Installing & Setup of Git

```
MINGW64:/e/Code/GitTutorials

avnis@Avnish MINGW64 /e/Code/GitTutorials
$ git config --global user.name "Avnish"

avnis@Avnish MINGW64 /e/Code/GitTutorials
$ git config --global user.email "avnishy84@gmail.com"

avnis@Avnish MINGW64 /e/Code/GitTutorials
$ git config --list
diff.astextplain.textconv=astextplain
filter.lfs.clean=git-lfs clean -- %f
filter.lfs.smudge=git-lfs smudge -- %f
filter.lfs.process=git-lfs filter-process
filter.lfs.required=true
http.sslbackend=openssl
http.sslcainfo=C:/Program Files/Git/mingw64/ssl/certs/ca-bundle.crt
core.autocrlf=true
core.fscache=true
core.symlinks=false
pull.rebase=false
credential.helper=manager-core
credential.https://dev.azure.com.usehttppath=true
init.defaultbranch=master
user.name=Avnish
user.email=avnishy84@gmail.com
```

Folder Initialization & Basic Commands

```
avnis@Avnish MINGW64 /e/Code/GitTutorials
$ git config user.name
Avnish

avnis@Avnish MINGW64 /e/Code/GitTutorials
$ git config user.email
avnishy84@gmail.com

avnis@Avnish MINGW64 /e/Code/GitTutorials
$ git status
fatal: not a git repository (or any of the parent directories): .git

avnis@Avnish MINGW64 /e/Code/GitTutorials
$ git init
Initialized empty Git repository in E:/Code/GitTutorials/.git/

avnis@Avnish MINGW64 /e/Code/GitTutorials (master)
$ git status
On branch master

No commits yet

nothing to commit (create/copy files and use "git add" to track)
```

add & commit Command

```
MINGW64:/e/Code/GitTutorials                                    —   □   ✕

avnis@Avnish MINGW64 /e/Code/GitTutorials (master)
$ git add --a

avnis@Avnish MINGW64 /e/Code/GitTutorials (master)
$ git status
On branch master

No commits yet

Changes to be committed:
   (use "git rm --cached <file>..." to unstage)
        new file:    1125.java
        new file:    App.js
        new file:    Assign1.class
        new file:    Assign1.java
        new file:    Ex.html
        new file:    ex.js
        new file:    main.css
        new file:    main.js
        new file:    new a2.txt
        new file:    new2.txt
        new file:    new222.java
        new file:    newfrm.css
        new file:    newfrm.html


avnis@Avnish MINGW64 /e/Code/GitTutorials (master)
$ git commit -m "Initial Commit 1"
[master (root-commit) c38bd68] Initial Commit 1
 13 files changed, 602 insertions(+)
 create mode 100644 1125.java
 create mode 100644 App.js
 create mode 100644 Assign1.class
 create mode 100644 Assign1.java
 create mode 100644 Ex.html
 create mode 100644 ex.js
 create mode 100644 main.css
 create mode 100644 main.js
 create mode 100644 new a2.txt
 create mode 100644 new2.txt
 create mode 100644 new222.java
 create mode 100644 newfrm.css
 create mode 100644 newfrm.html

avnis@Avnish MINGW64 /e/Code/GitTutorials (master)
$ git status
On branch master
nothing to commit, working tree clean
```

rm -rf .git (remove a file from a Git repository.)

```
avnis@Avnish MINGW64 /e/Code/GitTutorials (master)
$ git commit -m "Chnages3"
[master 7ea9f87] Chnages3
 1 file changed, 1 insertion(+)

avnis@Avnish MINGW64 /e/Code/GitTutorials (master)
$ git status
On branch master
nothing to commit, working tree clean

avnis@Avnish MINGW64 /e/Code/GitTutorials (master)
$ git log
commit 7ea9f87bc106b11ad4f45b1b60e13f885d71d72b (HEAD -> master)
Author: Avnish <avnishy84@gmail.com>
Date:   Fri Feb 25 14:21:29 2022 +0530

    Chnages3

commit e45ec4ad6c6bbe1488b87f3d3acb4c101e1d18a5
Author: Avnish <avnishy84@gmail.com>
Date:   Fri Feb 25 14:17:07 2022 +0530

    Changes in new2.txt Adding Some Add

commit c38bd68667f1e9bf94e6d5567d1c03e0856f576a
Author: Avnish <avnishy84@gmail.com>
Date:   Fri Feb 25 14:13:10 2022 +0530

    Initial Commit 1

avnis@Avnish MINGW64 /e/Code/GitTutorials (master)
$ rm -rf .git

avnis@Avnish MINGW64 /e/Code/GitTutorials
$ git status
fatal: not a git repository (or any of the parent directories): .git

avnis@Avnish MINGW64 /e/Code/GitTutorials
$
```
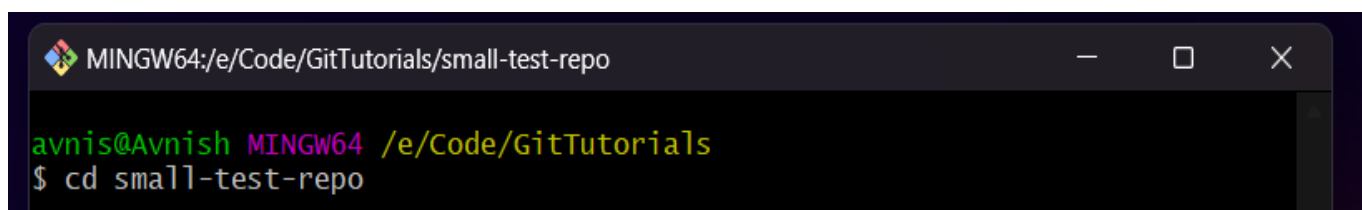
Copying Small git Repo using clone command.

```
MINGW64:/e/Code/GitTutorials/small-test-repo                    —    □    ✕

avnis@Avnish MINGW64 /e/Code/GitTutorials
$ cd small-test-repo
```

```
MINGW64:/e/Code/GitTutorials/small-test-repo                    —    □    ✕

avnis@Avnish MINGW64 /e/Code/GitTutorials/small-test-repo (master)
$ git status
On branch master
Your branch is up to date with 'origin/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:   EXAMPLE

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        EXAMPLE.bak

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

avnis@Avnish MINGW64 /e/Code/GitTutorials/small-test-repo (master)
$ git add --a

avnis@Avnish MINGW64 /e/Code/GitTutorials/small-test-repo (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   EXAMPLE
        new file:   EXAMPLE.bak


avnis@Avnish MINGW64 /e/Code/GitTutorials/small-test-repo (master)
$ git add --a

avnis@Avnish MINGW64 /e/Code/GitTutorials/small-test-repo (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   EXAMPLE
        new file:   EXAMPLE.bak
```

```
avnis@Avnish MINGW64 /e/Code/GitTutorials/small-test-repo (master)
$ git log
commit ce1e0703402e989bedf03d5df535401340f54b42 (HEAD -> master, origin/mast
er, origin/HEAD)
Author: Roberto Tyley <roberto.tyley@guardian.co.uk>
Date:   Fri Aug 26 22:22:55 2011 +0100

    commit1

commit 3974996807a9f596cf25ac3a714995c24bb97e2c
Author: Roberto Tyley <roberto.tyley@guardian.co.uk>
Date:   Fri Aug 26 22:18:53 2011 +0100

    commit0

avnis@Avnish MINGW64 /e/Code/GitTutorials/small-test-repo (master)
$
```
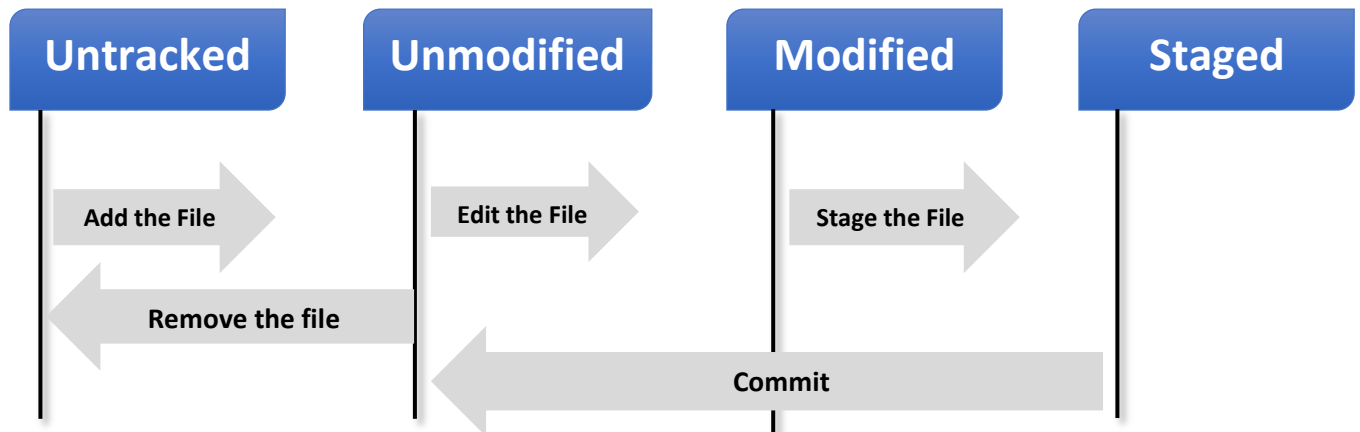
File Status Lifecycle

Untracked	Unmodified	Modified	Staged

Add the File →

Edit the File →

Stage the File →

← Remove the file

← Commit

Example of Untracked Position

```
MINGW64:/e/Code/GitTutorials                          —    □    ✕

avnis@Avnish MINGW64 /e/Code/GitTutorials
$ git status
fatal: not a git repository (or any of the parent directories): .git

avnis@Avnish MINGW64 /e/Code/GitTutorials
$ git init
Initialized empty Git repository in E:/Code/GitTutorials/.git/

avnis@Avnish MINGW64 /e/Code/GitTutorials (master)
$ git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        new a12.txt
        new222.java
        newfrm.css
        newfrm.html

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

avnis@Avnish MINGW64 /e/Code/GitTutorials (master)
$
```

Comes into Unmodified Status

```
MINGW64:/e/Code/GitTutorials                    —    □    ✕

avnis@Avnish MINGW64 /e/Code/GitTutorials (master)
$ git add --a

avnis@Avnish MINGW64 /e/Code/GitTutorials (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   new a12.txt
        new file:   new222.java
        new file:   newfrm.css
        new file:   newfrm.html
```

Modified

```
MINGW64:/e/Code/GitTutorials                                          —    □    ✕

avnis@Avnish MINGW64 /e/Code/GitTutorials (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:    new a12.txt
        new file:    new222.java
        new file:    newfrm.css
        new file:    newfrm.html

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:    new a12.txt


avnis@Avnish MINGW64 /e/Code/GitTutorials (master)
```

Staged

```
MINGW64:/e/Code/GitTutorials

avnis@Avnish MINGW64 /e/Code/GitTutorials (master)
$ git add --a

avnis@Avnish MINGW64 /e/Code/GitTutorials (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:    new a12.txt
        new file:    new222.java
        new file:    newfrm.css
        new file:    newfrm.html


avnis@Avnish MINGW64 /e/Code/GitTutorials (master)
$ A
```

Creating git Branch

```
avnis@Avnish MINGW64 /e/Code/GitTutorials (master)
$ git checkout -b develop
Switched to a new branch 'develop'

avnis@Avnish MINGW64 /e/Code/GitTutorials (develop)
$ git status
On branch develop
Changes not staged for commit:
  (use "git add/rm <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        deleted:    newfrm.html

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        Static/
        html/

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

avnis@Avnish MINGW64 /e/Code/GitTutorials (develop)
$ git status
On branch develop
Changes not staged for commit:
  (use "git add/rm <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        deleted:    new222.java
        deleted:    newfrm.css
        deleted:    newfrm.html

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        Static/
        css/
        html/
        js/

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

Make Changes in present working directory

Name	Date modified	Type	Size
.git	25-02-2022 03:49 PM	File folder	
css	25-02-2022 03:47 PM	File folder	
html	25-02-2022 03:47 PM	File folder	
js	25-02-2022 03:48 PM	File folder	
Static	25-02-2022 03:47 PM	File folder	
new a12	25-02-2022 03:28 PM	Text Document	1 KB

Switch to Master Branch

```
MINGW64:/e/Code/GitTutorials                                        —    □    ×
Changes not staged for commit:
  (use "git add/rm <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        deleted:        new222.java
        deleted:        newfrm.css
        deleted:        newfrm.html

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        Static/
        css/
        html/
        js/

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

avnis@Avnish MINGW64 /e/Code/GitTutorials (develop)
$ git add
Nothing specified, nothing added.
hint: Maybe you wanted to say 'git add .'?
hint: Turn this message off by running
hint: "git config advice.addEmptyPathspec false"

avnis@Avnish MINGW64 /e/Code/GitTutorials (develop)
$ git add --a

avnis@Avnish MINGW64 /e/Code/GitTutorials (develop)
$ git status
On branch develop
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        renamed:        new222.java -> Static/new222.java
        renamed:        newfrm.css -> css/newfrm.css
        renamed:        newfrm.html -> html/newfrm.html
        new file:       js/new222.java


avnis@Avnish MINGW64 /e/Code/GitTutorials (develop)
$ git commit -m "Restructred"
[develop dcae0dc] Restructred
 4 files changed, 95 insertions(+)
 rename new222.java => Static/new222.java (100%)
 rename newfrm.css => css/newfrm.css (100%)
 rename newfrm.html => html/newfrm.html (100%)
 create mode 100644 js/new222.java

avnis@Avnish MINGW64 /e/Code/GitTutorials (develop)
$ git status
On branch develop
nothing to commit, working tree clean

avnis@Avnish MINGW64 /e/Code/GitTutorials (develop)
$ git checkout master
Switched to branch 'master'

avnis@Avnish MINGW64 /e/Code/GitTutorials (master)
$ |
```

Name	Date modified	Type	Size
📁 .git	25-02-2022 03:54 PM	File folder	
📄 new a12	25-02-2022 03:28 PM	Text Document	1 KB
📄 new222	25-02-2022 03:54 PM	Java Source File	2 KB
# newfrm	25-02-2022 03:54 PM	CSS Source File	1 KB
🌐 newfrm	25-02-2022 03:54 PM	Chrome HTML Do...	3 KB

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