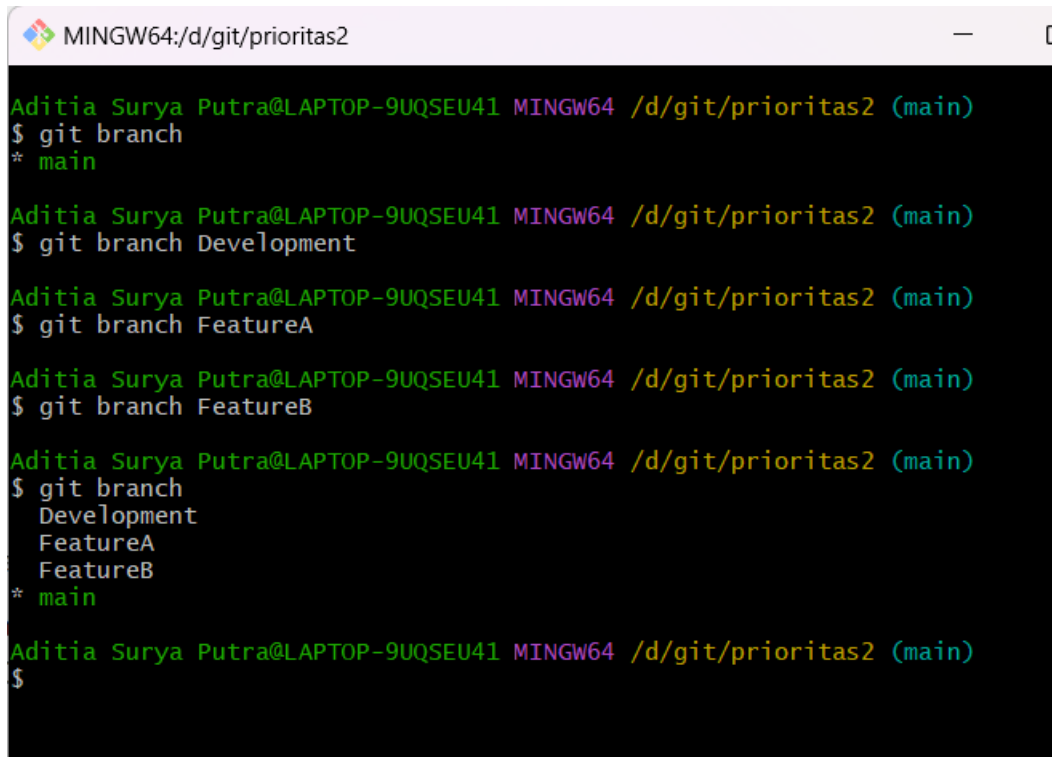


Nama : Aditia Surya Putra

Kelas : Flutter D

Membuat Branch

A terminal window titled 'MINGW64:/d/git/prioritas2' with a standard Windows window control bar. The terminal shows a series of 'git branch' commands being executed. The first command 'git branch' shows only the 'main' branch. Subsequent commands 'git branch Development', 'git branch FeatureA', and 'git branch FeatureB' are executed one by one. After the third command, the 'git branch' command is run again, showing a list of four branches: 'Development', 'FeatureA', 'FeatureB', and '* main'. The terminal session ends with a final '\$' prompt.

```
MINGW64:/d/git/prioritas2

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (main)
$ git branch
* main

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (main)
$ git branch Development

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (main)
$ git branch FeatureA

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (main)
$ git branch FeatureB

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (main)
$ git branch
  Development
  FeatureA
  FeatureB
* main

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (main)
$
```

Git Push

Git merupakan perintah yang digunakan untuk membuat repository local upload ke repository github

Git add.

Git commit -m "pesan commit"

Git push

```
Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (main)
$ git add .

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (main)
$ git commit -m "mengubah a.txt"
[main 6fc7767] mengubah a.txt
1 file changed, 1 insertion(+), 1 deletion(-)

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (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), 279 bytes | 139.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/surput06/prioritas2.git
78e0920..6fc7767  main -> main

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (main)
$
```

Git Pull

Merupakan perintah yang digunakan untuk mengambil data dari repository github ke local apabila branch local lebih belakang dari pada branch origin.

Disini saya mengubah isi txt di origin berbeda dengan yang ada di local

a.txt local

```
sdfswada
```

a.txt origin

```
1 lines (1 sloc) | 15 Bytes
```

```
1 Percobaan Pull
```

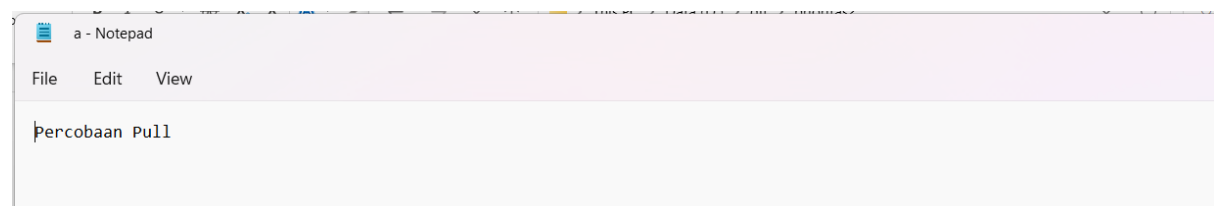
Lalu Melakukan

Git pull

```
Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (main)
$ git pull
remote: Enumerating objects: 5, done.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), 667 bytes | 55.00 KiB/s, done.
From https://github.com/surput06/prioritas2
  6fc7767..f144f06  main      -> origin/main
Updating 6fc7767..f144f06
Fast-forward
 a.txt | 2 +-
 1 file changed, 1 insertion(+), 1 deletion(-)

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (main)
$ |
```

Setelah melakukan git pull maka text yang ada di local akan berubah seperti yang ada di origin.



The screenshot shows a Notepad window titled 'a - Notepad'. The menu bar includes 'File', 'Edit', and 'View'. The text area contains the string 'Percobaan Pull'.

Git Merge

Git merge menggabungkan 2 branch menjadi 1 Dalam kasus ini branch development yang tidak mempunyai style.css digabung dengan FeatureB

```
ditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (FeatureB)
$ git checkout Development
Switched to branch 'Development'

ditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (Development)
$ git merge FeatureB
Updating 8ee3b08..1787561
Fast-forward
 style.css | 3 +++
 1 file changed, 3 insertions(+)
 create mode 100644 style.css

ditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (Development)
$ git graph --all
graph TD
    1787561[1787561 (HEAD -> Development, FeatureB)] -- Merge branch 'FeatureA' into FeatureB --- 8ee3b08[8ee3b08]
    8ee3b08 -- tambah index.html --- f144f06[f144f06 (origin/main, origin/HEAD, main)]
    f144f06 -- Update a.txt --- 6fc7767[6fc7767]
    6fc7767 -- mengubah a.txt --- 78e0920[78e0920]
    78e0920 -- 3 commit --- 4434291[4434291]
    4434291 -- second commit --- 0b533d9[0b533d9]
    0b533d9 -- Initial commit ---

ditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (Development)
$
```

Development Sebelum Merge :

Name	Date modified	Type	Size
.git	19/02/2023 03:58	File folder	
a	19/02/2023 03:00	Text Document	1 KB
index	19/02/2023 03:25	Chrome HTML Do...	1 KB
README	19/02/2023 02:28	Markdown Source ...	1 KB

Development Sesudah Merge dengan FeatureB

a	19/02/2023 03:00	Text Document	1 KB
index	19/02/2023 03:25	Chrome HTML Do...	1 KB
README	19/02/2023 02:28	Markdown Source File	1 KB
style	19/02/2023 03:58	CSS Source File	1 KB

GIT Stash

```
Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (main)
$ git add .

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (main)
$ git stash
Saved working directory and index state WIP on main: f144f06 Update a.txt

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (main)
$ git add.
git: 'add.' is not a git command. See 'git --help'.

The most similar command is
    add

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (main)
$ git add .

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (main)
$ git stash apply
Auto-merging a.txt
CONFLICT (content): Merge conflict in a.txt
On branch main
Your branch is up to date with 'origin/main'.

Unmerged paths:
  (use "git restore --staged <file>..." to unstage)
  (use "git add <file>..." to mark resolution)
    both modified:   a.txt

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

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (main)
$ git restore --staged a.txt to unstage
error: pathspec 'to' did not match any file(s) known to git
error: pathspec 'unstage' did not match any file(s) known to git

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (main)
$ git restore --staged a.txt

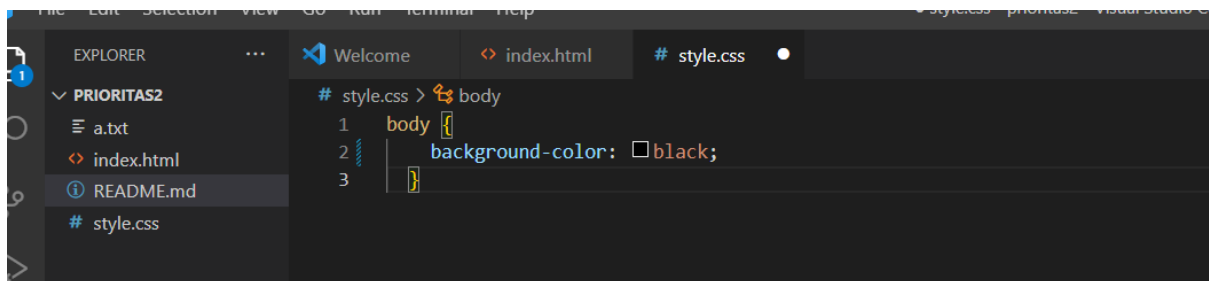
Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (main)
$
```

Git Merge Conflict

Dalam kasus ini merge conflict terjadi karena ada perbedaan dalam style.css pada 2 branch

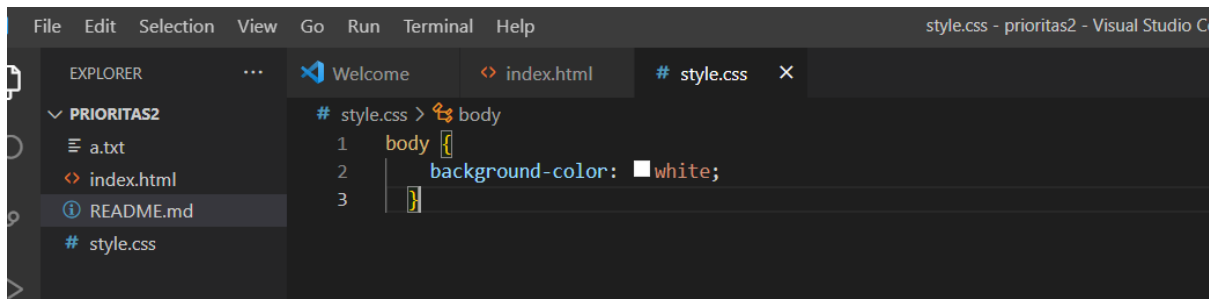
Pada branch Feature A Background-color Style.css nya berwarna hitam dan pada branch FeatureB Berwana putih

FeatureA :



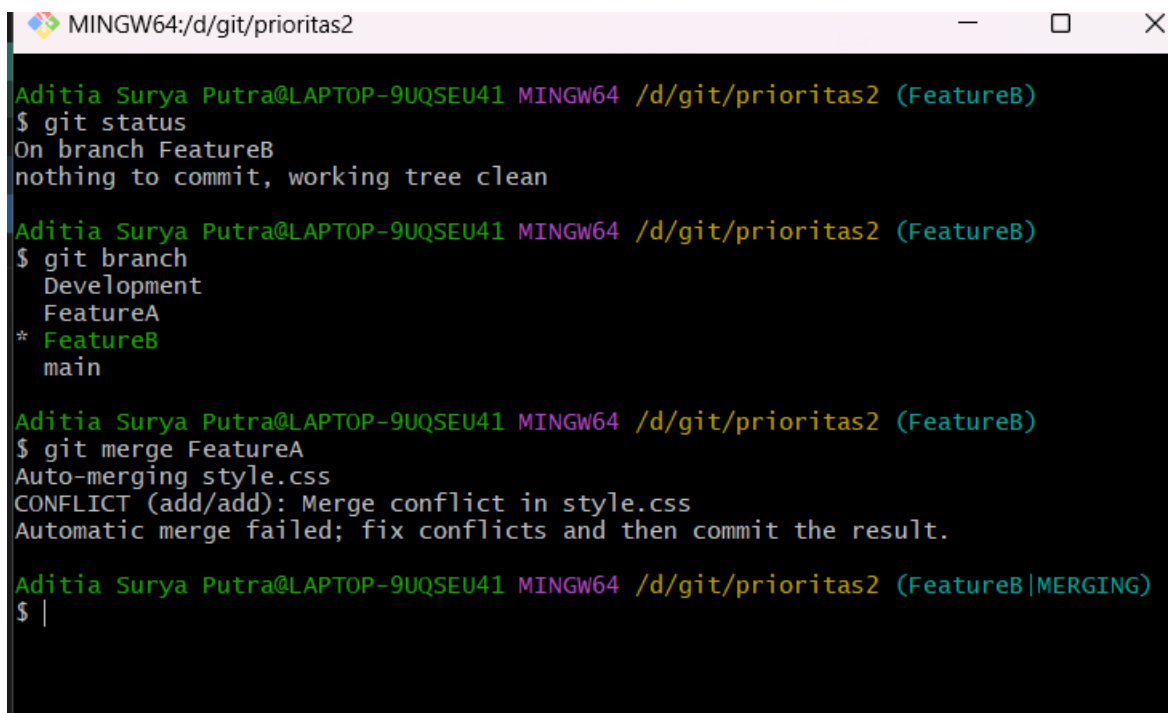
```
# style.css > body
1 body {
2     background-color: black;
3 }
```

FeatureB :



```
# style.css > body
1 body {
2     background-color: white;
3 }
```

Saat FeatureB merge dengan A maka terjadilah Conflict



```
MINGW64:/d/git/prioritas2

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (FeatureB)
$ git status
On branch FeatureB
nothing to commit, working tree clean

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (FeatureB)
$ git branch
  Development
  FeatureA
* FeatureB
  main

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (FeatureB)
$ git merge FeatureA
Auto-merging style.css
CONFLICT (add/add): Merge conflict in style.css
Automatic merge failed; fix conflicts and then commit the result.

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (FeatureB|MERGING)
$ |
```

Solusi Untuk Mengatasi Conflict Tersebut adalah dengan cara memilih warna mana yang akan dipakai untuk style.css dalam kasus ini saya menggunakan warna putih dan menghapus warna hitam

```
style.css > FeatureA
1  body {
2  <<<<<< HEAD (Current Change)
3  background-color: white;
4  =====
5  background-color: Black;
6  >>>>>> FeatureA (Incoming Change)
7  }
```

```
Welcome  <> index.html  # style.css ! x
# style.css > body
1  body {
2  background-color: white;
3  }
```

Setelah dikoreksi proses merge belum selesai, maka langkah selanjutnya adalah melakukan git add dan git commit.

```
Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (FeatureB)
$ git branch
Development
FeatureA
* FeatureB
main

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (FeatureB)
$ git merge FeatureA
Auto-merging style.css
CONFLICT (add/add): Merge conflict in style.css
Automatic merge failed; fix conflicts and then commit the result.

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (FeatureB|MERGING)
$ git status
On branch FeatureB
You have unmerged paths.
(fix conflicts and run "git commit")
(use "git merge --abort" to abort the merge)

Unmerged paths:
  (use "git add <file>..." to mark resolution)
    both added:   style.css

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

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (FeatureB|MERGING)
$ 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.addEmptyPathsSpec false"

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (FeatureB|MERGING)
$ git add .

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (FeatureB|MERGING)
$ git commit
[FeatureB 1787561] Merge branch 'FeatureA' into FeatureB
```

Dan Pada Akhirnya proses merge dapat diselesaikan

```
Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (FeatureB)
$ git branch
  Development
  FeatureA
* FeatureB
  main

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (FeatureB)
$ graphh
* 1787561 (HEAD -> FeatureB) Merge branch 'FeatureA' into FeatureB
| \
| * 90ca8d3 (FeatureA) Menambahkan Style.css black
* | ee59687 Menambahkan Sytle white
|/
* 8ee3b08 (Development) tambah index.html
* f144f06 (origin/main, origin/HEAD, main) Update a.txt
* 6fc7767 mengubah a.txt
* 78e0920 3 commit
* 4434291 second commit
* 0b533d9 Initial commit

Aditia Surya Putra@LAPTOP-9UQSEU41 MINGW64 /d/git/prioritas2 (FeatureB)
$
```