

# Git – LABs / Raghad Almalki

## Git - Lab 1: Local [Add, Commit, Log]

- قم بالانتقال الى مجلد Desktop.

```
Desktop — zsh — 80x24
(base) raghad@RAGHADS-MacBook-Pro ~ % cd Desktop
(base) raghad@RAGHADS-MacBook-Pro Desktop %
```

- بداخل مجلد Desktop قم بإنشاء مجلد جديد بالاسم git-test.

```
Desktop — zsh — 80x24
(base) raghad@RAGHADS-MacBook-Pro ~ % cd Desktop
(base) raghad@RAGHADS-MacBook-Pro Desktop % mkdir git-test
(base) raghad@RAGHADS-MacBook-Pro Desktop %
```

- قم بالدخول على مجلد git-test من ثم إنشاء مجلد جديد بالاسم test01.

```
git-test — zsh — 80x24
(base) raghad@RAGHADS-MacBook-Pro ~ % cd Desktop
(base) raghad@RAGHADS-MacBook-Pro Desktop % mkdir git-test
(base) raghad@RAGHADS-MacBook-Pro Desktop % cd git-test
(base) raghad@RAGHADS-MacBook-Pro git-test % mkdir test01
(base) raghad@RAGHADS-MacBook-Pro git-test % ls
test01
(base) raghad@RAGHADS-MacBook-Pro git-test %
```

- قم بالدخول على مجلد test01 من خلال terminal.

```
test01 — zsh — 80x24
(base) raghad@RAGHADS-MacBook-Pro ~ % cd Desktop
(base) raghad@RAGHADS-MacBook-Pro Desktop % mkdir git-test
(base) raghad@RAGHADS-MacBook-Pro Desktop % cd git-test
(base) raghad@RAGHADS-MacBook-Pro git-test % mkdir test01
(base) raghad@RAGHADS-MacBook-Pro git-test % ls
test01
(base) raghad@RAGHADS-MacBook-Pro git-test % cd test01
(base) raghad@RAGHADS-MacBook-Pro test01 %
```

# Git – LABs / Raghad Almalki

- الآن قم بإنشاء repository جديد باستخدام الأمر `git init`.

```
(base) raghad@RAGHADS-MacBook-Pro ~ % cd Desktop ]
(base) raghad@RAGHADS-MacBook-Pro Desktop % mkdir git-test ]
(base) raghad@RAGHADS-MacBook-Pro Desktop % cd git-test ]
(base) raghad@RAGHADS-MacBook-Pro git-test % mkdir test01 ]
(base) raghad@RAGHADS-MacBook-Pro git-test % ls ]
test01
(base) raghad@RAGHADS-MacBook-Pro git-test % cd test01 ]
(base) raghad@RAGHADS-MacBook-Pro test01 % git init ]
hint: Using 'master' as the name for the initial branch. This default branch nam
e
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /Users/raghad/Desktop/git-test/test01/.git/
(base) raghad@RAGHADS-MacBook-Pro test01 % ls -a ]
.
..
.git
(base) raghad@RAGHADS-MacBook-Pro test01 % █
```

- بهذا الشكل أصبح git قادر على تتبع المشروع بالتالي قم بإنشاء ملف `first.txt` من ثم حفظه على repository.

```
Initialized empty Git repository in /Users/raghad/Desktop/git-test/test01/.git/
(base) raghad@RAGHADS-MacBook-Pro test01 % ls -a
.
..
.git
(base) raghad@RAGHADS-MacBook-Pro test01 % touch first.txt
(base) raghad@RAGHADS-MacBook-Pro test01 % ls
first.txt
(base) raghad@RAGHADS-MacBook-Pro test01 % git status
On branch master

No commits yet

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

nothing added to commit but untracked files present (use "git add" to track)
(base) raghad@RAGHADS-MacBook-Pro test01 % git add first.txt
(base) raghad@RAGHADS-MacBook-Pro test01 % git status
On branch master

No commits yet

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

(base) raghad@RAGHADS-MacBook-Pro test01 % git commit -m "first file added"
[master (root-commit) 3c6891a] first file added
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 first.txt
(base) raghad@RAGHADS-MacBook-Pro test01 % █
```

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- بعد عمل commit قم بإنشاء ملف اخر بالاسم second.txt من ثم حفظه أيضا على repository.

```
[(base) raghad@RAGHADs-MacBook-Pro test01 % touch second.txt
[(base) raghad@RAGHADs-MacBook-Pro test01 % ls
first.txt      second.txt
[(base) raghad@RAGHADs-MacBook-Pro test01 % git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        second.txt

nothing added to commit but untracked files present (use "git add" to track)
[(base) raghad@RAGHADs-MacBook-Pro test01 % git add second.txt
[(base) raghad@RAGHADs-MacBook-Pro test01 % git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   second.txt

[(base) raghad@RAGHADs-MacBook-Pro test01 % git commit -m "second file added"
[master 820e893] second file added
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 second.txt
[(base) raghad@RAGHADs-MacBook-Pro test01 % git status
On branch master
nothing to commit, working tree clean
(base) raghad@RAGHADs-MacBook-Pro test01 % █
```

- قم بإنشاء ملفين اخرين بالاسم third.txt و fourth.txt. قم بحفظهم على repo من خلال استخدام الامر . add وعمل commit لهم.

```
[(base) raghad@RAGHADs-MacBook-Pro test01 % touch third.txt
[(base) raghad@RAGHADs-MacBook-Pro test01 % touch fourth.txt
[(base) raghad@RAGHADs-MacBook-Pro test01 % ls
first.txt      fourth.txt      second.txt      third.txt
[(base) raghad@RAGHADs-MacBook-Pro test01 % git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        fourth.txt
        third.txt

nothing added to commit but untracked files present (use "git add" to track)
[(base) raghad@RAGHADs-MacBook-Pro test01 % git add .
[(base) raghad@RAGHADs-MacBook-Pro test01 % git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   fourth.txt
        new file:   third.txt

[(base) raghad@RAGHADs-MacBook-Pro test01 % git commit -m "third and fourth files added"
[master ece3255] third and fourth files added
 2 files changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 fourth.txt
 create mode 100644 third.txt
[(base) raghad@RAGHADs-MacBook-Pro test01 % git status
On branch master
nothing to commit, working tree clean
(base) raghad@RAGHADs-MacBook-Pro test01 % █
```

# Git – LABs / Raghad Almalki

- الان قم باستعراض جميع commits التي قمت بعملها من خلال الامر `git log`.

```
((base) raghad@RAGHADs-MacBook-Pro test01 % git log
commit ece325598bbdd02f05d235df3c8ea6611e677f94 (HEAD -> master)
Author: Raghad <raghadnanmalki@gmail.com>
Date: Tue Jul 23 19:46:07 2024 +0300

    third and fourth files added

commit 820e89375cf3ca85a1c9cf2709e3874127ece7c7
Author: Raghad <raghadnanmalki@gmail.com>
Date: Tue Jul 23 19:40:02 2024 +0300

    second file added

commit 3c6891aad3c3666d5a5cc94aacc6b04f57455f2e
Author: Raghad <raghadnanmalki@gmail.com>
Date: Tue Jul 23 19:35:55 2024 +0300

    first file added
(base) raghad@RAGHADs-MacBook-Pro test01 % █
```

## Git - Lab 2: Local [Branches and Merging]

- قم باستعراض جميع Branches المتواجدة في المشروع.

```
((base) raghad@RAGHADs-MacBook-Pro test01 % git branch
* master
(base) raghad@RAGHADs-MacBook-Pro test01 % █
```

- الان قم بإنشاء فرع جديد بالاسم new-feature من ثم الانتقال اليه.

```
((base) raghad@RAGHADs-MacBook-Pro test01 % git branch
* master
((base) raghad@RAGHADs-MacBook-Pro test01 % git branch new-feature
((base) raghad@RAGHADs-MacBook-Pro test01 % git checkout new-feature
Switched to branch 'new-feature'
(base) raghad@RAGHADs-MacBook-Pro test01 % █
```

- في فرع new-feature قم بإنشاء ملف بالاسم lab02.txt من ثم عمل add و commit لهذا الملف.

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```
[(base) raghad@RAGHADs-MacBook-Pro test01 % git branch
master
* new-feature
[(base) raghad@RAGHADs-MacBook-Pro test01 % touch lab02.txt
[(base) raghad@RAGHADs-MacBook-Pro test01 % git status
On branch new-feature
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    lab02.txt

nothing added to commit but untracked files present (use "git add" to track)
[(base) raghad@RAGHADs-MacBook-Pro test01 % git add lab02.txt
[(base) raghad@RAGHADs-MacBook-Pro test01 % git status
On branch new-feature
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   lab02.txt

[(base) raghad@RAGHADs-MacBook-Pro test01 % git commit -m "lab02 file added"
[new-feature da70fa8] lab02 file added
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 lab02.txt
[(base) raghad@RAGHADs-MacBook-Pro test01 % git status
On branch new-feature
nothing to commit, working tree clean
(base) raghad@RAGHADs-MacBook-Pro test01 %
```

- الان قم باستعراض الملفات خلال وجودك في الفرع new-feature.

```
(base) raghad@RAGHADs-MacBook-Pro test01 % ls
first.txt      fourth.txt    lab02.txt     second.txt    third.txt
(base) raghad@RAGHADs-MacBook-Pro test01 %
```

- قم بالعودة الى الفرع mater من ثم استعراض الملفات مرة أخرى ستلاحظ عدم وجود lab02.txt في هذا الفرع، بالتالي سنقوم بعملية دمج للفرعين حتى يكون الملف متواجد في الفرع master.

```
[(base) raghad@RAGHADs-MacBook-Pro test01 % git branch
master
* new-feature
[(base) raghad@RAGHADs-MacBook-Pro test01 % git checkout master
Switched to branch 'master'
[(base) raghad@RAGHADs-MacBook-Pro test01 % ls
first.txt      fourth.txt    second.txt    third.txt
(base) raghad@RAGHADs-MacBook-Pro test01 %
```

- قم بدمج الفروع. وقم باستعراض الملفات مرة أخرى، ستجد ان الملف lab02.txt متواجد في الفرع master.

```
(base) raghad@RAGHADs-MacBook-Pro test01 % git merge new-feature
Updating ece3255..da70fa8
Fast-forward
 lab02.txt | 0
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 lab02.txt
(base) raghad@RAGHADs-MacBook-Pro test01 % ls
first.txt      fourth.txt    lab02.txt     second.txt    third.txt
(base) raghad@RAGHADs-MacBook-Pro test01 %
```

Git – LAB 0: Github Repository



# Git – LABs / Raghad Almalki

- قم بالذهاب الى Github وانشاء repository جديد من ثم نسخ الرابط الخاص به.

**Quick setup — if you've done this kind of thing before**

Set up in Desktop

 or 

HTTPS

SSH

https://github.com/RaghadAlmalki/Git\_labs.git

Get started by [creating a new file](#) or [uploading an existing file](#). We recommend every repository include a [README](#), [LICENSE](#), and [.gitignore](#).

- قم بإضافة remote جديد على الرابط الذي تم نسخه.

```
(base) raghad@RAGHADs-MacBook-Pro test01 % git remote -v
(base) raghad@RAGHADs-MacBook-Pro test01 % git remote add new-remote https://github.com/RaghadAlmalki/Git_labs.git
(base) raghad@RAGHADs-MacBook-Pro test01 % git remote -v
new-remote      https://github.com/RaghadAlmalki/Git_labs.git (fetch)
new-remote      https://github.com/RaghadAlmalki/Git_labs.git (push)
(base) raghad@RAGHADs-MacBook-Pro test01 %
```

- الان قم برفع جميع الملفات والتعديلات الى repository المتواجد في GitHub من خلال استخدام الامر `git push`.

```
(base) raghad@RAGHADs-MacBook-Pro test01 % git push --set-upstream Git_labs master
fatal: 'Git_labs' does not appear to be a git repository
fatal: Could not read from remote repository.
```

Please make sure you have the correct access rights  
and the repository exists.

```
(base) raghad@RAGHADs-MacBook-Pro test01 % git push --set-upstream new-remote master
```

```
Enumerating objects: 9, done.
Counting objects: 100% (9/9), done.
Delta compression using up to 16 threads
Compressing objects: 100% (7/7), done.
Writing objects: 100% (9/9), 805 bytes | 805.00 KiB/s, done.
Total 9 (delta 2), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (2/2), done.
To https://github.com/RaghadAlmalki/Git_labs.git
 * [new branch]      master -> master
branch 'master' set up to track 'new-remote/master'.
(base) raghad@RAGHADs-MacBook-Pro test01 %
```

Git\_labs

Public

Pin

Unwatch

1

master

1 Branch

0 Tags

Go to file

t

+

Code

RaghadAlmalki

lab02 file added

da70fa8 · 2 hours ago

4 Commits

first.txt	first file added	3 hours ago
fourth.txt	third and fourth files added	3 hours ago
lab02.txt	lab02 file added	2 hours ago
second.txt	second file added	3 hours ago
third.txt	third and fourth files added	3 hours ago