## Présenté par



## Introduction à git

Nicolas Coden Lead Front-End chez Clevy



### Qui ne connait pas git?

(on ne jugera pas)

git pull

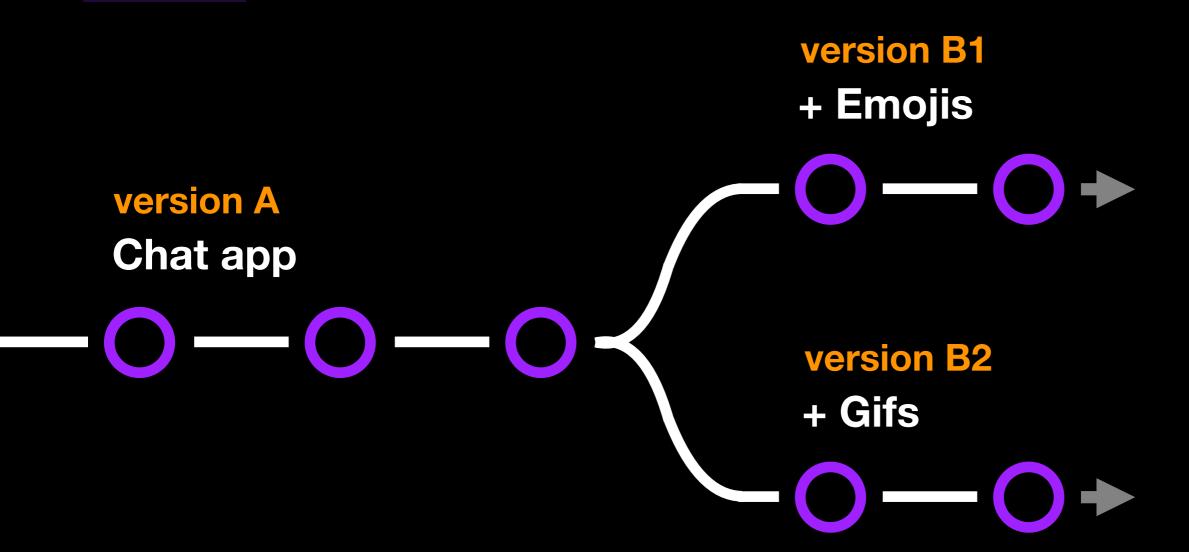
git fetch

git cherry-pick

git reflog

git rebase --interactive





# version B1 + Emojis version C Chat app with Emojis/Gifs version B2 + Gifs

- \$ git clone
- \$ git add.
- \$ git commit -m "wip"
- \$ git push origin master

- \$ git add.
- \$ git commit -m "wip"
- \$ git push origin master

Error: failed to push to ma...

\$ git push origin master

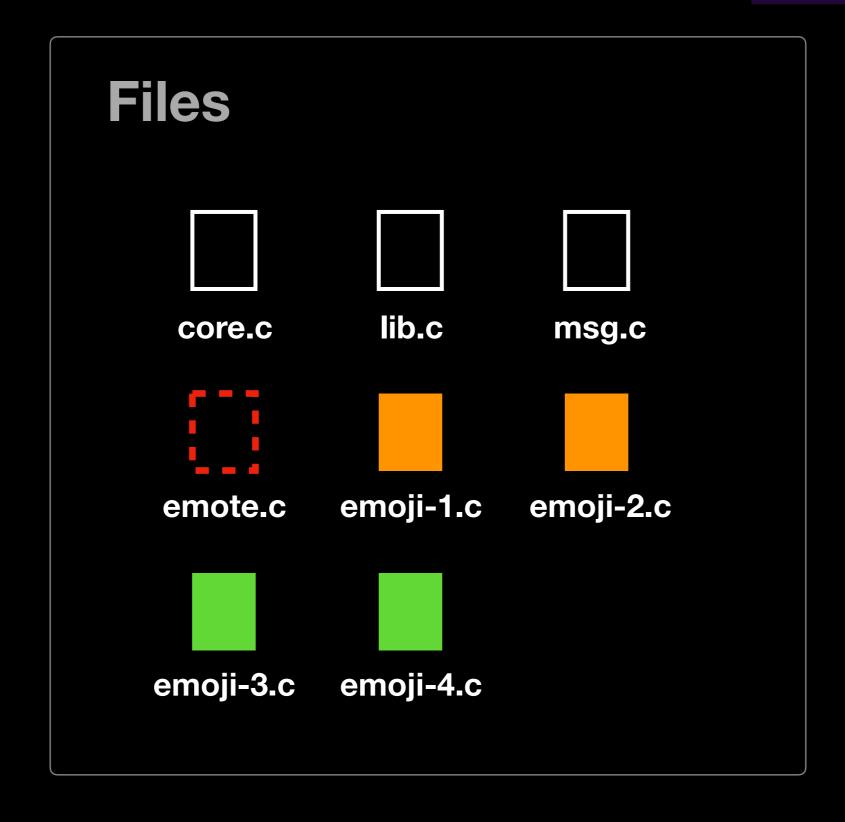
Error: failed to push to ma...

\$ git status

**CRITICAL:** will destroy hu...

# fuck this

- \$ rm -rf project
- \$ git clone









git add git commit Repository Staging **Files** git reset

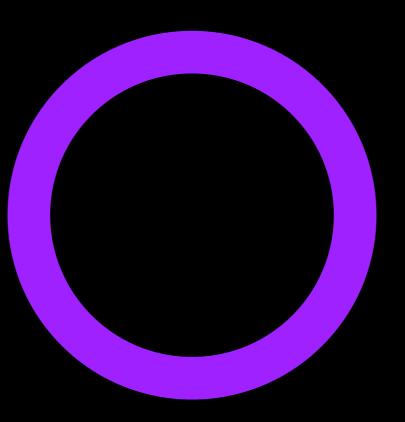
Modifié

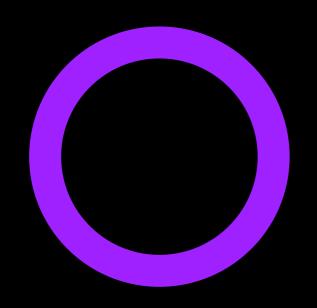
Supprimé

**Ajouté** 

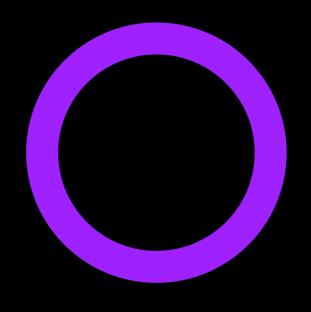
Inchangé

### What's inside our commit



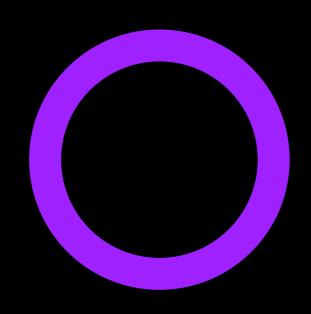


- + 39 lines added in A
- + 6 lines added in B
- 9 lines removed in Y
- + File X added
- + File Y added
- File Z removed



### # ellbaf7fe9b1f

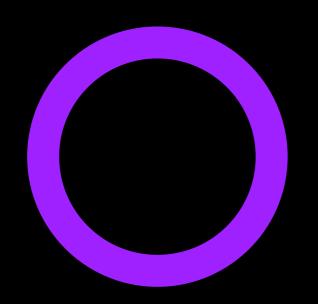
- + 39 lines added in A
- + 6 lines added in B
- 9 lines removed in Y
- + File X added
- + File Y added
- File Z removed



#### # e11baf7fe9b1f

## Committed by Nicolas At 15:57 01/03/19

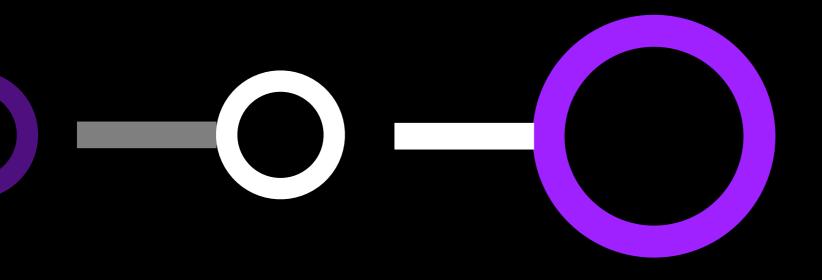
- + 39 lines added in A
- + 6 lines added in B
- 9 lines removed in Y
- + File X added
- + File Y added



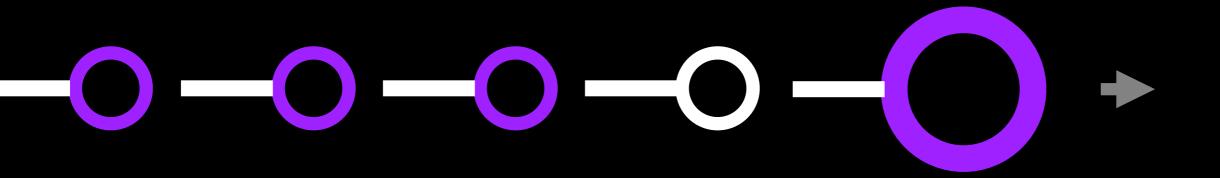
- # e11baf7fe9b1f
- O Parent: ae9b4f90eebaf5

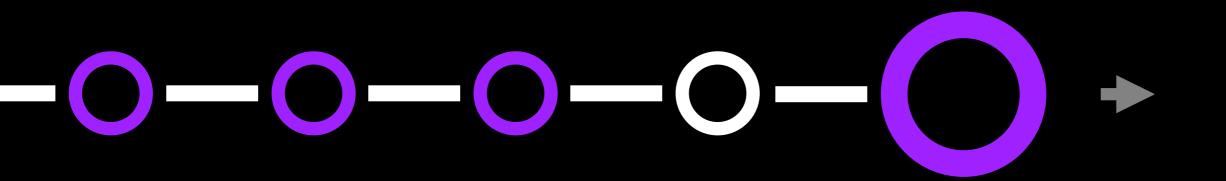
Committed by Nicolas At 15:57 01/03/19

- + 39 lines added in A
- + 6 lines added in B
- 9 lines removed in Y
- + File X added



## Branches





## — O — O — O — master

## 

master ellbaf7fe9blf

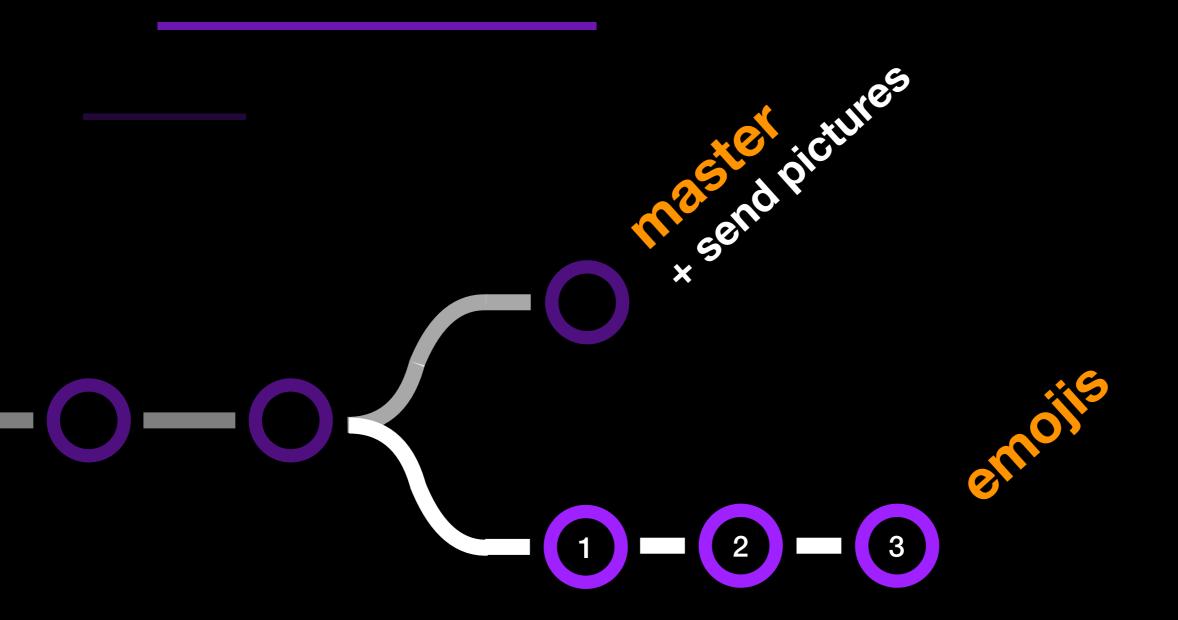
develop 67bfe9af7b1fe

beta

099b1fecc7fe9

-O-O-O-Rasiter

emoilis



- \$ git merge
- \$ git cherry-pick
- \$ git rebase
- \$ copy & paste

### Copy & Paste

### feature

```
#include <stdio.h>
int main(){
    int dividend;
    printf("Enter dividend: ");
    expected = !sp inquisition;
    scanf("%d", &dividend);
    temp = dividend + 1;
    printf("Enter divisor: ");
    remainder = dividend;
    yourenot = payingattention;
    printf("Quotient = %d\n)
    printf("I loose the game");
    printf(temp);
```

### master

```
#include <stdio.h>
int main(){
    int dividend;
    scanf("%d", &dividend);
    temp = dividend + 1;
    printf("Enter divisor: ");
    remainder = dividend;
    yourenot = payingattention;
   printf("Quotient = %d\n)
    printf("I loose the game");
    printf(temp);
```

### Copy & Paste

### feature

```
#include <stdio.h>
int main(){
    int dividend;
    printf("Enter dividend: ");
    expected = !sp_inquisition;
    scanf("%d", &dividend);
    temp = dividend + 1;
    printf("Enter divisor: ");
    printf("Do not enter 0");
    remainder = dividend;
    yourenot = payingattention;
    printf("Quotient = %d\n)
    printf("I loose the game");
```

### master

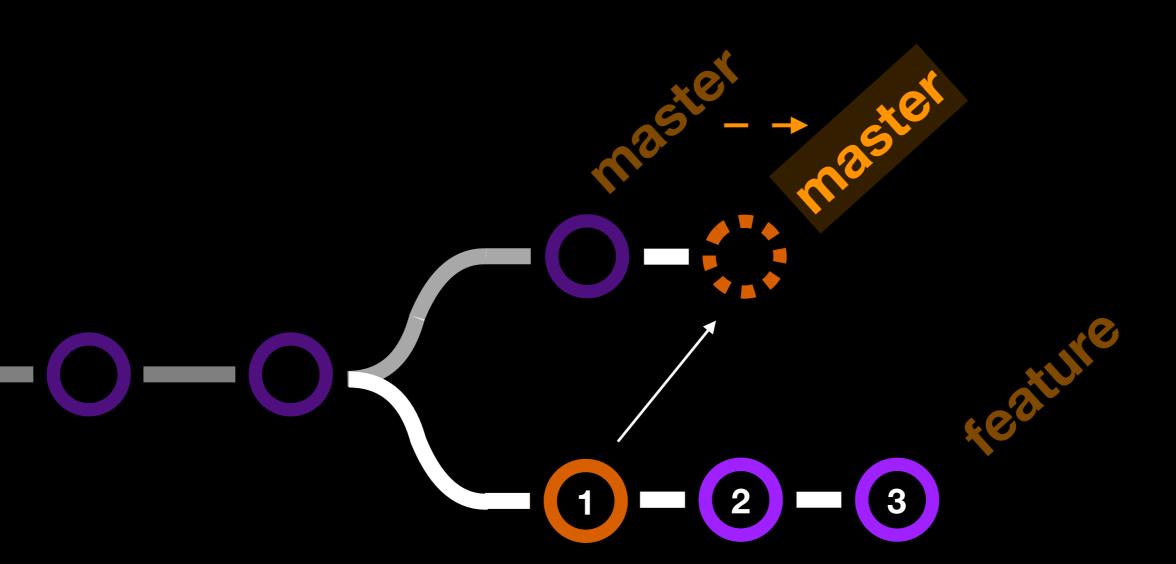
```
(!)
```

```
#include <stdio.h>
int main(){
    int dividend;
    scanf("%d", &dividend);
    scanf("%d", &dividend * 2);
    divisor = !dividend - rem;
    temp = dividend + 1;
    printf("Enter divisor: ");
    remainder = dividend;
    yourenot = payingattention;
    printf("Quotient = %d\n)
    printf("I loose the game");
```

### That's conflicts

When git does not know how to resolve changes between two versions.

\$ git cherry-pick 1

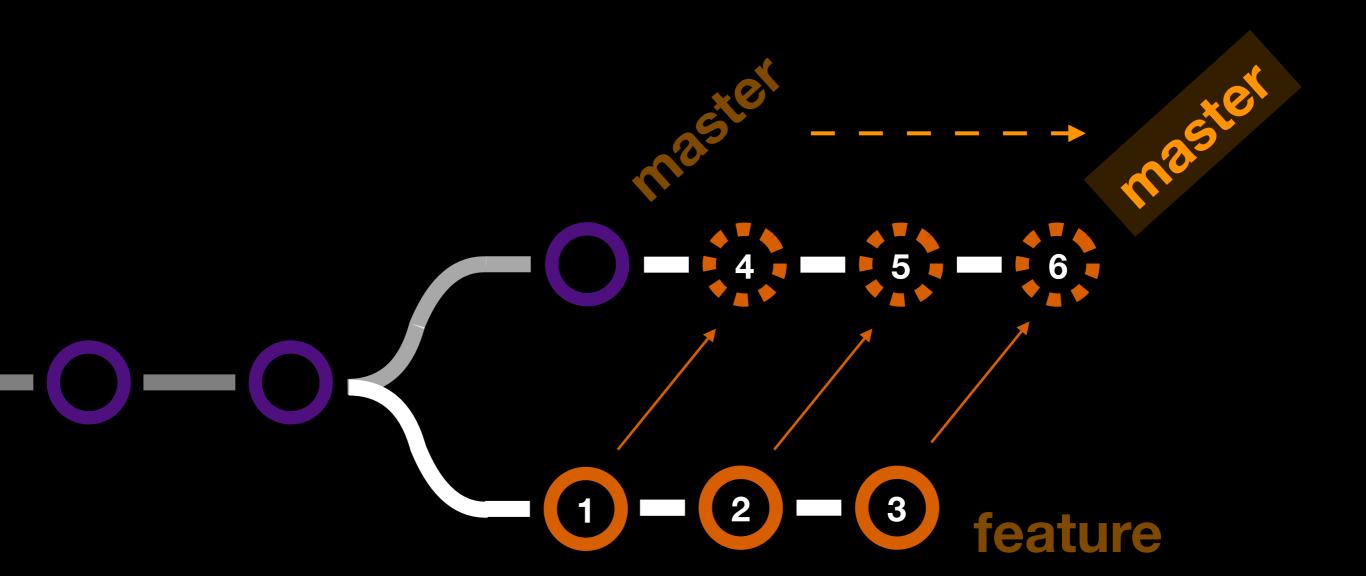


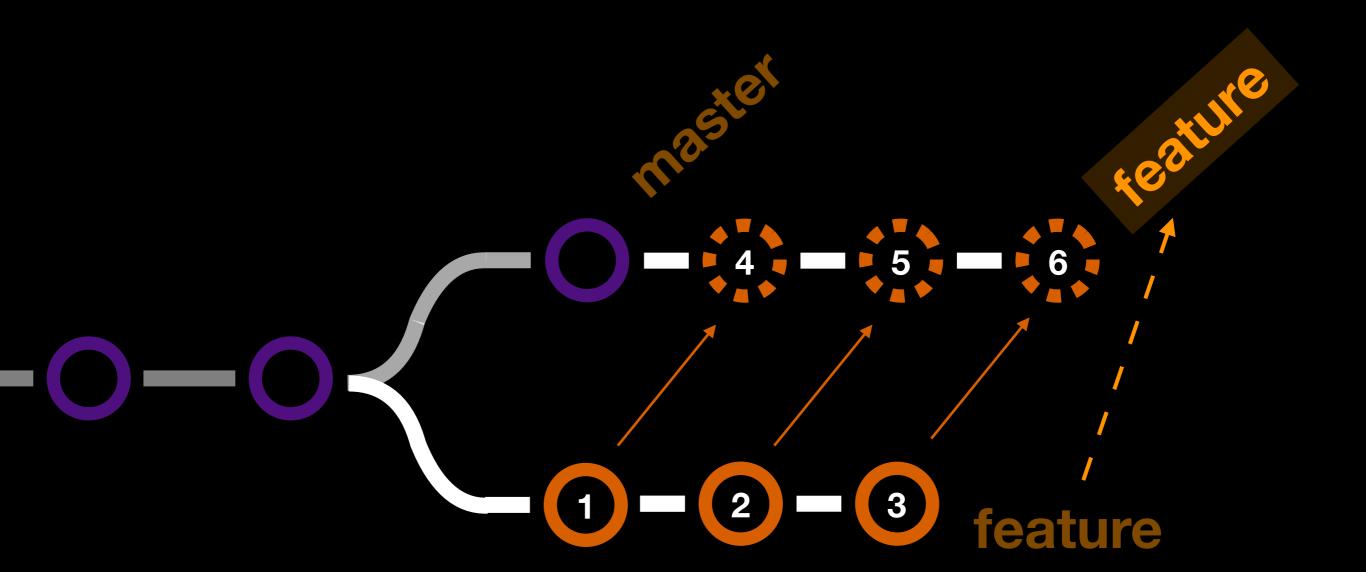
### git cherry-pick <hash>

Copy the commit <hash> into the current branch.

Example: integrate a fix that was made in the wrong branch.

git cherry-pick (x3)

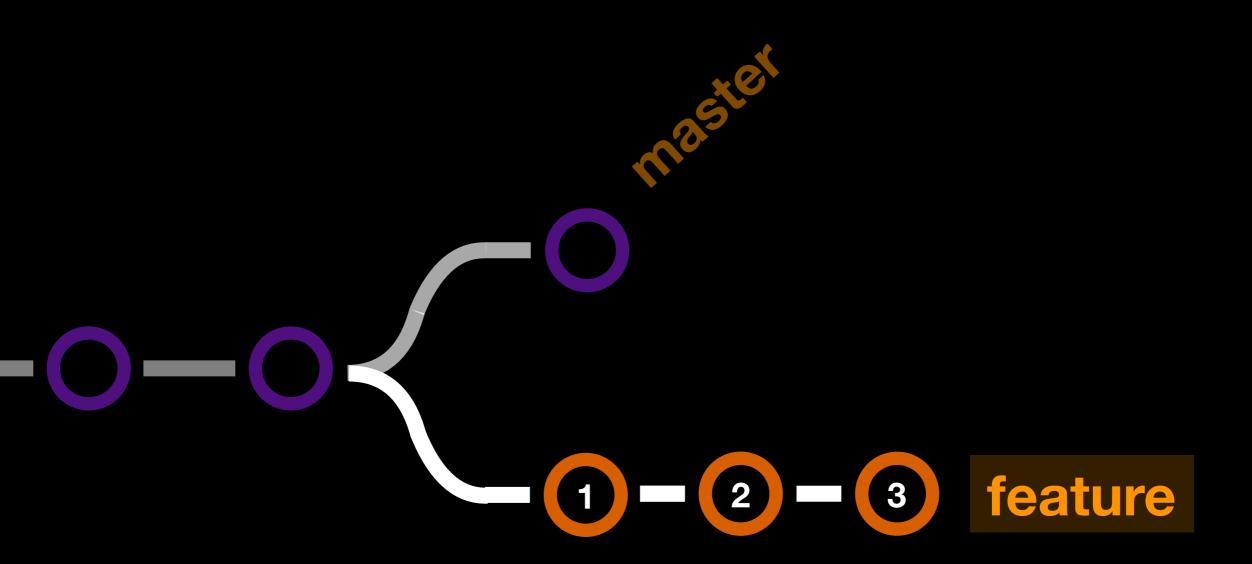


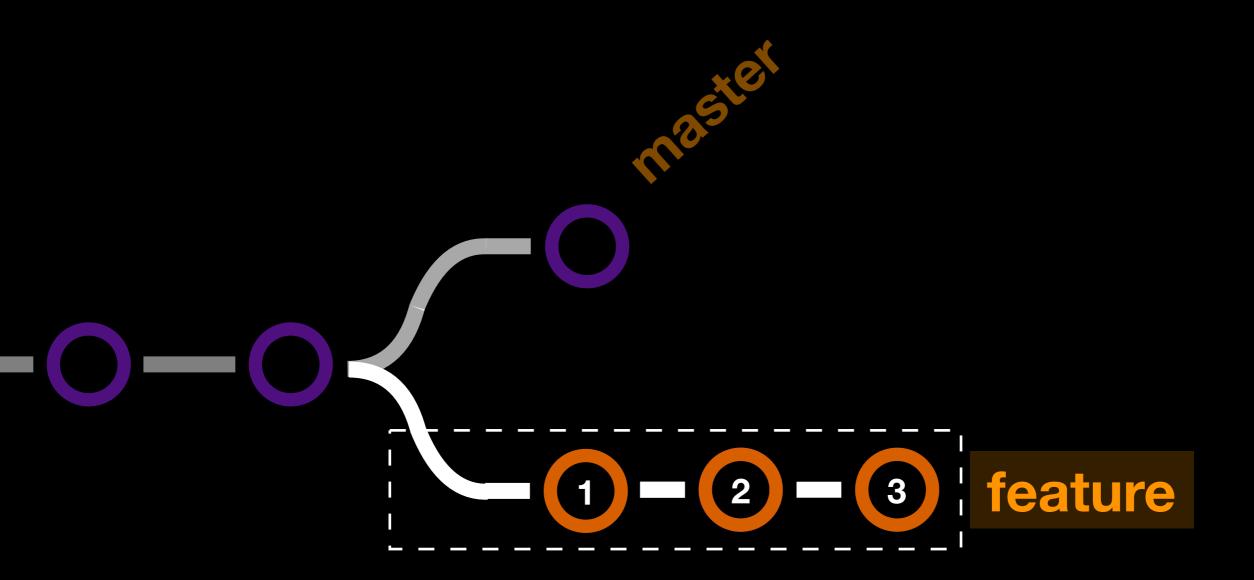


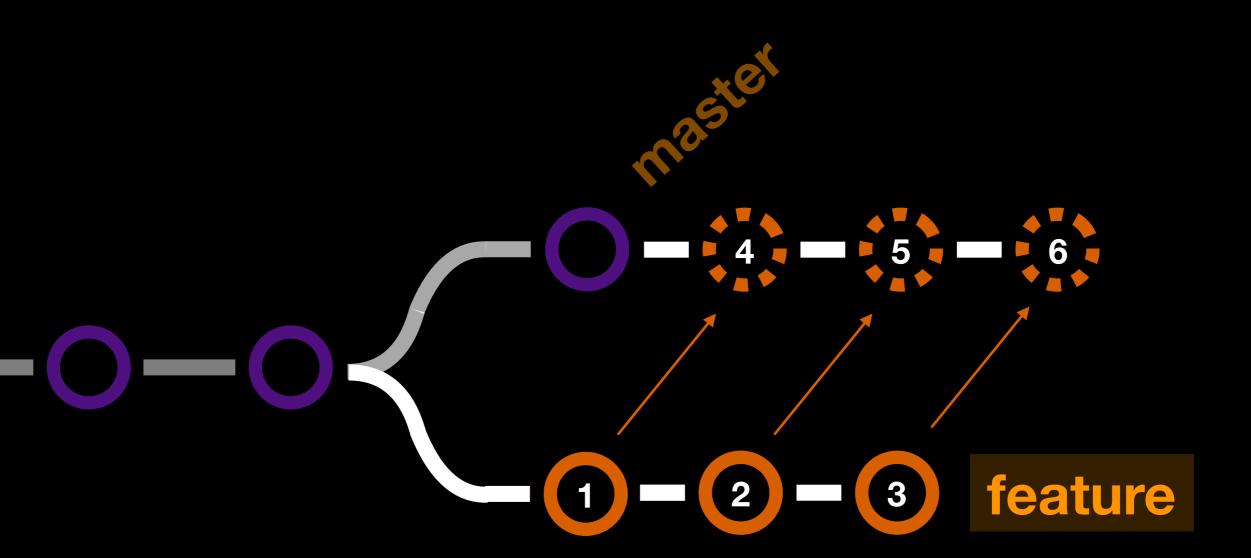
#### git rebase <br/>branch>

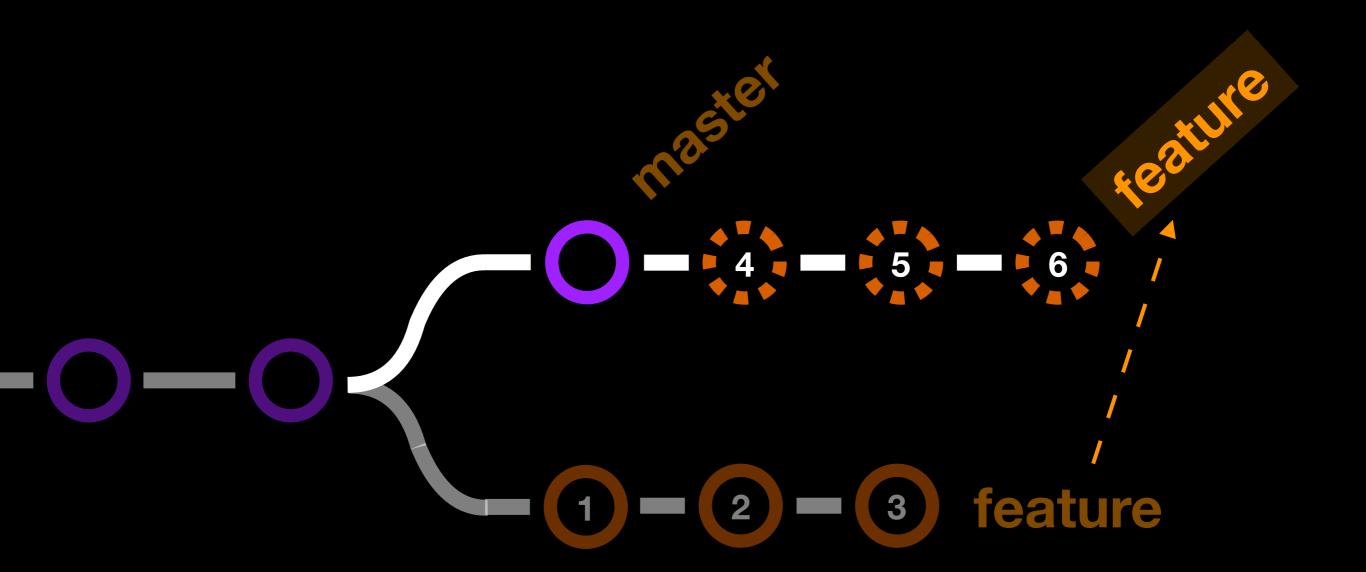
Give the current branch a new base. (recreate all the commits of the current branch on <br/>
branch on <br/>
branch>)

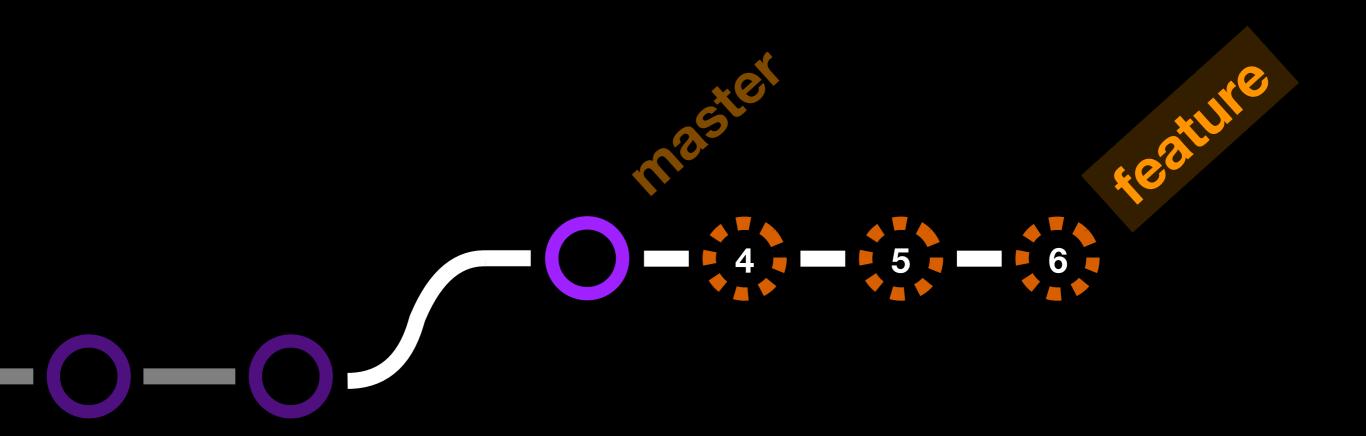
Example: Continue the development on <feature> with the new things from <master>

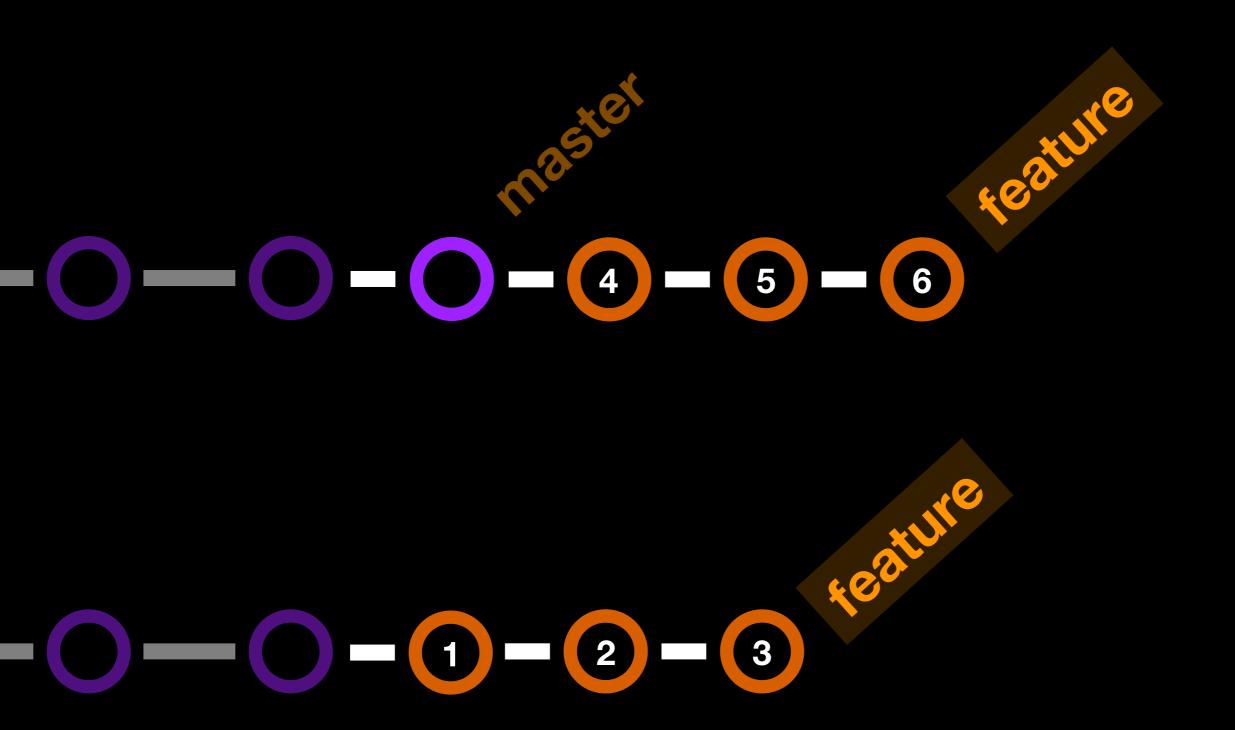




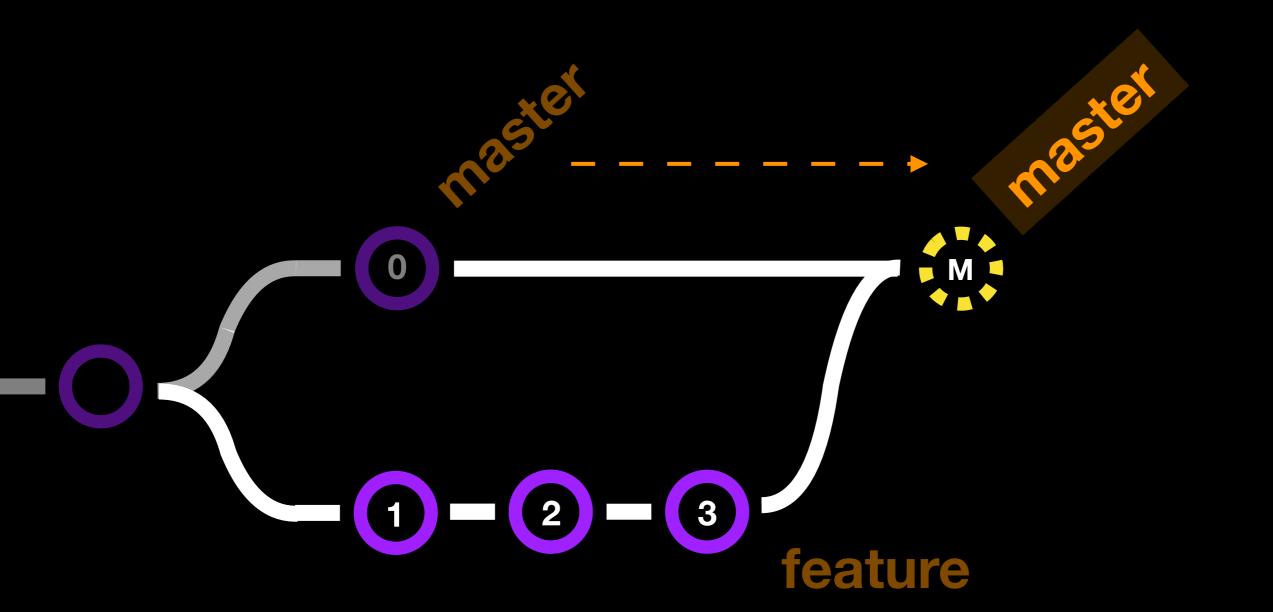








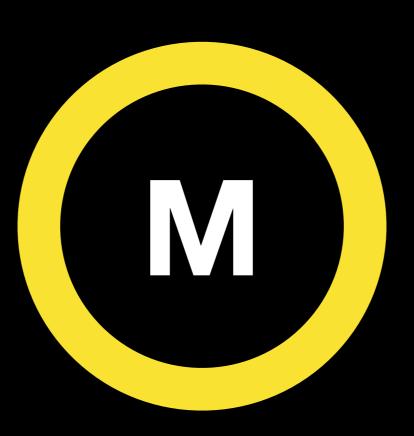
**\$** git merge feature



## git merge <br/>branch>

Create a "merge commit" that is the child of both the current branch and <br/>
<br/>
<br/>
<br/>
<br/>
child of both the current branch and

Example: Integrate a new feature to the stable branch <master>.





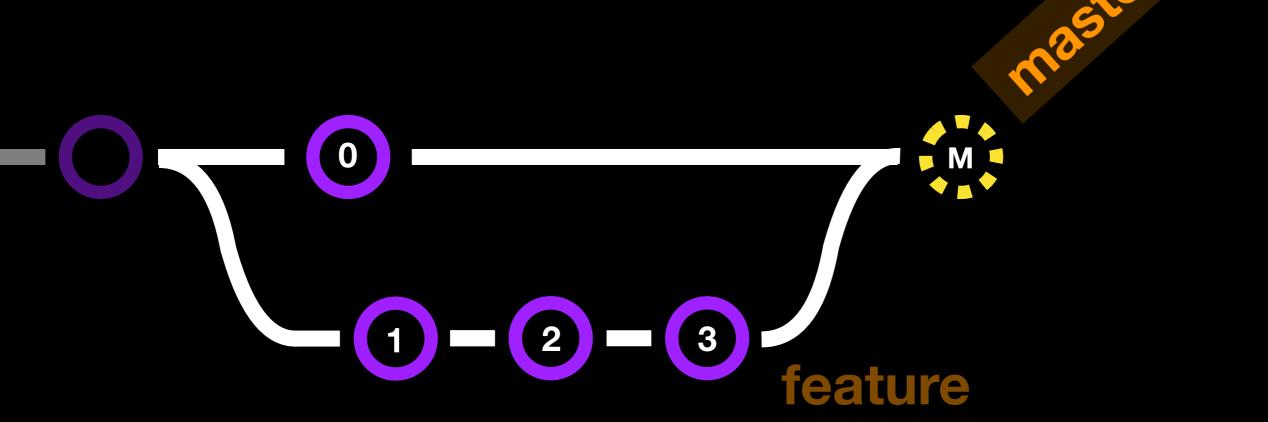
#### # e11baf7fe9b1f

- 1st Parent: 000000000...
- O 2nd Parent: 333333333...

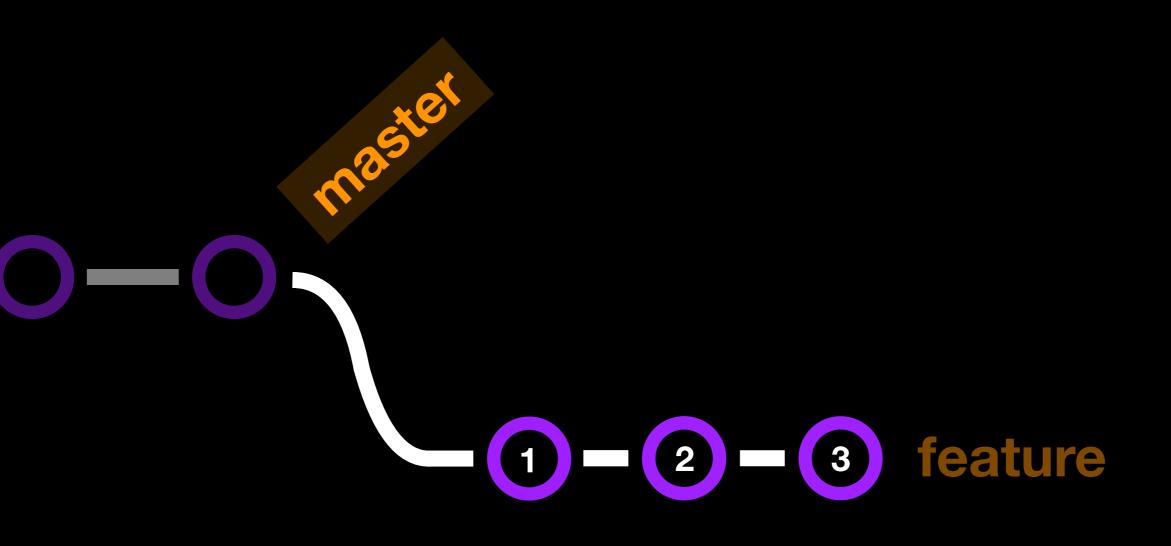
Committed by Nicolas At 16:34 01/03/19

- + Added 1
- + Added 2
- + Added 3

\$ git merge feature



\$ git merge feature



#### **Fast Forward**

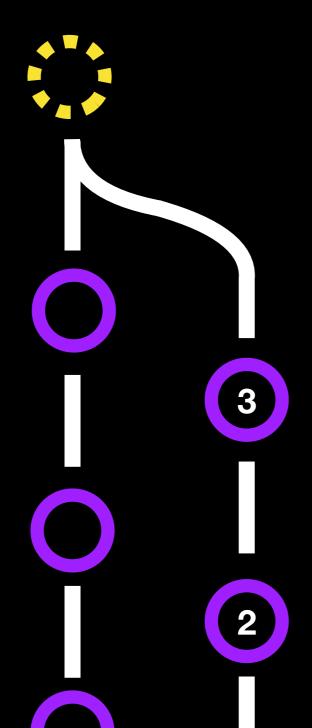
To force a merge commit

git merge --no-ff <br/>branch>

# Merge vs Rebase

git merge

git rebase





git merge



#### **Preserve the commits**

You know better what happened



#### git rebase Rewrite the commits

You know better what the author wanted to do

#### git merge



#### **Preserve the commits**

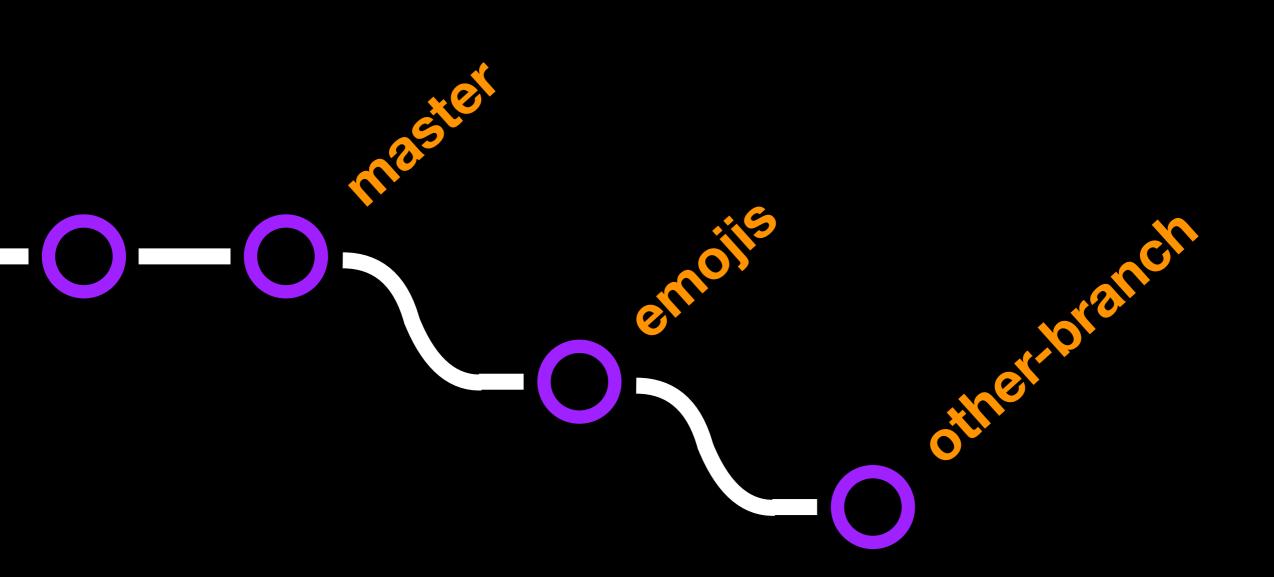
You know better what happened



#### git rebase Rewrite the commits

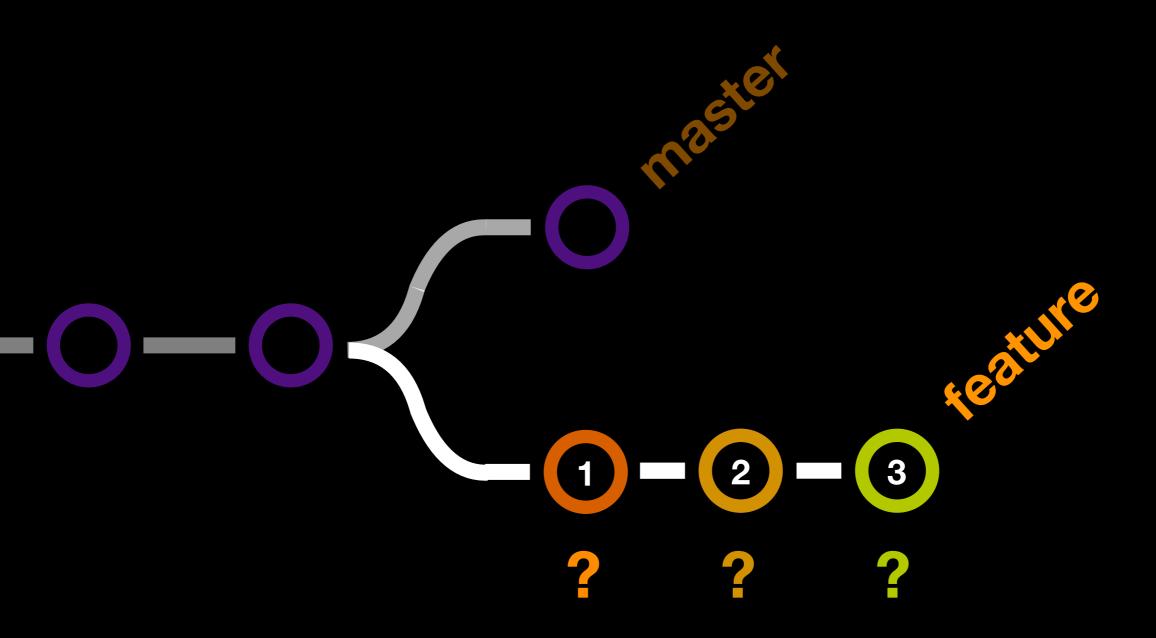
You know better what the author wanted to do

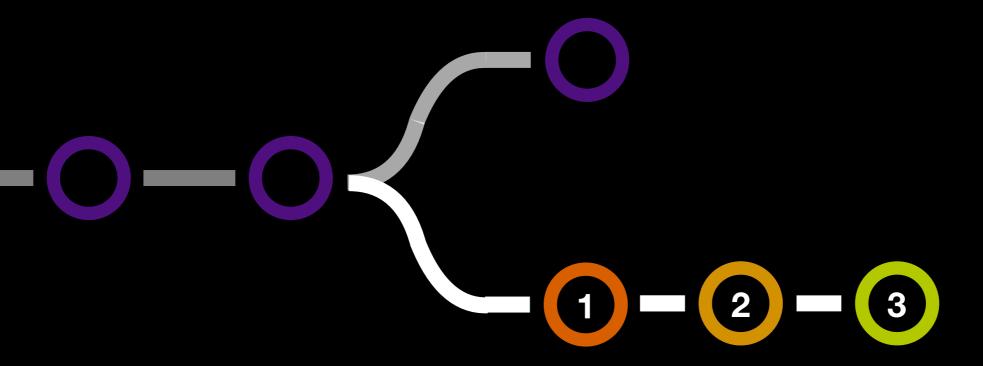
Don't if the commits are used



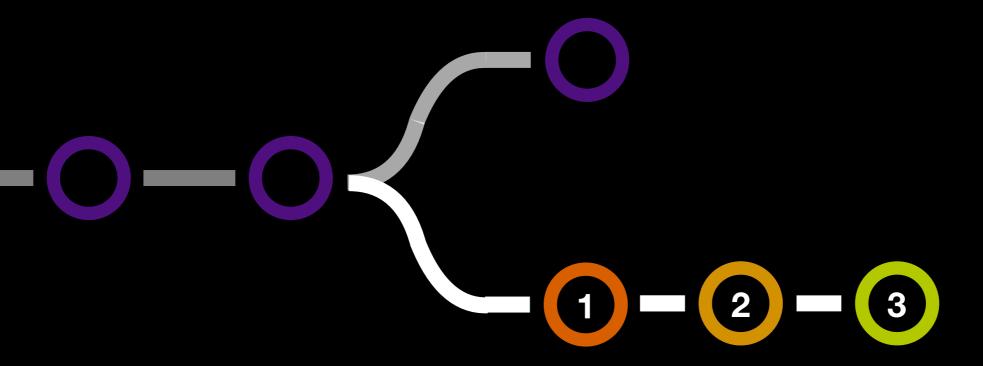
# git rebase

# git rebase --interactive

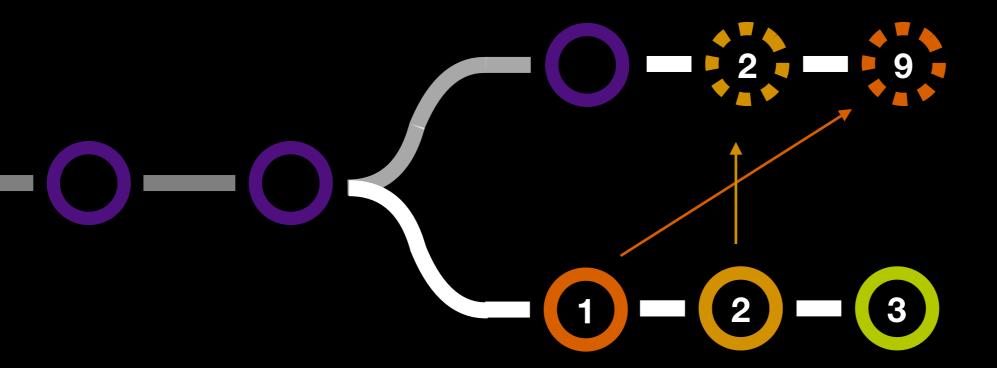




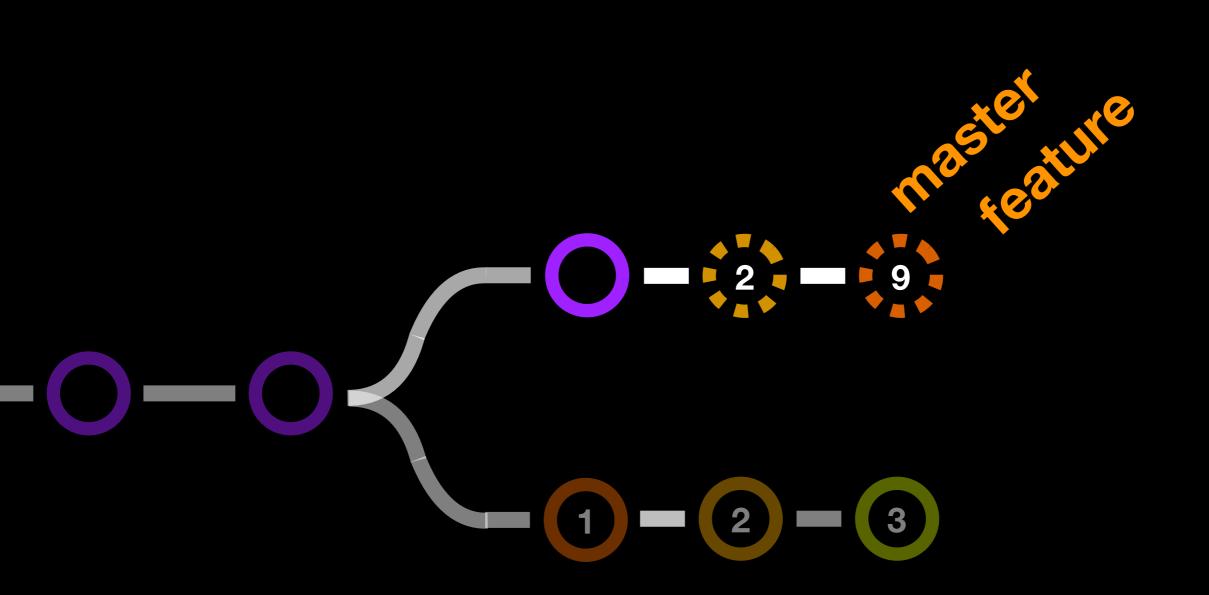
11111111 pick 22222222 pick 333333333 pick



22222222 pick
1111111 reword
333333333 drop



22222222 pick
1111111 reword
333333333 drop



pick Use the commit

reword Rename

edit Stop to amend

squash Merge in the previous commit

drop Ignore

## Please clean up your history

But not if someone is already using it

## GitFlow process

master Production (stable)

dev Development (safe)

<br/>
<br/>
dranch> ...

feat Features & improvements

fix Fixes

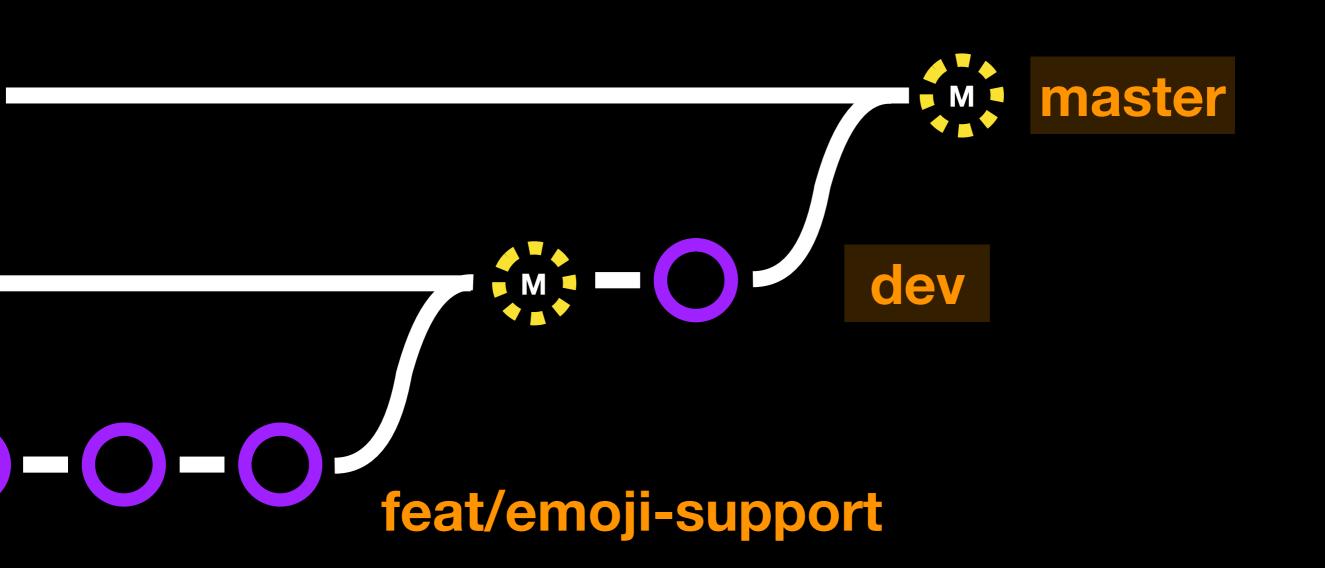
docs Documentation & comments

refactor Refactor & cleaning

chore CI, dependencies...

style Finting, formatting

\$ git merge feature



Commit message feat: add support for emoji #42

Branch name feat/add-support-for-emoji-42

### En bonus

```
git reflog
git stash
git pull -rebase
```