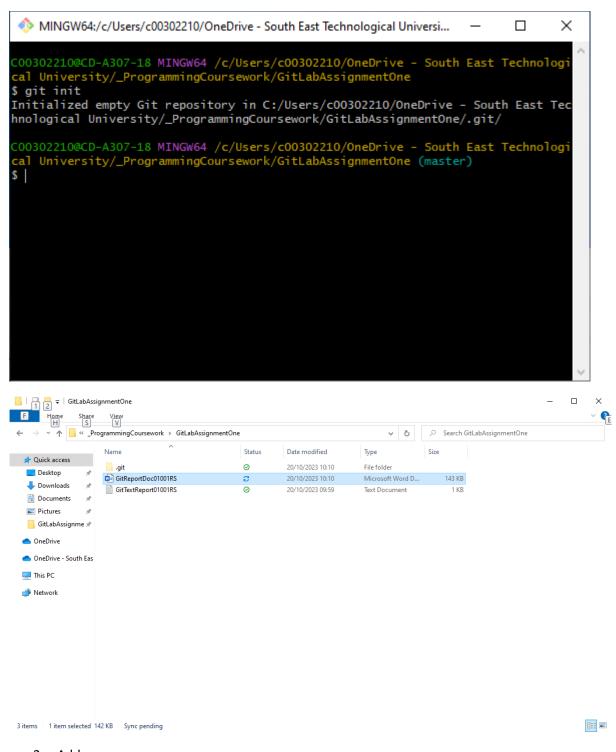
1. Init

The git init command initialises a local repository on my computer and allows me to work on it on my PC. After executing 'init', the repo will be in sub folder of where I ran the 'init' command. (hidden git folder). You may need to enter the working dir with the CD command. I can't seem to use the dir/w command, so it looks like I'll have to relearn some stuff...!



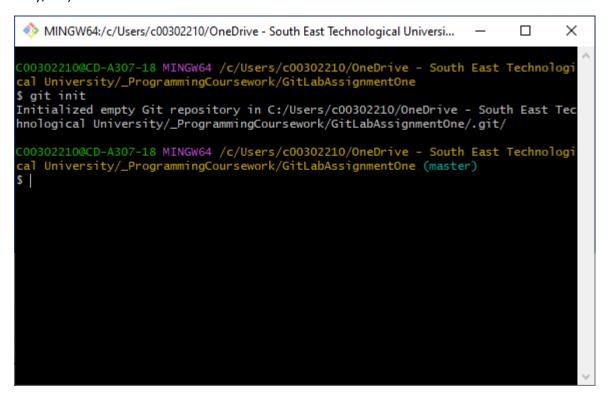
2. Add

The git add command can make files or whole directories staged for committing to repositories.

```
MINGW64:/c/Users/c00302210/OneDrive - South East Technological Universi...
                                                                                                Х
error: open("GitReportDoc01001RS.docx"): Permission denied
error: unable to index file 'GitReportDoc01001RS.docx' fatal: adding files failed
C00302210@CD-A307-18 MINGW64 /c/Users/c00302210/OneDrive - South East Technologi
cal University/_ProgrammingCoursework/GitLabAssignmentOne (master)
$ git add .
C00302210@CD-A307-18 MINGW64 /c/Users/c00302210/OneDrive - South East Technological University/_ProgrammingCoursework/GitLabAssignmentOne (master)
$ git status
On branch master
No commits yet
Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file: GitReportDoc01001RS.docx
          new file: GitTextReport01001RS.txt
C00302210@CD-A307-18 MINGW64 /c/Users/c00302210/OneDrive - South East Technological University/_ProgrammingCoursework/GitLabAssignmentOne (master)
```

3. Status

Status indicates the current contents of the local repo and their current state (eg. Whether staged, dirty, etc).



4. Commit

Creates a new commit with files that have been staged. The new commit is the child of the head, I think.

```
🧆 MINGW64:/c/Users/c00302210/OneDrive - South East Technological Universi...
                                                                                     Х
                                                                              C00302210@CD-A307-18 MINGW64 /c/Users/c00302210/OneDrive - South East Technologi
cal University/_ProgrammingCoursework/GitLabAssignmentOne (master)
$ git commit -m "Initial commit."
[master (root-commit) 637cf2a] Initial commit.
Committer: (Student C00302210) Robert Mc Gregor <C00302210@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, 19 insertions(+)
create mode 100644 GitReportDoc01001RS.docx
create mode 100644 GitTextReport01001RS.txt
C00302210@CD-A307-18 MINGW64 /c/Users/c00302210/OneDrive - South East Technologi
cal University/_ProgrammingCoursework/GitLabAssignmentOne (master)
```

5. Remote

Manages the repos associated with the project, allows you to see what you're currently attached to ('master') – does a lot more stuff!

```
MINGW64:/c/Users/c00302210/OneDrive - South East Technological Universi...
                                                                                        \times
C00302210@CD-A307-18 MINGW64 /c/Users/c00302210/OneDrive - South East Technological University/_ProgrammingCoursework/GitLabAssignmentOne (master)
$ git branch
C00302210@CD-A307-18 MINGW64 /c/Users/c00302210/OneDrive - South East Technologi
cal University/_ProgrammingCoursework/GitLabAssignmentOne (master)
$ git remote add origin https://github.com/PeterLowe/git-one-RobertMcGregorIsCoo
l.git
C00302210@CD-A307-18 MINGW64 /c/Users/c00302210/OneDrive - South East Technologi
cal University/_ProgrammingCoursework/GitLabAssignmentOne (master)
$ git status
On branch master
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: GitReportDoc01001RS.docx
no changes added to commit (use "git add" and/or "git commit -a")
C00302210@CD-A307-18 MINGW64 /c/Users/c00302210/OneDrive - South East Technologi
cal University/_ProgrammingCoursework/GitLabAssignmentOne (master)
```

6. Push

Updates the remote node with the current node – sends staged files/commits to remote repo.

```
MINGW64:/c/Users/c00302210/OneDrive - South East Technological Universi...
                                                                                         Х
                                                                                  bash: remote: command not found
C00302210@CD-A307-18 MINGW64 /c/Users/c00302210/OneDrive - South East Technologic
/GitLabAssignmentOne (master)
$ git remote
origin
C00302210@CD-A307-18 MINGW64 /c/Users/c00302210/OneDrive - South East Technologi
/GitLabAssignmentOne (master)
$ git push -u origin master
info: please complete authentication in your browser...
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 16 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 32.69 KiB | 32.69 MiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/PeterLowe/git-one-RobertMcGregorIsCool.git
   [new branch]
                       master -> master
branch 'master' set up to track 'origin/master'.
C00302210@CD-A307-18 MINGW64 /c/Users/c00302210/OneDrive - South East Technologi
 'GitLabAssignmentOne (master)
```

7. Branch

Branch allows the user to list created branches, make a new branch or delete branches. (Doesn't switch to 'em?)

8. Checkout

```
MINGW64:/c/Users/c00302210/OneDrive - South East Technological Universi... — 

C00302210@CD-A307-18 MINGW64 /c/Users/c00302210/OneDrive - South East Technological University/_ProgrammingCoursework/GitLabAssignmentOne (master)

§ git checkout el_hefe_bastardo

Switched to branch 'el_hefe_bastardo'

C00302210@CD-A307-18 MINGW64 /c/Users/c00302210/OneDrive - South East Technological University/_ProgrammingCoursework/GitLabAssignmentOne (el_hefe_bastardo)

§ git checkout master

Switched to branch 'master'

Your branch is ahead of 'origin/master' by 1 commit.

(use "git push" to publish your local commits)

C00302210@CD-A307-18 MINGW64 /c/Users/c00302210/OneDrive - South East Technological University/_ProgrammingCoursework/GitLabAssignmentOne (master)

§ |
```

Checkout makes my node (El Hefe Bastardo) the current HEAD. Then I switched back to MASTER as all my work had disappeared (wrong branch).

9. Merge

Incorporates changes from El_Hefe_Bastardo into the current branch (Master). As El_Hefe_Bastardo has no major advances on Master, git reports that the Master branch is already up to date.

```
X
 MINGW64:/c/Users/c00302210/OneDrive - South East Technological Universi...
Your branch is up to date with 'origin/master'.
nothing to commit, working tree clean
C00302210@CD-A002-40 MINGW64 /c/Users/c00302210/OneDrive - South East Technologi
cal University/_ProgrammingCoursework/GitLabAssignmentOne (master)
$ git branch
 el_hefe_bastardo
C00302210@CD-A002-40 MINGW64 /c/Users/c00302210/OneDrive - South East Technologi
cal University/_ProgrammingCoursework/GitLabAssignmentOne (master)
$ git merge el_hefe_bastardo
Already up to date.
C00302210@CD-A002-40 MINGW64 /c/Users/c00302210/OneDrive - South East Technologi
cal University/_ProgrammingCoursework/GitLabAssignmentOne (master)
$ git branch
 el_hefe_bastardo
 master
C00302210@CD-A002-40 MINGW64 /c/Users/c00302210/OneDrive - South East Technologi
cal University/_ProgrammingCoursework/GitLabAssignmentOne (master)
```

Lists the commit logs, can be navigated with <space> and <q>.

```
MINGW64:/c/Users/c00302210/OneDrive - South East Technological Universi...
                                                                                        X
                                                                                it 9c0aaacf616a3b69b432b8674e73cac57ac43ea4 (HEAD -> master, origin/master)
Author: (Student C00302210) Robert Mc Gregor <C00302210@setu.ie>
Date: Fri Oct 20 15:59:06 2023 +0100
    Merged El Hefe Bastardo
commit 6e77449278a695d8816ab11f1b2e79380c8a1ac1
Author: (Student C00302210) Robert Mc Gregor <C00302210@setu.ie>
Date: Fri Oct 20 10:46:18 2023 +0100
    Last commit before leaving class.
commit 90065a39c095fef4d59cfa1085f0275fc28e9256
Author: (Student C00302210) Robert Mc Gregor <C00302210@setu.ie>
Date: Fri Oct 20 10:36:38 2023 +0100
    Enter 'El Hefe Bastardo'
commit 3603432ba46424461cdac6f0c8b412d26b1955df (el_hefe_bastardo)
Author: (Student C00302210) Robert Mc Gregor <C00302210@setu.ie>
Date: Fri Oct 20 10:25:42 2023 +0100
    Updating docs after writing 'Push'
```

Have not done these as I've reached my 10/10!

- 11. Clone
- 12. Pull
- 13. Stash
- 14. Rm