

Nama : Naufal Athallah Iwel

NIM : 1920010174

Kelas : 3SC1

Config nama dan email

```
Naufal@DESKTOP-EISC94T MINGW64 ~
$ git config --global user.name "Naufal Athallah Iwel"

Naufal@DESKTOP-EISC94T MINGW64 ~
$ git config --global user.email naufalaiwel@gmail.com

Naufal@DESKTOP-EISC94T MINGW64 ~
$ 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.email=naufalaiwel@gmail.com
user.name=Naufal Athallah Iwel
```

Membuat local repository

```
Naufal@DESKTOP-EISC94T MINGW64 ~
$ mkdir tutorial-001

Naufal@DESKTOP-EISC94T MINGW64 ~
$ git init tutorial-001
Initialized empty Git repository in C:/Users/Naufal/tutorial-001/.git/
```

Git status sebelum add dan commit

```
Naufal@DESKTOP-EISC94T MINGW64 ~
$ cd tutorial-001

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001 (master)
$ git status
On branch master

No commits yet

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

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

Add dan commit

```
Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001 (master)
$ git add biodata.txt

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001 (master)
$ git commit -m 'initial project version'
[master (root-commit) 3bfd22d] initial project version
1 file changed, 2 insertions(+)
 create mode 100644 biodata.txt
```

Log

```
Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001 (master)
$ git log
commit 3bfd22da8ceb7cb38c55ade266e72c05899717ea (HEAD -> master)
Author: Naufal Athallah Iwel <naufalaiwel@gmail.com>
Date: Tue Jan 5 09:40:59 2021 +0700

    initial project version
```

Status setelah tambah jurusan

```
Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001 (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:   biodata.txt

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

Log setelah commit kedua

```
Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001 (master)
$ git log
commit f44cf638e2bee9f64a8ffbd40e7ee3a959aa37b9 (HEAD -> master)
Author: Naufal Athallah Iwel <naufalaiwel@gmail.com>
Date: Tue Jan 5 10:52:33 2021 +0700

    commit kedua

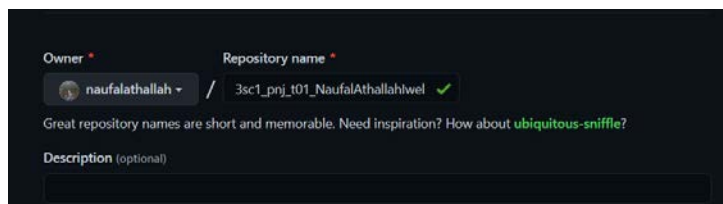
commit 3bfd22da8ceb7cb38c55ade266e72c05899717ea
Author: Naufal Athallah Iwel <naufalaiwel@gmail.com>
Date: Tue Jan 5 09:40:59 2021 +0700

    initial project version
```

Perbedaan antar commit pertama dan kedua

```
Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001 (master)
$ git diff 3bfd22da8ceb7cb38c55ade266e72c05899717ea
diff --git a/biodata.txt b/biodata.txt
index fcd94ca..cd49626 100644
--- a/biodata.txt
+++ b/biodata.txt
@@ -1,2 +1,3 @@
 No. Reg      : 1920010174
-Nama       : Naufal Athallah Iwel
 \ No newline at end of file
+Nama       : Naufal Athallah Iwel
+Jurusan    : Software Engineer
 \ No newline at end of file
```

Membuat repository github



The screenshot shows the GitHub repository creation interface. The 'Owner' field is set to 'naufalathallah' and the 'Repository name' field is set to '3sc1_pnj_t01_NaufalAthallahIwel'. A green checkmark is visible next to the repository name. Below these fields, there is a note: 'Great repository names are short and memorable. Need inspiration? How about ubiquitous-sniffle?'. At the bottom, there is a 'Description (optional)' field which is currently empty.

Push repository dan mengganti master menjadi main

```
Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001 (master)
$ git remote add origin https://github.com/naufalathallah/3sc1_pnj_t01_NaufalAthallahIwel.git

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001 (master)
$ git branch -M main

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001 (main)
$ git push -u origin main
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 12 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (6/6), 571 bytes | 571.00 KiB/s, done.
Total 6 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/naufalathallah/3sc1_pnj_t01_NaufalAthallahIwel.git
 * [new branch] main -> main
Branch 'main' set up to track remote branch 'main' from 'origin'.
```

Stagging, Commit, dan push untuk mengupdate file

```
Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001 (main)
$ git add biodata.txt

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001 (main)
$ git commit -m 'commit ketiga'
[main 9b9e339] commit ketiga
1 file changed, 2 insertions(+), 1 deletion(-)

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001 (main)
$ git push
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 293 bytes | 293.00 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/naufalathallah/3sc1_pnj_t01_NaufalAthallahIwel.git
 f44cf63..9b9e339 main -> main
```

Membuat dan pindah branch dari main ke testing

```
Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001 (main)
$ git branch testing

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001 (main)
$ git checkout testing
Switched to branch 'testing'

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001 (testing)
$
```

Membuat brach.txt lalu push

```
Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001 (testing)
$ touch branch.txt

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001 (testing)
$ git add branch.txt

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001 (testing)
$ git commit -m 'commit branch'
[testing e897264] commit branch
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 branch.txt
```

```

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001 (testing)
$ git push --set-upstream origin testing
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 283 bytes | 283.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'testing' on GitHub by visiting:
remote:   https://github.com/naufalathallah/3sc1_pnj_t01_NaufalAthallahIwe1/pull/new/testing
remote:
To https://github.com/naufalathallah/3sc1_pnj_t01_NaufalAthallahIwe1.git
 * [new branch]   testing -> testing
Branch 'testing' set up to track remote branch 'testing' from 'origin'.

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001 (testing)
$ git push
Everything up-to-date

```

Kembali ke branch main dan merge

```

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001 (testing)
$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001 (main)
$ git merge testing
Updating 9b9e339..e897264
Fast-forward
 branch.txt | 0
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 branch.txt

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001 (main)
$ git push
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/naufalathallah/3sc1_pnj_t01_NaufalAthallahIwe1.git
 9b9e339..e897264  main -> main

```

Clone repository

```

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001 (main)
$ git clone https://github.com/TirtaSouja/3sc1_pnj.git
Cloning into '3sc1_pnj'...
remote: Enumerating objects: 8, done.
remote: Counting objects: 100% (8/8), done.
remote: Compressing objects: 100% (4/4), done.
remote: Total 8 (delta 0), reused 3 (delta 0), pack-reused 0
Receiving objects: 100% (8/8), done.

```

Stagging commit 1920010174.txt

```

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001/3sc1_pnj (master)
$ git add 1920010174.txt

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001/3sc1_pnj (master)
$ git commit -m 'commit 1920010174'
[master 5f2d75c] commit 1920010174
 1 file changed, 4 insertions(+)
 create mode 100644 1920010174.txt

```

Setting remote dan push

```

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001/3sc1_pnj (master)
$ git remote set-url origin https://github.com/TirtaSouja/3sc1_pnj.git

```

```

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-001/3sc1_pnj (master)
$ git push
remote: Permission to TirtaSouja/3sc1_pnj.git denied to naufalathallah.
fatal: unable to access 'https://github.com/TirtaSouja/3sc1_pnj.git/': The requested URL
returned error: 403

```

Q1: Apa yang terjadi jika perintah dijalankan tanpa menyantumkan nama (path) directory?

Akan menginisialisasi git repository tidak di dalam file tutorial-01

Q2: Jelaskan perbedaan status working tree sebelum dan setelah menjalankan perintah add?

Perbedaannya file biodata akan hijau dan itu tandanya file telah ditracking git

Q3: Apakah maksud dari -m dan 'initial project version' pada perintah diatas? Apa yang terjadi jika perintah dilakukan tanpa menambahkan -m?

-m berfungsi untuk memberikan pesan yang diberikan, jika tidak menggunakan -m maka akan error karena tidak diberikan inisialisasi pesan

Q4: Informasi apa saja yang ditampilkan pada perintah log?

Informasi tentang commit yang sudah dilakukan author

Q5: Informasi apa yang anda peroleh dari status saat ini?

File biodata yang ditracking akan terdeteksi perubahan

Q6: Informasi apa yang anda peroleh dari status saat ini?

File yang dimodifikasi berikan perintah add ulang dan hasilnya berhasil tertracking kembali

Q7: Berapakah id commit pertama anda?

commit 3bfd22da8ceb7cb38c55ade266e72c05899717ea

Q8: Apakah maksud dari -u, origin, dan master pada perintah dalam kotak merah?

-u setting otomatis upstream, origin adalah nama remote, master / main adalah nama branch

Q9: Apa perbedaan antara local dan remote repository pada titik ini?

Local dimana file yang terdapat di dalam komputer pengguna, sedangkan remote repository merupakan file yang local yang telah diupload dan online

Q10: Perubahan apa yang terjadi pada remote repository?

Setelah staging, commit, dan push maka file di remote repository akan terupdate

Q11: Apa itu conflict dalam konteks Git. Jika pada langkah ini anda menemukan conflict, tambahkan pada jawaban anda bagaimana anda menyelesaikannya.

Conflict merupakan ketika 2 branch terpisah telah dilakukan pengeditan pada baris sebuah file atau ketika file telah dihapus tetapi diedit di branch yang lainnya. Contohnya pada kasus ini ketika pengupdatean isi pada biodata dimana terjadi update pada file dan harus diupload kembali untuk update.