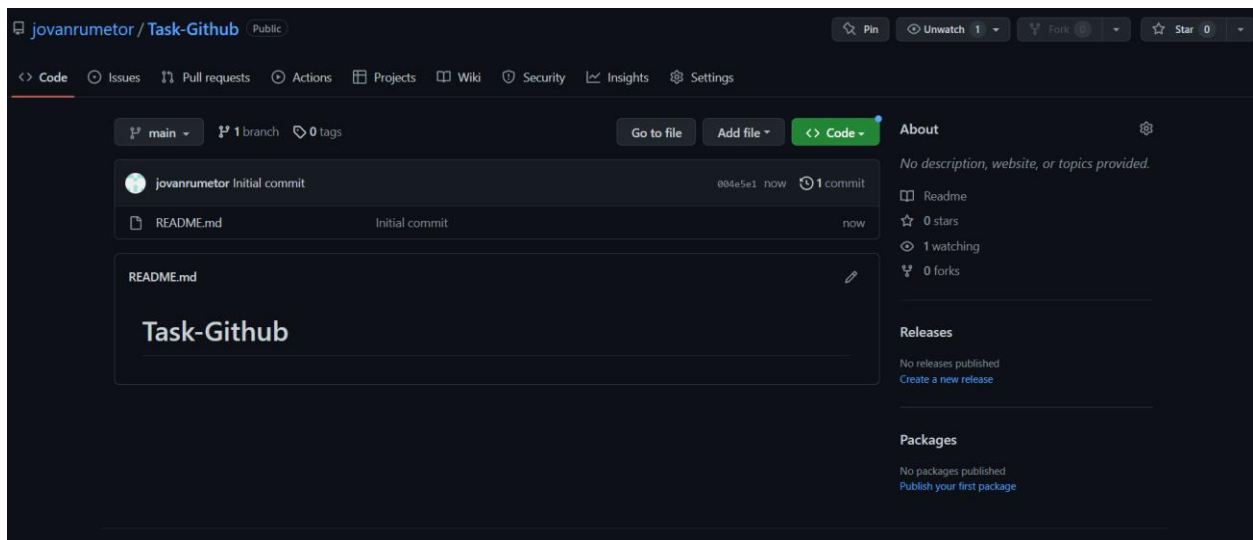


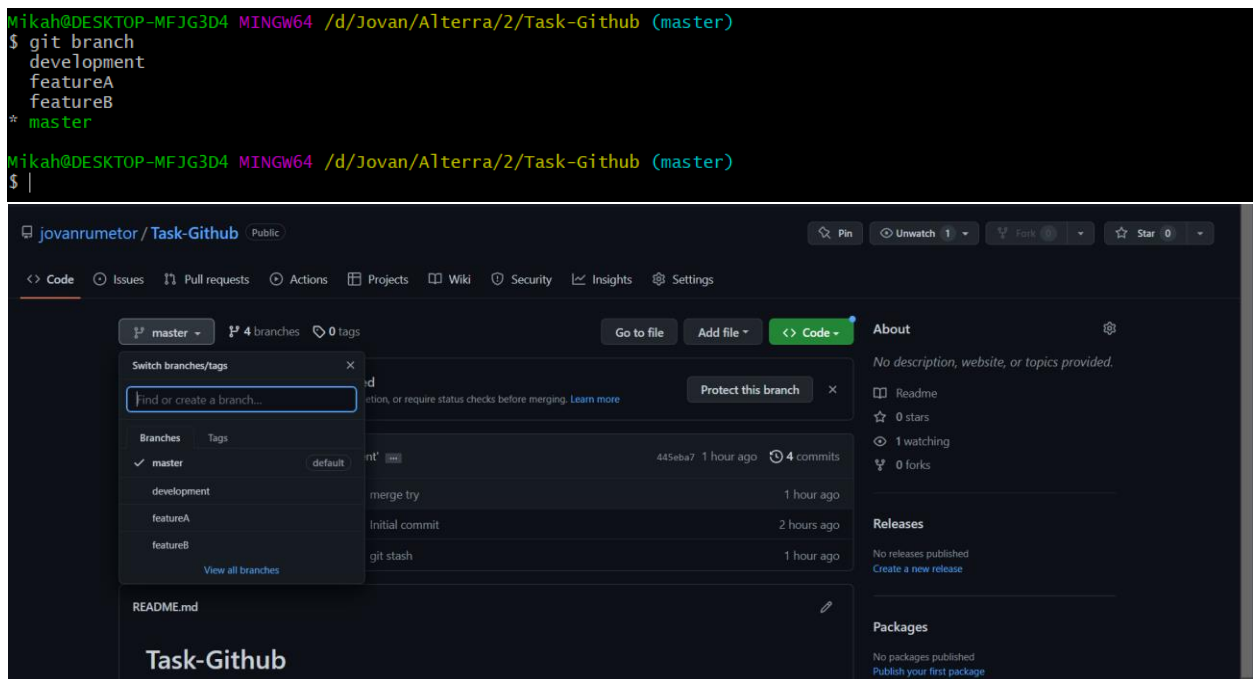
TASK GITHUB

1. Buat Repository di Github



Gambar 1. Repository di github

2. Implementasikan penggunaan branching yang terdiri dari master, development, featureA, featureB.



Gambar 2. Branch di repository

3. Implementasikan intruksi git untuk push, pull, stash dan merge

```
Mikah@DESKTOP-MFJG3D4 MINGW64 /d/Jovan/Alterra/2/Task-Github
$ git init
Initialized empty Git repository in D:/Jovan/Alterra/2/Task-Github/.git/

Mikah@DESKTOP-MFJG3D4 MINGW64 /d/Jovan/Alterra/2/Task-Github (master)
$ git remote add origin "https://github.com/jovanrumetor/Task-Github.git"

Mikah@DESKTOP-MFJG3D4 MINGW64 /d/Jovan/Alterra/2/Task-Github (master)
$ git pull origin main
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), done.
From https://github.com/jovanrumetor/Task-Github
 * branch          main       -> FETCH_HEAD
 * [new branch]    main       -> origin/main

Mikah@DESKTOP-MFJG3D4 MINGW64 /d/Jovan/Alterra/2/Task-Github (master)
$ git checkout -b development
Switched to a new branch 'development'

Mikah@DESKTOP-MFJG3D4 MINGW64 /d/Jovan/Alterra/2/Task-Github (development)
$ git add .

Mikah@DESKTOP-MFJG3D4 MINGW64 /d/Jovan/Alterra/2/Task-Github (development)
$ git commit -m "development branch"
On branch development
nothing to commit, working tree clean

Mikah@DESKTOP-MFJG3D4 MINGW64 /d/Jovan/Alterra/2/Task-Github (development)
$ git add .

Mikah@DESKTOP-MFJG3D4 MINGW64 /d/Jovan/Alterra/2/Task-Github (development)
$ git add .

Mikah@DESKTOP-MFJG3D4 MINGW64 /d/Jovan/Alterra/2/Task-Github (development)
$ git push origin development
Total 0 (delta 0), reused 0 (delta 0)
remote:
remote: Create a pull request for 'development' on GitHub by visiting:
remote:   https://github.com/jovanrumetor/Task-Github/pull/new/development
remote:
To https://github.com/jovanrumetor/Task-Github.git
 * [new branch]    development -> development
```

Gambar 3. Git Pull dan Push

```

Mikah@DESKTOP-MFJG3D4 MINGW64 /d/Jovan/Alterra/2/Task-Github (master)
$ git add .

Mikah@DESKTOP-MFJG3D4 MINGW64 /d/Jovan/Alterra/2/Task-Github (master)
$ git stash
Saved working directory and index state WIP on master: 004e5e1 Initial commit

Mikah@DESKTOP-MFJG3D4 MINGW64 /d/Jovan/Alterra/2/Task-Github (master)
$ git status
On branch master
nothing to commit, working tree clean

Mikah@DESKTOP-MFJG3D4 MINGW64 /d/Jovan/Alterra/2/Task-Github (master)
$ git stash pop
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   Test.txt

Dropped refs/stash@{0} (66d0029f66780b1179a2c402cf7f9e7761e49057)

Mikah@DESKTOP-MFJG3D4 MINGW64 /d/Jovan/Alterra/2/Task-Github (master)
$ git git commit -m "git stash"
git: 'git' is not a git command. See 'git --help'.

The most similar command is
    init

Mikah@DESKTOP-MFJG3D4 MINGW64 /d/Jovan/Alterra/2/Task-Github (master)
$ git commit -m "git stash"
[master 0ba5ed6] git stash
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 Test.txt

Mikah@DESKTOP-MFJG3D4 MINGW64 /d/Jovan/Alterra/2/Task-Github (master)
$ git push origin master
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 268 bytes | 268.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To https://github.com/jovanrumetor/Task-Github.git
004e5e1..0ba5ed6  master -> master

Mikah@DESKTOP-MFJG3D4 MINGW64 /d/Jovan/Alterra/2/Task-Github (master)
$ |

```

Gambar 4. Git Stash

MINGW64/d/Jovan/Alterra/2/Task-Github

```
Merge branch 'development'
# Please enter a commit message to explain why this merge is necessary.
# especially if it merges an updated upstream into a topic branch.
#
# Lines starting with '#' will be ignored, and an empty message aborts
# the commit.
#
# It looks like you may be committing a merge.
# If this is not correct, please remove the file
#   .git/MERGE_HEAD
# and try again.
'merge trying'

# Please enter the commit message for your changes. Lines starting
# with '#' will be ignored, and an empty message aborts the commit.
#
# On branch master
# All conflicts fixed but you are still merging.
#
# Changes to be committed:
#   new file:   Git.txt
#
~
~
~
~
~
~
~
~
~
~
```

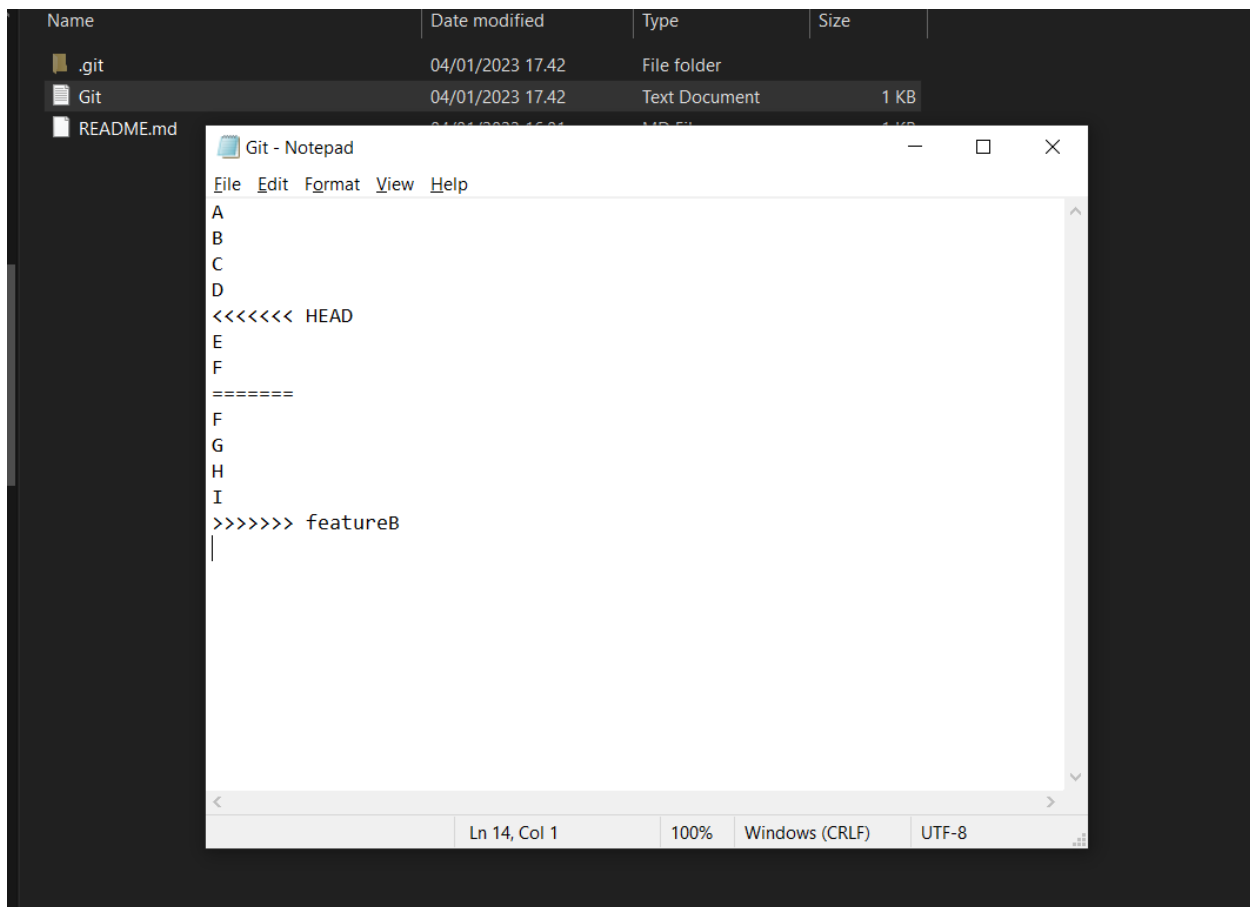
Gambar 5. Git Merge

4. Implementasikan sebuah penanganan conflict di branch development Ketika setelah merge dari branch featureA lalu merge dari branch featureB (Conflict bisa terjadi jika kedua branch mengerjakan di file dan line code yang sama)

```
Mikah@DESKTOP-MFJG3D4 MINGW64 /d/Jovan/Alterra/2/Task-Github (development)
$ git merge featureA
Merge made by the 'recursive' strategy.
 Git.txt | 6 ++++++
 1 file changed, 6 insertions(+)
 create mode 100644 Git.txt

Mikah@DESKTOP-MFJG3D4 MINGW64 /d/Jovan/Alterra/2/Task-Github (development)
$ git merge featureB
CONFLICT (add/add): Merge conflict in Git.txt
Auto-merging Git.txt
Automatic merge failed; fix conflicts and then commit the result.
```

Gambar 6. Merge Conflict



Gambar 7. Resolve Conflict

```
Mikah@DESKTOP-MFJG3D4 MINGW64 /d/Jovan/Alterra/2/Task-Github (development|MERGING)
$ git status
On branch development
All conflicts fixed but you are still merging.
(use "git commit" to conclude merge)

Changes to be committed:
  modified:   Git.txt

Mikah@DESKTOP-MFJG3D4 MINGW64 /d/Jovan/Alterra/2/Task-Github (development|MERGING)
$ git commit
[development e4655cb] Merge branch 'featureB' into development "resolve conflict"

Mikah@DESKTOP-MFJG3D4 MINGW64 /d/Jovan/Alterra/2/Task-Github (development)
$ |
```

Gambar 8. Conflict Resolved

5. Gunakan merge no fast forward

```
Mikah@DESKTOP-MFJG3D4 MINGW64 /d/Jovan/Alterra/2/Task-Github (master)
$ git merge --no-ff development
Merge made by the 'recursive' strategy.
Git.txt | 9 ++++++++
1 file changed, 9 insertions(+)
Mikah@DESKTOP-MFJG3D4 MINGW64 /d/Jovan/Alterra/2/Task-Github (master)
$
```

Gambar 9. Merge --no-ff