

LAPORAN PRAKTIKUM

TEKNOLOGI CLOUD

PERTEMUAN KE-1



NAMA	: Ahmad Ubaidillah
NIM	: 195610033
PROGRAM STUDI	: Sistem Informasi
JENJANG	: S1

UNIVERSITAS TEKNOLOGI DIGITAL INDONESIA

YOGYAKARTA

2022

A. Tujuan

1. Mahasiswa memahami berbagai aktifitas pada metodologi agile serta kaitannya dengan source code management
2. Memahami dan mampu menggunakan Git untuk mengelola repository.
3. Memahami dan mampu menggunakan Git untuk mengelola remote repository di GitHub.
4. Memahami dan mampu menggunakan Git dan GitHub, baik untuk single person maupun kolaborasi dengan team.

B. Pembahasan

1. Software engineering, software configuration management, version control, dan distributed version control.
2. Git dan perintah-perintah dasarnya
3. Markdown sebagai format untuk dokumentasi
4. Git dan remote repository (GitHub, GitLab, Assembla, BitBucket)
5. Git untuk single person development
6. Git untuk tim pengembang aplikasi

C. Latihan

I.

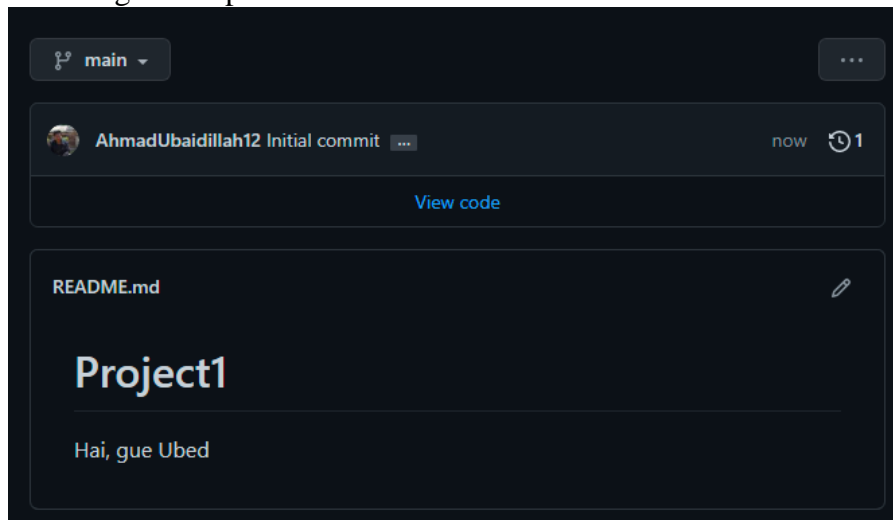
1. Instalasi git

A screenshot of a MINGW64 terminal window. The title bar at the top reads "MINGW64:/c/Users/Lenovo". The terminal content shows the prompt "Lenovo@DESKTOP-5A0BNP2 MINGW64 ~ (master)" followed by a dollar sign "\$" on the next line, indicating the terminal is ready for input. The window has standard Windows-style controls (minimize, maximize, close) in the top right corner.

2. Konfigurasi Git

```
MINGW64:/d/Kuliah/Semester 6/Teknologi-Cloud
Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Teknologi-Cloud
$ git config --global user.name "AhmadUbaidillah12"
Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Teknologi-Cloud
$ git config --global user.email beedh866@gmail.com
Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Teknologi-Cloud
$ 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
core.editor=nano.exe
pull.rebase=false
credential.helper=manager-core
credential.https://dev.azure.com.usehttppath=true
init.defaultbranch=master
```

3. Mengelola repo sendiri



- Clone Repo

```
MINGW64:/d/Kuliah/Semester 6/Praktikum Teknologi Cloud
Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud
$ git clone https://github.com/AhmadUbaidillah12/Project1
Cloning into 'Project1'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (3/3), done.
Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud
$ |
```

Ket : Proses clone adalah proses untuk menduplikasikan remote repo di GitHub ke komputer lokal. Untuk melakukan proses clone di direktori Project1 akan disimpan isi repo yang sama dengan di GitHub. Perbedaannya, di komputer lokal terdapat direktori .git yang digunakan secara internal oleh Git

- Mengelola Repo termasuk juga dengan file dihapus, diedit, membuat file/direktori baru, dan menghapus

```
MINGW64:/d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Project1
Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ vim README.md

[1]+  Stopped                  vim README.md

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ cat README.md
# Project1
Hai, gue Ubed

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

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

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

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ |
```

Vim digunakan untuk mengedit file yang akan dituju, file diatas yaitu README.md.

Cat digunakan untuk menampilkan isi file

Git status untuk melihat status dari kita main atau master

```
MINGW64:/d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Project1
nothing added to commit but untracked files present (use "git add" to track)

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git add -A

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git commit -m "Add: README.md"
[main a86f413] Add: README.md
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 README.md.swp

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git push origin main
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 4 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 447 bytes | 447.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/AhmadUbaidillah12/Project1
a341130..a86f413 main -> main

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$
```

Git add -A untuk menambahkan yaitu menggunakan git commit pada file yang dituju yaitu README.md.

- Mengubah isi dengan branching dan merging

```
MINGW64/d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Project1
Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git checkout -b edit-readme-1
Switched to a new branch 'edit-readme-1'

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (edit-readme-1)
$ vim README.md

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (edit-readme-1)
$ cat README.md
# Project1
Hai, gue Ubed

ini perubahan pertama gue

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (edit-readme-1)
$ git status
On branch edit-readme-1
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:   README.md.swp
        modified:   README.md

no changes added to commit (use "git add" and/or "git commit -a")
Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
```

Ket : mengganti origin main ke edit-readme-1 dengan melakukan git checkout, mengedit isi README.md dan menampilkan

```
MINGW64/d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Project1
Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (edit-readme-1)
$ git status
On branch edit-readme-1
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:   README.md.swp
        modified:   README.md

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

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (edit-readme-1)
$ git add -A

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (edit-readme-1)
$ git commit -m "Add: isi README.md"
[edit-readme-1 96f5a03] Add: isi README.md
2 files changed, 3 insertions(+), 1 deletion(-)
```

Ket : menambahkan -A dan mengcommit dengan Add: isi README.md

```
Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (edit-readme-1)
$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
```

Ket : mengembalikan dari origin edit-readme-1 ke main

```
Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

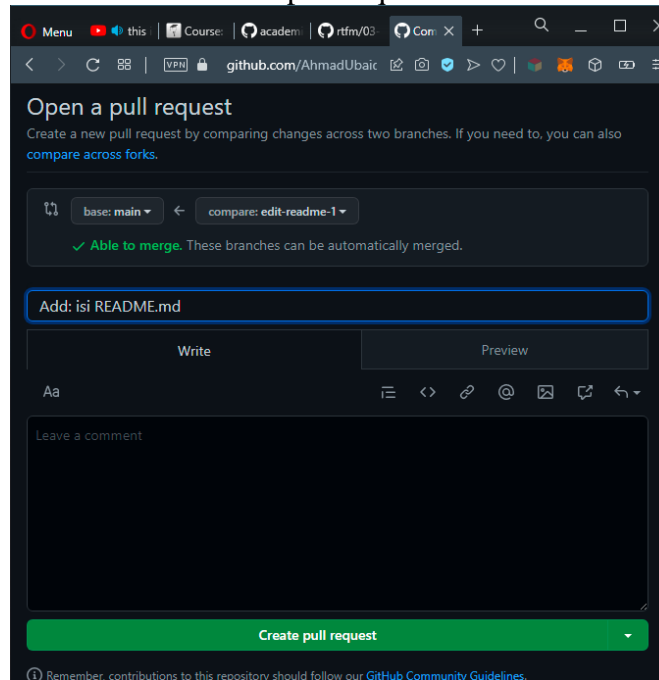
nothing to commit, working tree clean

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git push origin edit-readme-1
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 4 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 594 bytes | 594.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'edit-readme-1' on GitHub by visiting:
remote:   https://github.com/AhmadUbaidillah12/Project1/pull/new/edit-readme-1
remote:
To https://github.com/AhmadUbaidillah12/Project1
 * [new branch]   edit-readme-1 -> edit-readme-1

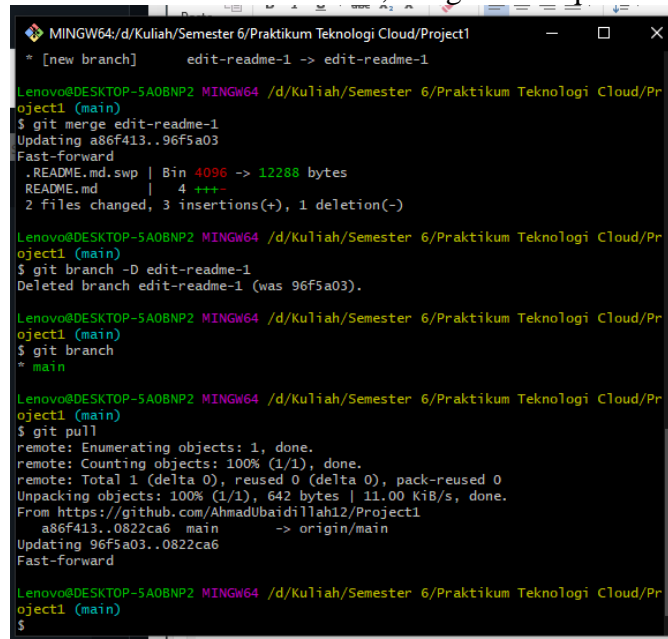
Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$
```

Ket : melihat status branch dan melakukan push pada origin edit-readme-1 dengan menggunakan origin main.

- Melakukan kirim pull request dan confirm merge



Setelah itu, Confirm Merge, branch yang kita kirimkan tadi sudah dimasukkan ke branch master. Setelah itu, merge di komputer lokal:



Ket : git pull digunakan untuk sinkronisasi jika suatu saat menggunakan computer lain dan mengedit repo melalui computer lain.

- Membatalkan perubahan

Membuat branch pada saat kita akan melakukan perubahan-perubahan. Jika perubahan-perubahan yang kita lakukan sudah sedemikian kacaunya, maka kita bisa membuat supaya perubahan-perubahan yang kacau tersebut hilang dan kembali ke kondisi bersih seperti semula.

```
MINGW64:/d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Project1

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$ git checkout -b edit-readme-2
Switched to a new branch 'edit-readme-2'

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (edit-readme-2)
$ vim README.md

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (edit-readme-2)
$ cat README.md
# Project1
Hai, gue Ubed

ini perubahan pertama gue, TAPI DISURUH BERANTAKIN

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (edit-readme-2)
$ git checkout main
Switched to branch 'main'
D .README.md.swp
M README.md
Your branch is up to date with 'origin/main'.

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$ cat README.md
# Project1
Hai, gue Ubed

ini perubahan pertama gue, TAPI DISURUH BERANTAKIN

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$ git branch -D edit-readme-2
Deleted branch edit-readme-2 (was 0822ca6).

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$ git branch
* main

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$ cat README.md
# Project1
Hai, gue Ubed

ini perubahan pertama gue, TAPI DISURUH BERANTAKIN

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$ git reset --hard
HEAD is now at 0822ca6 Merge pull request #1 from AhmadUbaiddillah12/edit-readme-
1

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$ cat README.md
# Project1
Hai, gue Ubed

ini perubahan pertama gue

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$ |
```

Ket : melakukan hal sama seperti origin edit-readme-1 tapi origin edit-readme-2 melakukan pengeditan pada README.md kemudian di kembalikan seperti semula.

- Undo commit terakhir

```
MINGW64:/d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Project1

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$ cat README.md
# Project1
Hai, gue Ubed

ini perubahan pertama gue

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$ git log --oneline
0822ca6 (HEAD -> main, origin/main, origin/HEAD) Merge pull request #1 from Ahma
dUbaiddillah12/edit-readme-1
96f5a03 (origin/edit-readme-1) Add: isi README.md
a86f413 Add: README.md
a341130 Initial commit
```

```
MINGW64:/d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Project1
Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ vim README.md

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git add -A

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git commit -m "Add: contents"
[main b781601] Add: contents
1 file changed, 0 insertions(+), 0 deletions(-)

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git push origin main
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 4 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 418 bytes | 418.00 KiB/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/AhmadUbaidillah12/Project1
0822ca6..b781601 main -> main

MINGW64:/d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Project1
Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ vim README.md

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git add -A

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git commit -m "Add: contents - 2"
[main 329ab6c] Add: contents - 2
1 file changed, 4 insertions(+)

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git push origin main
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 4 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 340 bytes | 340.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/AhmadUbaidillah12/Project1
b781601..329ab6c main -> main

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ cat README.md
# Project1
Hai, gue Ubed

ini perubahan pertama gue

ini isi 1

ini isi 2

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ |
```

Ket : kode diatas merupakan untuk mengubah README.md dengan beberapa commit. Setelh itu, kita akan mengembalikan ke posisi terakhir sebelum commit terakhir.

\$git reverd HEAD -> untuk membuka editor dapat mengetikkan pesan revert

```
Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git revert HEAD
hint: Waiting for your editor to close the file...
[main 2022-02-15T10:10:32.948Z] update#setState idle
[main 2022-02-15T10:10:35.139Z] ExtensionHostStarterWorker created
[main 2022-02-15T10:11:00.423Z] Starting extension host with pid 7764 (fork() to
ole 389 ms).
[main 2022-02-15T10:11:00.424Z] ExtensionHostStarterWorker.start() took 397 ms.
[main 2022-02-15T10:11:02.971Z] update#setState checking for updates
[main 2022-02-15T10:11:06.139Z] update#setState idle
[3296:0215/171222.783:ERROR:gpu_init.cc(440)] Passthrough is not supported, GL i
s disabled
[main 2022-02-15T10:12:36.818Z] Waiting for extension host with pid 7764 to exit
[main 2022-02-15T10:12:37.001Z] Extension host with pid 7764 exited with code: 0
, signal: null.
[main 3b4d207] Revert "Add: contents - 2"
1 file changed, 4 deletions(-)
```


Selanjutnya tinggal di-push ke repo github

```
MINGW64:/d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Project1
Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
(use "git push" to publish your local commits)

nothing to commit, working tree clean

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$ git push origin main
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 4 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 336 bytes | 336.00 KiB/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/AhmadUbaidillah12/Project1
329ab6c..3b4d207 main -> main

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$ cat README.md
# Project1
Hai, gue Ubed

ini perubahan pertama gue

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$ |
```

Jika commit sudah dilakukan, tetapi belum di-push ke repo GitHub (masih berada di lokal), cara membatalkannya:

```
MINGW64:/d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Project1
Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$ vim README.md

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$ cat README.md
# Project1
Hai, gue Ubed

ini perubahan pertama gue

ini isi 1

ini isi tambahan 1

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$ git add -A

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$ git commit -m "Add: isi tambahan 1"
[main e610f87] Add: isi tambahan 1
1 file changed, 4 insertions(+)

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
(use "git push" to publish your local commits)

nothing to commit, working tree clean

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$ git log --oneline
e610f87 (HEAD -> main) Add: isi tambahan 1
3b4d207 (origin/main, origin/HEAD) Revert "Add: contents - 2"
329ab6c Add: contents - 2
b781601 Add: contents
0822ca6 Merge pull request #1 from AhmadUbaidillah12/edit-readme-1
96f5a03 (origin/edit-readme-1) Add: isi README.md
a86f413 Add: README.md
a341130 Initial commit
```

```

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$ git reset --hard HEAD^
HEAD is now at 3b4d207 Revert "Add: contents - 2"

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$ cat README.md
# Project1
Hai, gue Ubed

ini perubahan pertama gue

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$ |

```

Untuk kembali ke perubahan pada saat yang sudah lama, yang perlu dilakukan adalah melakukan git revert <posisi> kemudian mengedit secara manual kemudian push ke repo.

```

MINGW64:/d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Project1

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$ cat README.md
# Project1
Hai, gue Ubed

ini perubahan pertama gue

isi 1
isi 2
isi 3

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$ git log --oneline
103528a (HEAD -> main) Add : isi 3
2abd4e2 Revert "Add: contents"
3b4d207 (origin/main, origin/HEAD) Revert "Add: contents - 2"
329ab6c Add: contents - 2
b781601 Add: contents
0822ca6 Merge pull request #1 from AhmadUbaidillah12/edit-readme-1
96f5a03 (origin/edit-readme-1) Add: isi README.md
a86f413 Add: README.md
a341130 Initial commit

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$ git revert 103528a
hint: Waiting for your editor to close the file...
[main 2022-02-15T10:32:15.362Z] update#setState idle
[main 2022-02-15T10:32:15.482Z] ExtensionHostStarterWorker created
[main 2022-02-15T10:32:26.814Z] Starting extension host with pid 7872 (fork() to
ok 21 ms).
[main 2022-02-15T10:32:26.815Z] ExtensionHostStarterWorker.start() took 29 ms.
[main 2022-02-15T10:32:45.374Z] update#setState checking for updates
[main 2022-02-15T10:32:45.547Z] update#setState idle
[main 2022-02-15T10:32:57.698Z] Extension host with pid 7872 exited with code: 0
, signal: null.
[main 6dc634b] Revert "Add : isi 3"
2 files changed, 6 deletions(-)
create mode 100644 .README.md.swp

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
ject1 (main)
$

```

Ket: pada tahap ini get revert<posisi> saya gagal tidak tahu karena apa. Saya juga sudah melakukan beberapa percobaan tapi masih gagal. Gagal tersebut yaitu jika melakukan revert <posisi> akan membuka editor code seperti dilangkah sebelumnya

- Edit file setelah disimpan

```

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ vim README.md

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 3 commits.
(use 'git push' to publish your local commits)

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:    README.md.swp
        modified:   README.md

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

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$

```

- Setelah itu, lanjutkan proses revert. Saat git revert --continue isikan pesan revert.

```

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git add README.md

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 3 commits.
(use 'git push' to publish your local commits)

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   README.md

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:    README.md.swp

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git revert --continue
error: no cherry-pick or revert in progress
fatal: revert failed

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 3 commits.
(use 'git push' to publish your local commits)

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   README.md

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:    README.md.swp

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git push origin main
Enumerating objects: 10, done.
Counting objects: 100% (10/10), done.
Delta compression using up to 4 threads
Compressing objects: 100% (6/6), done.
Writing objects: 100% (7/7), 897 bytes | 897.00 KiB/s, done.
Total 7 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/AhmadUbaidillah12/Project1
   3bd207..6dc634b  main -> main

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ |

```

II. Buat rangkuman

Cloud Computing atau Komputasi Awan dalam bahasa indonesianya merupakan gabungan pemanfaatan teknologi computer dan pengemangan berbasis internet, sebagaimana yang sering digambarkan di diagram jaringan computer.

Komputasi awan adalah suatu konsep umum yang mencakup SaaS, Web 2.0, dan trend teknologi terbaru lain yang dikenal luas.

Sejarah cloud computing.

1. Cloud computing pertama kali muncul pada tahun 50-an, cloud computing ini memiliki konsep yang mendasar. Ketika komputer mainframe yang tersedia dalam skala yang besar dalam dunia pendidikan dan perusahaan dapat diakses melalui komputer terminal disebut dengan Terminal statis. Terminal tersebut hanya dapat digunakan untuk melakukan komunikasi tetapi tidak memiliki kapasitas pemrosesan internal.
2. Tahun 60-an (1960)
John McCarthy, Pakar Komputasi dan kecerdasan buatan dari MIT. “Suatu hari nanti, komputasi akan menjadi Infrastruktur publik seperti halnya listrik dan telepon.”[7] Ini adalah sebuah ide yang mengawali suatu bentuk komputasi yang kita kenal dengan istilah Komputasi awan
3. Tahun 1995
Larry Ellison, pendiri perusahaan Oracle. “Network Computing” Ide ini sebenarnya cukup unik dan sedikit menyindir perusahaan Microsoft pada saat itu. Intinya, kita tidak harus "menanam" berbagai perangkat lunak kedalam PC pengguna, mulai dari sistem operasi hingga perangkat lunak lainnya. Cukup dengan koneksi dengan server dimana akan disediakan sebuah environment yang mencakup berbagai kebutuhan PC pengguna.
4. Akhir era 90-an
Lahir konsep ASP (Application Service Provider) yang ditandai dengan kemunculan perusahaan pusat pengolahan data. Ini merupakan sebuah perkembangan pada kualitas jaringan komputer. Akses untuk pengguna menjadi lebih cepat.
5. Tahun 2000
Marc Benioff, mantan wakil direktur perusahaan Oracle. “salesforce.com” ini merupakan sebuah perangkat lunak CRM dengan basis SaaS (Software as a Service).
6. Tahun 2005 – sekarang
Cloud Computing sudah semakin meningkat popularitasnya, dari mulai penerapan sistem, penggunaan nama, dll. Amazon dengan EC2 (Elastic Computer Cloud); Google dengan Google App. Engine; IBM dengan Blue Cord Initiative; dsb.

Manfaat cloud computing

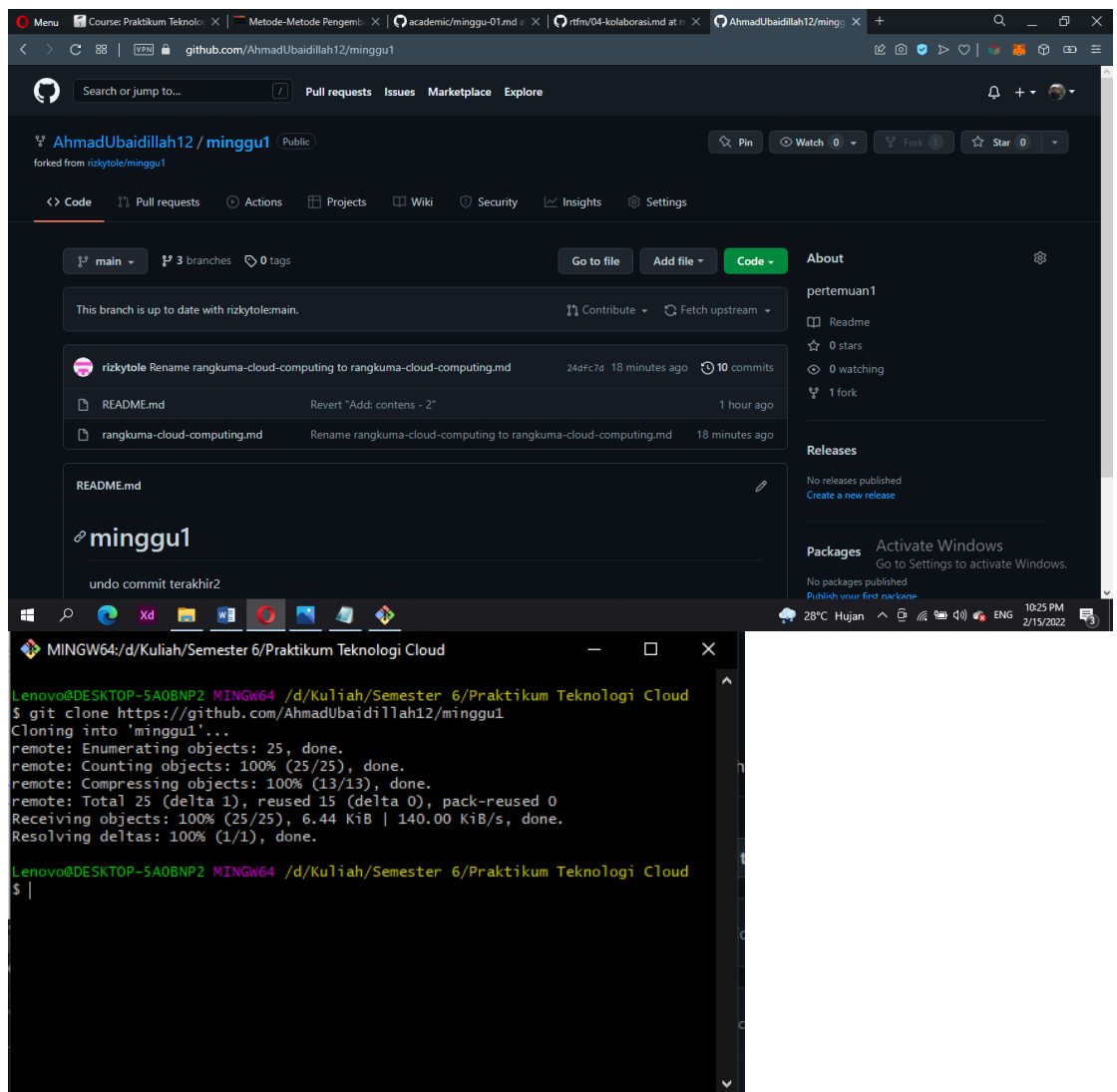
- Skalabilitas
- Aksesibilitas
- Keamanan
- Kreasi
- Kecemasan

Kekurangan cloud computing

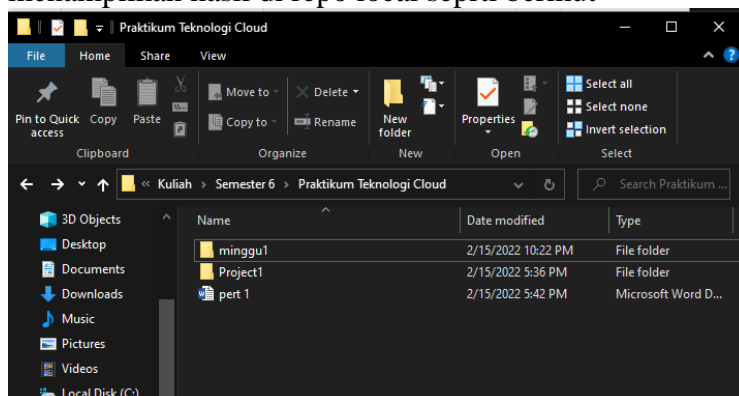
- Harus menggunakan akses internet
- Tergantung pada vendor atau penyedia layanan
- Dapat diretas jika keamanan lemah

III. Tugas

1. Memilih teman untuk mengerjakan. Anda bebas memilih, siapa yang akan jadi upstream author dan siapa yang akan jadi contributor.
Dalam pembahasan ini saya memilih teman saya yaitu dengan nama akun Rizkytola



Ket : melakukan clone repo dari akun Rizkyole di github dengan git dan menampilkan hasil di repo local seperti berikut



Tambahkan remote upstream

```
Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git clone https://github.com/rizkytole/minggu1
Cloning into 'minggu1'...
remote: Enumerating objects: 27, done.
remote: Counting objects: 100% (27/27), done.
remote: Compressing objects: 100% (15/15), done.
remote: Total 27 (delta 1), reused 15 (delta 0), pack-reused 0
Receiving objects: 100% (27/27), 7.10 KiB | 1.42 MiB/s, done.
Resolving deltas: 100% (1/1), done.

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git remote -v
origin https://github.com/AhmadUbaidillah12/Project1 (fetch)
origin https://github.com/AhmadUbaidillah12/Project1 (push)

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git remote add upstream https://github.com/rizkytole/minggu1

MINGW64:/d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Project1
Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git remote -v
origin https://github.com/AhmadUbaidillah12/Project1 (fetch)
origin https://github.com/AhmadUbaidillah12/Project1 (push)
upstream https://github.com/rizkytole/minggu1 (fetch)
upstream https://github.com/rizkytole/minggu1 (push)

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$
```

Membuat perubahan di repo local

1. Sudah ada koordinasi secara manual tentang perubahan-perubahan yang akan dilakukan.
2. Setelah melakukan perubahan-perubahan, pastikan bahwa isi repo lokal tersinkronisasi dengan repo dari upstream author.
3. Cara melakukan sinkronisasi:

```
Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud
$ cd Project1

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git fetch upstream
remote: Enumerating objects: 27, done.
remote: Counting objects: 100% (27/27), done.
remote: Compressing objects: 100% (15/15), done.
remote: Total 27 (delta 1), reused 15 (delta 0), pack-reused 0
Unpacking objects: 100% (27/27), 7.08 KiB | 4.00 KiB/s, done.
From https://github.com/rizkytole/minggu1
* [new branch]      edit-readme-1 -> upstream/edit-readme-1
* [new branch]      edit-readme-2 -> upstream/edit-readme-2
* [new branch]      main -> upstream/main

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ |
```

4. Melakukakn perubahan-perubahan

```
Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
oject1 (main)
$ ls -la
total 13
drwxr-xr-x 1 Lenovo 197609  0 Feb 15 22:32 ./
drwxr-xr-x 1 Lenovo 197609  0 Feb 15 22:22 ../
drwxr-xr-x 1 Lenovo 197609  0 Feb 15 22:34 .git/
-rw-r--r-- 1 Lenovo 197609 98 Feb 15 17:36 README.md
drwxr-xr-x 1 Lenovo 197609  0 Feb 15 22:32 minggu1/

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
oject1 (main)
$ cat README.md
# Project1
Hai, gue Ubed

ini perubahan pertama gue

isi 1

isi 2 setelah revert

isi 3

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
oject1 (main)
$ git checkout -b add-contributor
Switched to a new branch 'add-contributor'

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
oject1 (add-contributor)
$ git branch
* add-contributor
  main

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
oject1 (add-contributor)
$ vim README.md

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
oject1 (add-contributor)
$ cat README.md
cat: README.md: No such file or directory
```

```
Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (add-contributor)
$ cat README.md
# Project1
Hai, gue Ubed

ini perubahan pertama gue

isi 1

isi 2 setelah revert

isi 3

contributor

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (add-contributor)
$ git status
On branch add-contributor
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   README.md

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:    .README.md.swp
        modified:   README.md

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        minggu1/

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (add-contributor)
$ git add -A
```



```

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
oject1 (add-contributor)
$ git commit -m "Add: contributor"
[add-contributor 681504f] Add: contributor
3 files changed, 9 insertions(+)
delete mode 100644 .README.md.swp
create mode 160000 minggu1

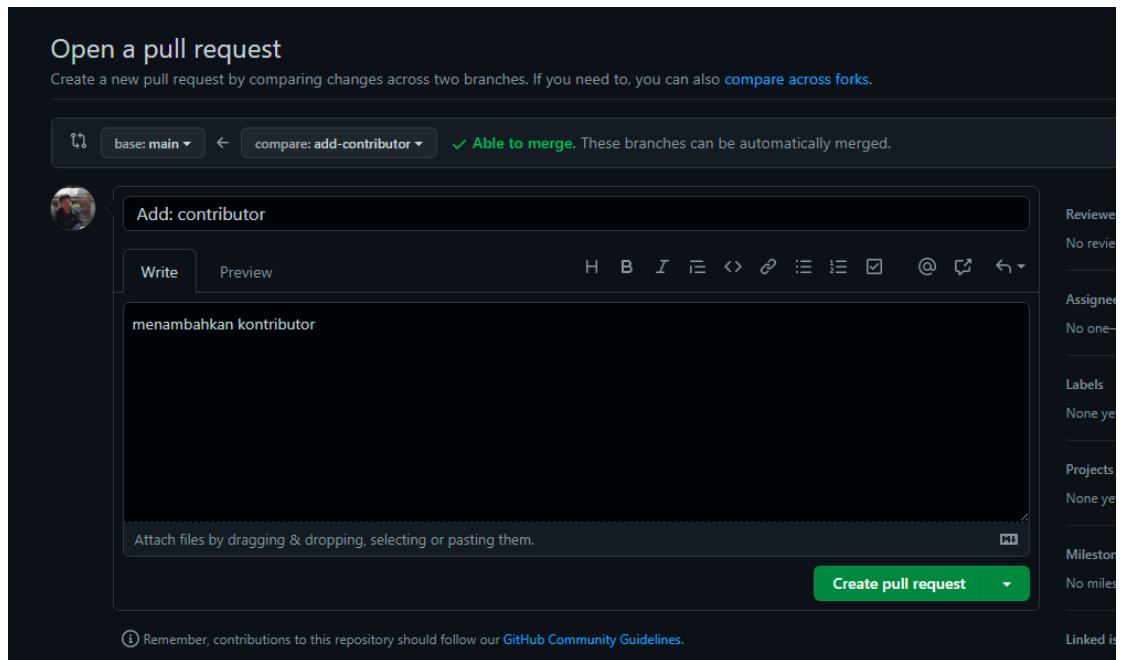
Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
oject1 (add-contributor)
$ git checkout add-contributor
Already on 'add-contributor'

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
oject1 (add-contributor)
$ git checkout main
warning: unable to rmdir 'minggu1': Directory not empty
Switched to branch 'main'
Your branch is up to date with 'origin/main'.

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
oject1 (main)
$ git push origin add-contributor
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 4 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 367 bytes | 367.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'add-contributor' on GitHub by visiting:
remote:   https://github.com/AhmadUbaidillah12/Project1/pull/new/add-contribu
tor
remote:
To https://github.com/AhmadUbaidillah12/Project1
 * [new branch]      add-contributor -> add-contributor

```

5. Setelah itu, buka halaman Web dari repo kontributor <https://github.com/AhmadUbaidillah12/Project1>. Pada halaman tersebut akan ditampilkan isi yang kita push.
6. Pilih Compare and pull request, kemudian isikan deskripsi PR dan klik pada Create pull request:
7. Pada repo upstream author, muncul angka 1 (artinya jumlahnya 1) pada Pull requests di bagian atas.
8. Upstream author bisa menyetujui setelah melakukan review: klik pada Pull requests, akan muncul PR dengan message seperti yang ditulis oleh kontributor (Add: contributor). Klik pada PR tersebut, review kemudian klik Merge pull request diikuti dengan Confirm merge. Setelah itu, status akan berubah menjadi Merged.



9. Sinkronisasi semua repo local maupun github

```

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git checkout main
Already on 'main'
Your branch is up to date with 'origin/main'.

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git branch
    add-contributor
* main

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git fetch upstream
remote: Enumerating objects: 8, done.
remote: Counting objects: 100% (8/8), done.
remote: Compressing objects: 100% (4/4), done.
remote: Total 6 (delta 0), reused 6 (delta 0), pack-reused 0
Unpacking objects: 100% (6/6), 641 bytes | 2.00 KiB/s, done.
From https://github.com/rizkytole/minggu1
* [new branch]      add-contributor -> upstream/add-contributor

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ cat README.md
# Project1
Hai, gue Ubed

ini perubahan pertama gue

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git merge upstream/main
fatal: refusing to merge unrelated histories

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git merge upstream/add-contributor
fatal: refusing to merge unrelated histories

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git merge upstream/main
fatal: refusing to merge unrelated histories

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git merge upstream/main
fatal: refusing to merge unrelated histories

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git push origin main
Everything up-to-date

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git merge upstream/edit-readme-2
fatal: refusing to merge unrelated histories

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Pr
object1 (main)
$ git branch -D add-contributor
Deleted branch add-contributor (was 681504f).

Lenovo@DESKTOP-5A0BNP2 MINGW64 /d/Kuliah/Semester 6/Praktikum Teknologi Cloud/Project1 (main)
$ !

```