETU/Comms/GitHubWork/git-one-ByrneNoel (main)
$ git clone https://github.com/PeterLowe/git-one-ByrneNoel.git
Cloning into 'git-one-ByrneNoel'...
remote: Enumerating objects: 19, done.
remote: Counting objects: 100% (19/19), done.
remote: Compressing objects: 100% (12/12), done.
remote: Total 19 (delta 8), reused 18 (delta 7), pack-reused 0
Receiving objects: 100% (19/19), 244.52 KiB | 1.12 MiB/s, done.
Resolving deltas: 100% (8/8), done.
```

Push:

Git push is used to push the work you have committed to the main branch. It updates the remote node with the current. This is me pushing my work to the main branch.

```
Me@DESKTOP-OIIVE02 MINGW64 /d/SETU/Comms/GitHubWork/git-one-ByrneNoel (main)
$ git push -u origin main
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 16 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 26.18 KiB | 8.73 MiB/s, done.
Total 4 (delta 2), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
To https://github.com/PeterLowe/git-one-ByrneNoel.git
   e7525b7..1953b87  main -> main
branch 'main' set up to track 'origin/main'.
```

Branch:

Git branch lists the branches that are in the repository. You can add branches using `git branch <name>`. I'm going to make a branch and then delete the branch using `git branch -d <name>`. (fingers crossed).

```
Me@DESKTOP-OIIVE02 MINGW64 /d/SETU/Comms/GitHubWork/git-one-ByrneNoel (main)
$ git branch
* main

Me@DESKTOP-OIIVE02 MINGW64 /d/SETU/Comms/GitHubWork/git-one-ByrneNoel (main)
$ git branch test

Me@DESKTOP-OIIVE02 MINGW64 /d/SETU/Comms/GitHubWork/git-one-ByrneNoel (main)
$ git branch
* main
  test
```

```
Me@DESKTOP-OIIVE02 MINGW64 /d/SETU/Comms/GitHubWork/git-one-ByrneNoel (main)
$ git branch -d test
Deleted branch test (was 1fece38).

Me@DESKTOP-OIIVE02 MINGW64 /d/SETU/Comms/GitHubWork/git-one-ByrneNoel (main)
$ git branch
* main
```

Log:

Git log displays the commit history of the current branch you are on. You can navigate by pressing space and quitting by pressing q.

```
commit 73b91fbb3006b9b892dfbc75af7630c5d72bd6d8 (HEAD -> main, origin/main, origin/HEAD)
Author: ByrneNoel <noelbyrne2013@gmail.com>
Date:   Fri Oct 20 17:35:22 2023 +0100

    git branch

commit 1fece3812f2186a11f334fe15cbcf602863e0864
Author: ByrneNoel <noelbyrne2013@gmail.com>
Date:   Fri Oct 20 17:25:49 2023 +0100

    git push

commit 1953b87aca7fc58c025db246feec48b7ce2e9147
Author: ByrneNoel <noelbyrne2013@gmail.com>
Date:   Fri Oct 20 17:08:48 2023 +0100

    git clone

commit e7525b71df24631b2f2ad7fb318987cd692785ae
Author: (Student C00299761) Noel Byrne <C00299761@setu.ie>
Date:   Fri Oct 20 13:00:37 2023 +0100

    git remote

commit 02801d040fb86c34d78d79b31650dd698793e2ae
Author: (Student C00299761) Noel Byrne <C00299761@setu.ie>
Date:   Fri Oct 20 12:51:10 2023 +0100

    testing remote

commit 0af8c638225919667cb01045d0c771b82a8f31a3
Author: (Student C00299761) Noel Byrne <C00299761@setu.ie>
Date:   Fri Oct 20 12:35:32 2023 +0100
```

RM:

Git rm is used to remove files. It should be treated with caution and only be used by people who know what they are doing.

```
Me@DESKTOP-OIIVE02 MINGW64 /d/SETU/Comms/GitHubWork/git-one-ByrneNoel (main)
$ ls -a
./  ../  .git/  GitGuide.docx  scaryvirusfile.txt  script.txt  '~$tGuide.docx'  '~WRL0003.tmp'

Me@DESKTOP-OIIVE02 MINGW64 /d/SETU/Comms/GitHubWork/git-one-ByrneNoel (main)
$ git rm scaryvirusfile.txt
rm 'scaryvirusfile.txt'

Me@DESKTOP-OIIVE02 MINGW64 /d/SETU/Comms/GitHubWork/git-one-ByrneNoel (main)
$ ls -a
./  ../  .git/  GitGuide.docx  script.txt  '~$tGuide.docx'  '~WRL0003.tmp'

Me@DESKTOP-OIIVE02 MINGW64 /d/SETU/Comms/GitHubWork/git-one-ByrneNoel (main)
$ |
```