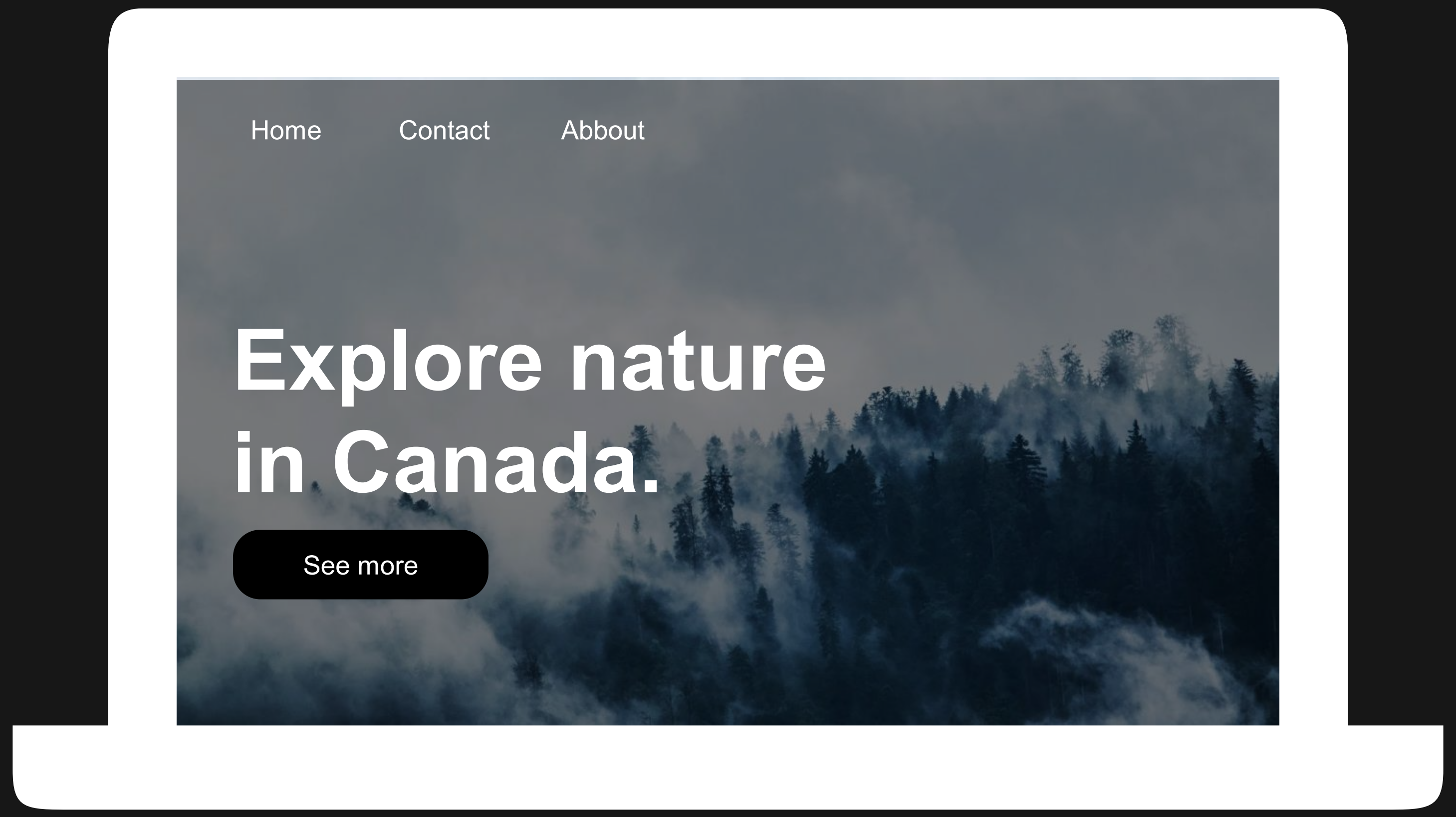
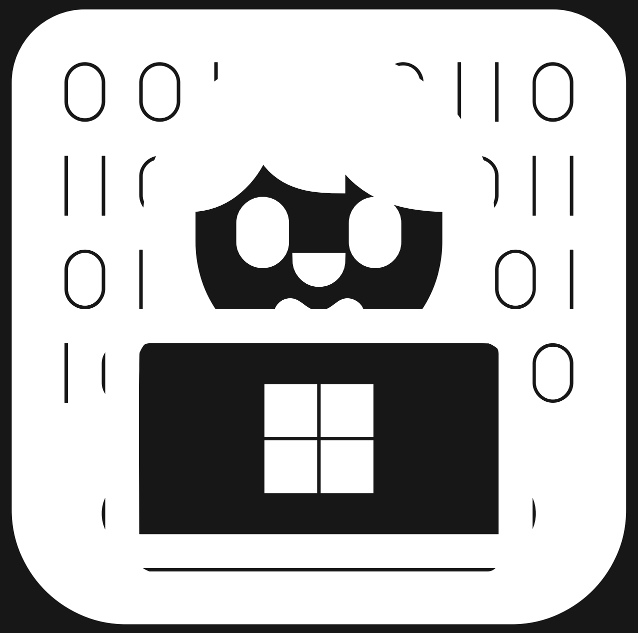
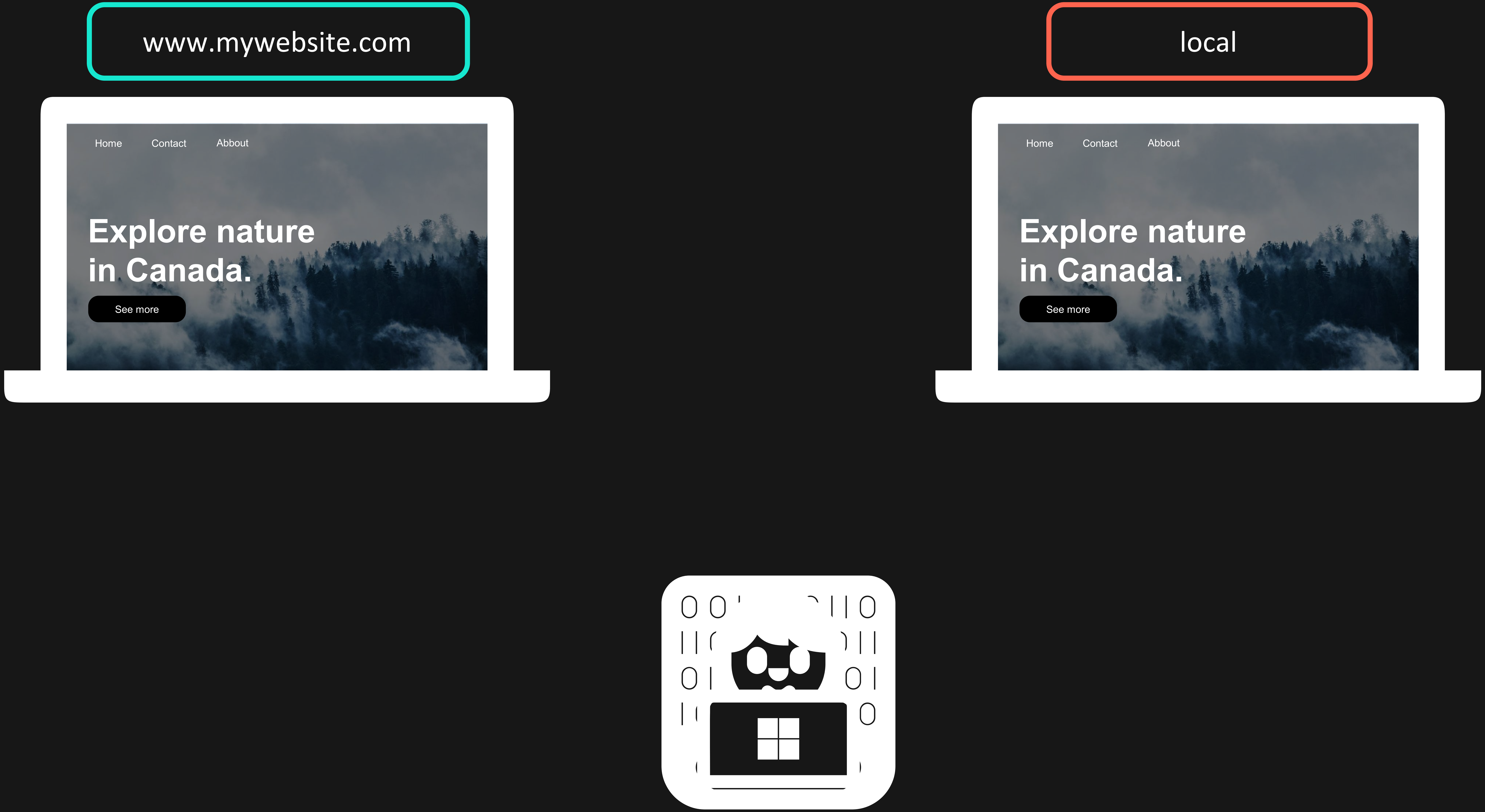
KODEKLOUD

# Git



Explore nature in Canada.

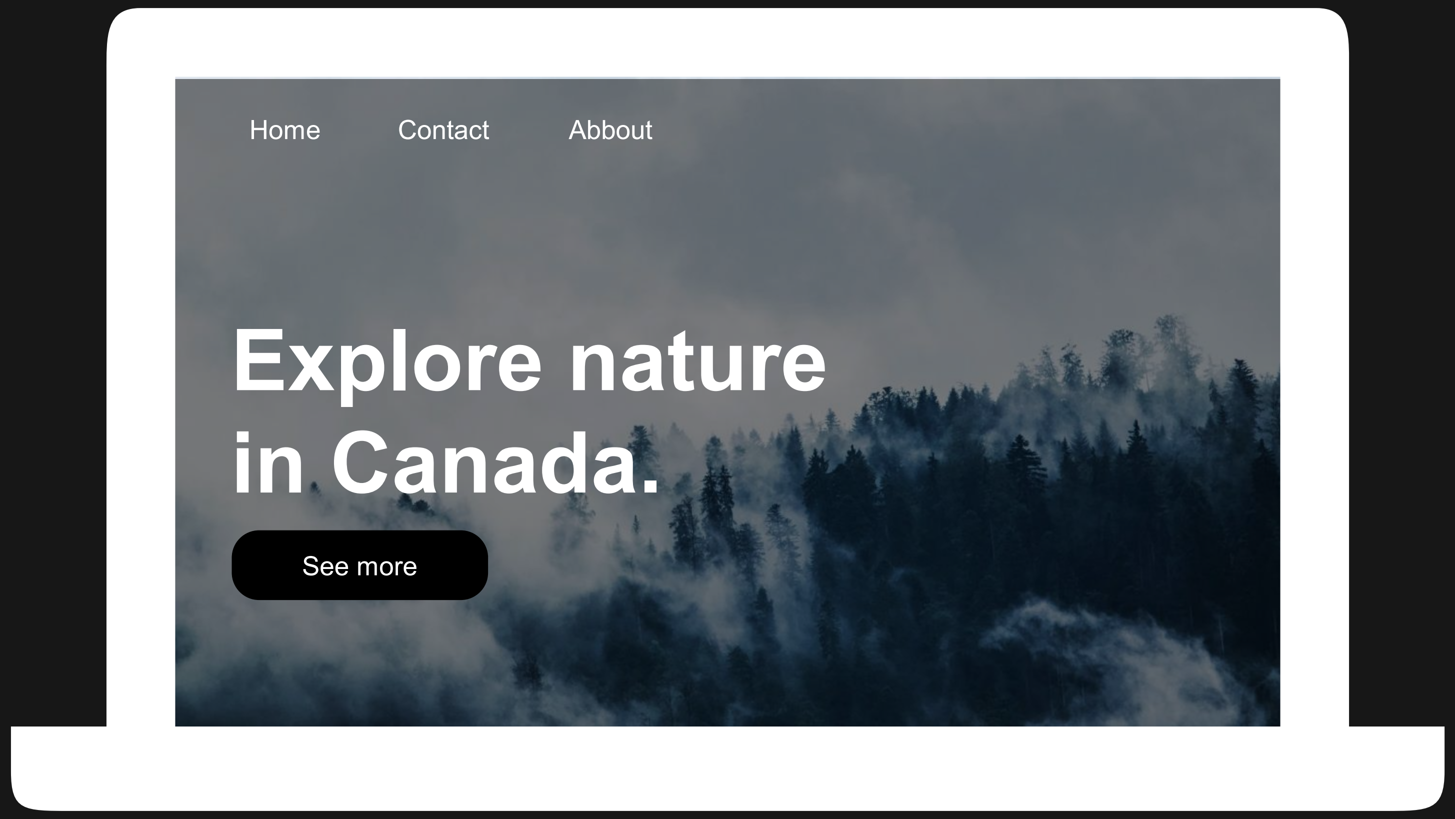




www.mywebsite.com

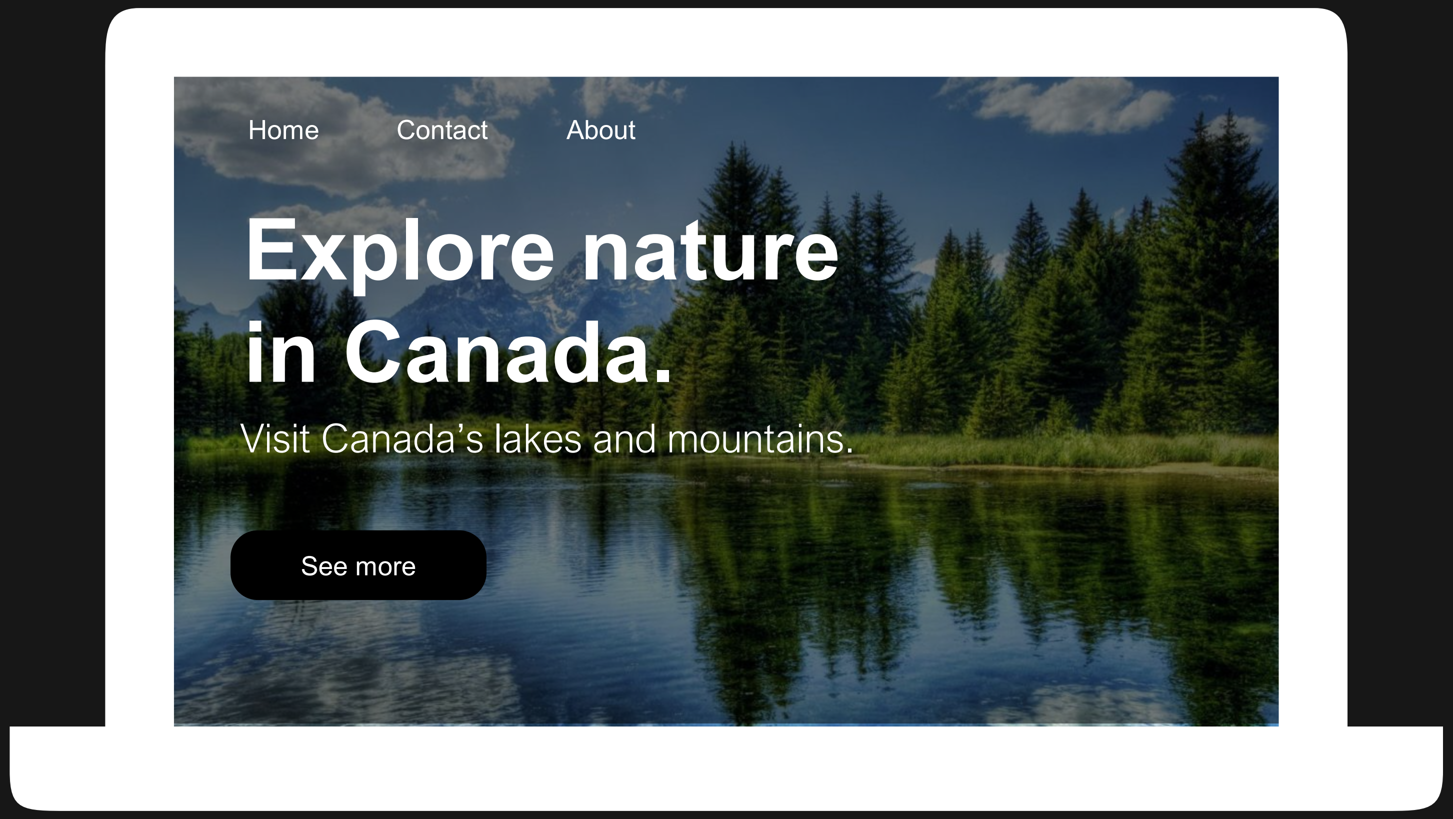
local

www.mywebsite.com



Explore nature in Canada.

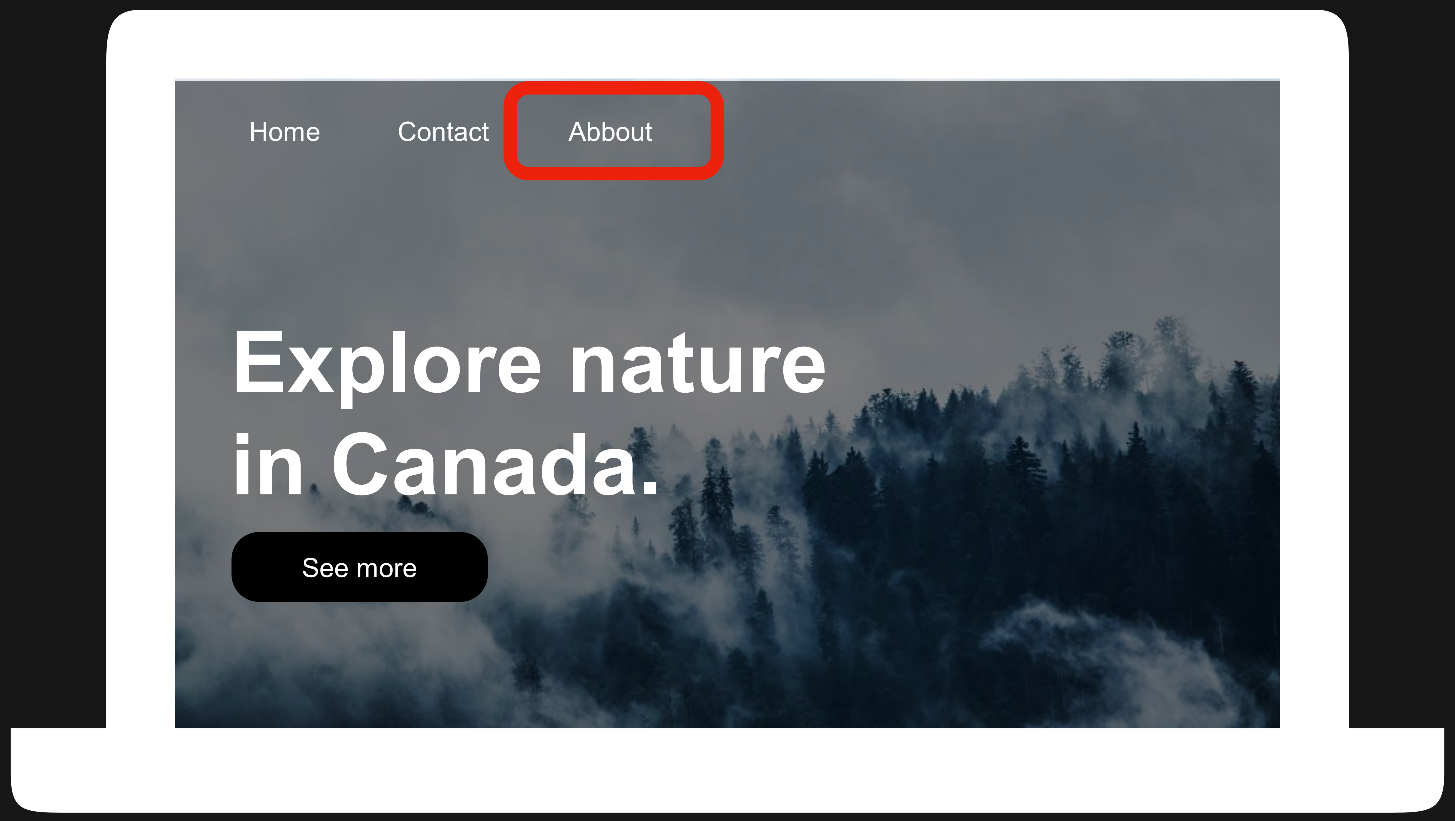
local



Explore nature in Canada.

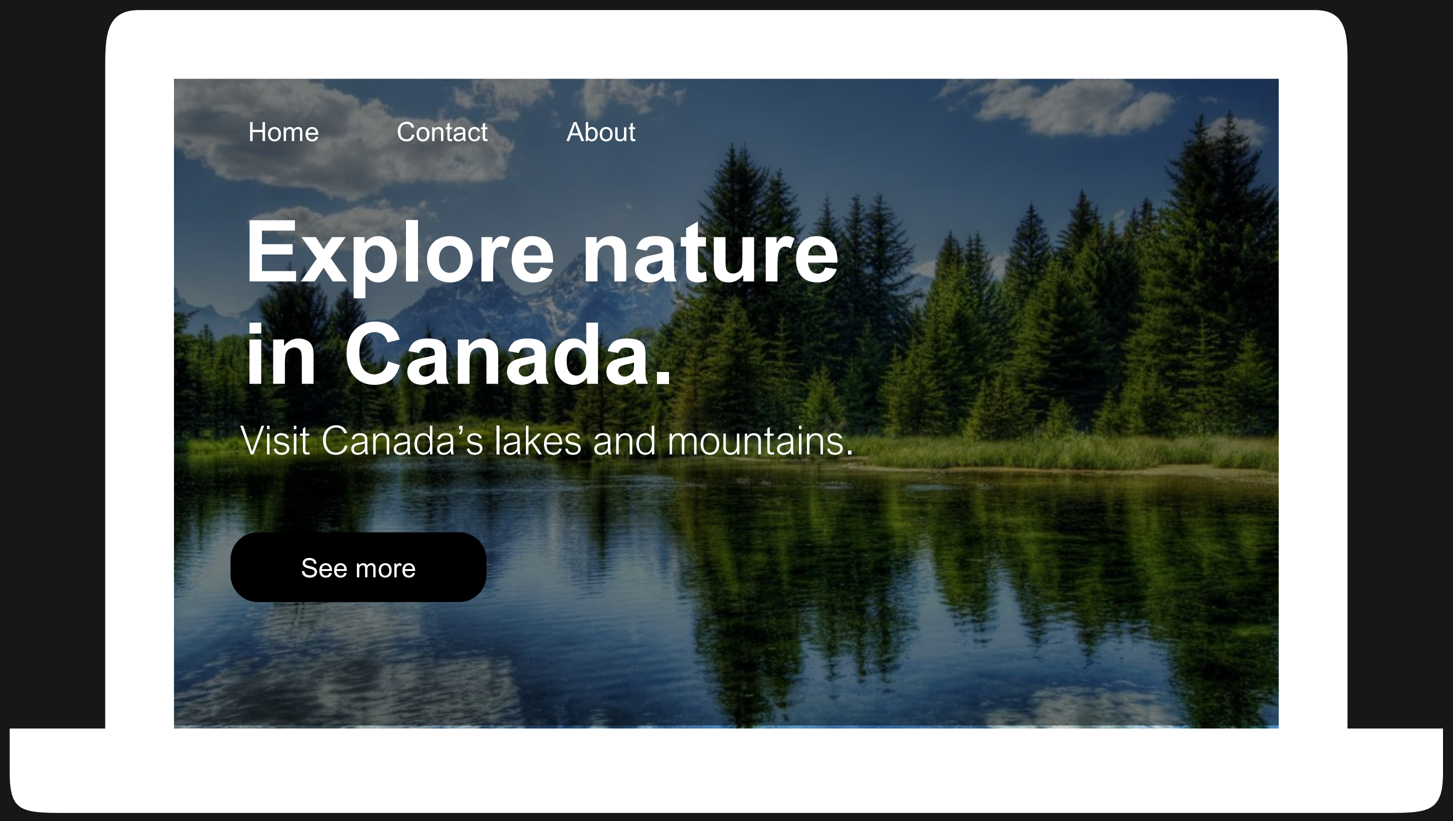
Visit Canada's lakes and mountains.

www.mywebsite.com



Explore nature in Canada.

local



Explore nature in Canada.

Visit Canada's lakes and mountains.

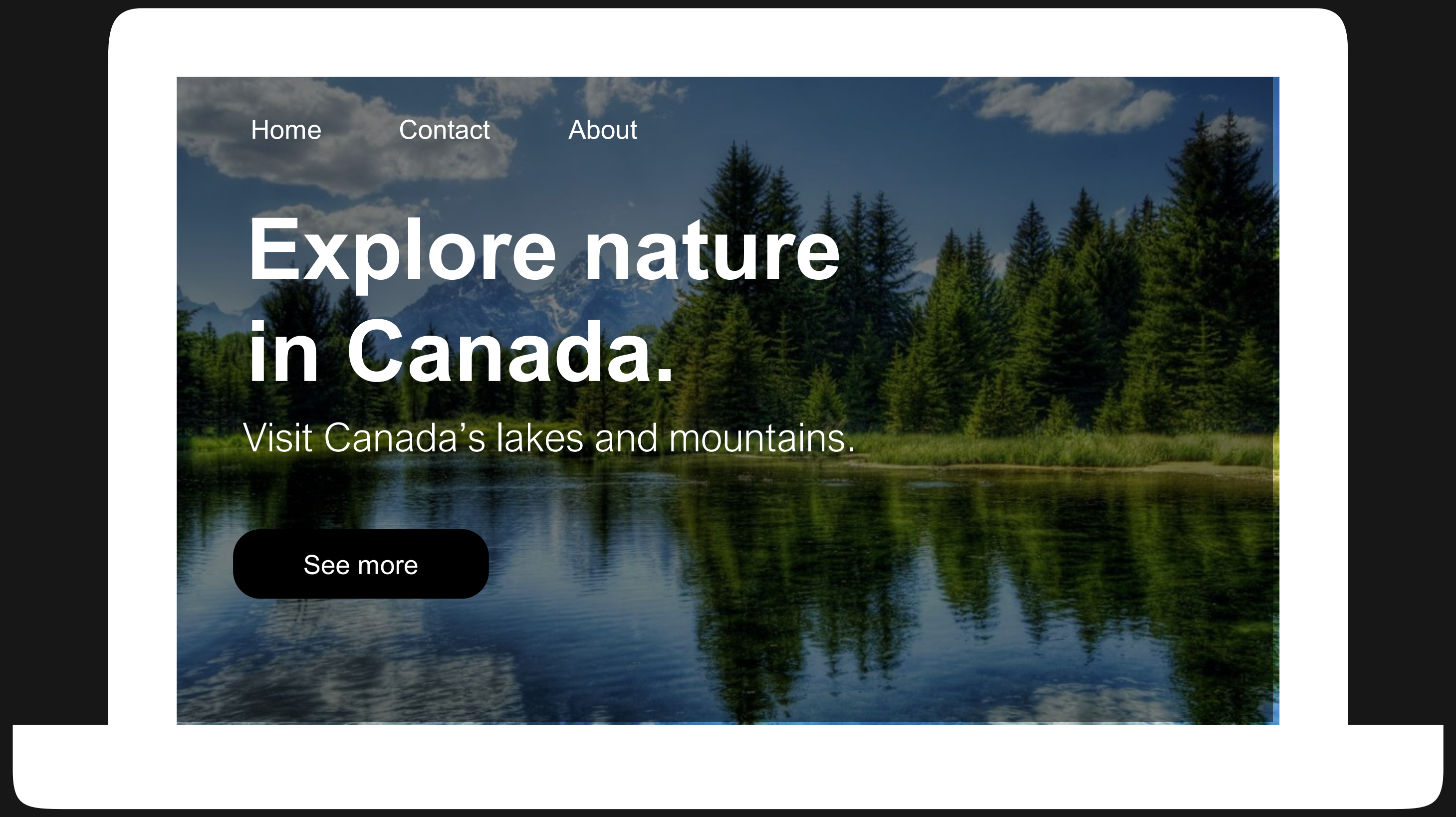
# Git

KODEKLOUD

# Git

Content tracker

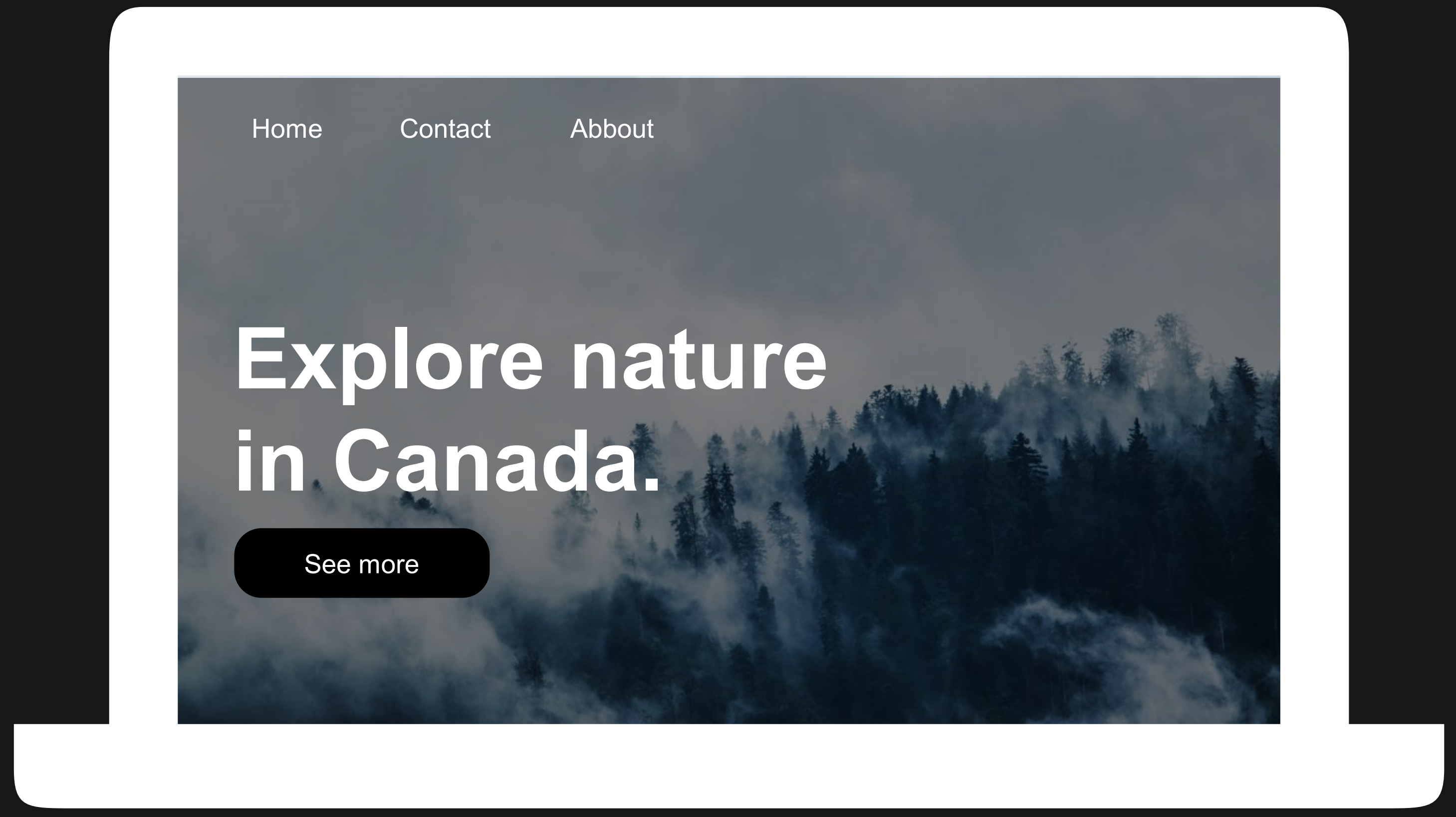
Distributed Version Control System



Explore nature in Canada.

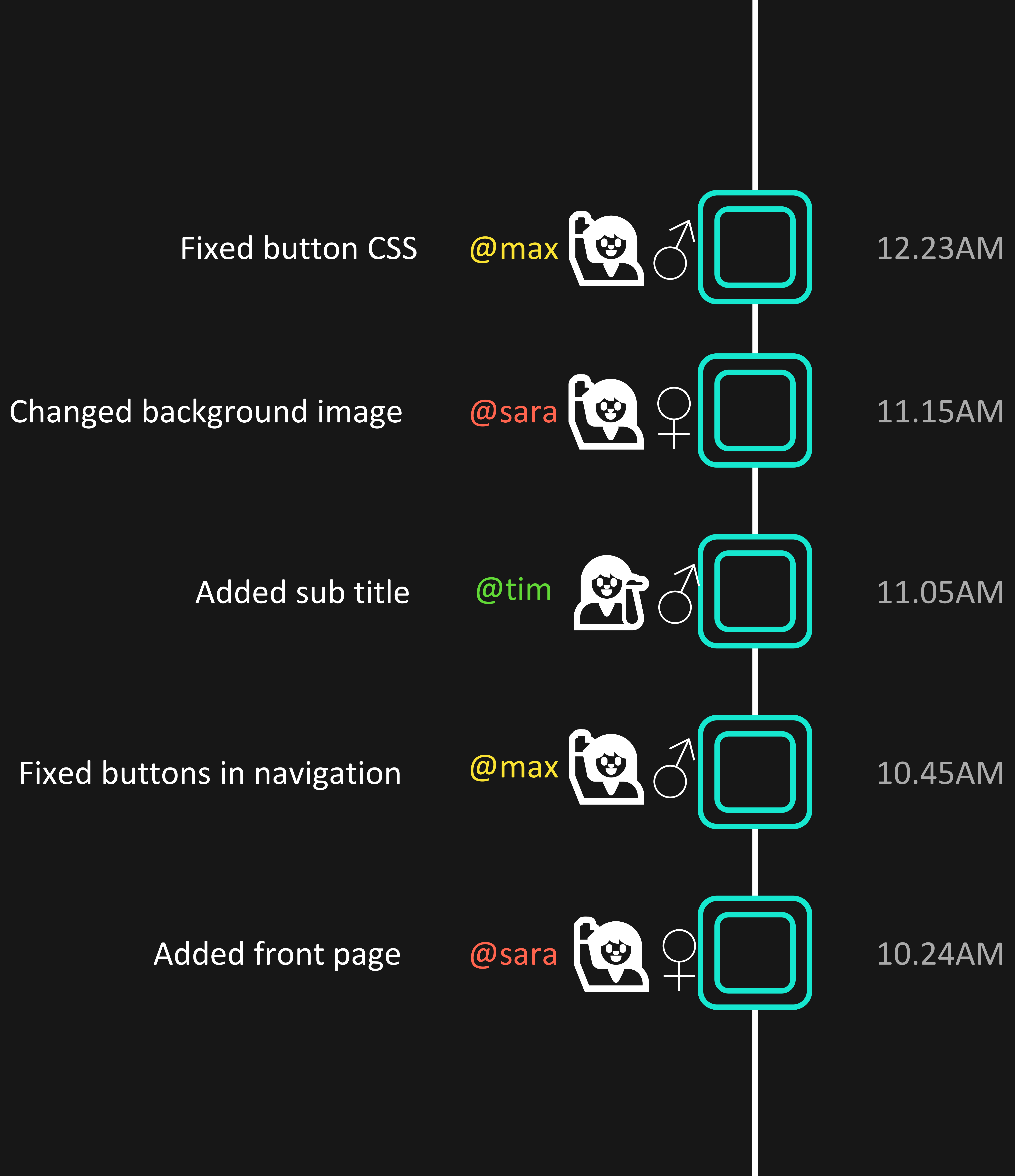
Visit Canada's lakes and mountains.

New state of your website with the local changes



Explore nature in Canada.

Hosted state of your website



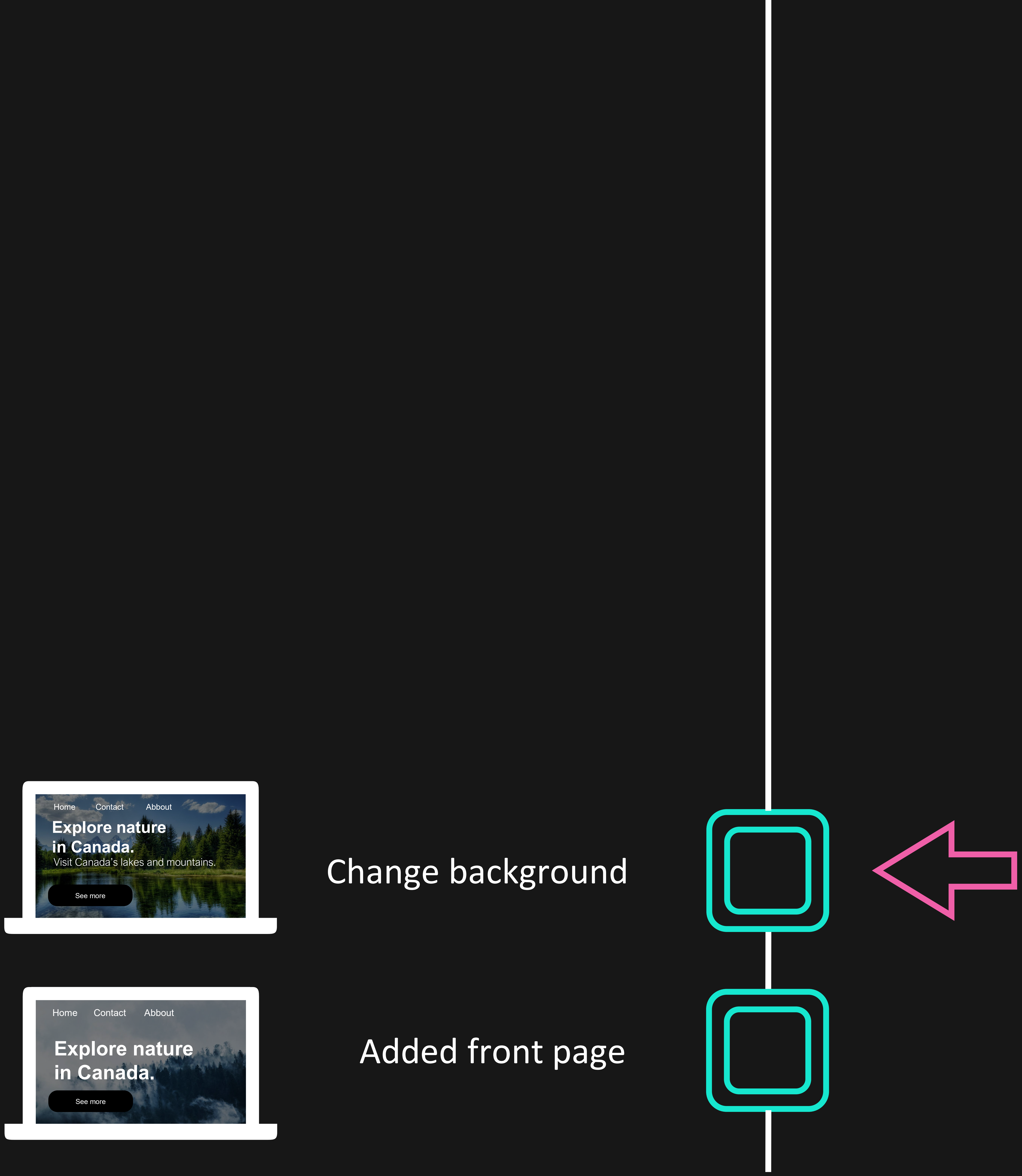
Fixed button CSS @max 🙋♂ 12.23AM

Changed background image @sara 🙋♀ 11.15AM

Added sub title @tim 🙋♂ 11.05AM

Fixed buttons in navigation @max 🙋♂ 10.45AM

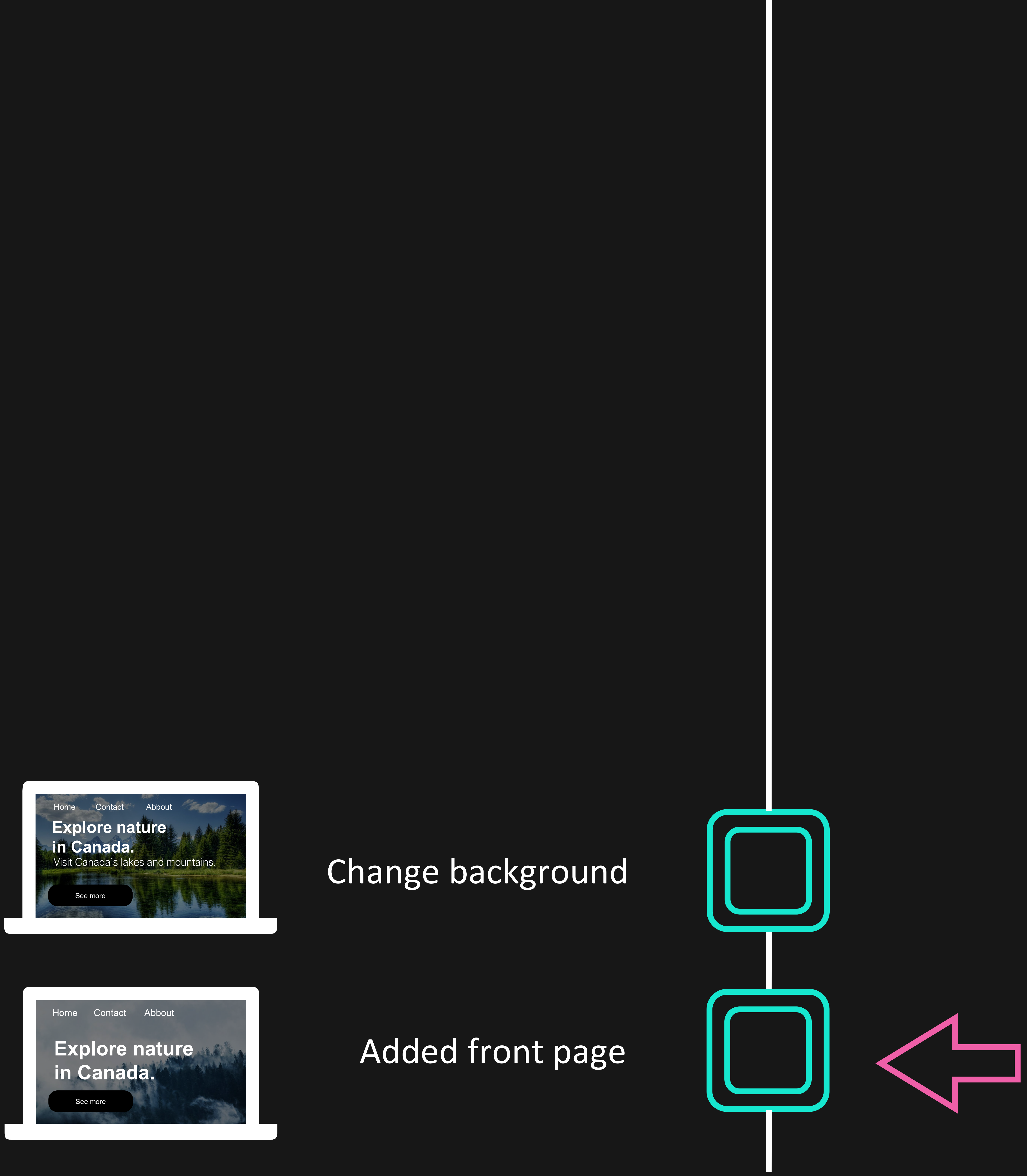
Added front page @sara 🙋♀ 10.24AM



Home
Contact
Abbout
Explore nature in Canada.
Visit Canada's lakes and mountains.
See more
Home
Contact
Abbout
Explore nature in Canada.
See more

Change background

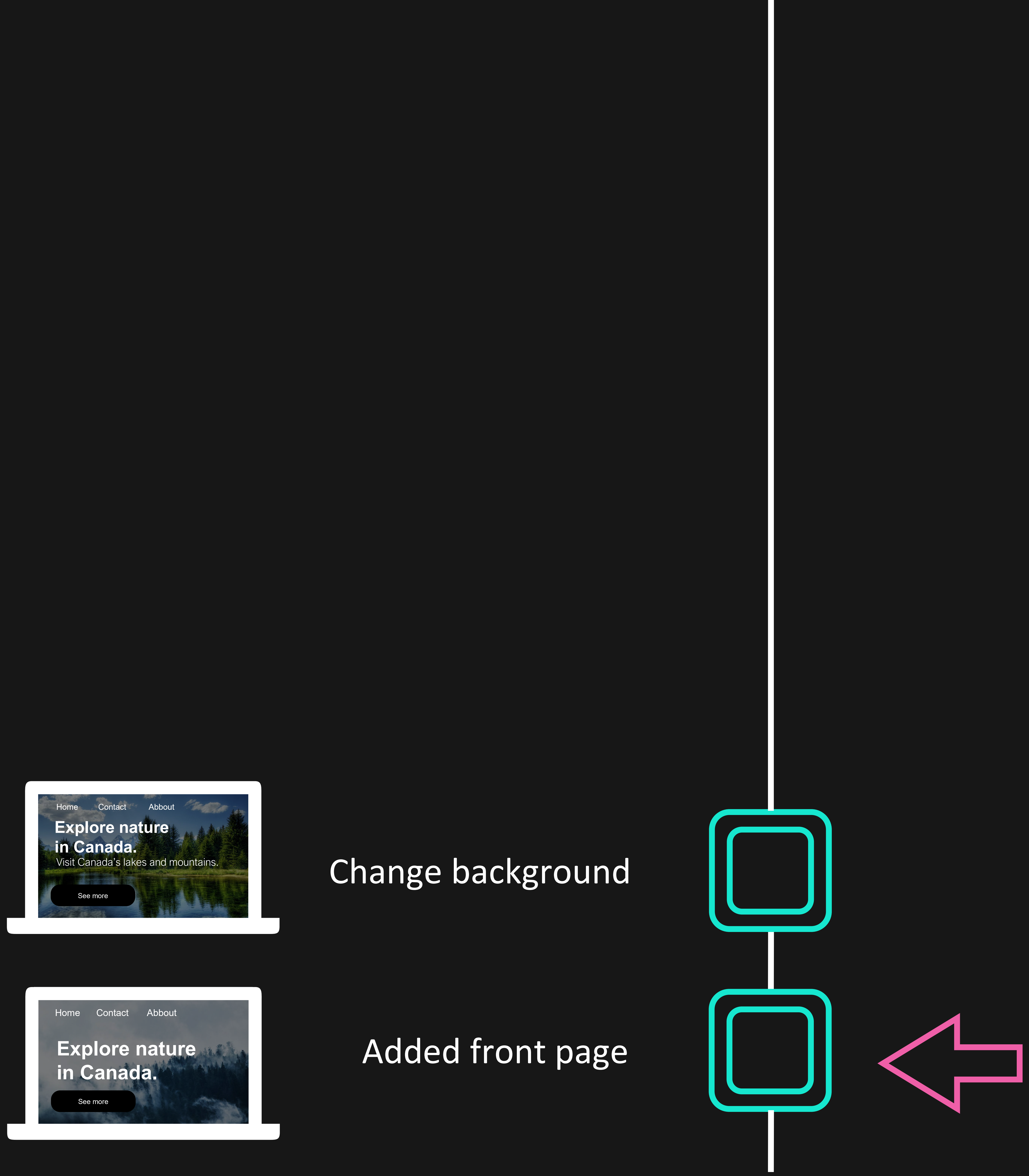
Added front page



Home
Contact
Abbout
Explore nature in Canada.
Visit Canada's lakes and mountains.
See more
Home
Contact
Abbout
Explore nature in Canada.
See more

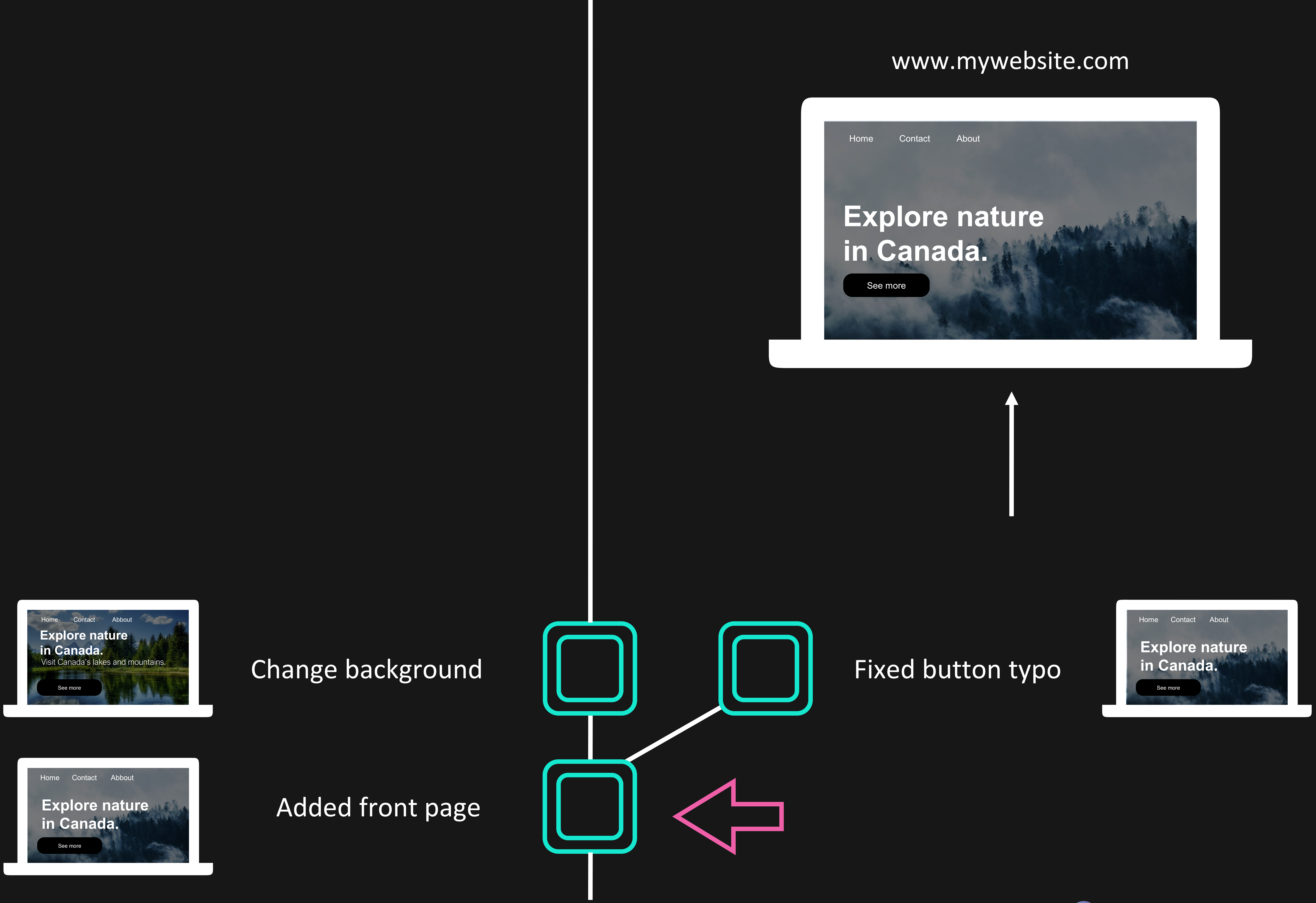
Change background

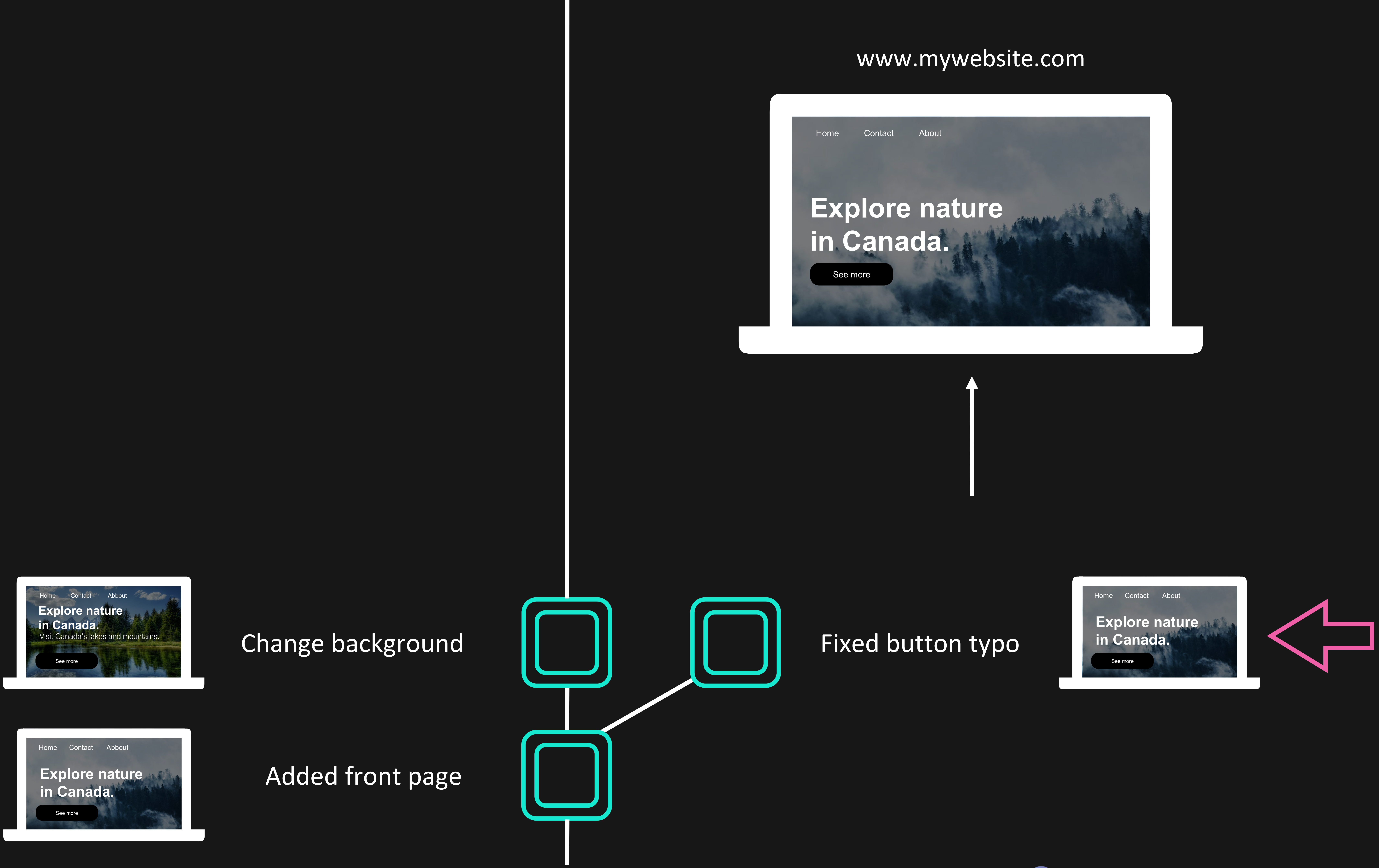
Added front page


Home
Contact
Abbout
Explore nature in Canada.
Visit Canada's lakes and mountains.
See more
Home
Contact
Abbout
Explore nature in Canada.
See more

Change background

Added front page


www.mywebsite.com
Home
Contact
About
Explore nature in Canada.
See more
Home
Contact
Abbout
Explore nature in Canada.
Visit Canada's lakes and mountains.
See more
Change background
Fixed button typo
Home
Contact
About
Explore nature in Canada.
See more
Home
Contact
Abbout
Explore nature in Canada.
See more
Added front page

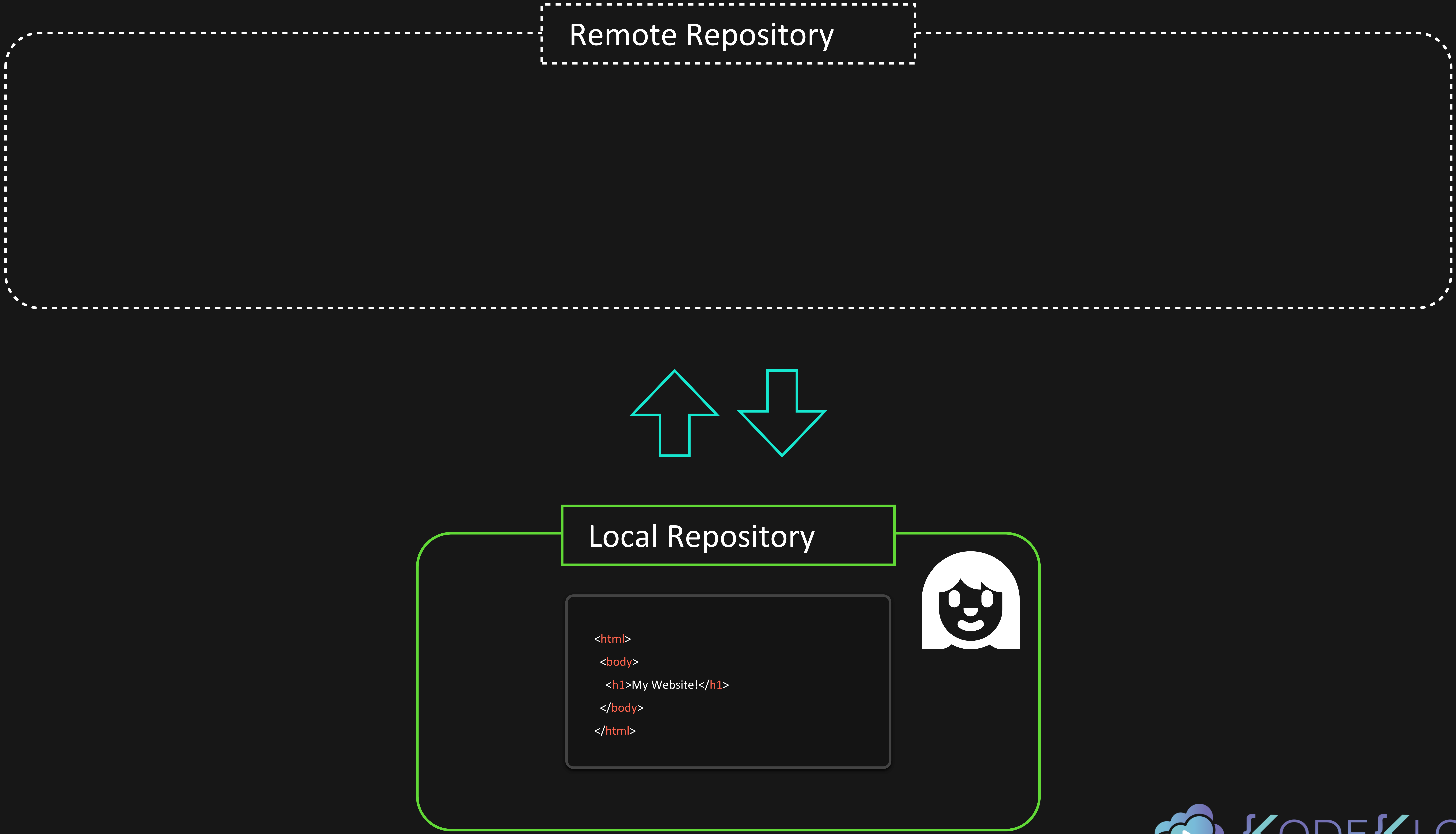


www.mywebsite.com

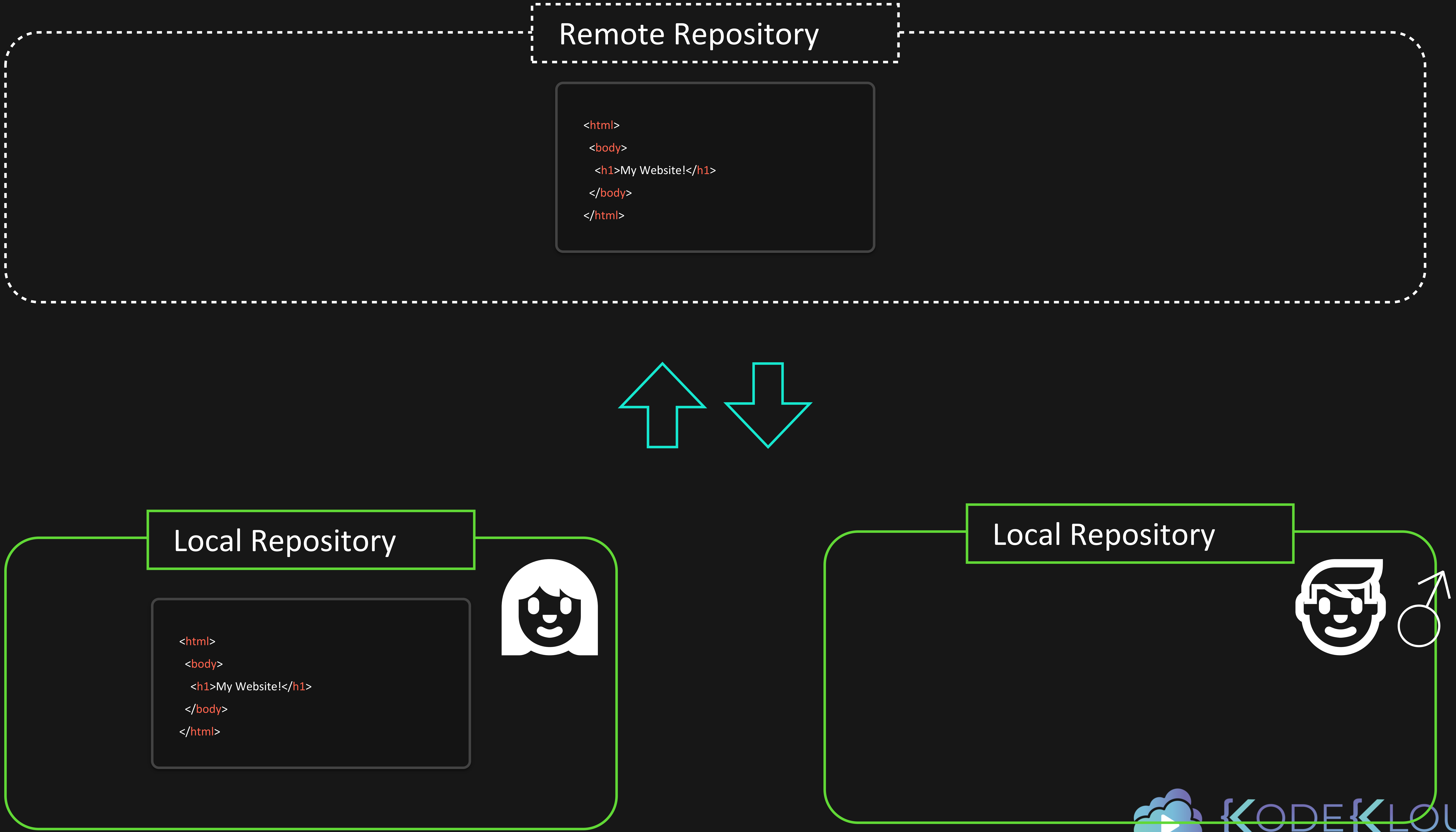
Change background

Added front page

Fixed button typo



```
<html>
 <body>
  <h1>My Website!</h1>
 </body>
</html>
```



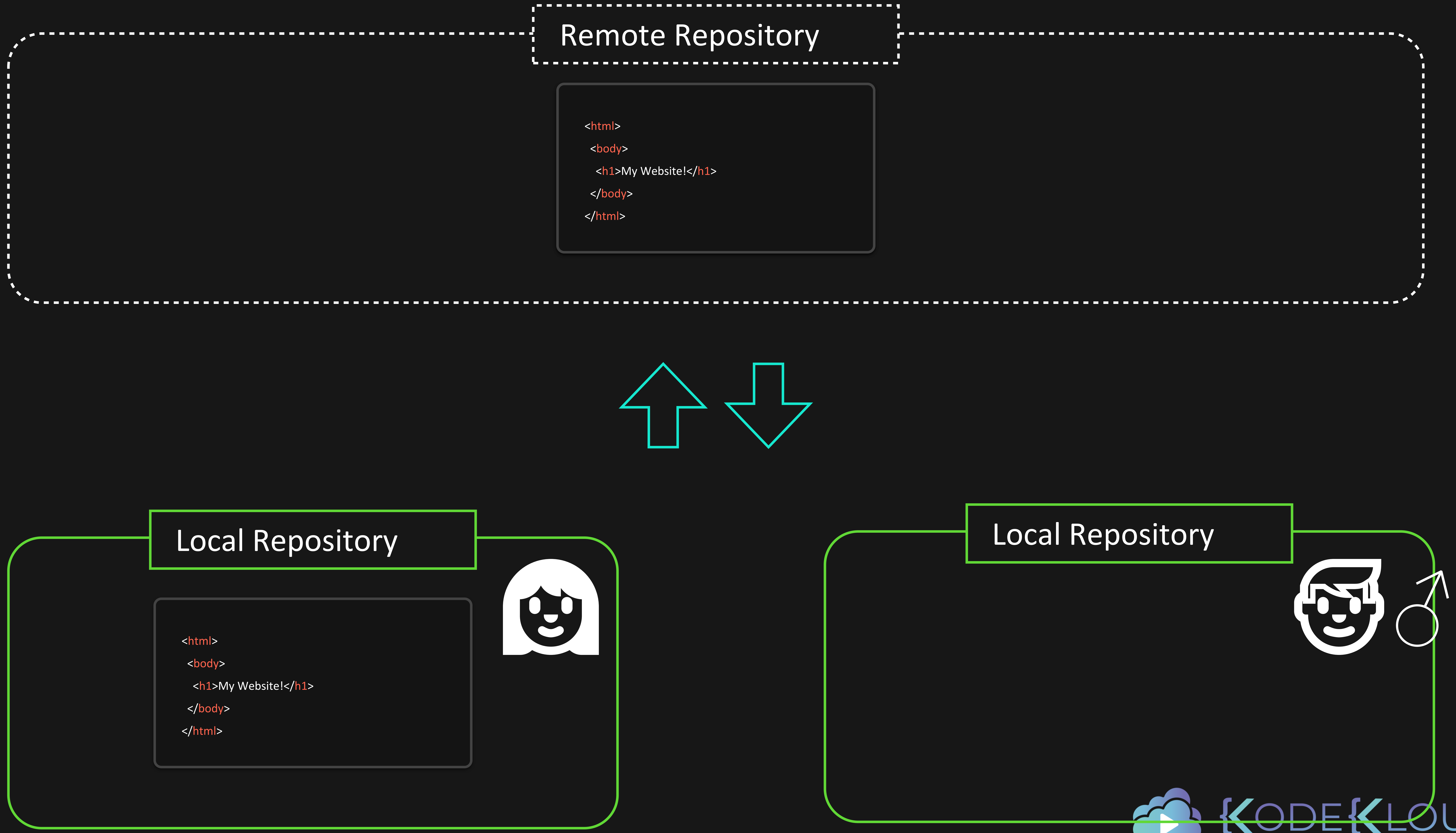
Remote Repository

```
<html>
 <body>
  <h1>My Website!</h1>
 </body>
</html>
```

Local Repository

```
<html>
 <body>
  <h1>My Website!</h1>
 </body>
</html>
```

Local Repository



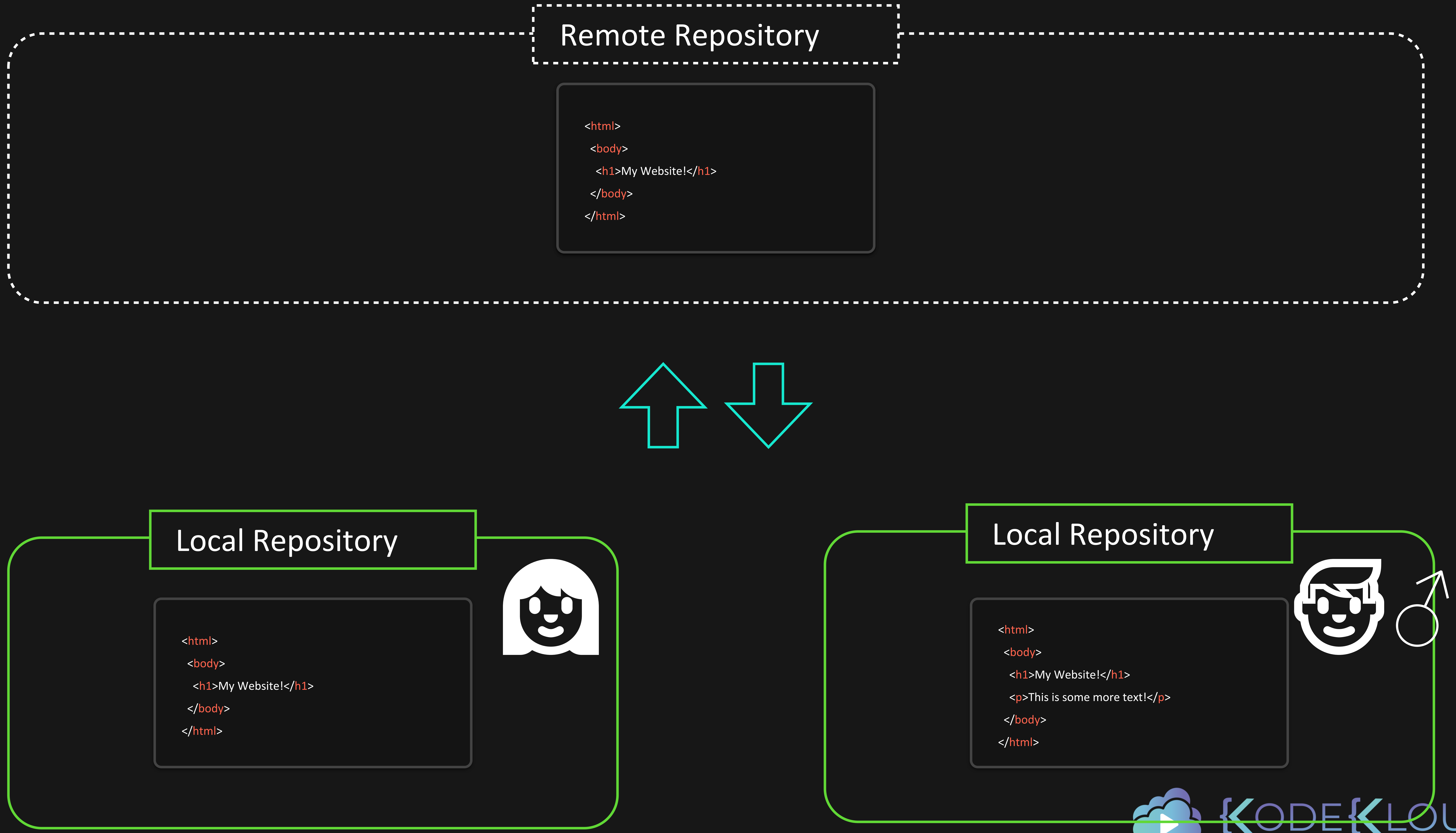
Remote Repository

```
<html>
 <body>
  <h1>My Website!</h1>
 </body>
</html>
```

Local Repository

```
<html>
 <body>
  <h1>My Website!</h1>
 </body>
</html>
```

Local Repository



Remote Repository

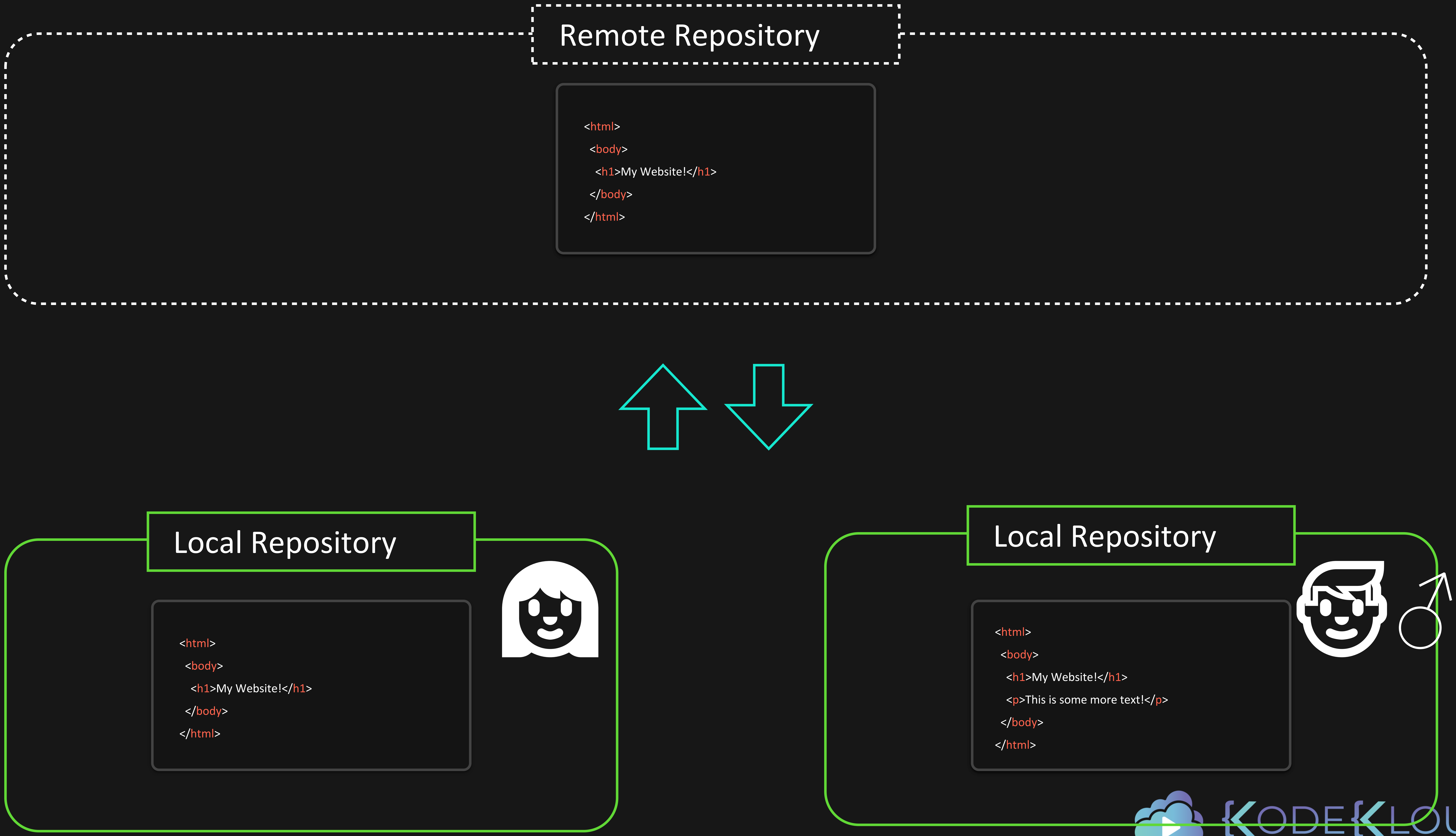
```
<html>
 <body>
  <h1>My Website!</h1>
 </body>
</html>
```

Local Repository

```
<html>
 <body>
  <h1>My Website!</h1>
 </body>
</html>
```

Local Repository

```
<html>
 <body>
  <h1>My Website!</h1>
  <p>This is some more text!</p>
 </body>
</html>
```



## Remote Repository

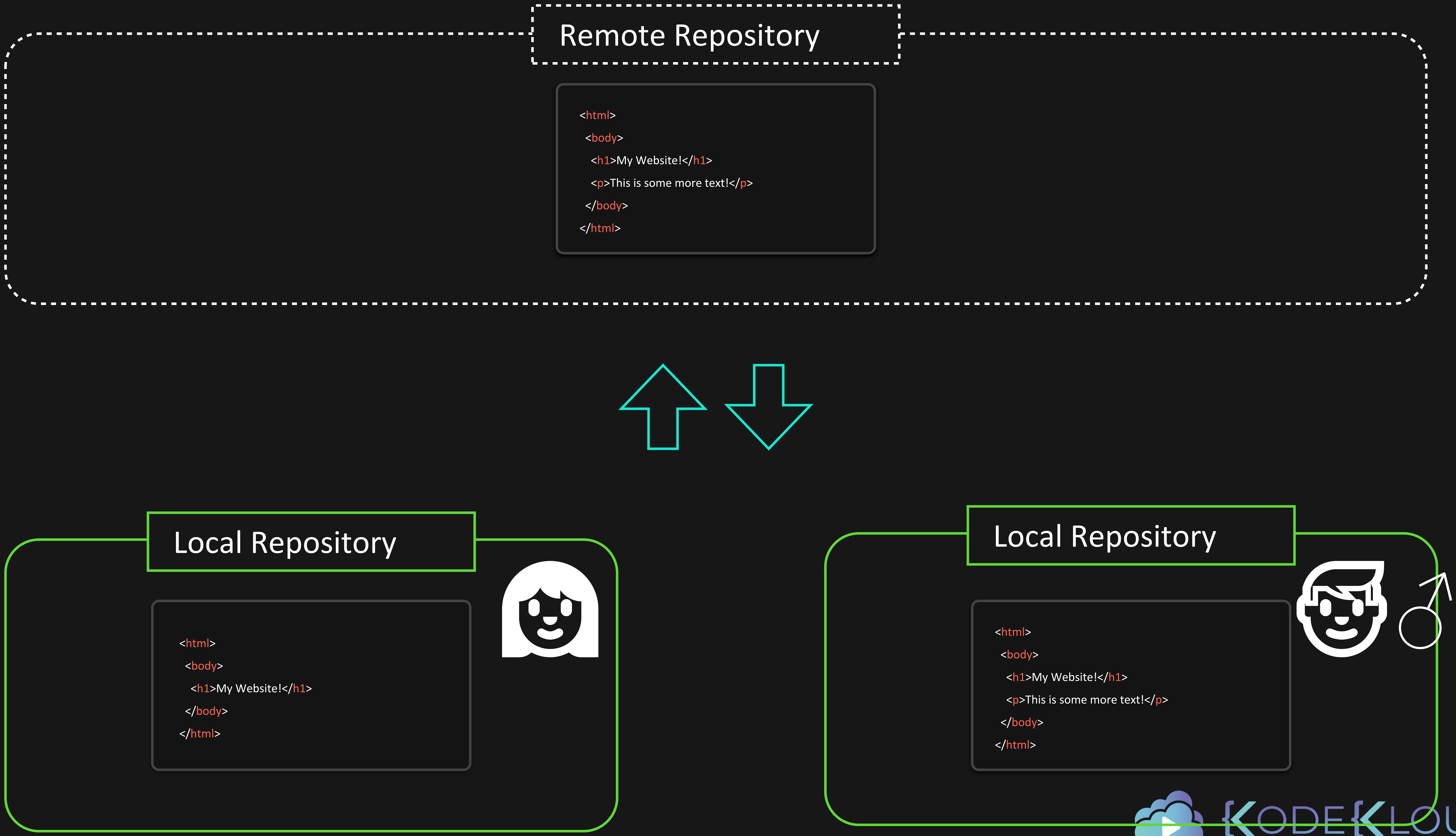
```
<html>
 <body>
  <h1>My Website!</h1>
 </body>
</html>
```

## Local Repository

```
<html>
 <body>
  <h1>My Website!</h1>
 </body>
</html>
```

## Local Repository

```
<html>
 <body>
  <h1>My Website!</h1>
  <p>This is some more text!</p>
 </body>
</html>
```



Remote Repository

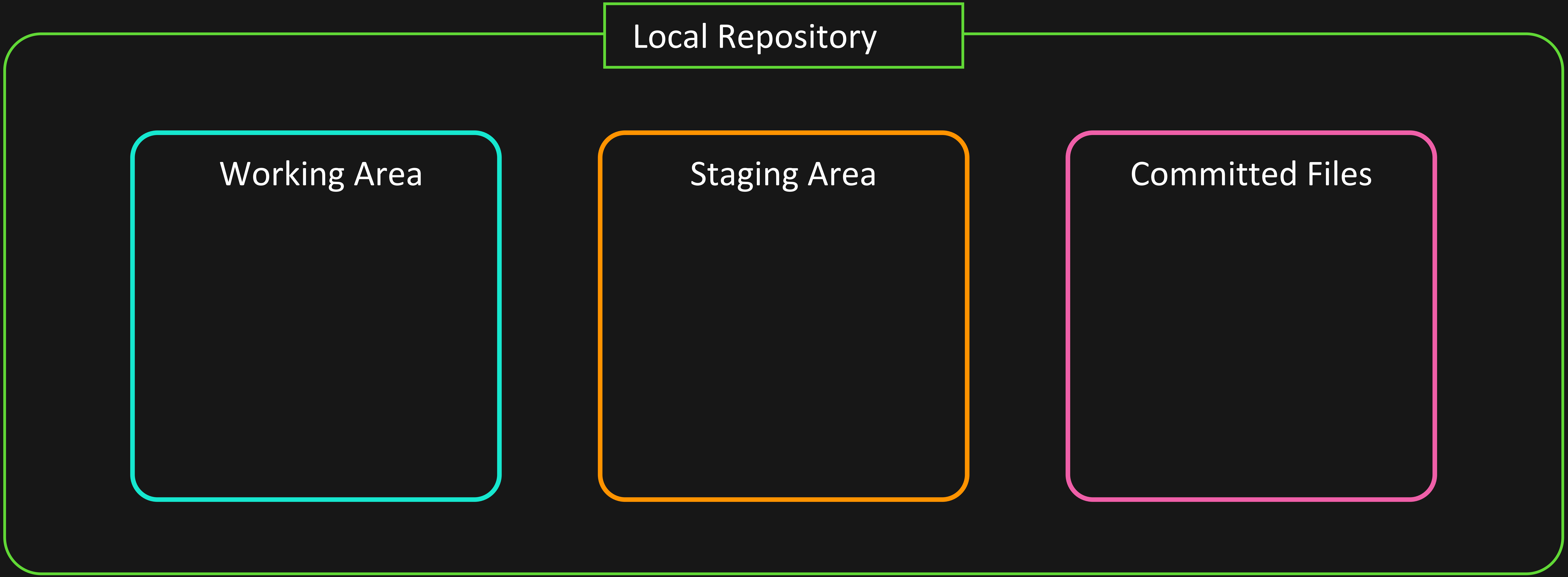
```
<html>
 <body>
  <h1>My Website!</h1>
  <p>This is some more text!</p>
 </body>
</html>
```

Local Repository

```
<html>
 <body>
  <h1>My Website!</h1>
 </body>
</html>
```

Local Repository

```
<html>
 <body>
  <h1>My Website!</h1>
  <p>This is some more text!</p>
 </body>
</html>
```

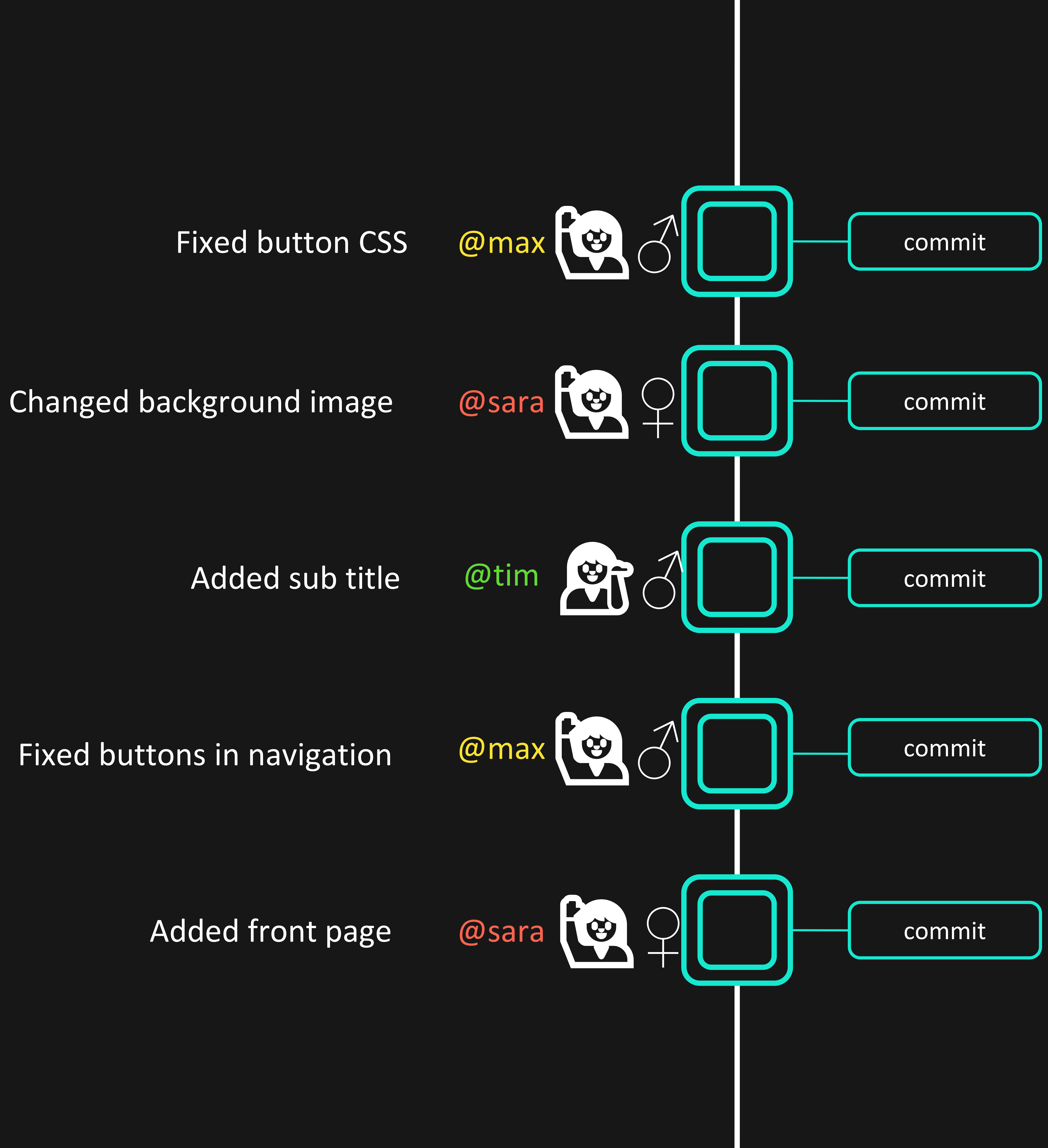


Local Repository

Working Area

Staging Area

Committed Files



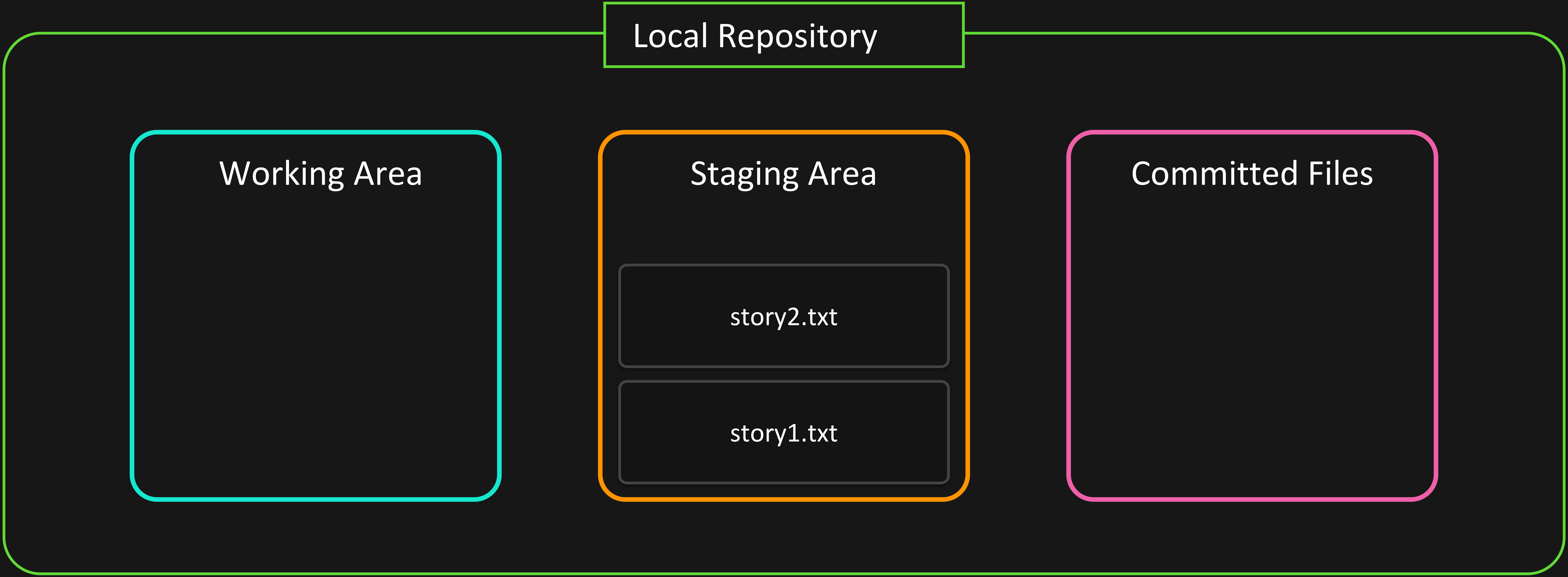
Fixed button CSS @max ♂ commit

Changed background image @sara ♀ commit

Added sub title @tim ♂ commit

Fixed buttons in navigation @max ♂ commit

Added front page @sara ♀ commit



Local Repository

Working Area

Staging Area

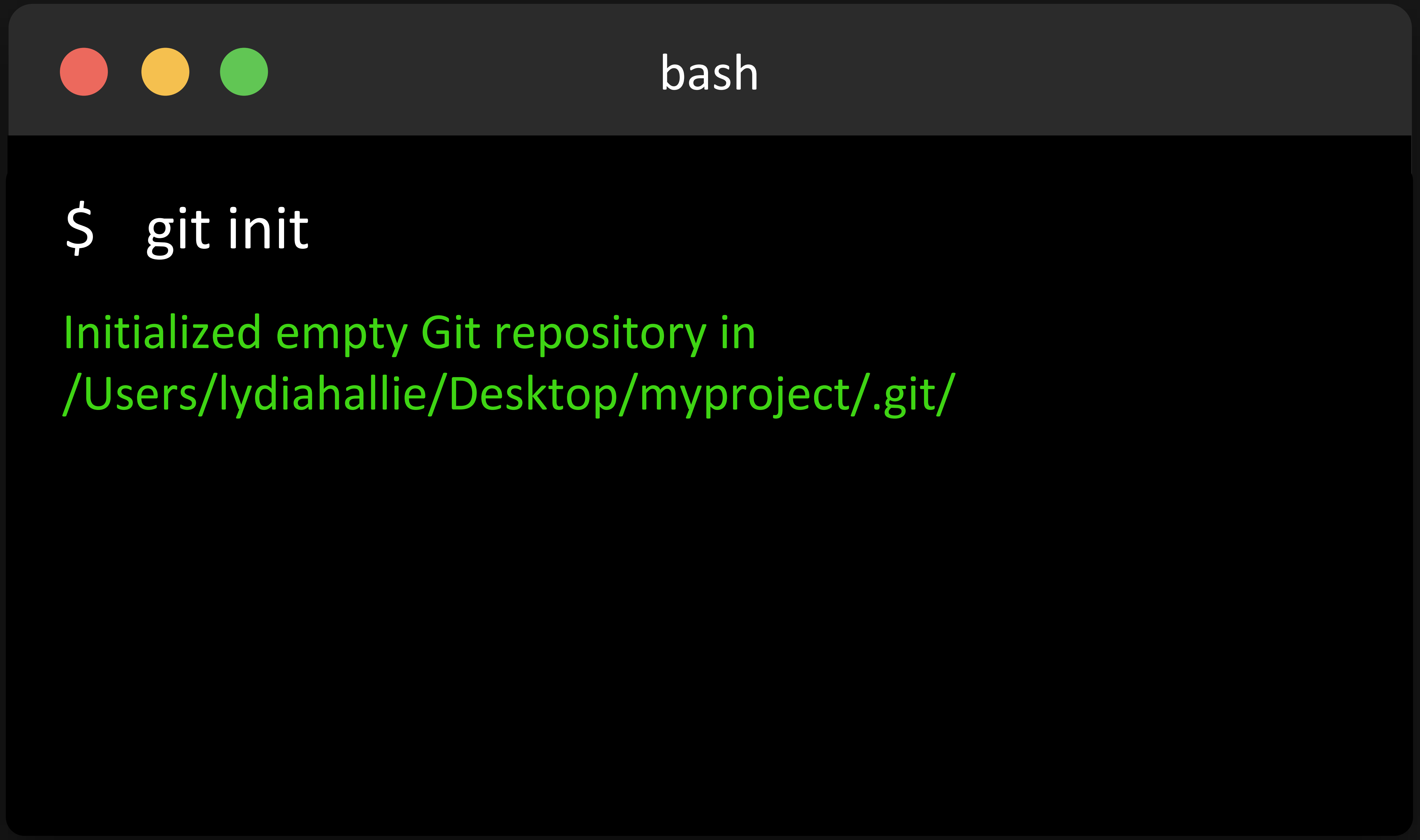
story2.txt

story1.txt

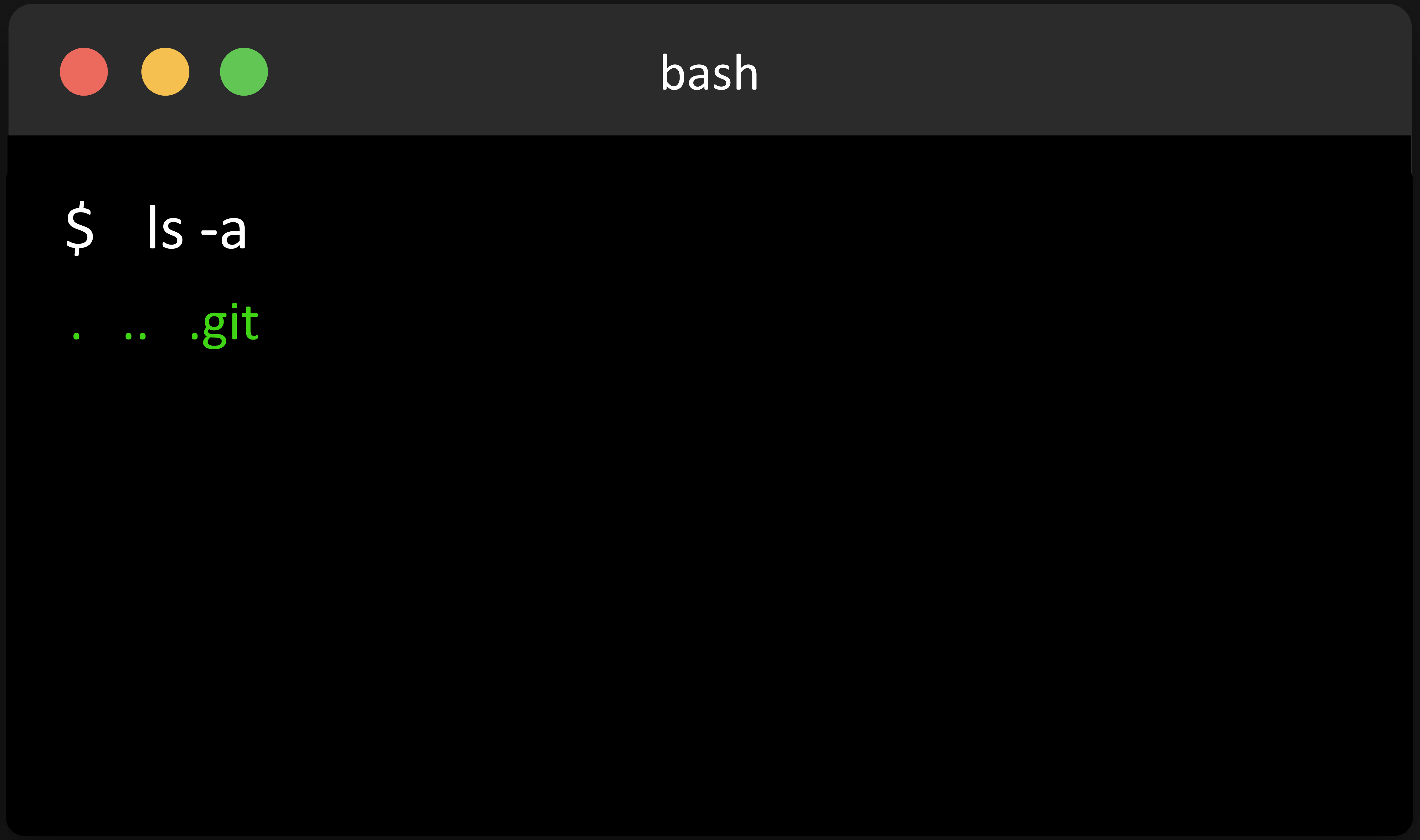
Committed Files

KODEKLOUD

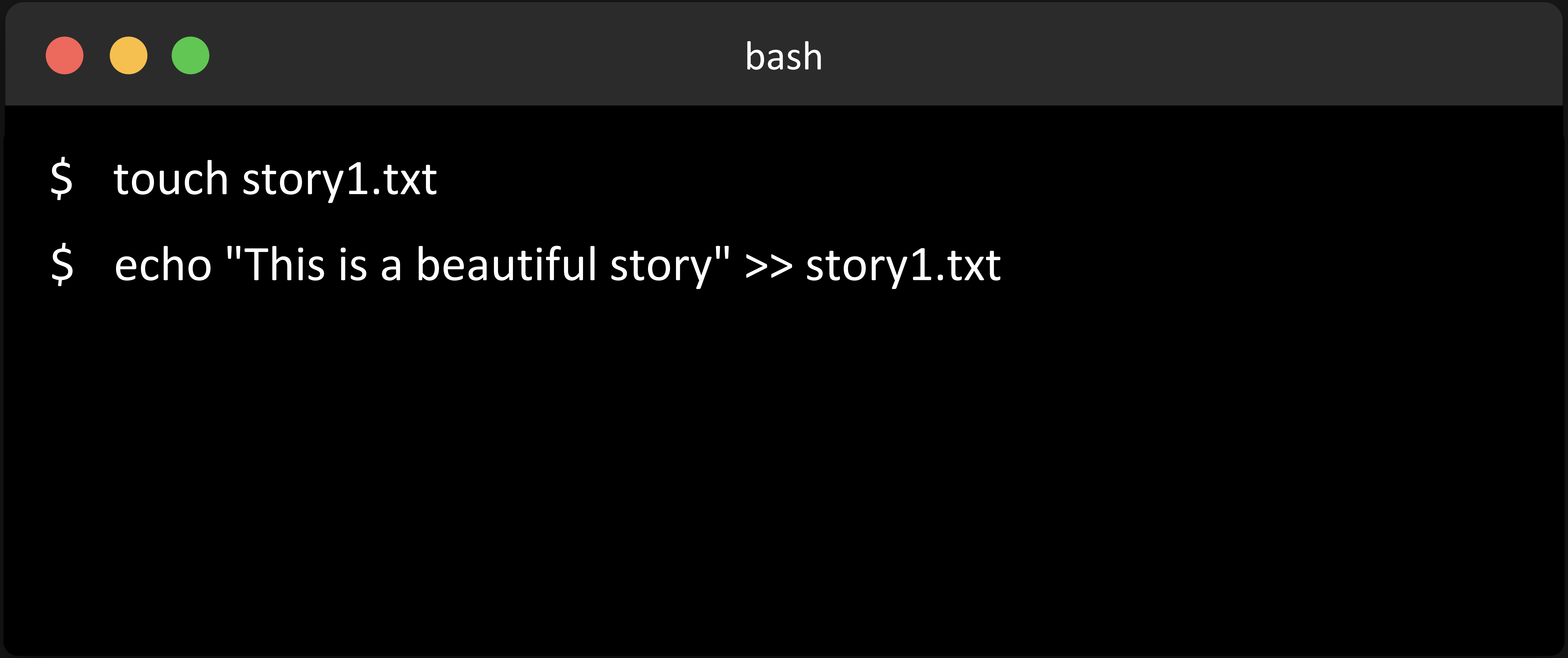
# Initialize Git Repo



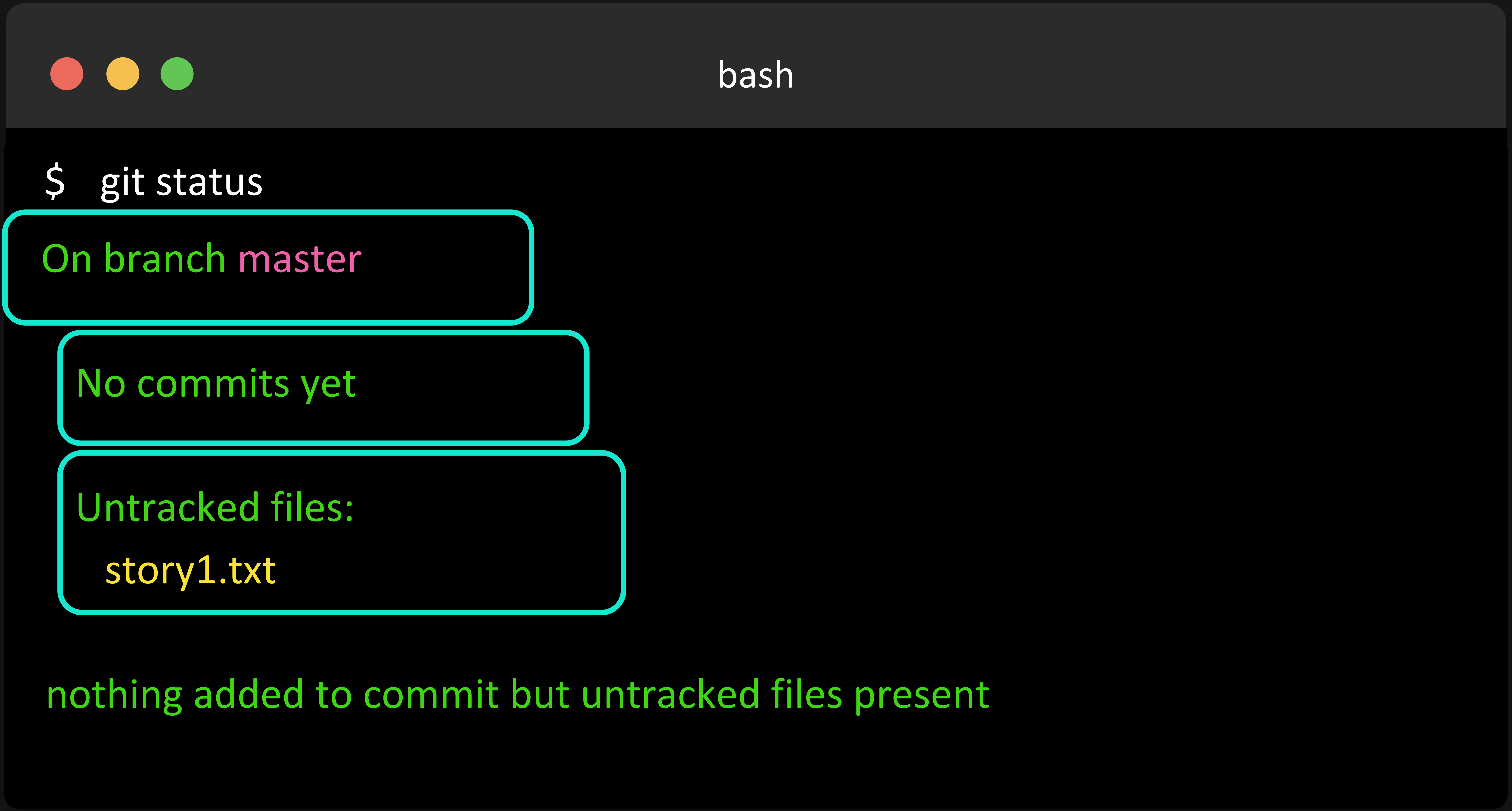
```
$  git init

Initialized empty Git repository in
/Users/lydiahallie/Desktop/myproject/.git/
```



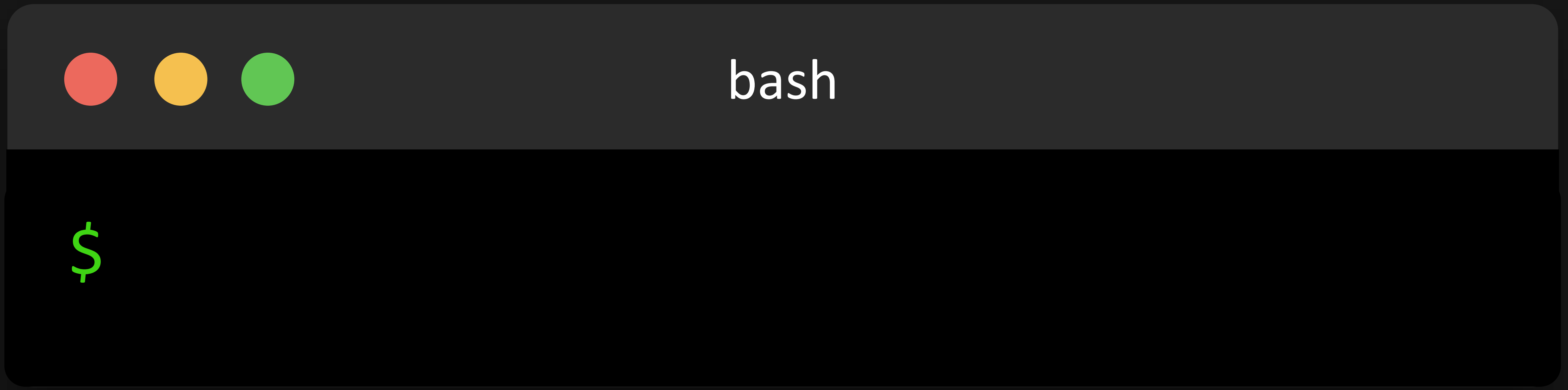
```
$  ls -a
.  ..  .git
```



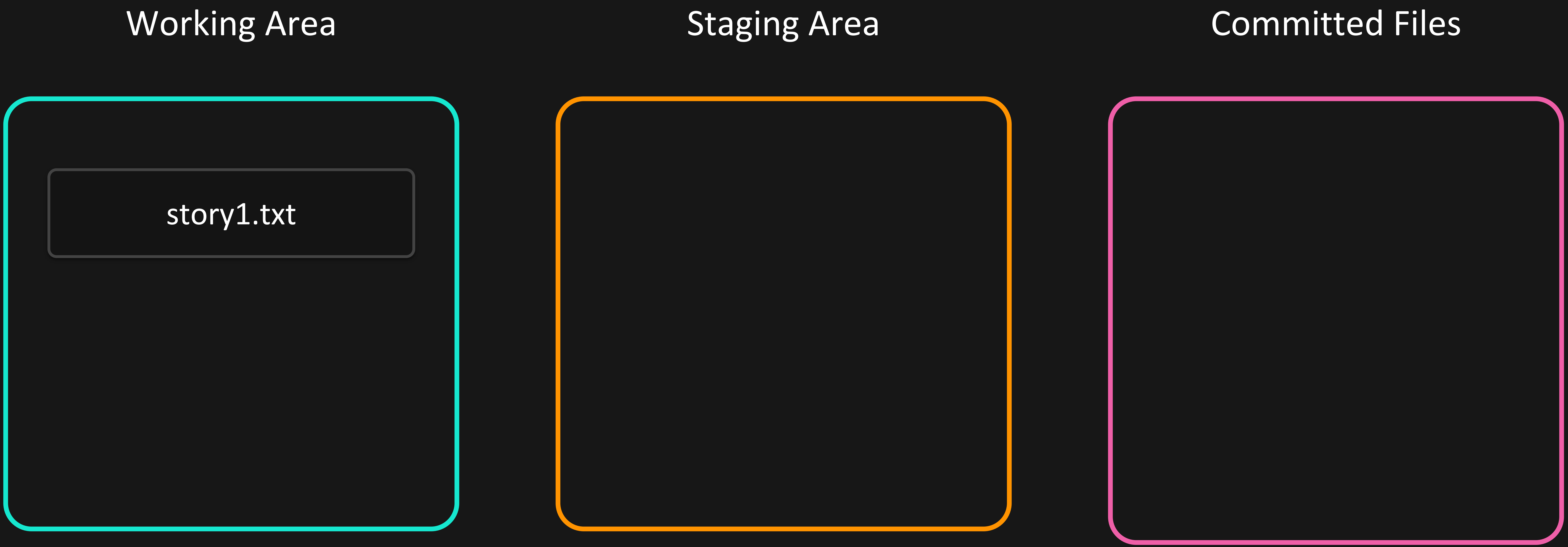
```
$  touch story1.txt

$  echo "This is a beautiful story" >> story1.txt
```

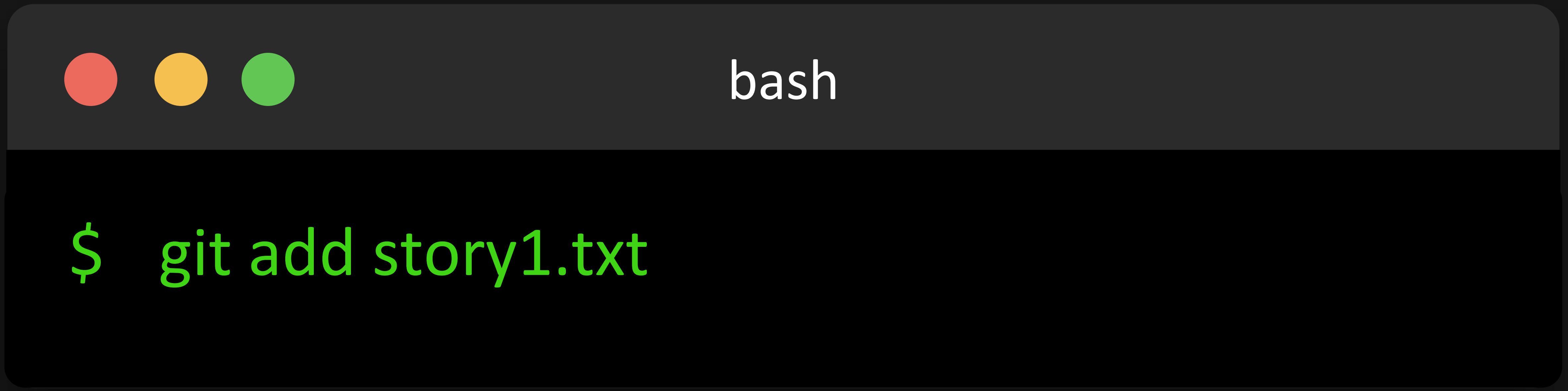


```
$  git status
On branch master

  No commits yet

  Untracked files:
     story1.txt


nothing added to commit but untracked files present
```

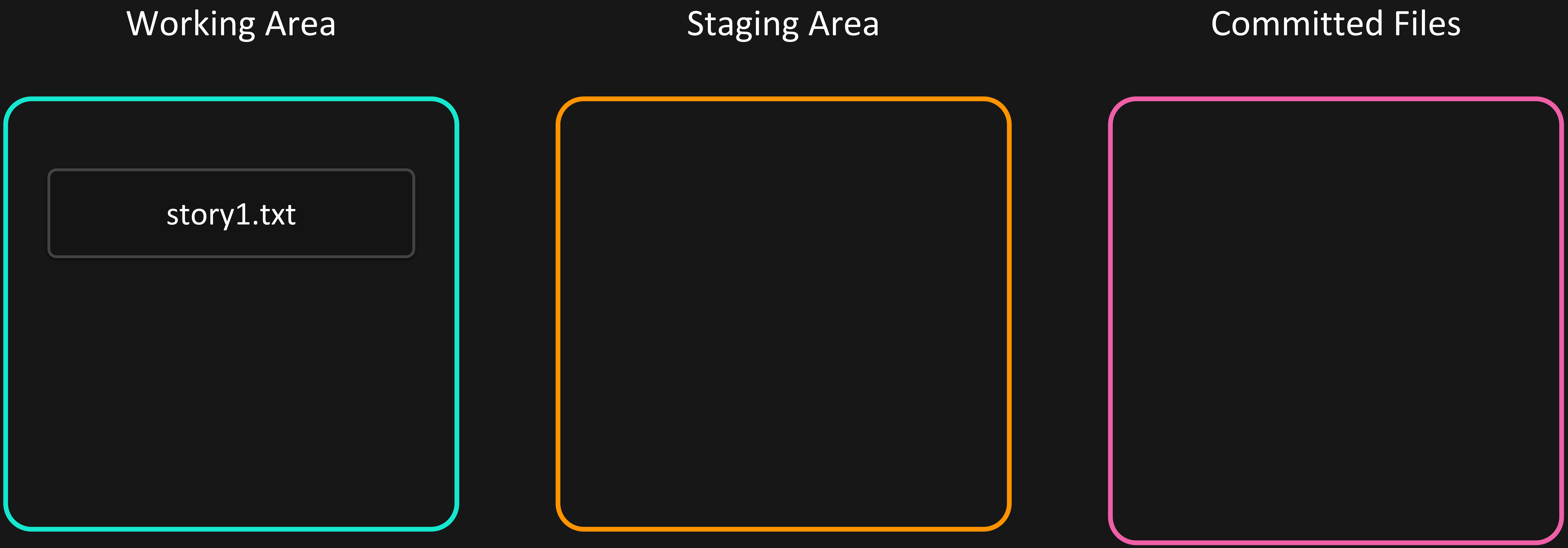

bash

```
$
```


Working Area
Staging Area
Committed Files
story1.txt



```
$ git add story1.txt
```

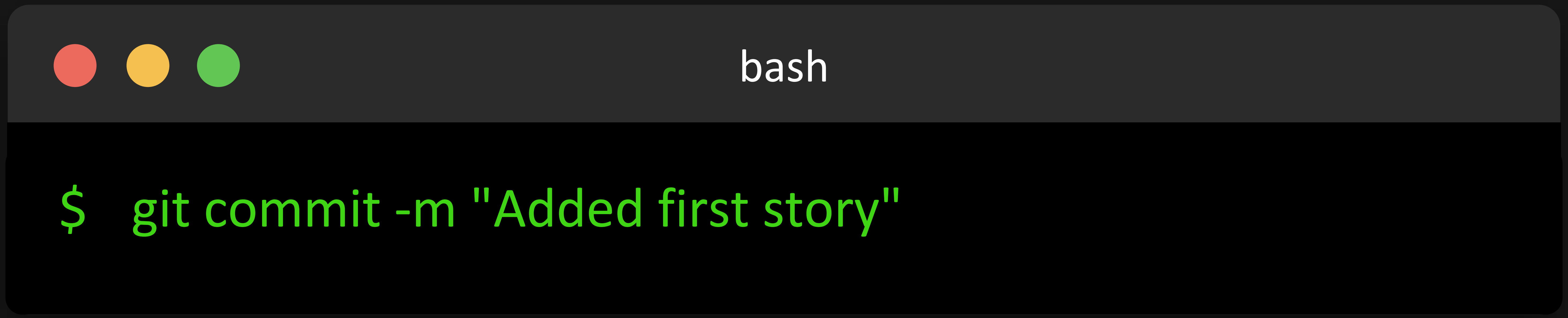


Working Area

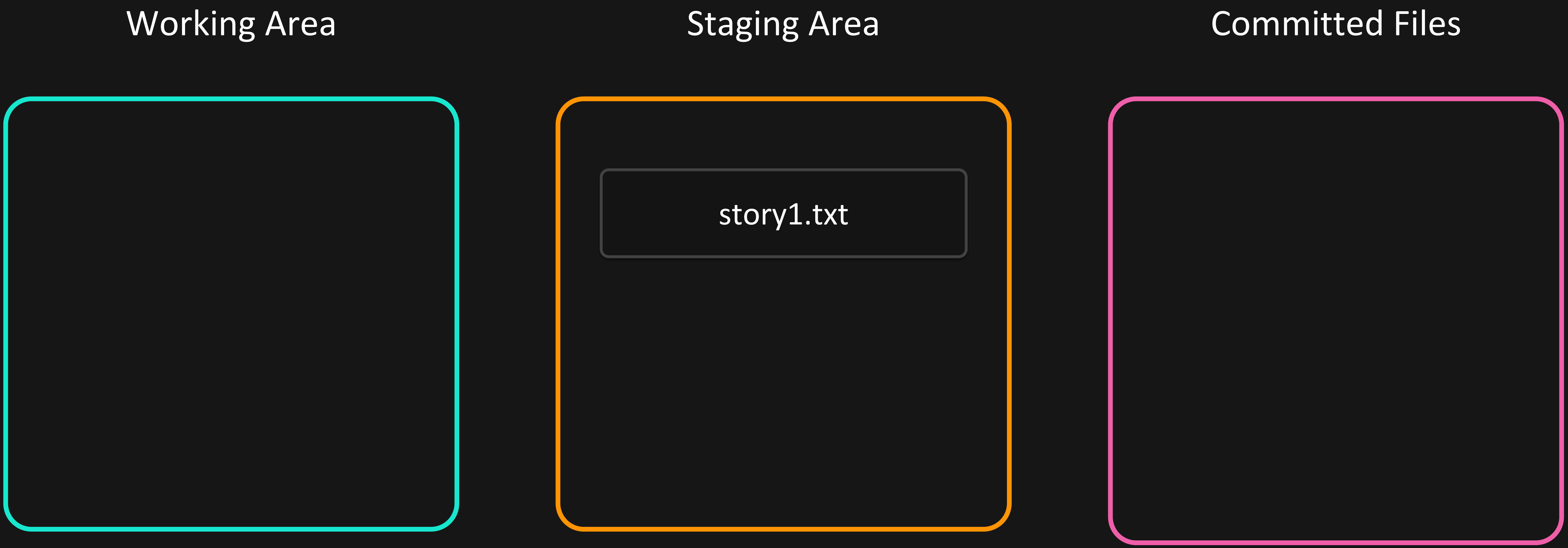
story1.txt

Staging Area

Committed Files



```
$ git commit -m "Added first story"
```

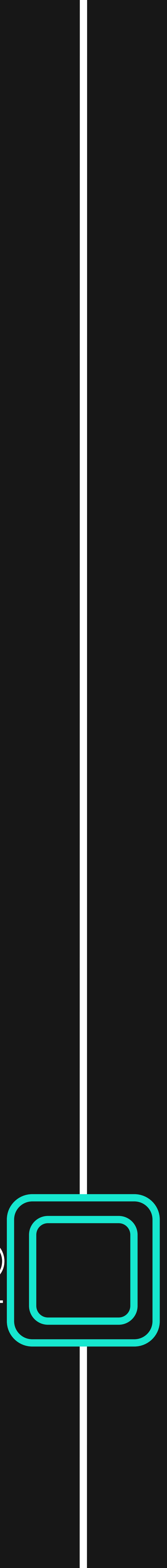


Working Area

Staging Area

story1.txt

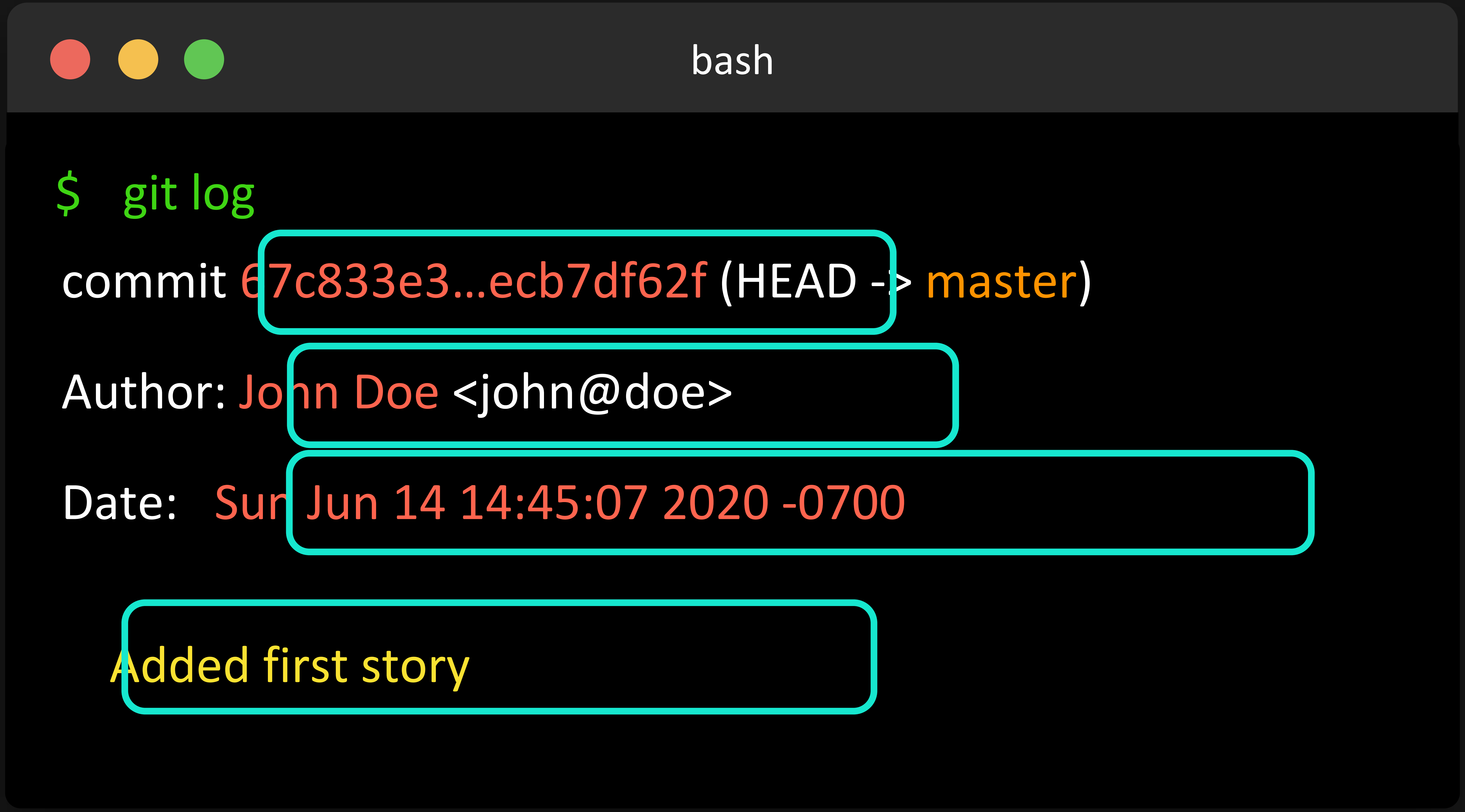
Committed Files



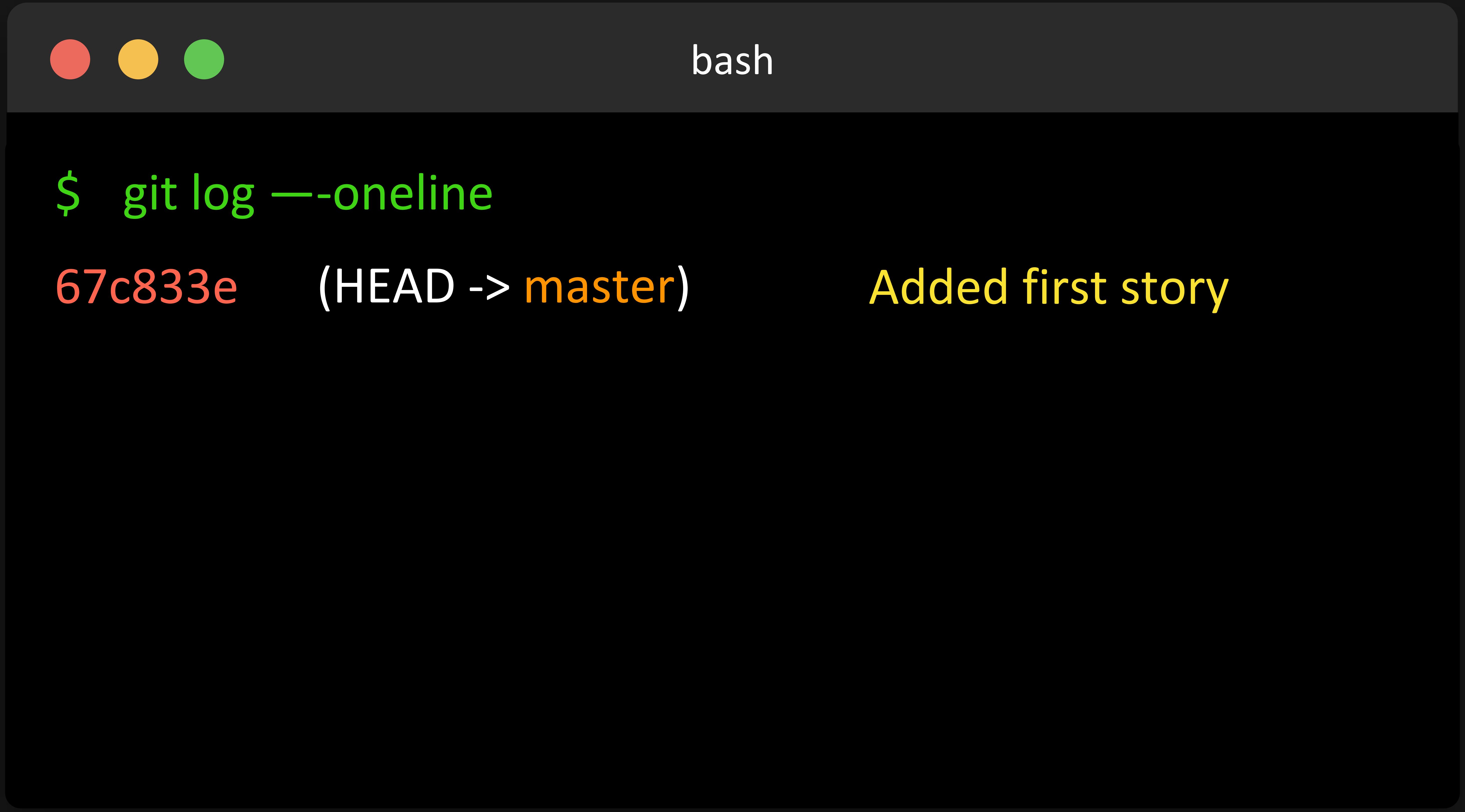
Added first story @me 🙋‍♀️

KODEKLOUD

# Git log



```
$  git log
commit 67c833e3...ecb7df62f (HEAD -> master)
Author: John Doe <john@doe>
Date:   Sun Jun 14 14:45:07 2020 -0700

    Added first story
```



```
$  git log —-oneline

67c833e     (HEAD -> master)          Added first story
```

KODEKLOUD

# Initializing a remote repo

GitHub
GitLab
Bitbucket

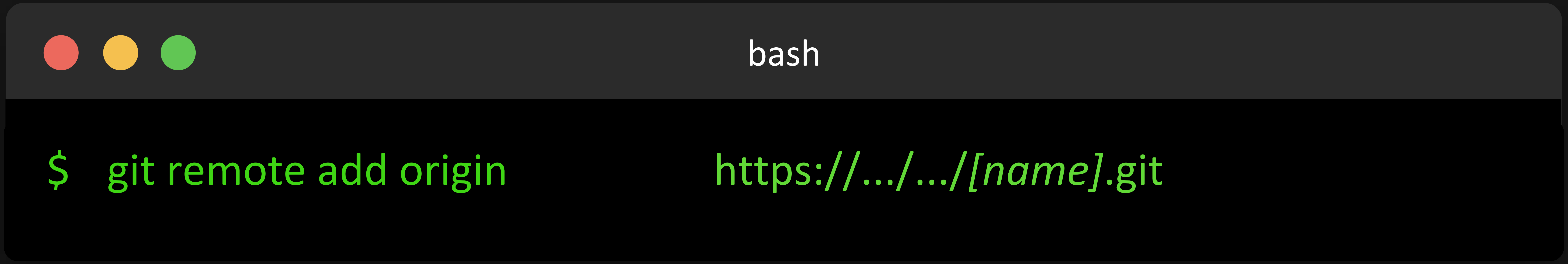
GitHub

GitLab

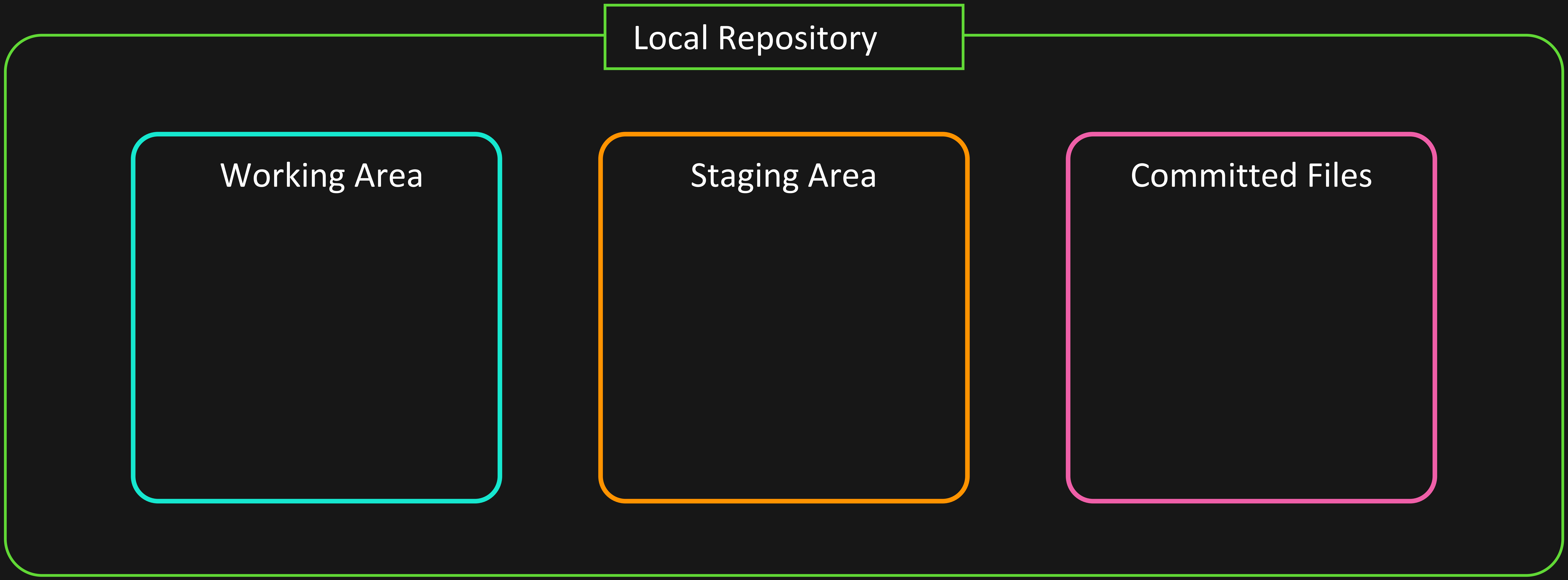
Bitbucket

**Connection String**

```
https://.../.../[name].git
```



```
$  git remote add origin             https://.../.../[name].git
```

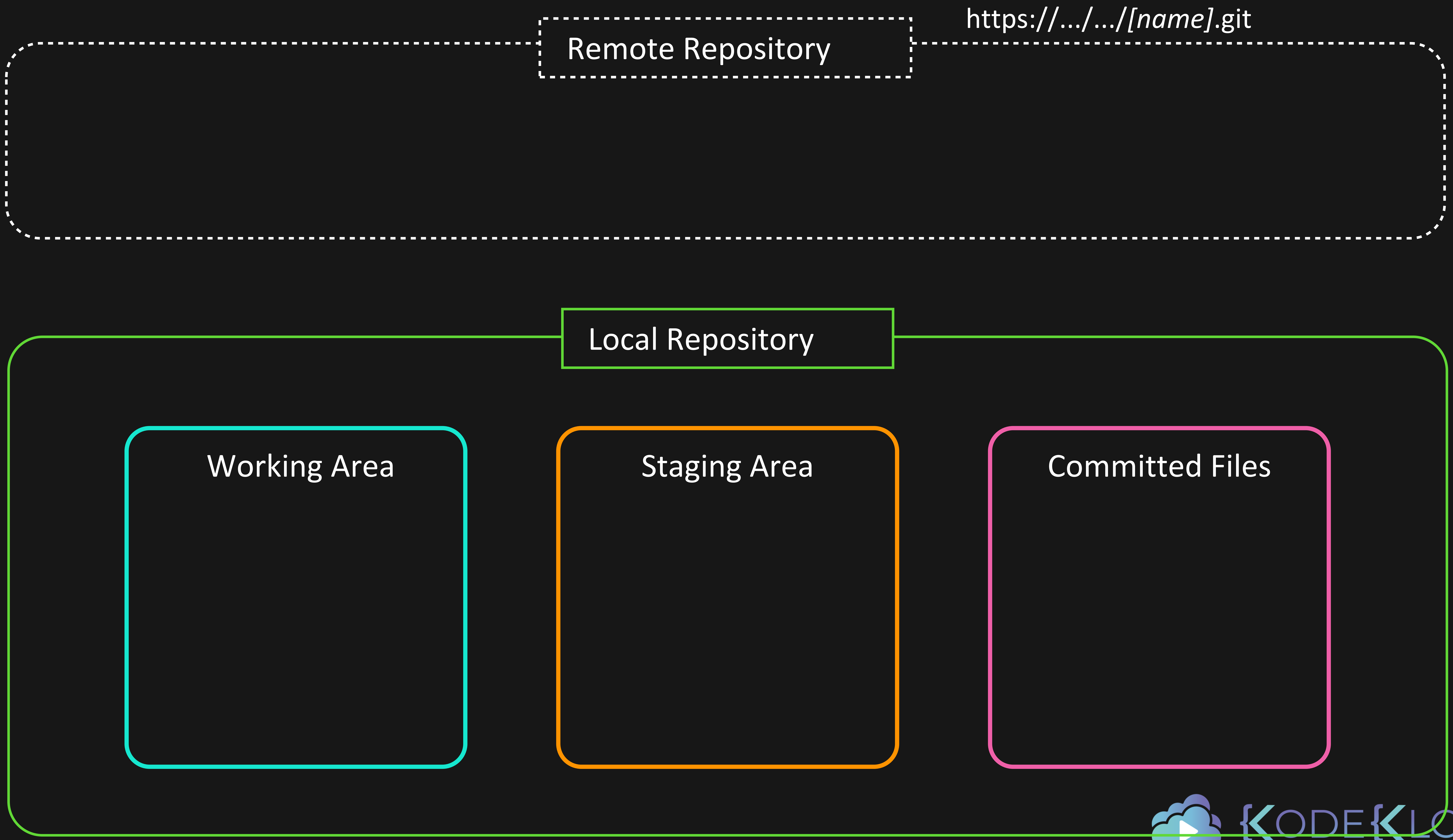


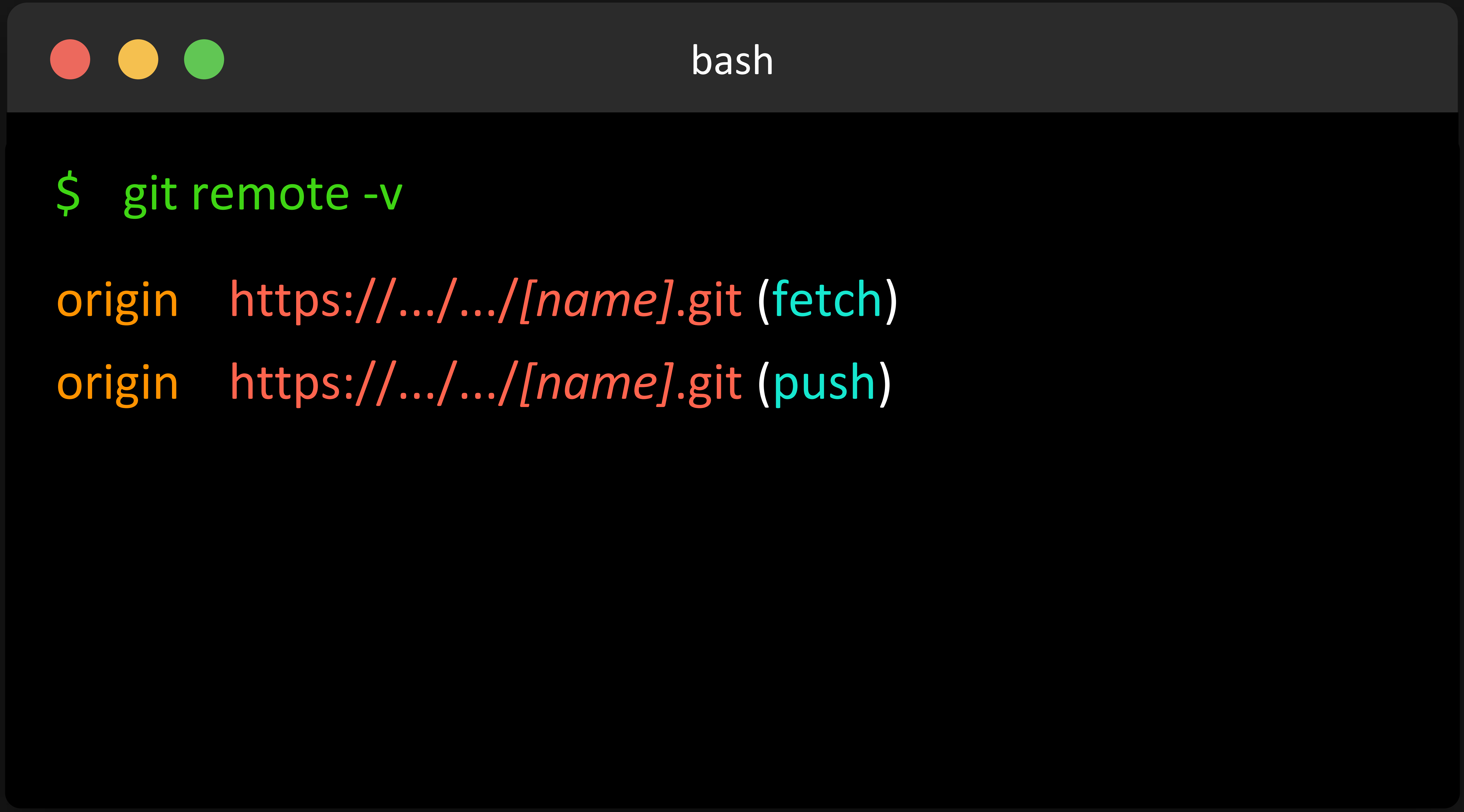
Local Repository

Working Area

Staging Area

Committed Files

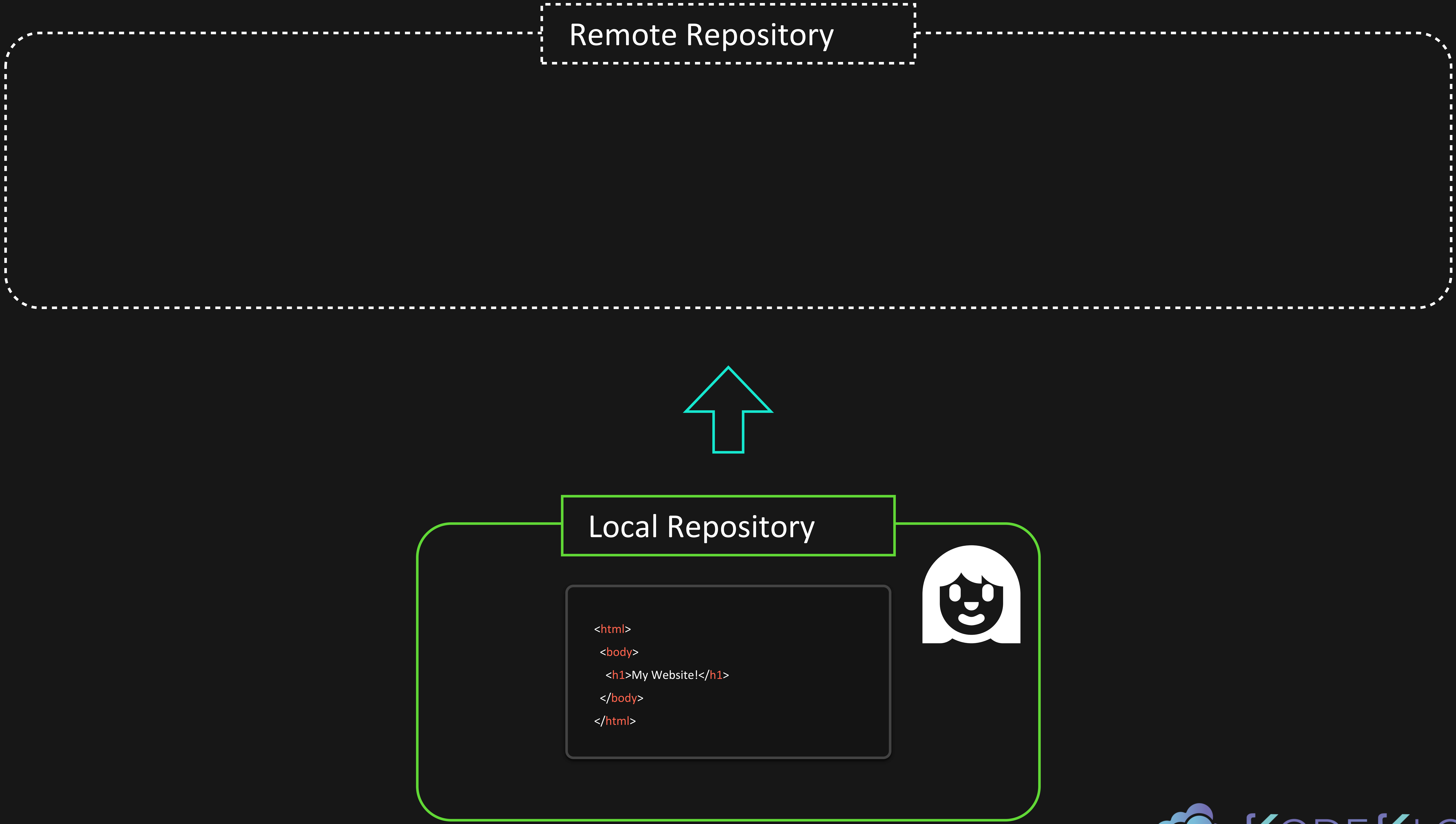

https://…/…/*[name]*.git
Remote Repository
Local Repository
Working Area
Staging Area
Committed Files



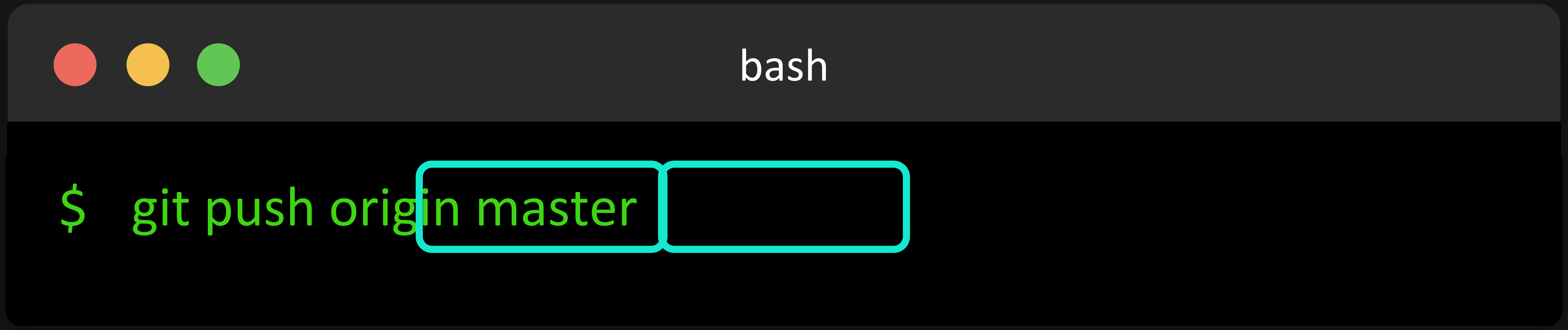
```
$   git remote -v

origin    https://.../.../[name].git (fetch)
origin    https://.../.../[name].git (push)
```

KODEKLOUD

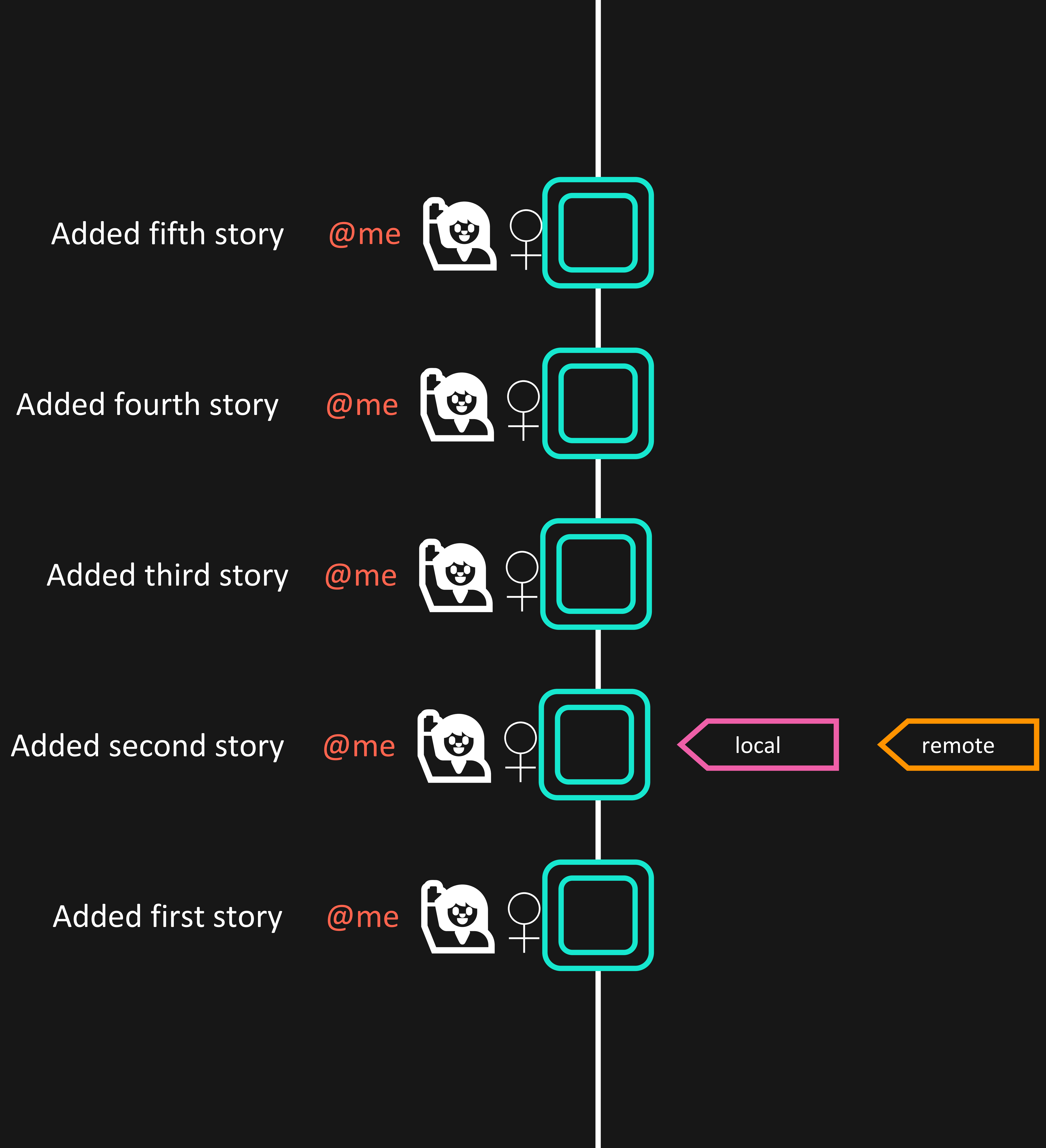
# Pushing



```
<html>
 <body>
  <h1>My Website!</h1>
 </body>
</html>
```



```
$ git push origin master
```



Added fifth story @me 🙋‍♀

Added fourth story @me 🙋‍♀

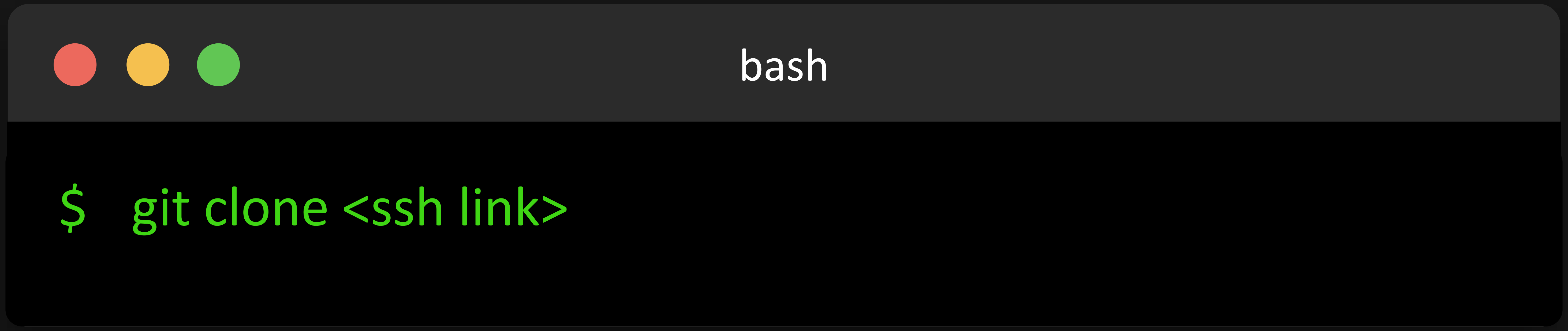
Added third story @me 🙋‍♀

Added second story @me 🙋‍♀

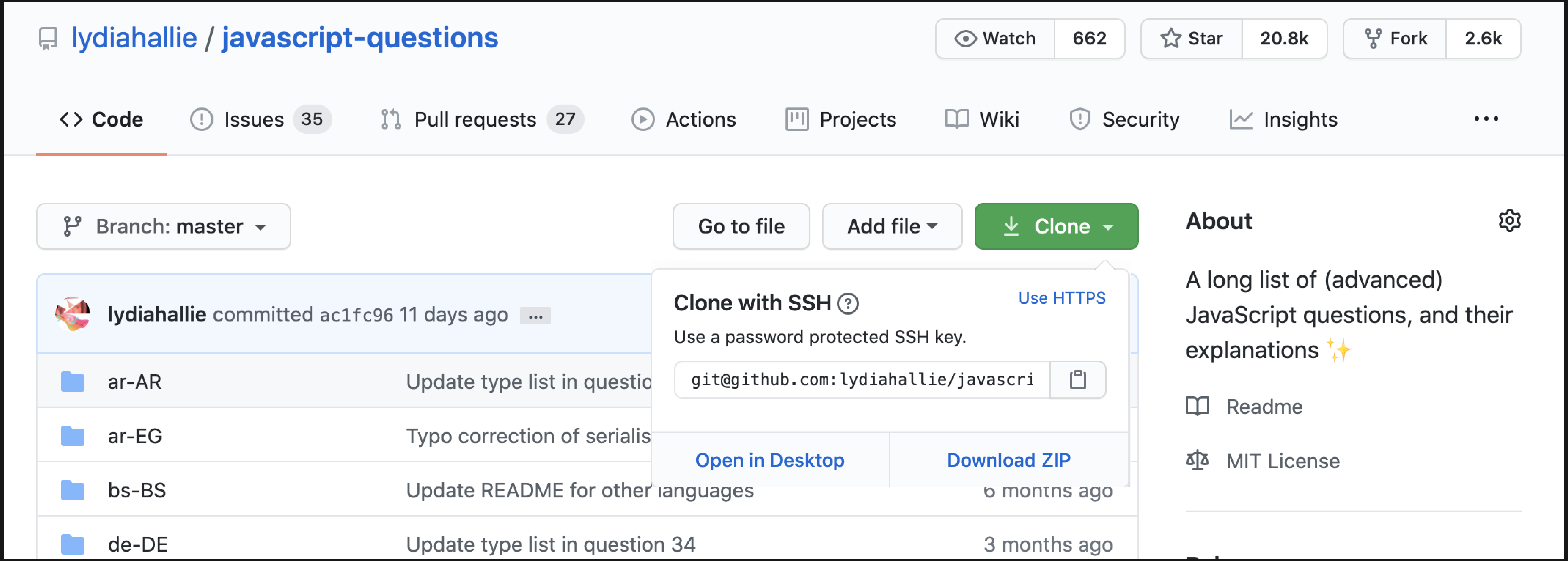
Added first story @me 🙋‍♀

KODEKLOUD

# Cloning



```
$   git clone <ssh link>
```



lydiahallie committed ac1fc96 11 days ago

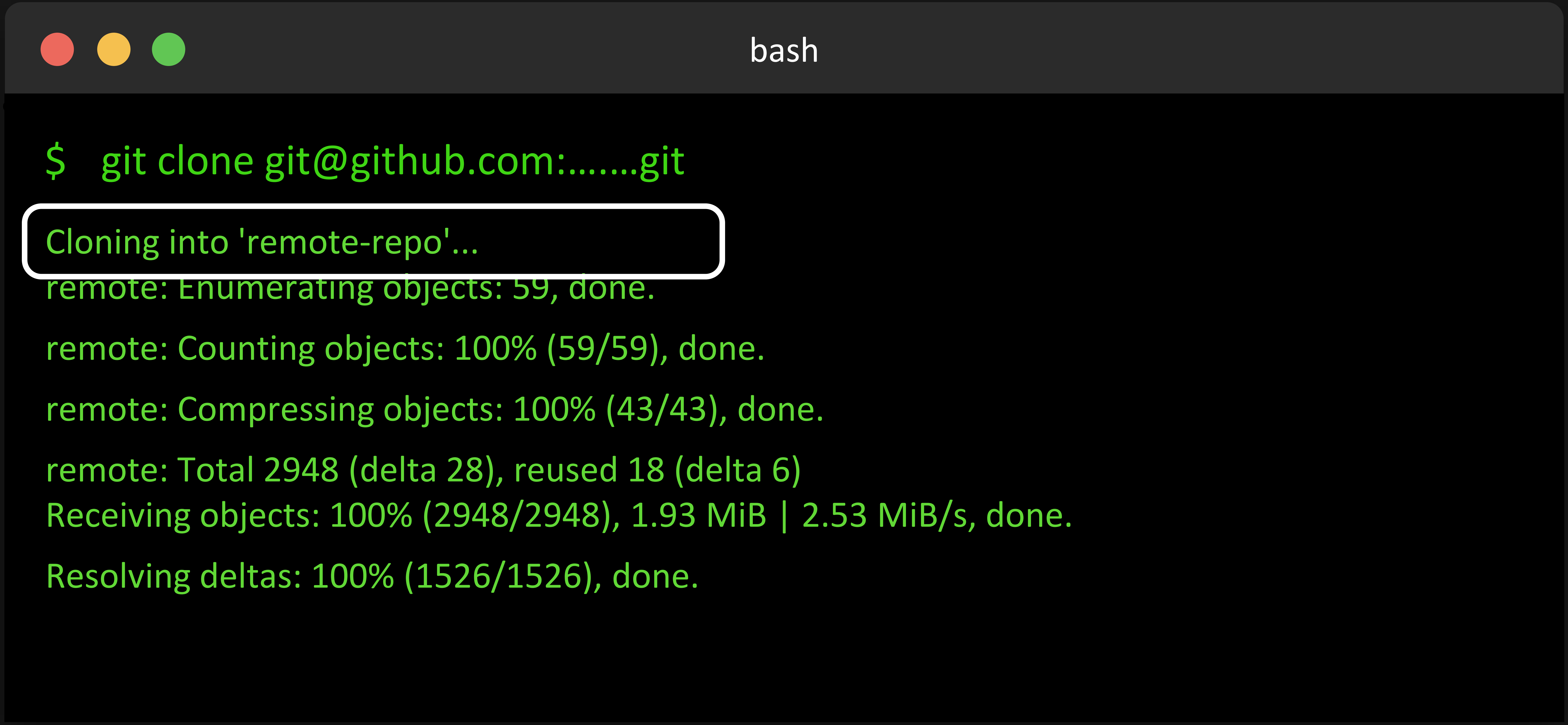
| | | |
|---|---|---|
| ar-AR | Update type list in questio | |
| ar-EG | Typo correction of serialis | |
| bs-BS | Update README for other languages | 6 months ago |
| de-DE | Update type list in question 34 | 3 months ago |

Clone with SSH

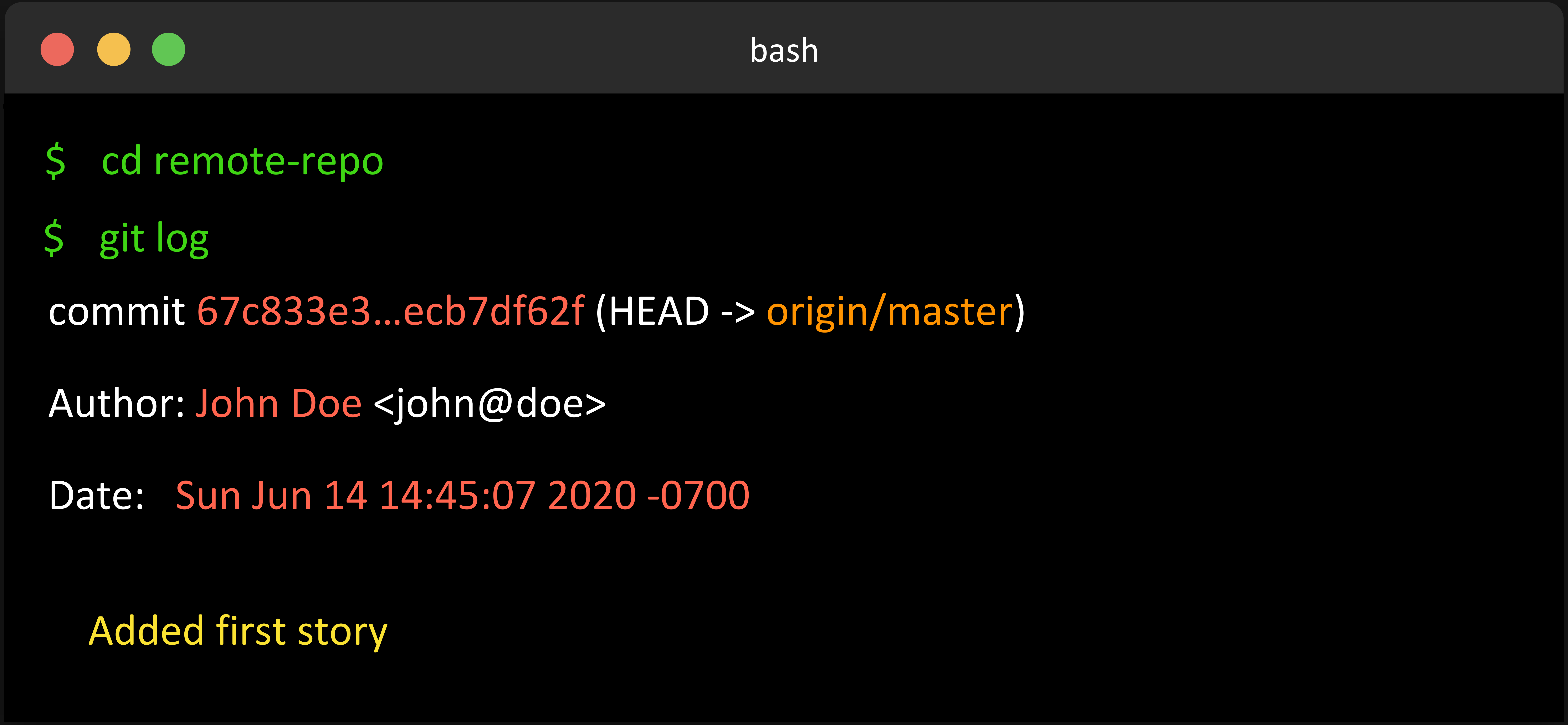
Use a password protected SSH key.

```
git@github.com:lydiahallie/javascri
```

A long list of (advanced) JavaScript questions, and their explanations ✨



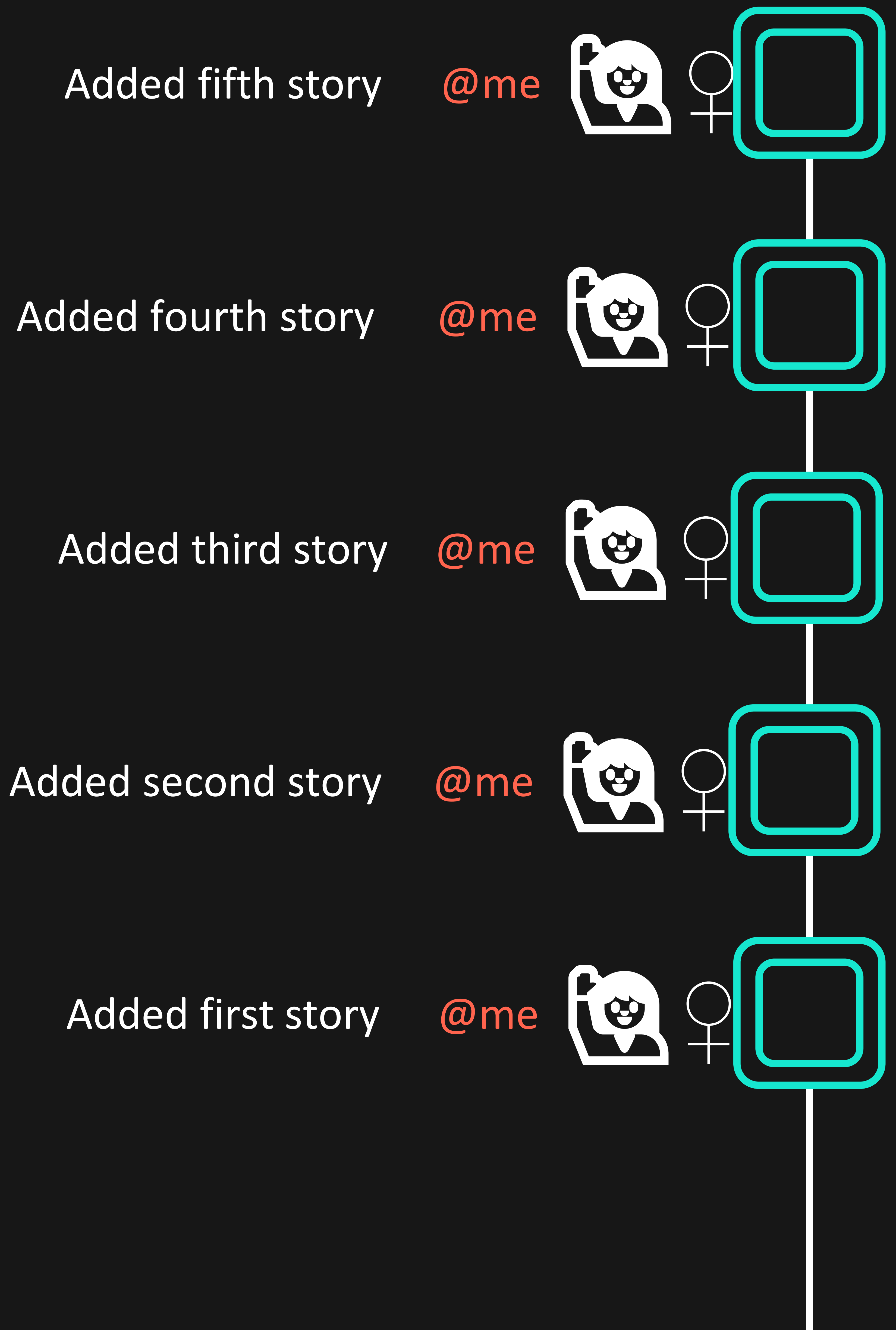
```
$   git clone git@github.com:.......git
Cloning into 'remote-repo'...
remote: Enumerating objects: 59, done.
remote: Counting objects: 100% (59/59), done.
remote: Compressing objects: 100% (43/43), done.
remote: Total 2948 (delta 28), reused 18 (delta 6)
Receiving objects: 100% (2948/2948), 1.93 MiB | 2.53 MiB/s, done.
Resolving deltas: 100% (1526/1526), done.
```



```
$   cd remote-repo

$   git log

commit 67c833e3...ecb7df62f (HEAD -> origin/master)

Author: John Doe <john@doe>

Date:   Sun Jun 14 14:45:07 2020 -0700


    Added first story
```

KODEKLOUD

# Branches



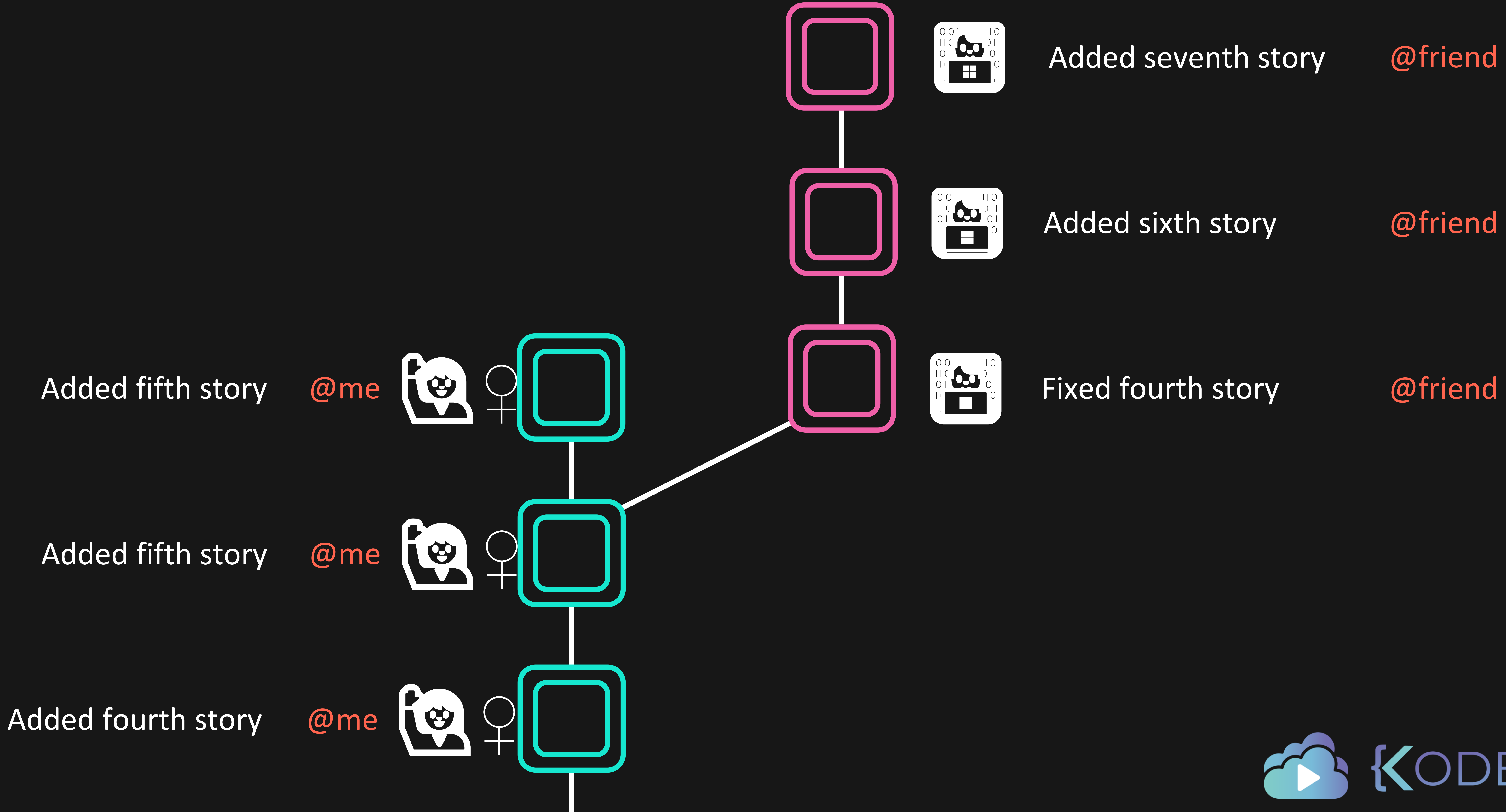
Added fifth story @me 🙋‍♀️

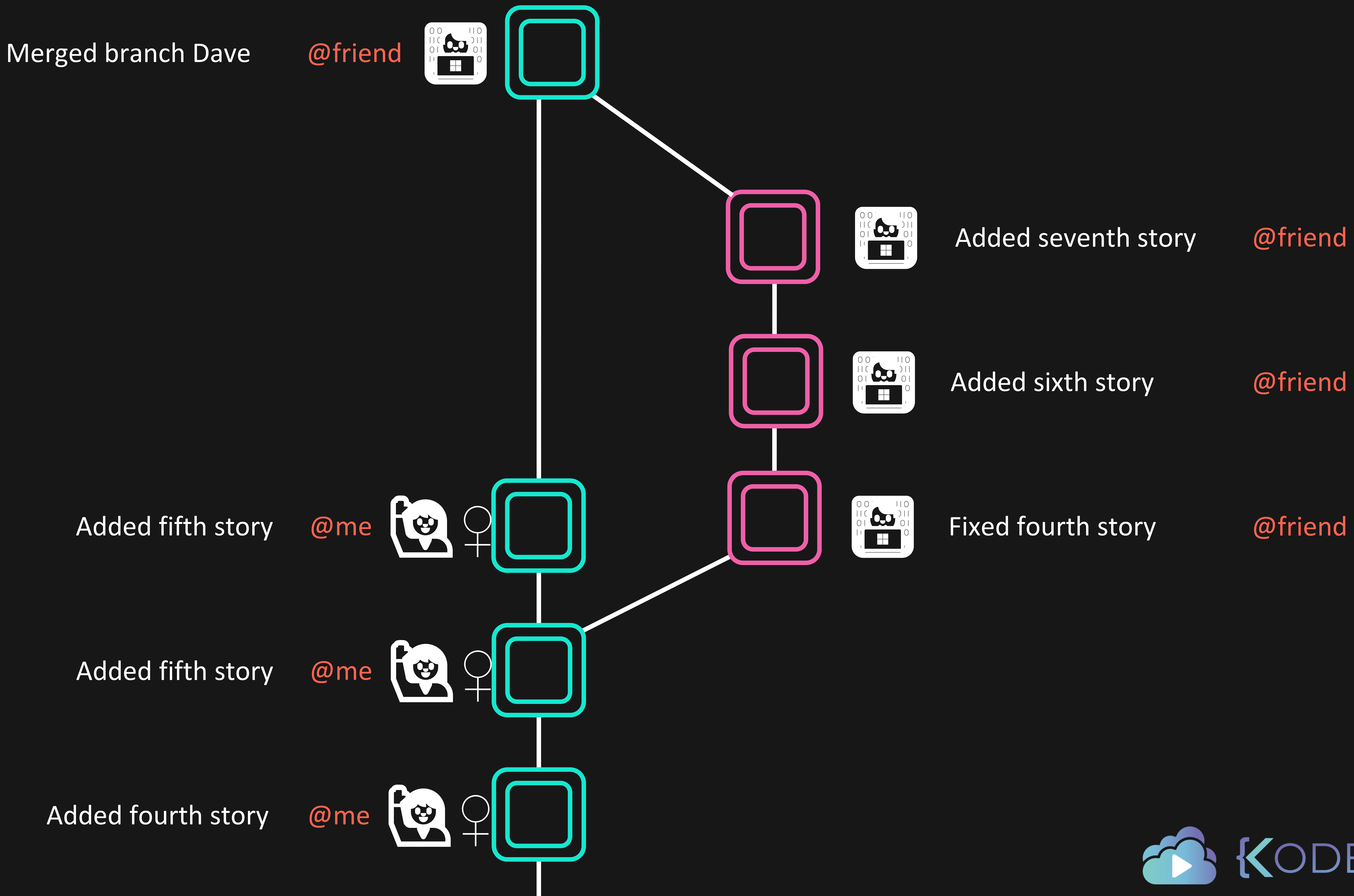
Added fourth story @me 🙋‍♀️

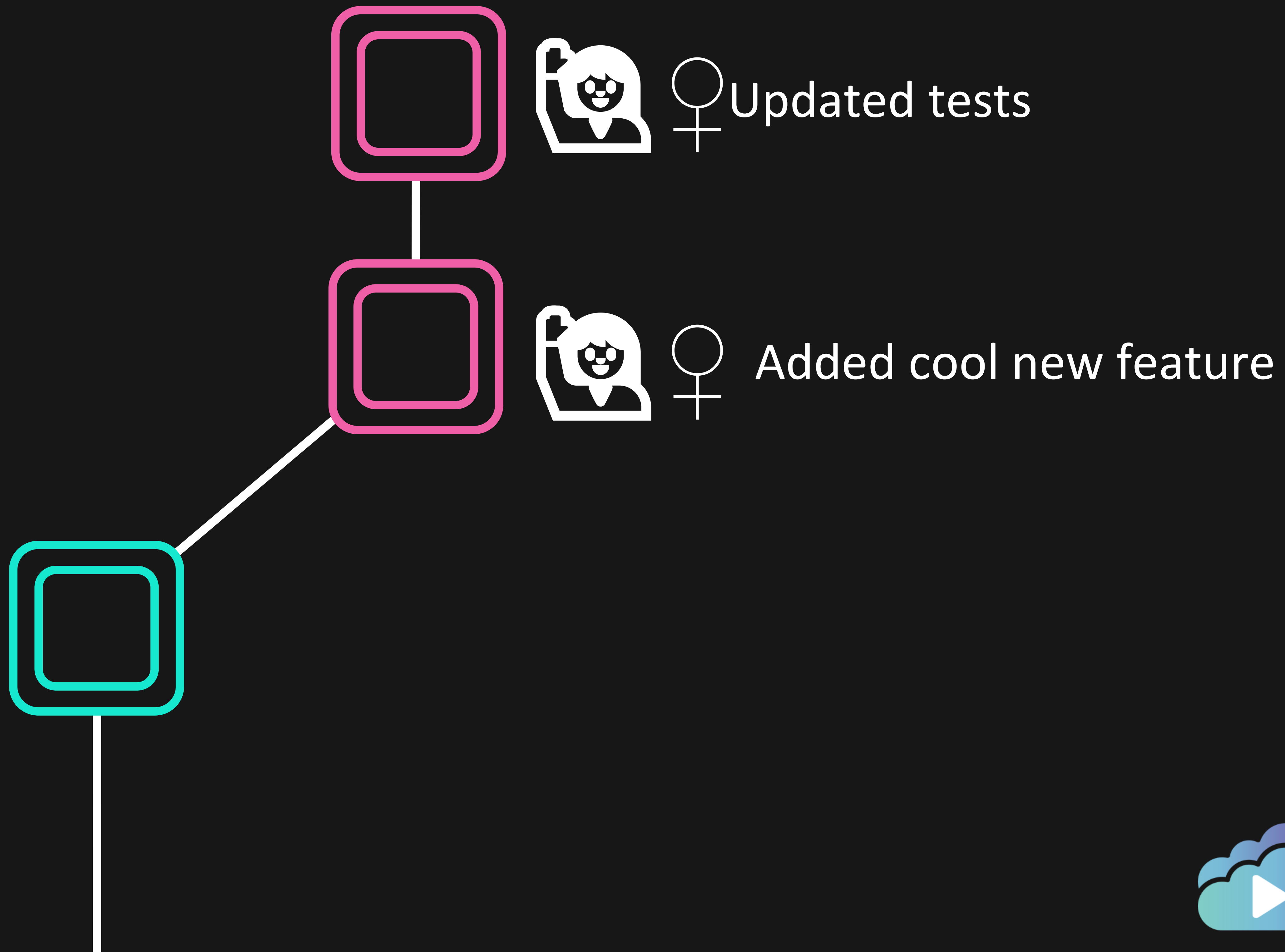
Added third story @me 🙋‍♀️

Added second story @me 🙋‍♀️

Added first story @me 🙋‍♀️

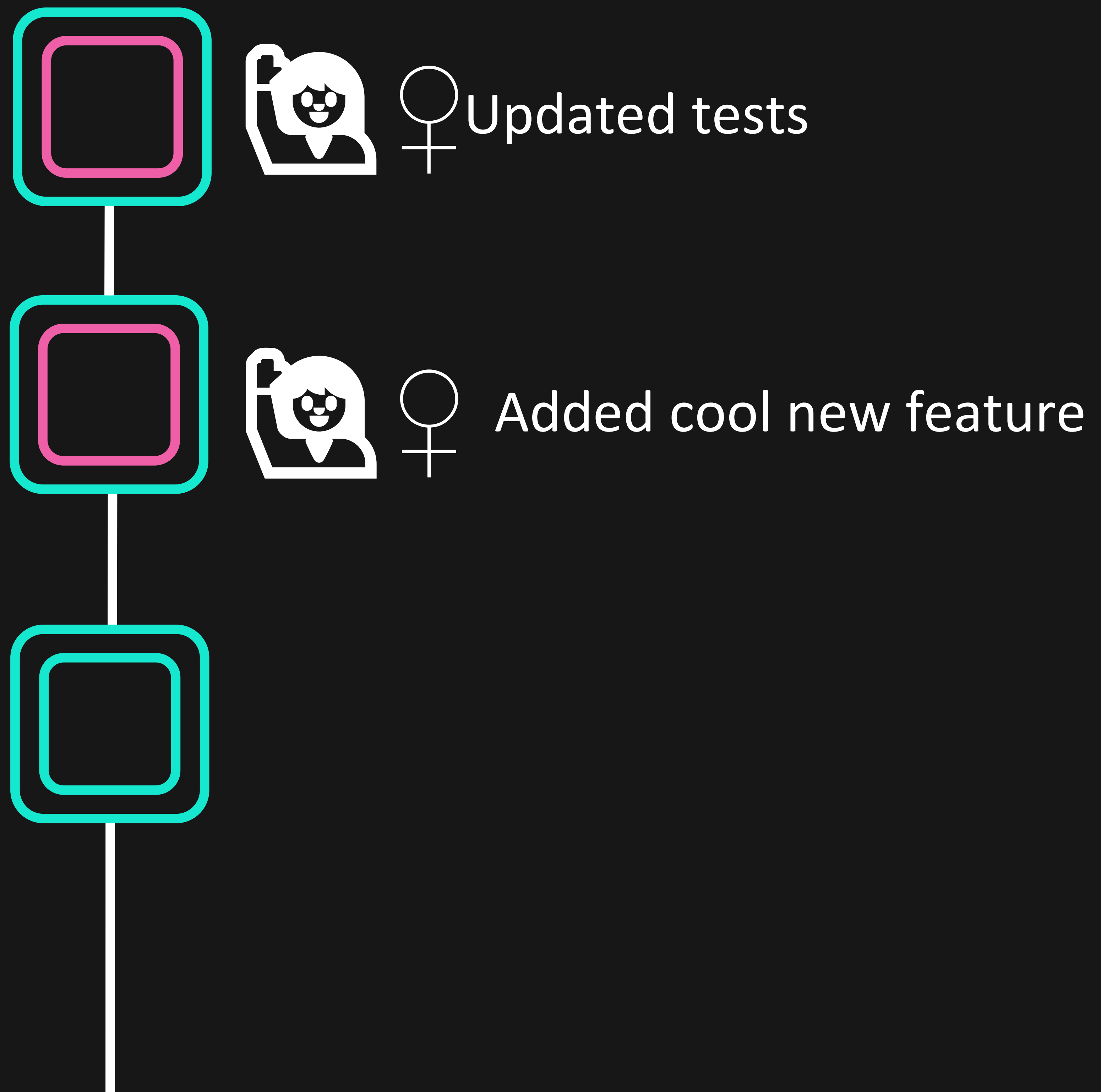

Added seventh story
@friend
Added sixth story
@friend
Added fifth story
@me
Fixed fourth story
@friend
Added fifth story
@me
Added fourth story
@me


Merged branch Dave
@friend
Added seventh story
@friend
Added sixth story
@friend
Fixed fourth story
@friend
Added fifth story
@me
Added fifth story
@me
Added fourth story
@me



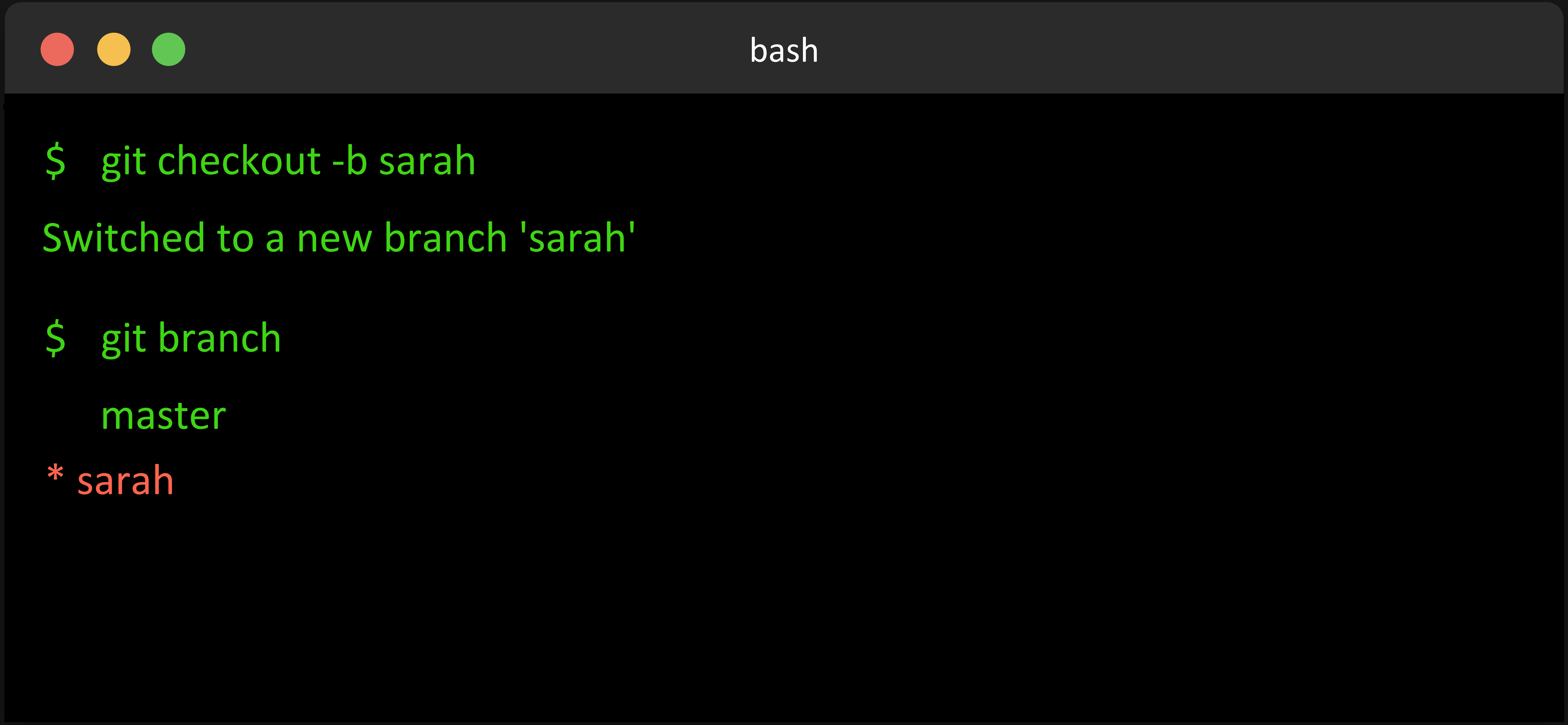
🙋‍♀️ Updated tests

🙋‍♀️ Added cool new feature

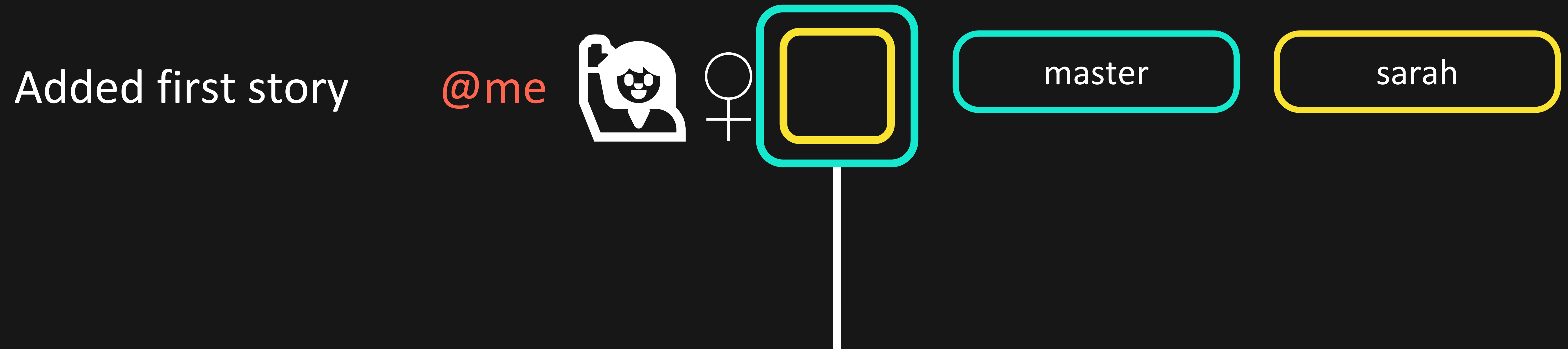


🙋‍♀️Updated tests

🙋‍♀️ Added cool new feature



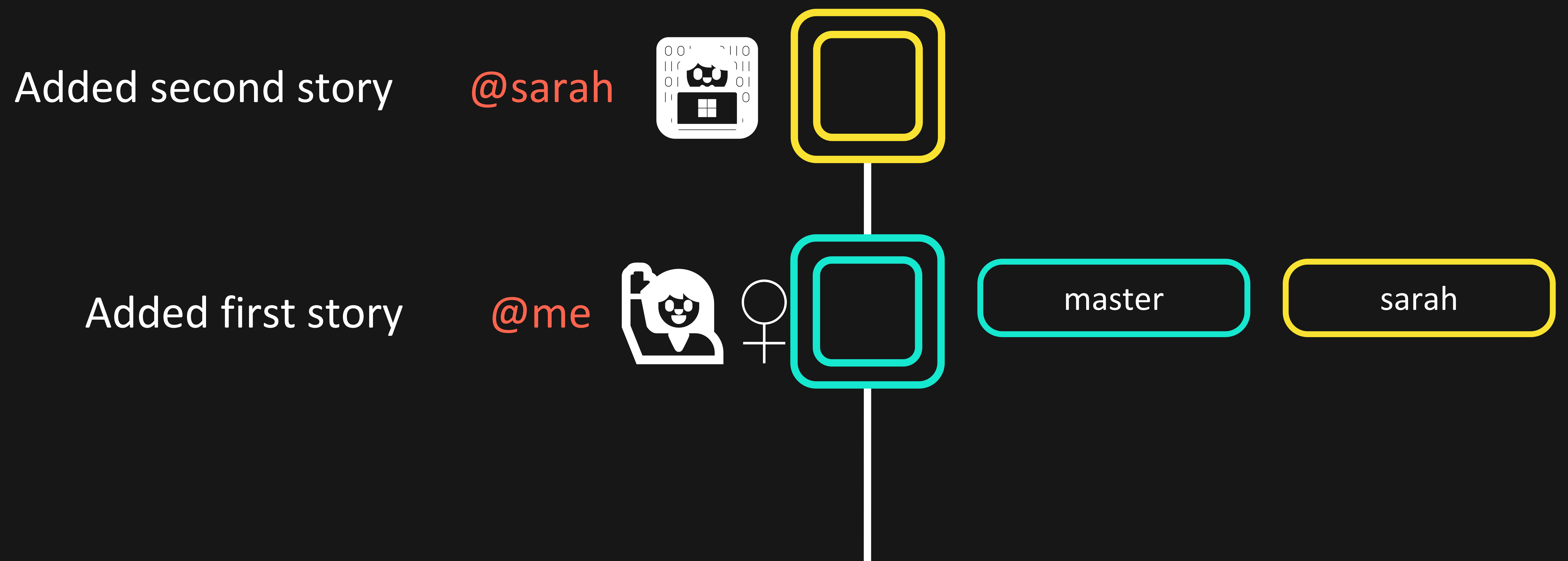
```
$  git checkout -b sarah
Switched to a new branch 'sarah'

$  git branch
   master
* sarah
```



Added first story @me 🙋‍♀️

master

sarah

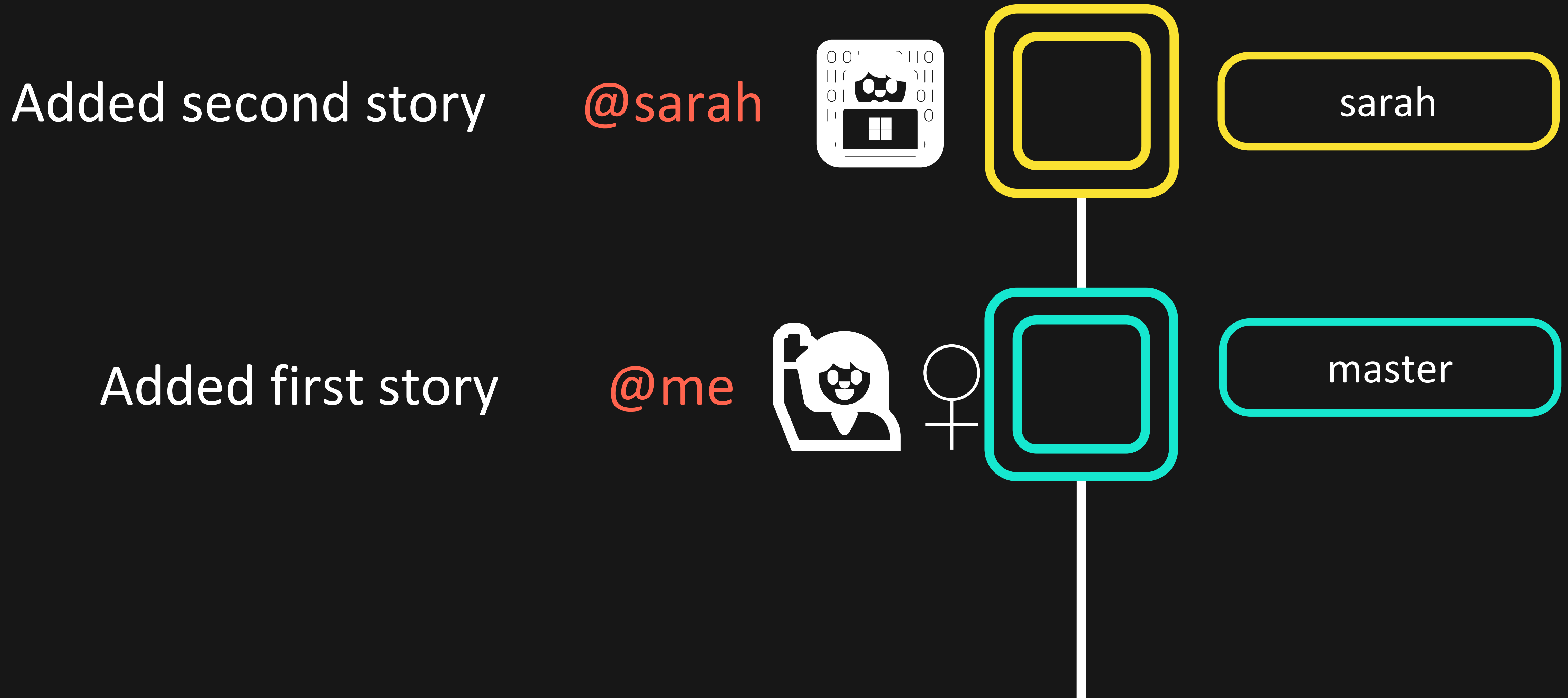


Added second story @sarah

Added first story @me

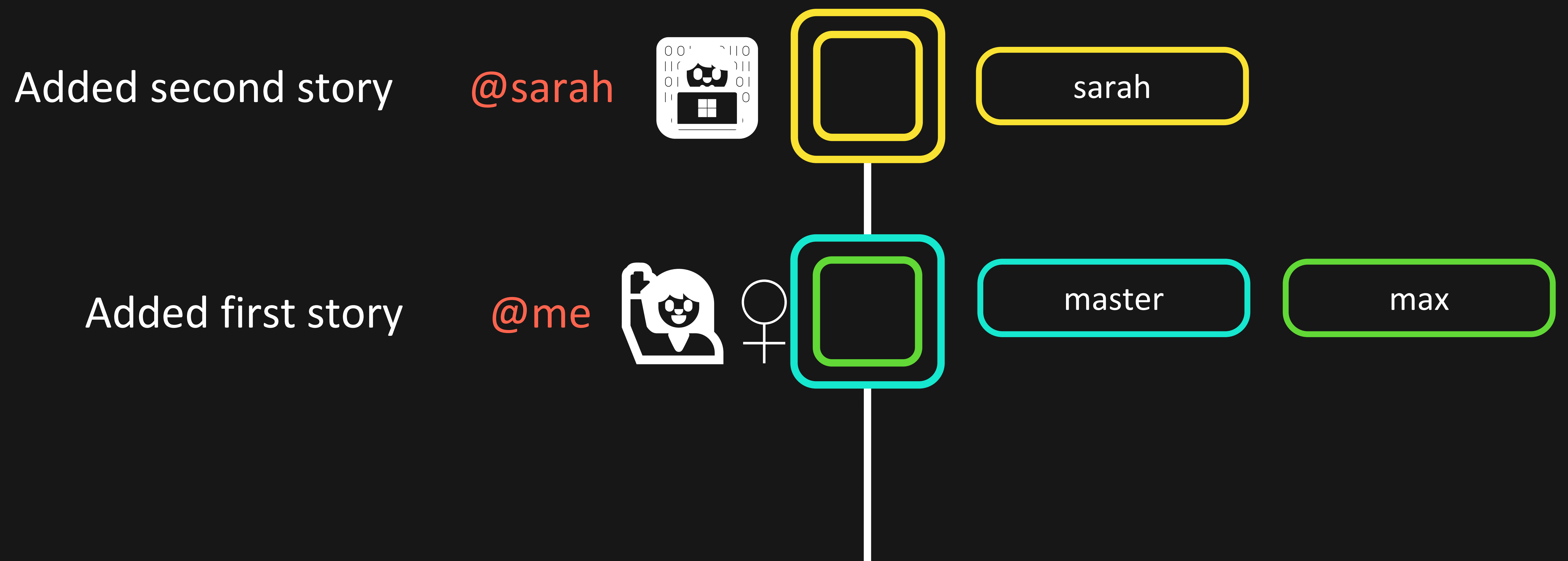
master

sarah



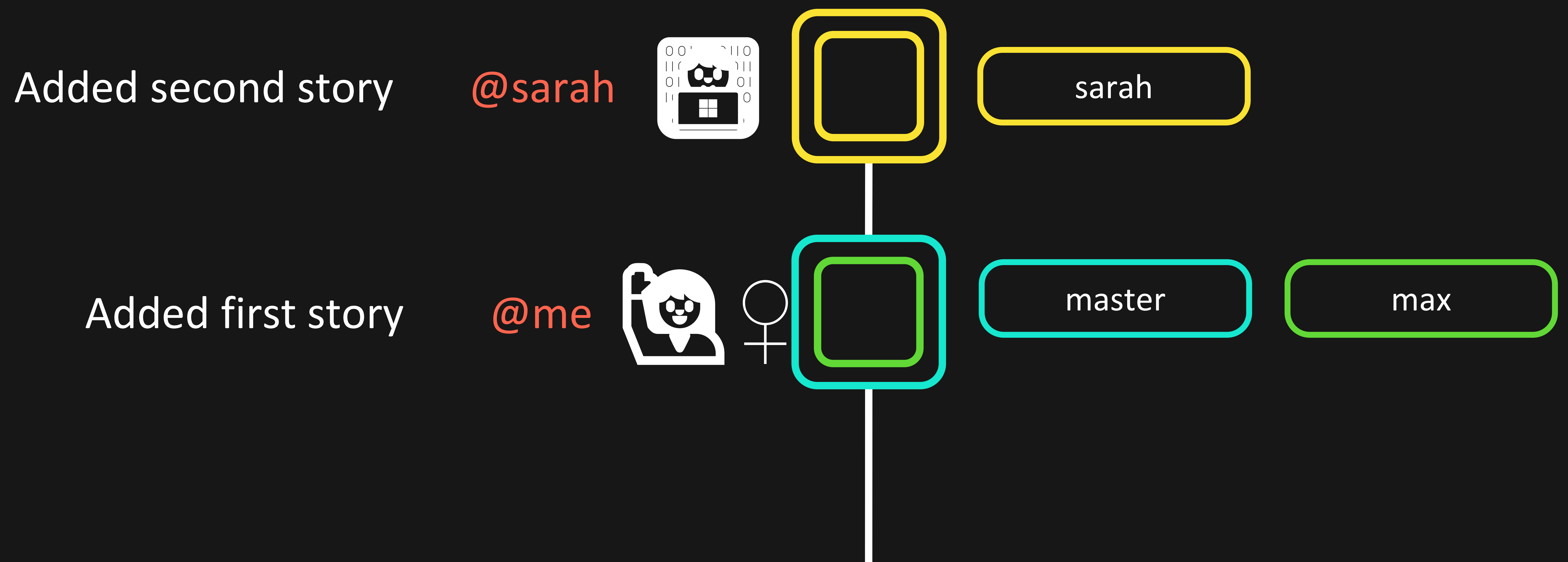
Added second story @sarah sarah

Added first story @me master



Added second story @sarah sarah

Added first story @me master max



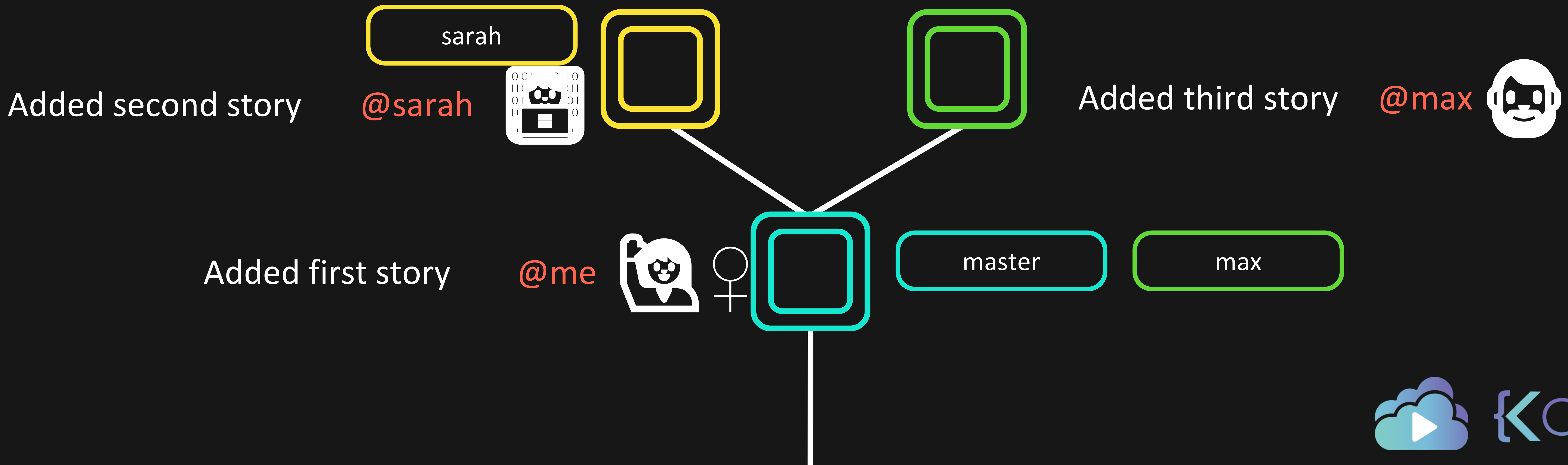
Added second story @sarah

sarah

Added first story @me

master

max



sarah

Added second story @sarah

Added third story @max

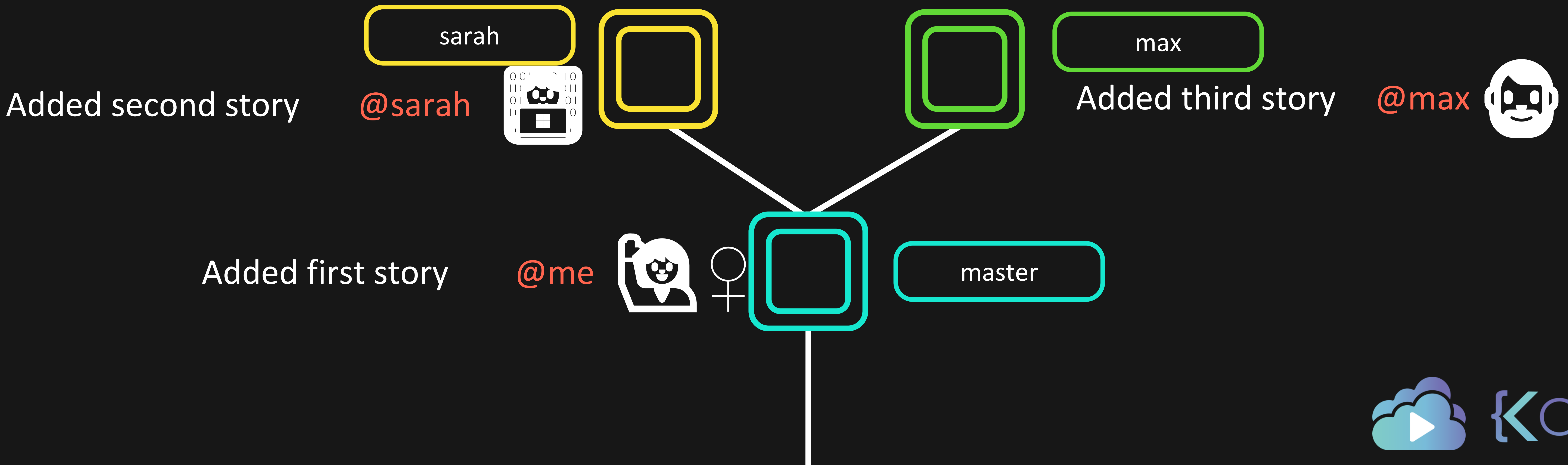
Added first story @me

master

max

KODEKLOUD

# Merging



sarah

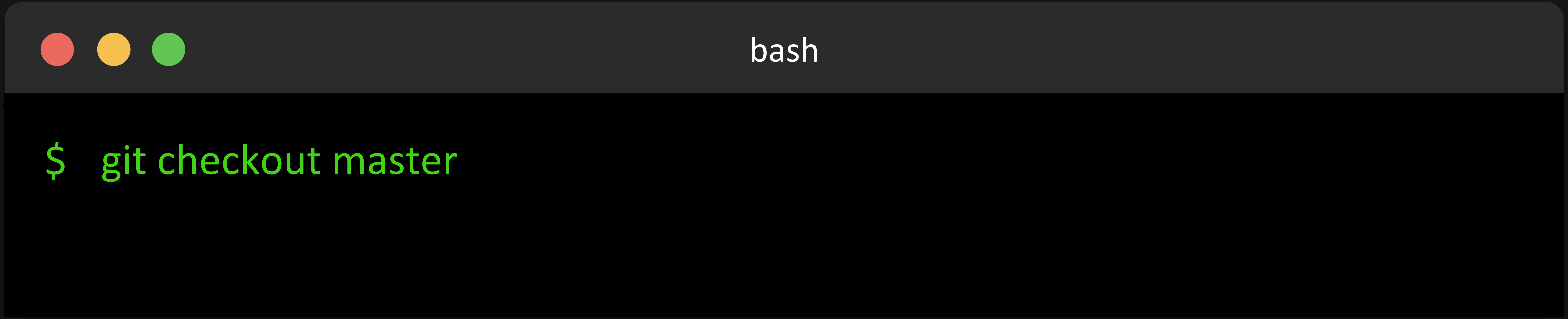
Added second story @sarah

max

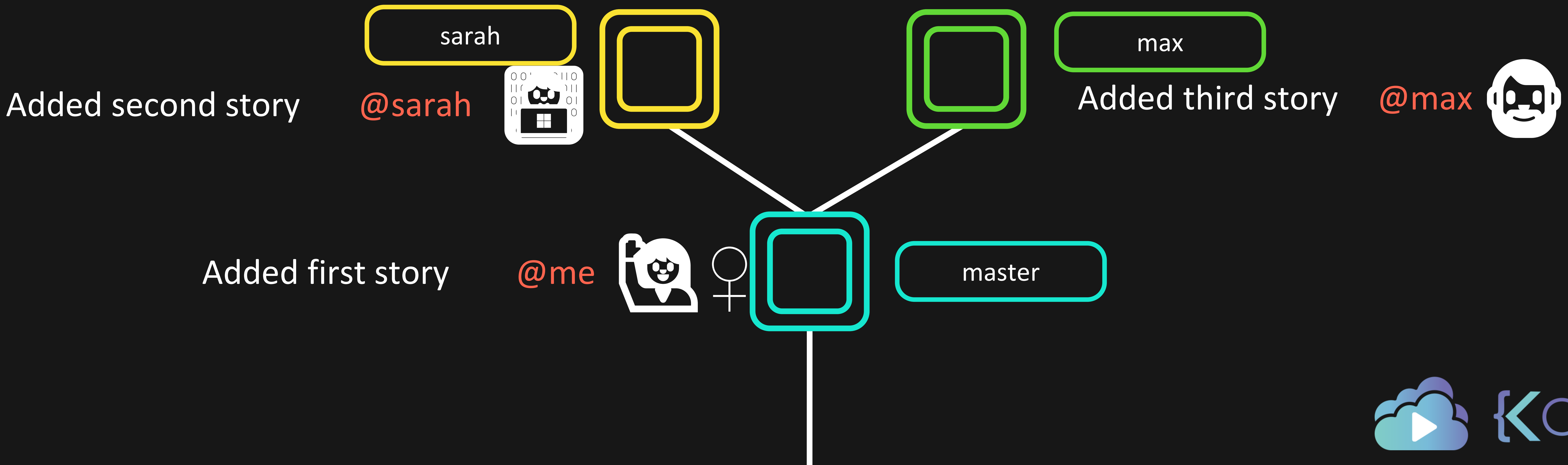
Added third story @max

Added first story @me

master



```
$ git checkout master
```



sarah

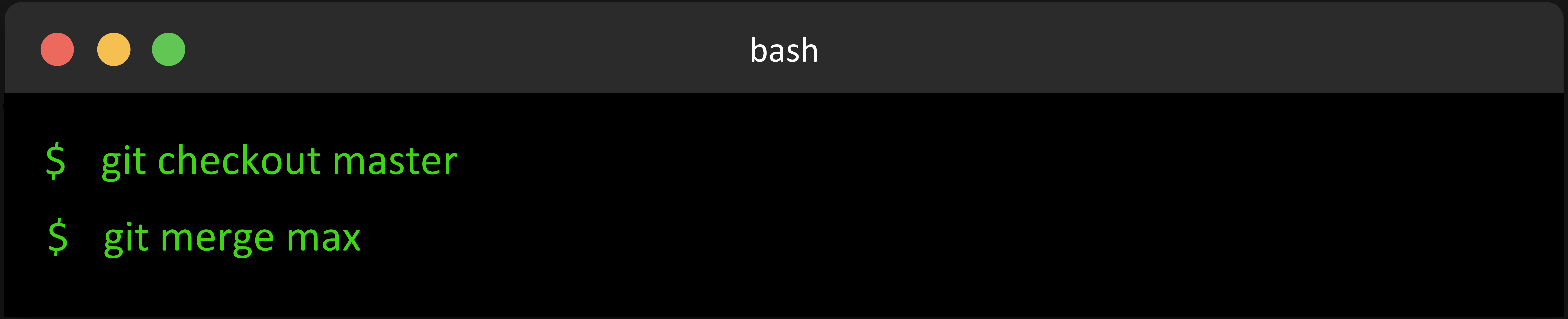
max

Added second story @sarah

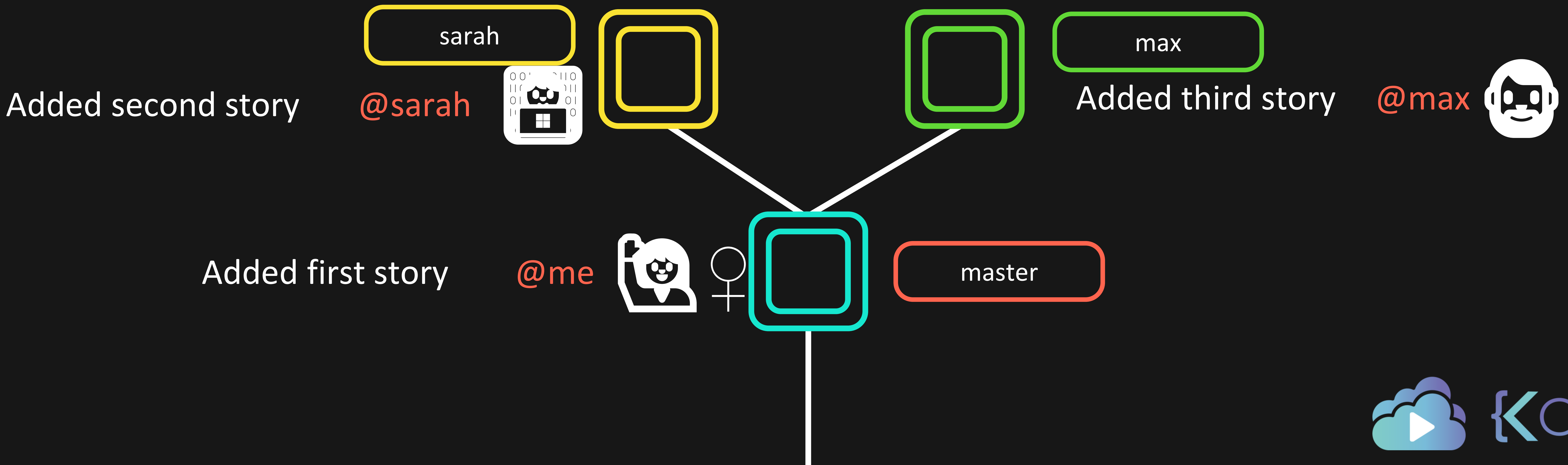
Added third story @max

Added first story @me

master



```
$  git checkout master
$  git merge max
```



sarah

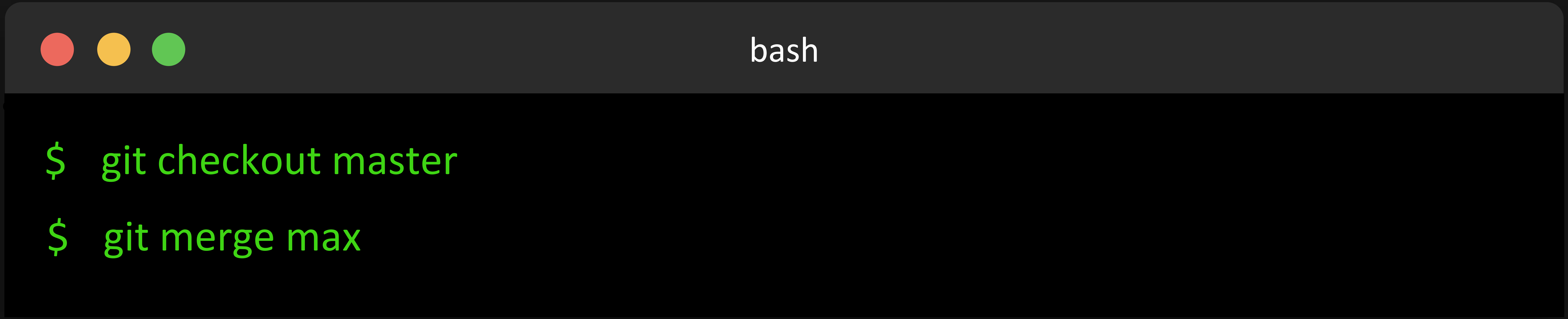
max

Added second story @sarah

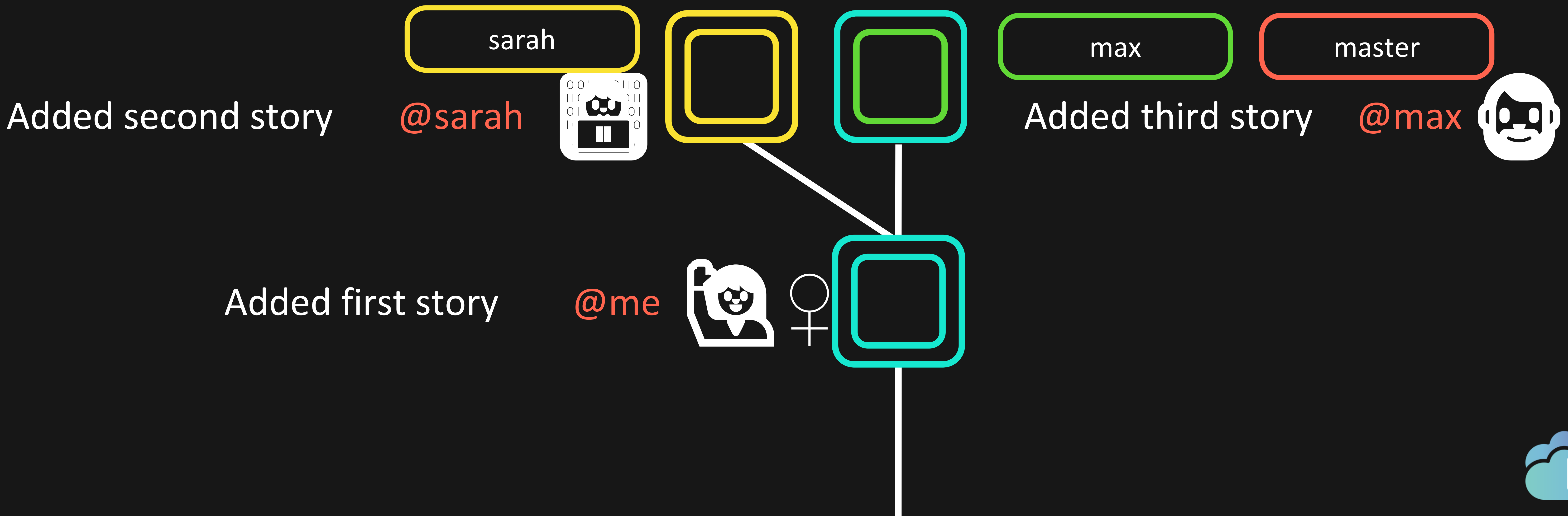
Added third story @max

Added first story @me

master



```
$  git checkout master
$  git merge max
```



sarah

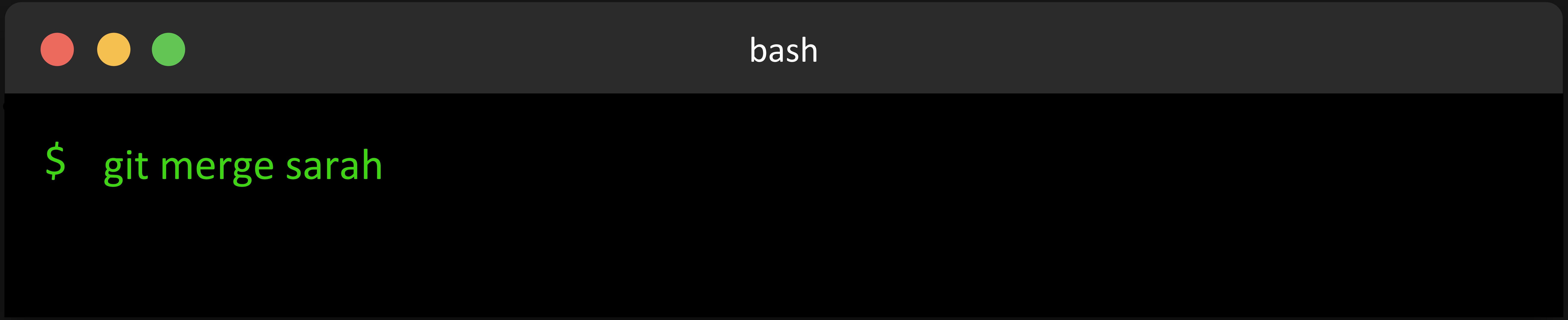
max

master

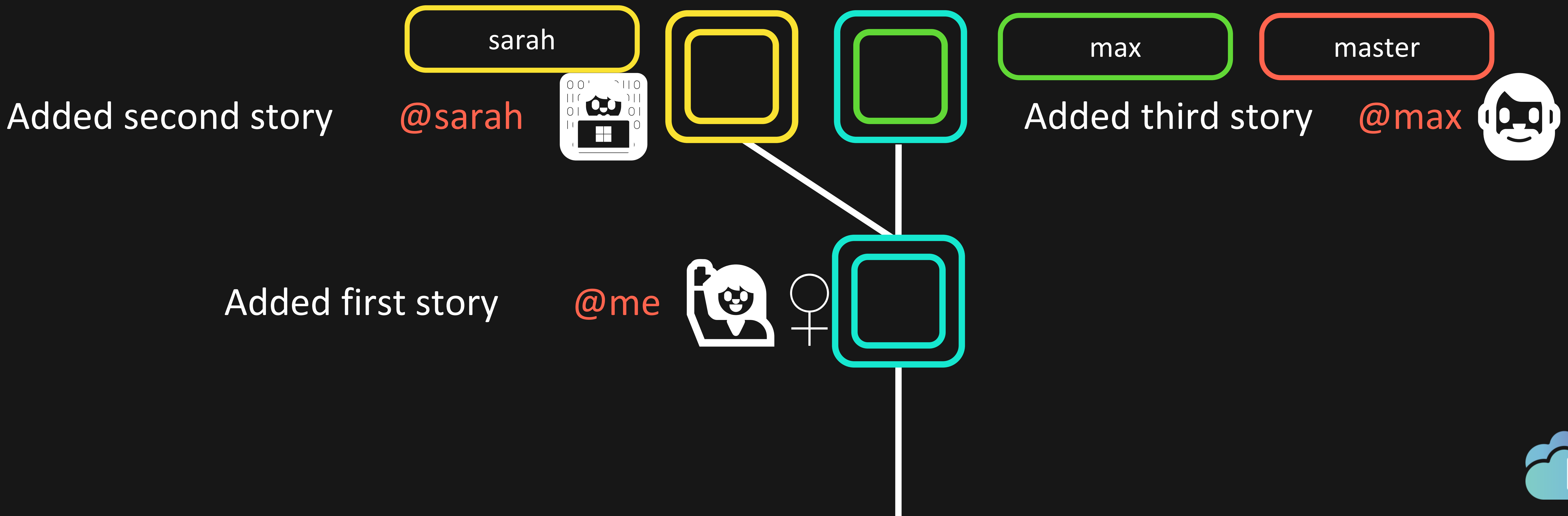
Added second story @sarah

Added third story @max

Added first story @me ♀



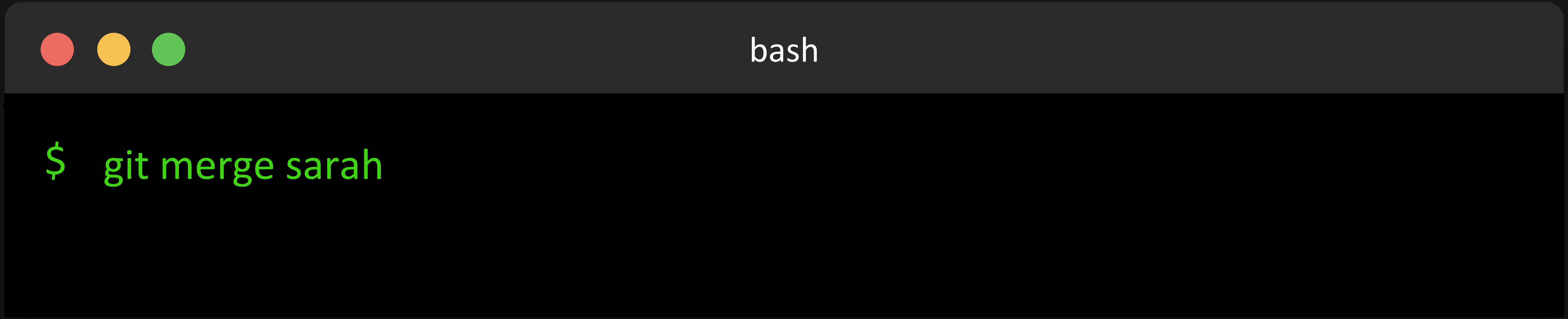
```
bash

$ git merge sarah
```



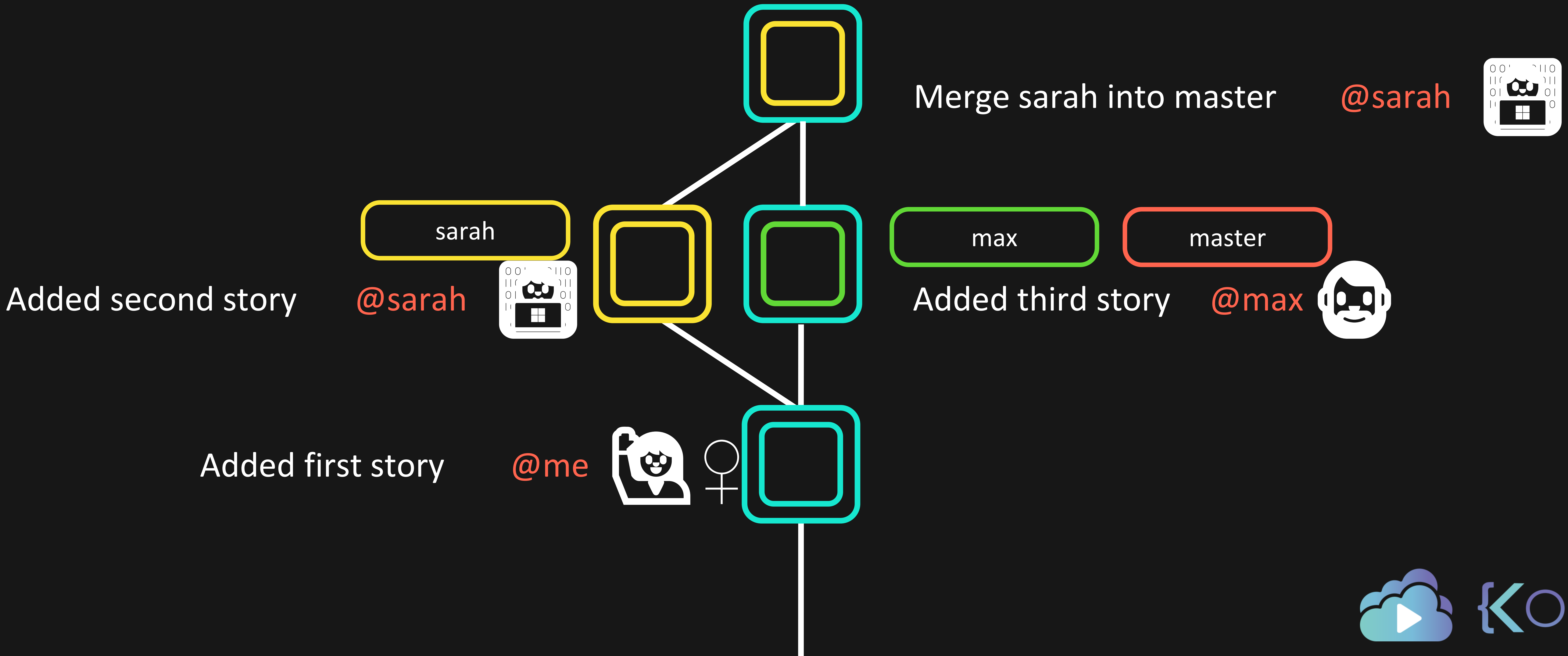
Added second story @sarah

Added third story @max

Added first story @me



```
$ git merge sarah
```



Merge sarah into master @sarah

sarah

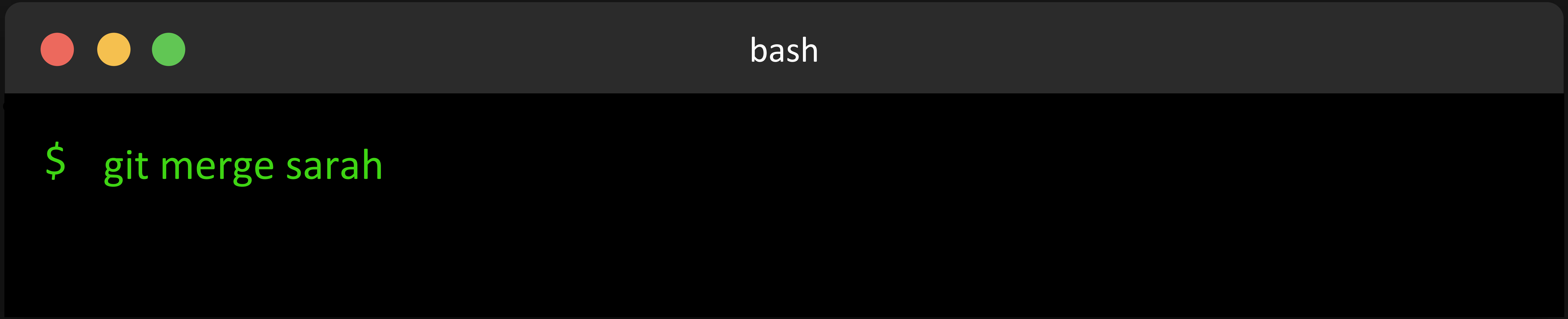
max

master

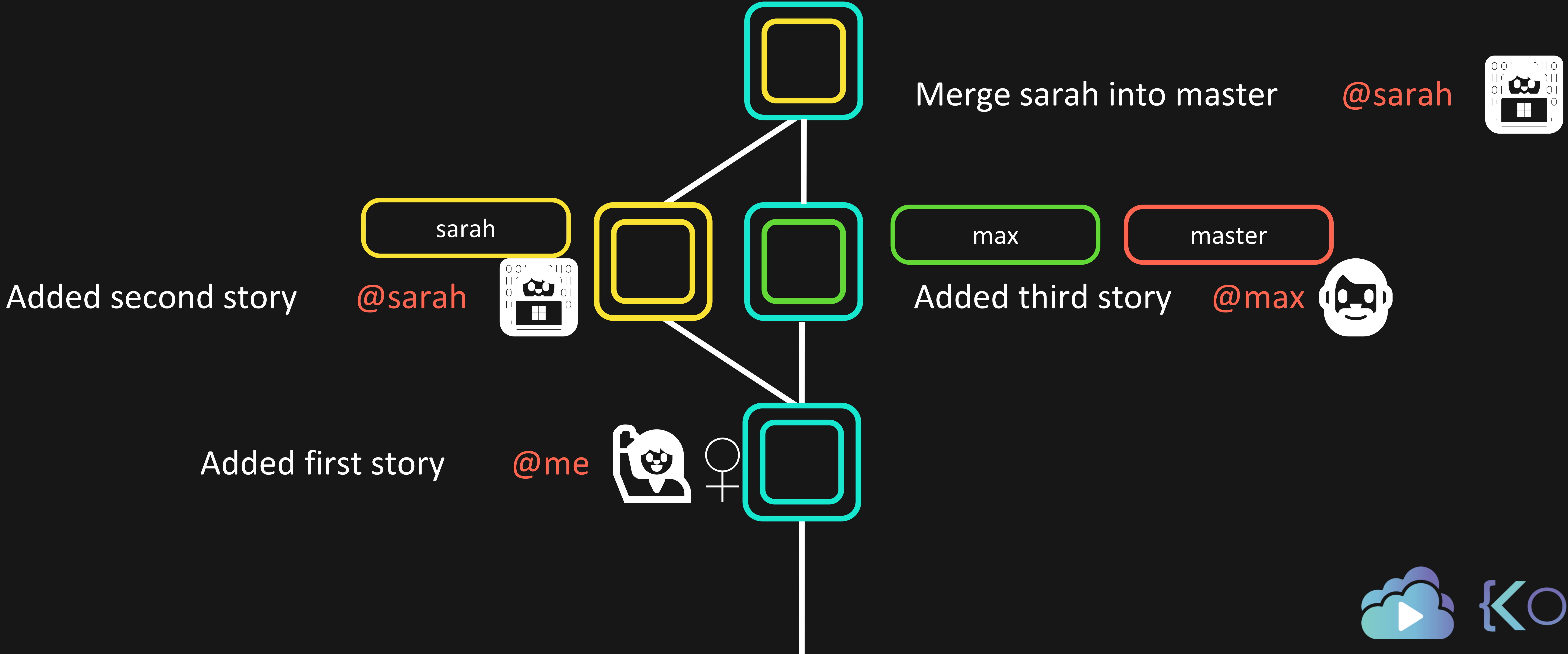
Added second story @sarah

Added third story @max

Added first story @me ♀

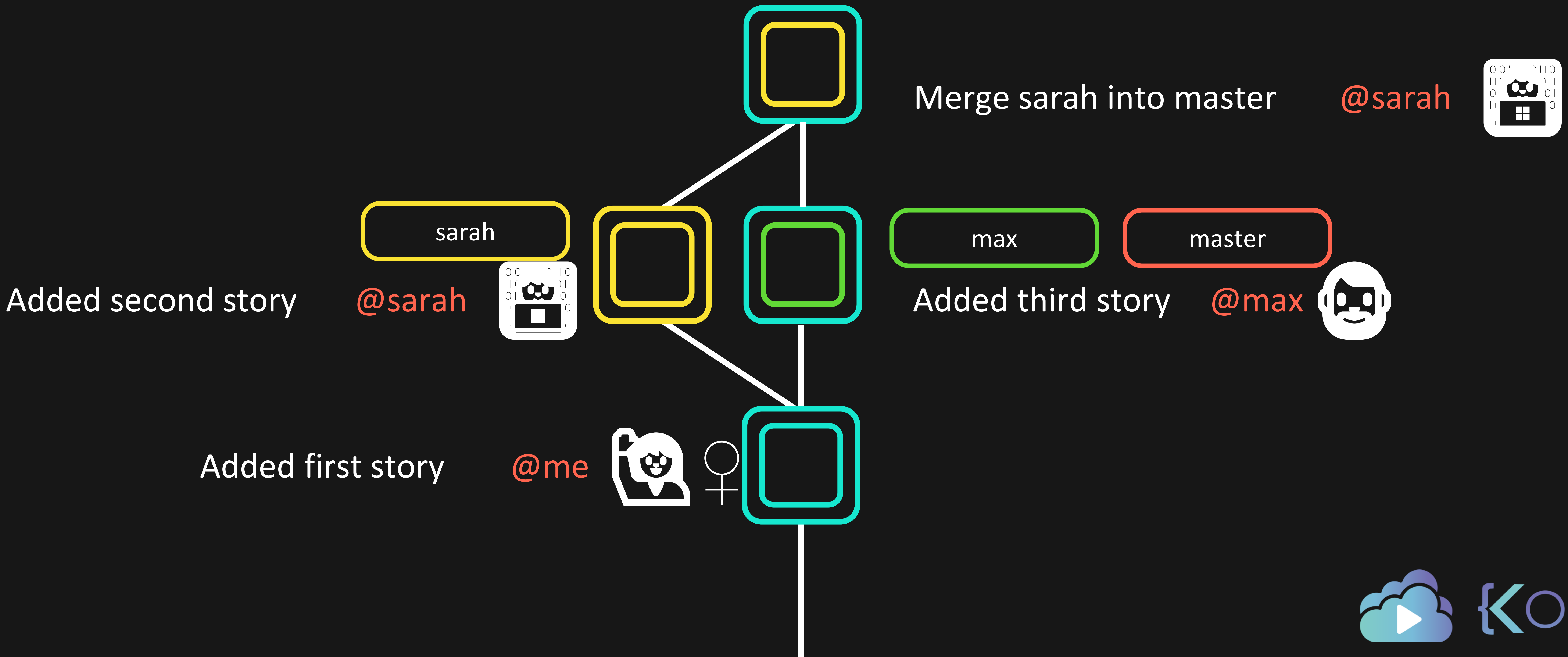


```
$ git merge sarah
```



KODEKLOUD

# Merge Conflicts



Merge sarah into master
@sarah
sarah
max
master
Added second story
@sarah
Added third story
@max
Added first story
@me

fourth_story.md

## Fourth Story

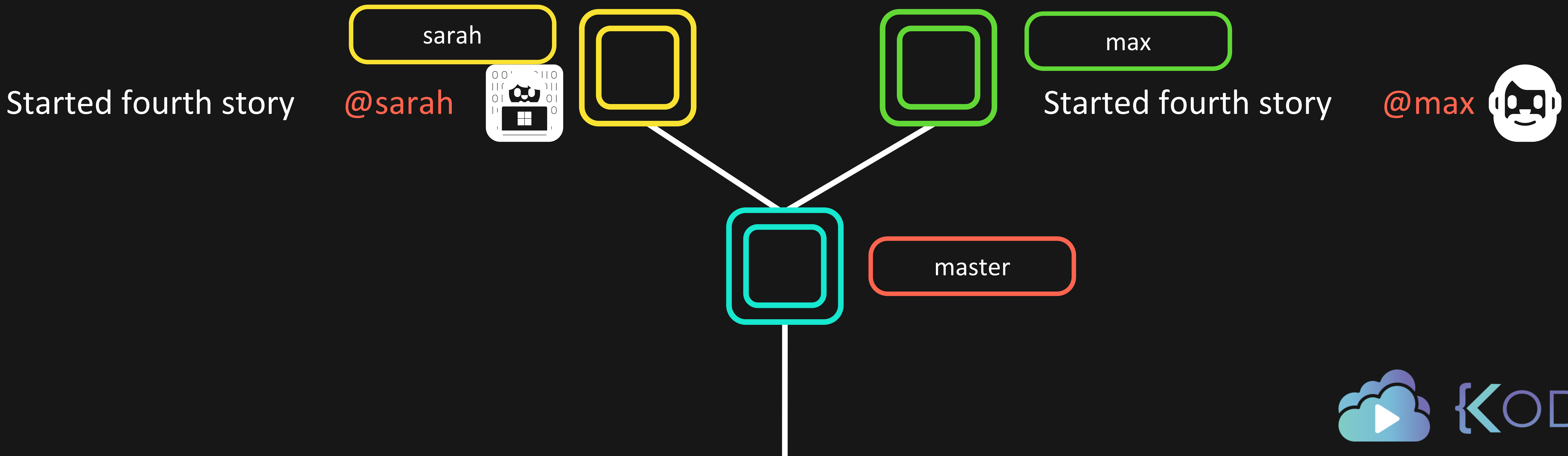
This is Sarah’s version
of the fourth story!

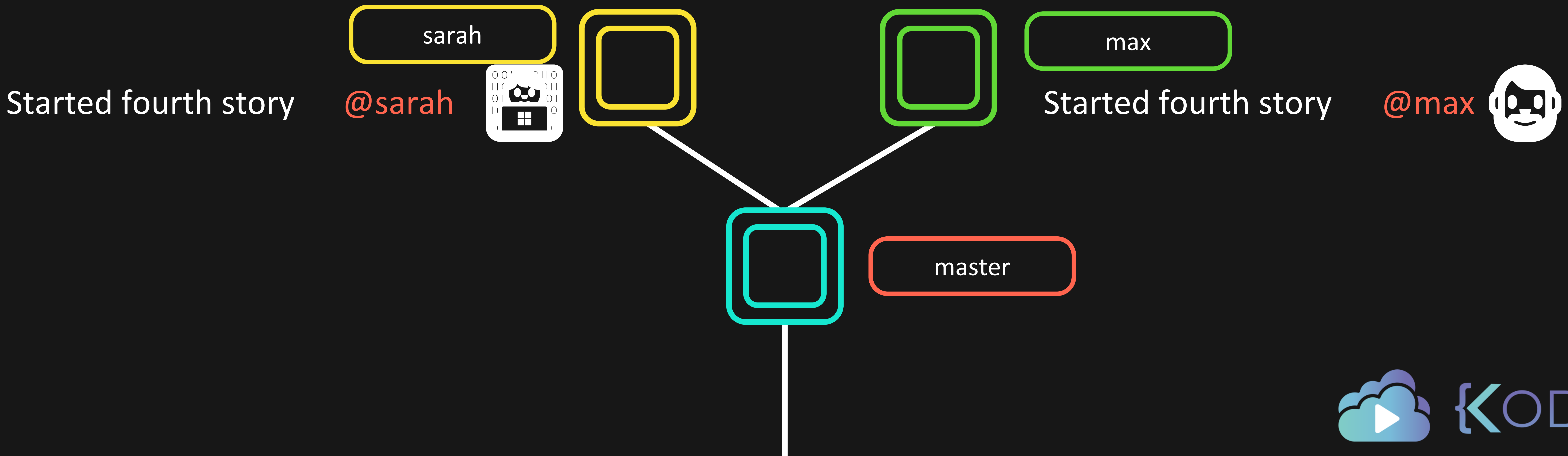
Some extra stuff Sarah
added

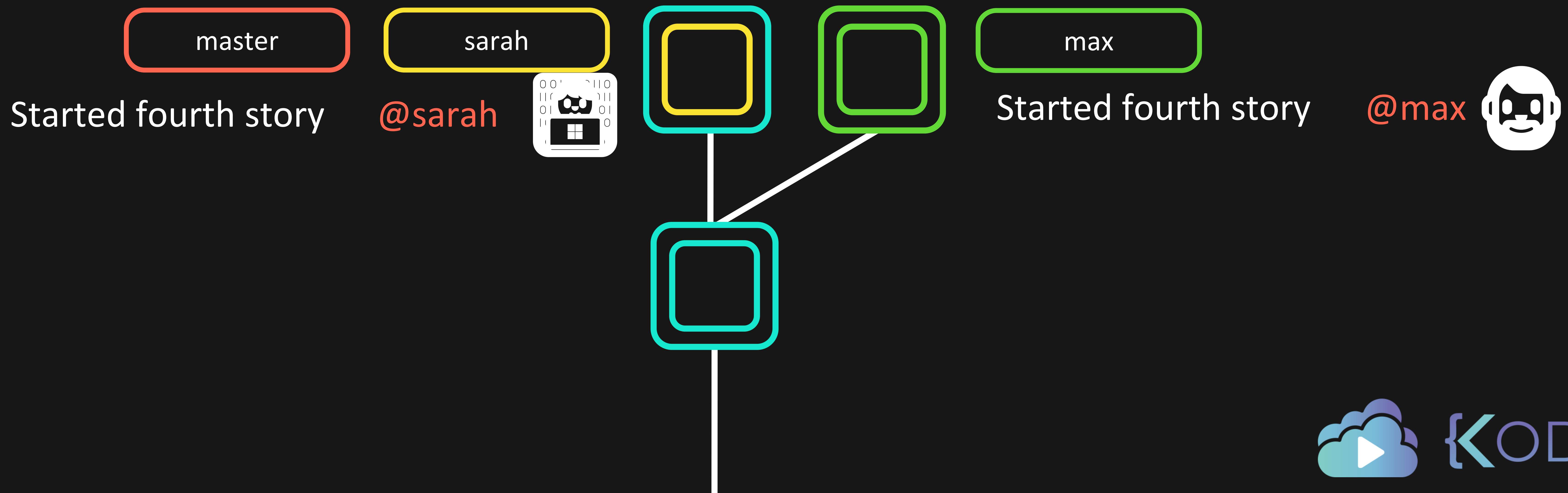
fourth_story.md

## Fourth Story

This is Max’s version
of the fourth story!




sarah
Started fourth story
@sarah
max
Started fourth story
@max
master

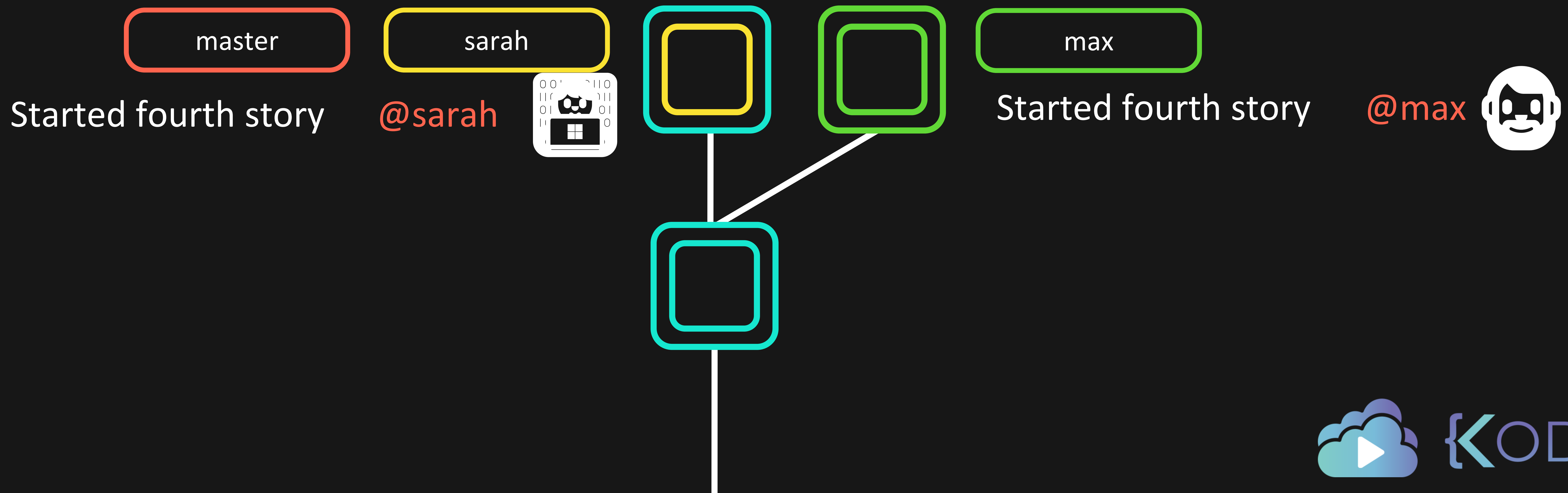

master
sarah
Started fourth story
@sarah
max
Started fourth story
@max

fourth_story.md

```
## Fourth Story

This is Sarah's version
of the fourth story!
```

fourth_story.md

```
## Fourth Story

This is Max's version
of the fourth story!
```



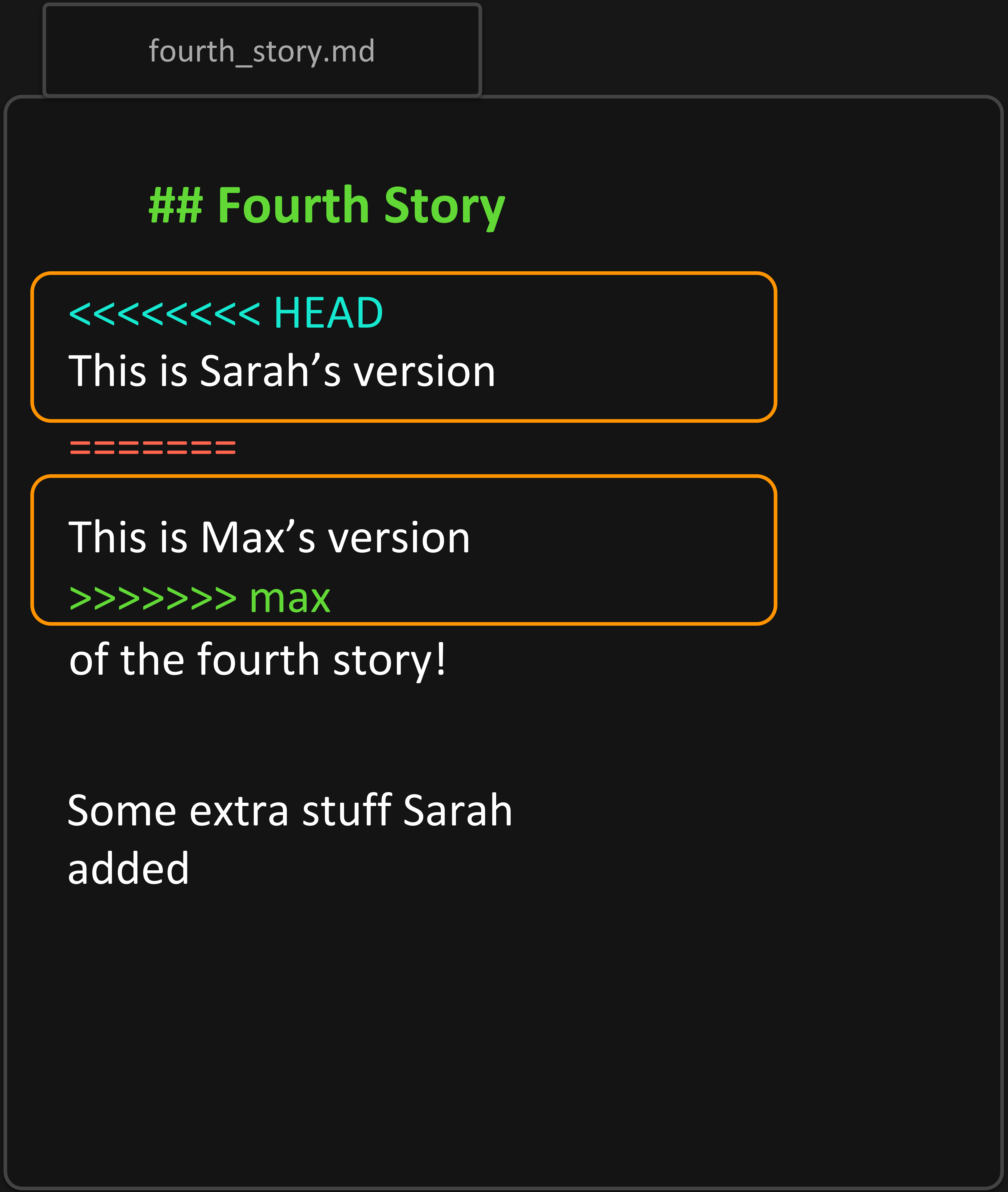
master

sarah

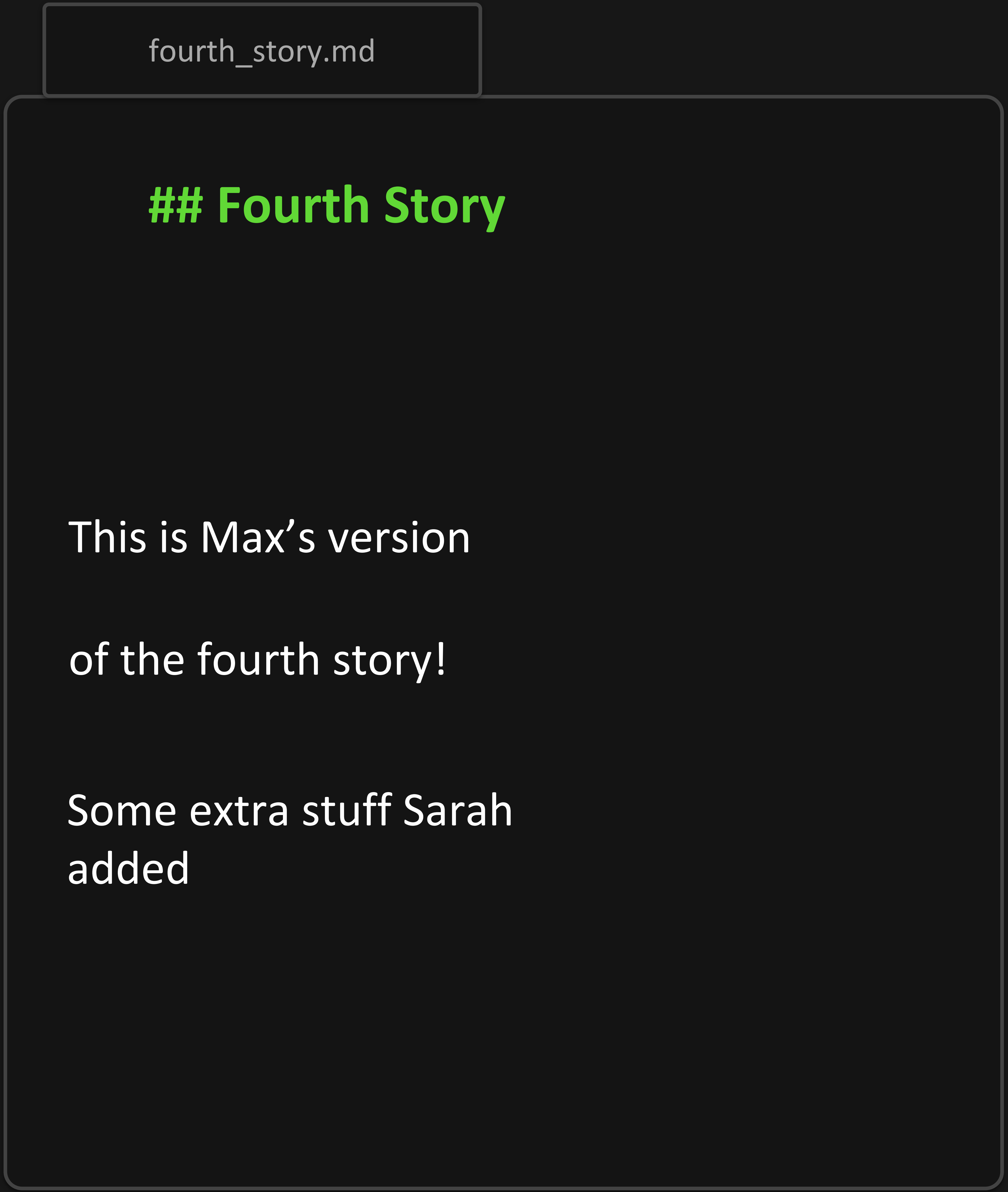
Started fourth story @sarah

max

Started fourth story @max

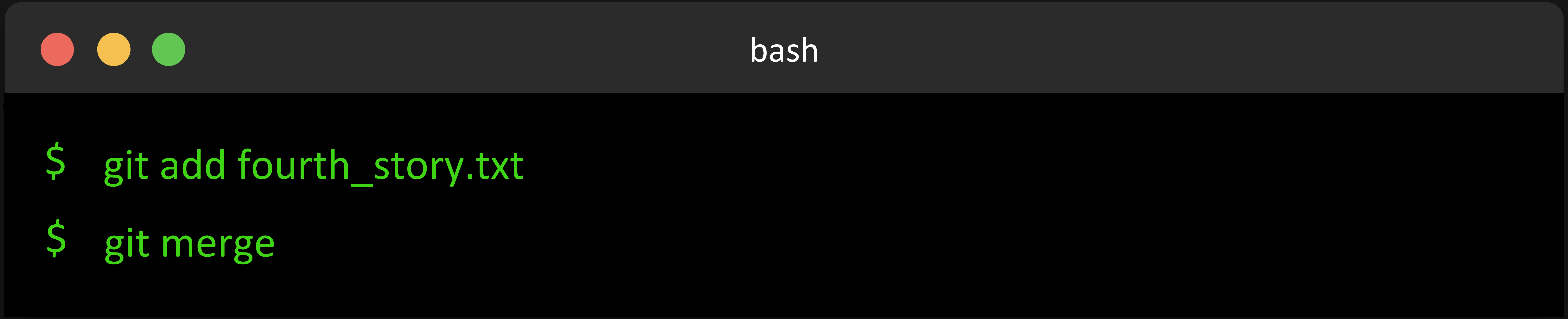


```
fourth_story.md

## Fourth Story

<<<<<<<< HEAD
This is Sarah’s version
=======

This is Max’s version
>>>>>>> max
of the fourth story!


Some extra stuff Sarah
added
```



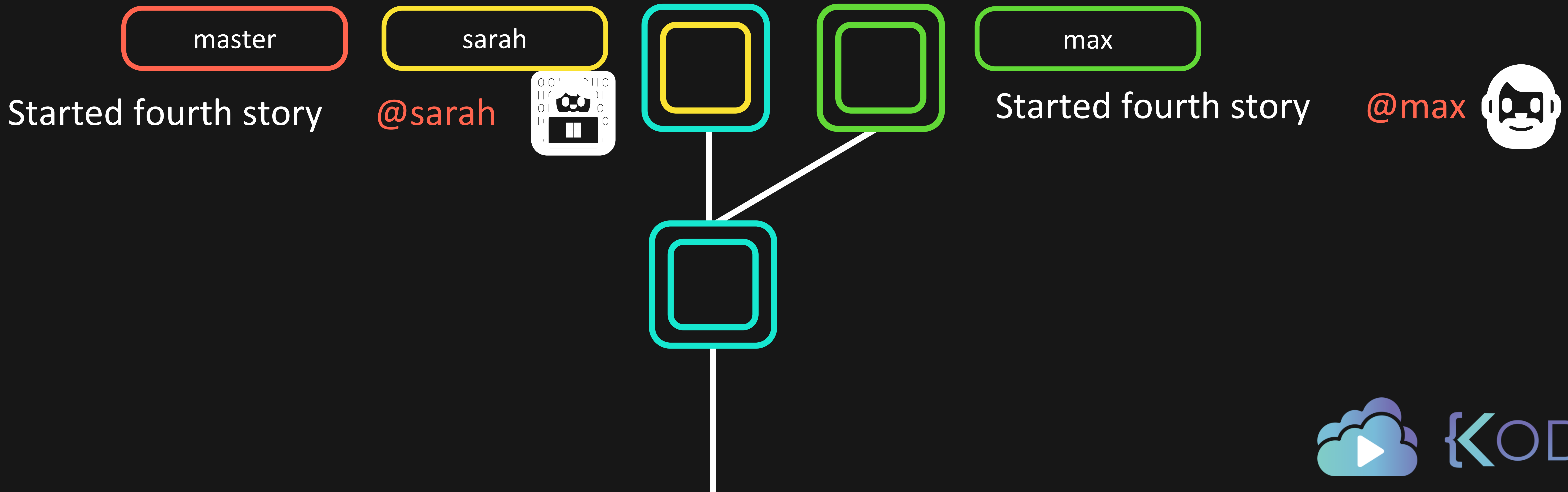
fourth_story.md

```
## Fourth Story



This is Max’s version

of the fourth story!

Some extra stuff Sarah
added
```



bash

```
$  git add fourth_story.txt
$  git merge
```



master

Started fourth story

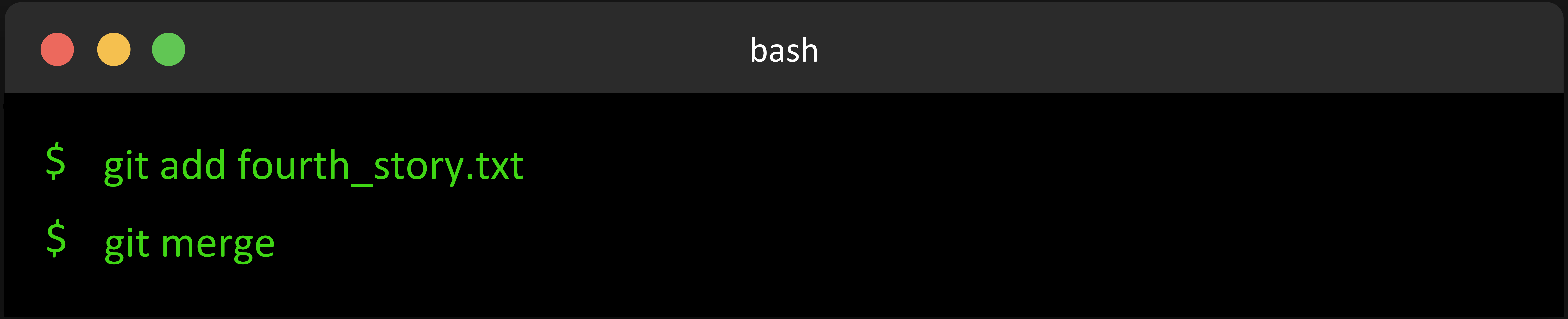
sarah

@sarah

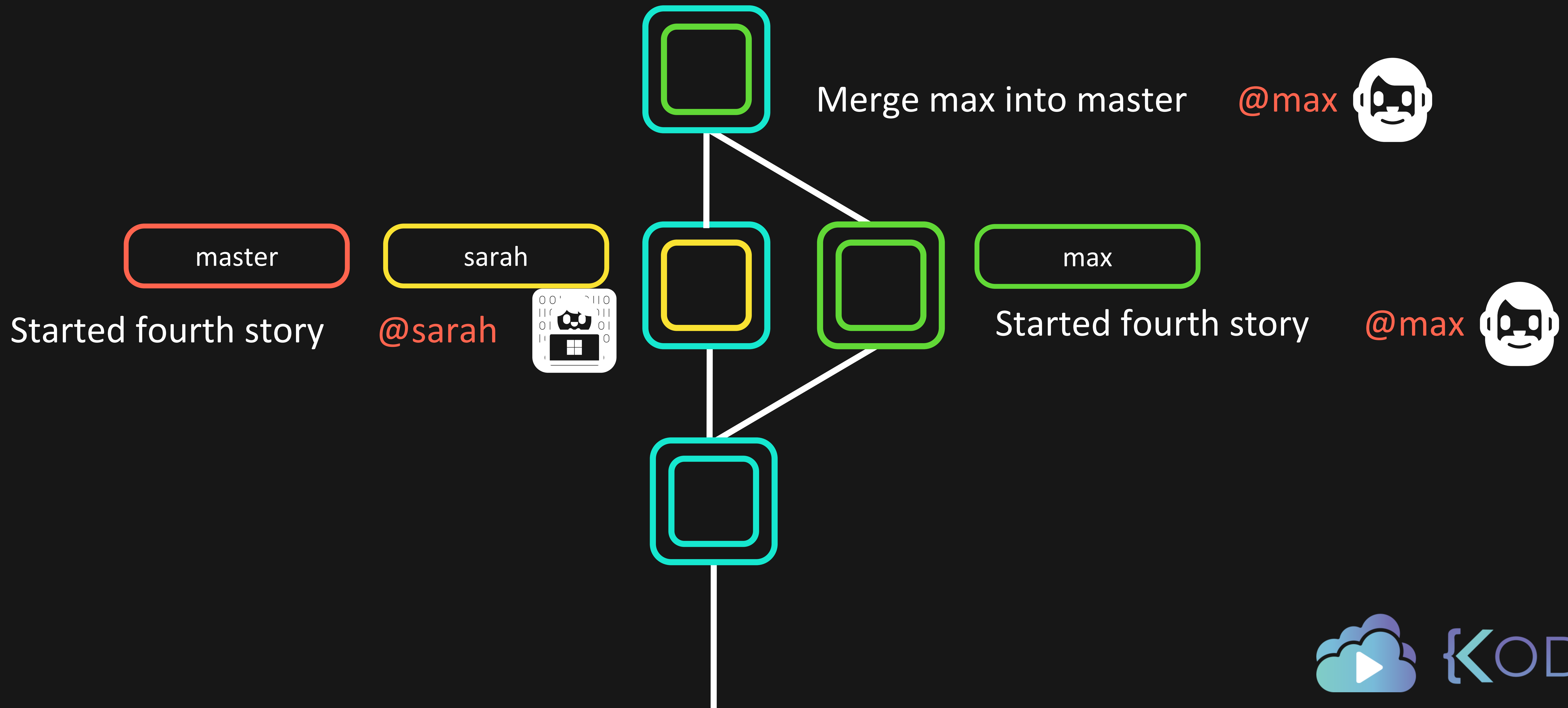
max

Started fourth story

@max



```
$ git add fourth_story.txt
$ git merge
```



Merge max into master @max

master

sarah

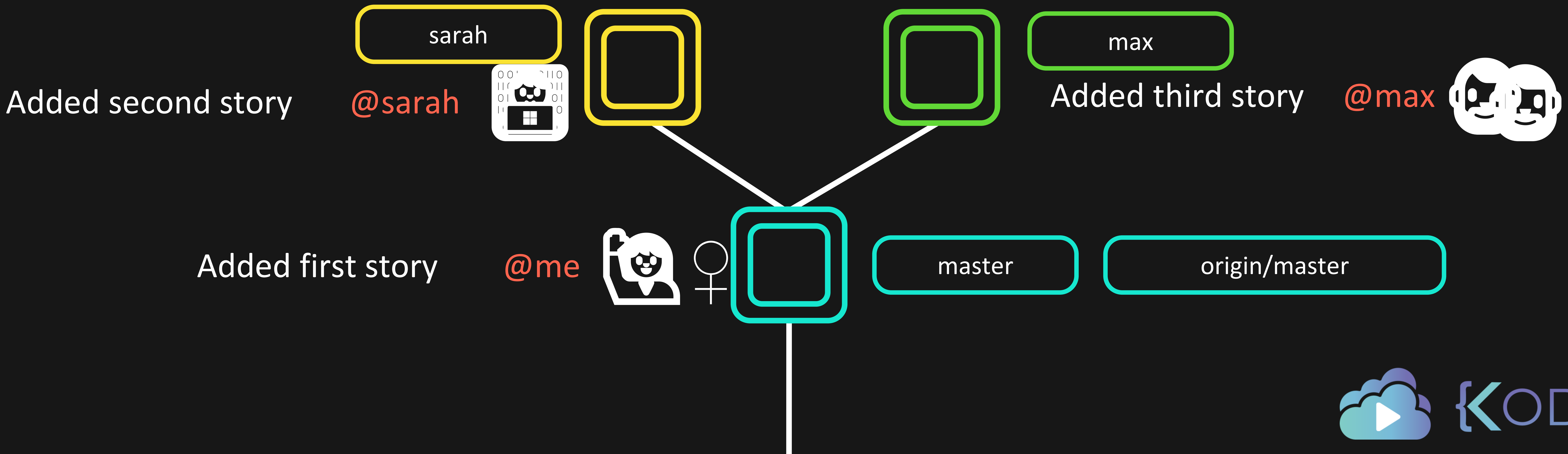
Started fourth story @sarah

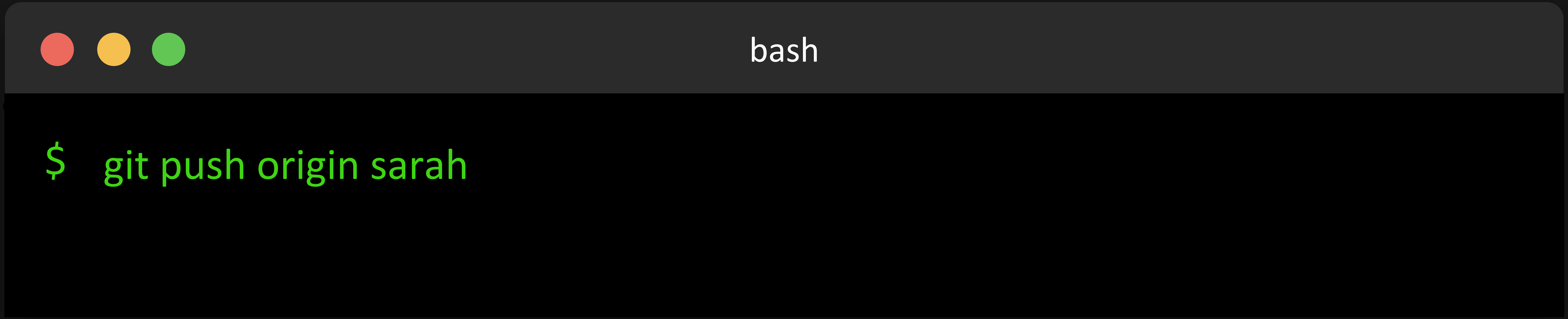
max

Started fourth story @max

KODEKLOUD

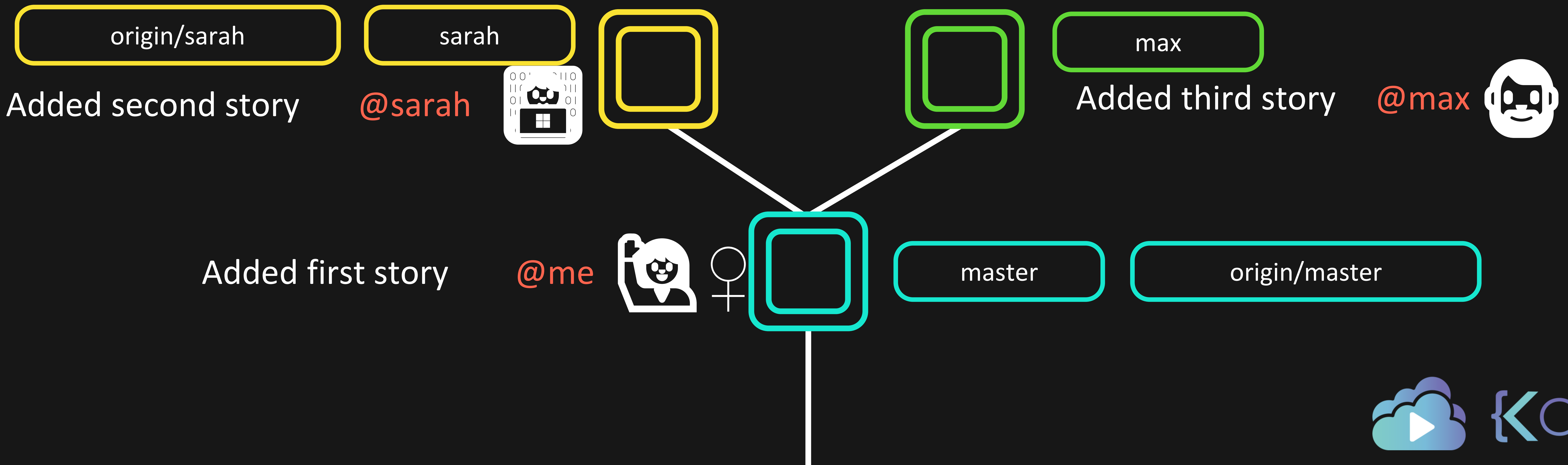
# Pull Request


sarah
Added second story
@sarah
max
Added third story
@max
Added first story
@me
master
origin/master



bash

```
$ git push origin sarah
```



origin/sarah

sarah

Added second story

@sarah

max

Added third story

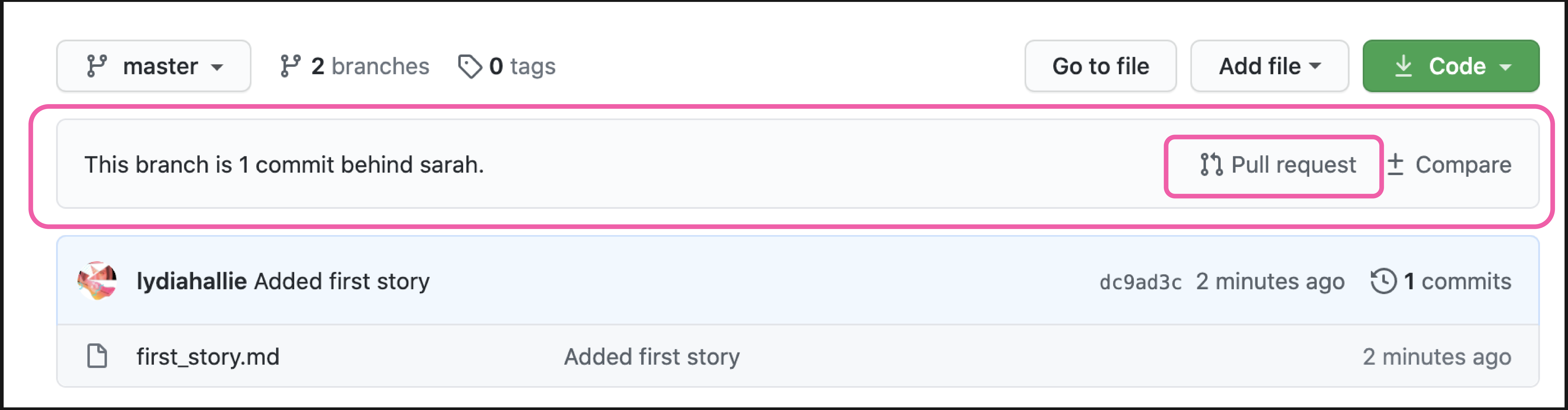
@max

Added first story

@me

master

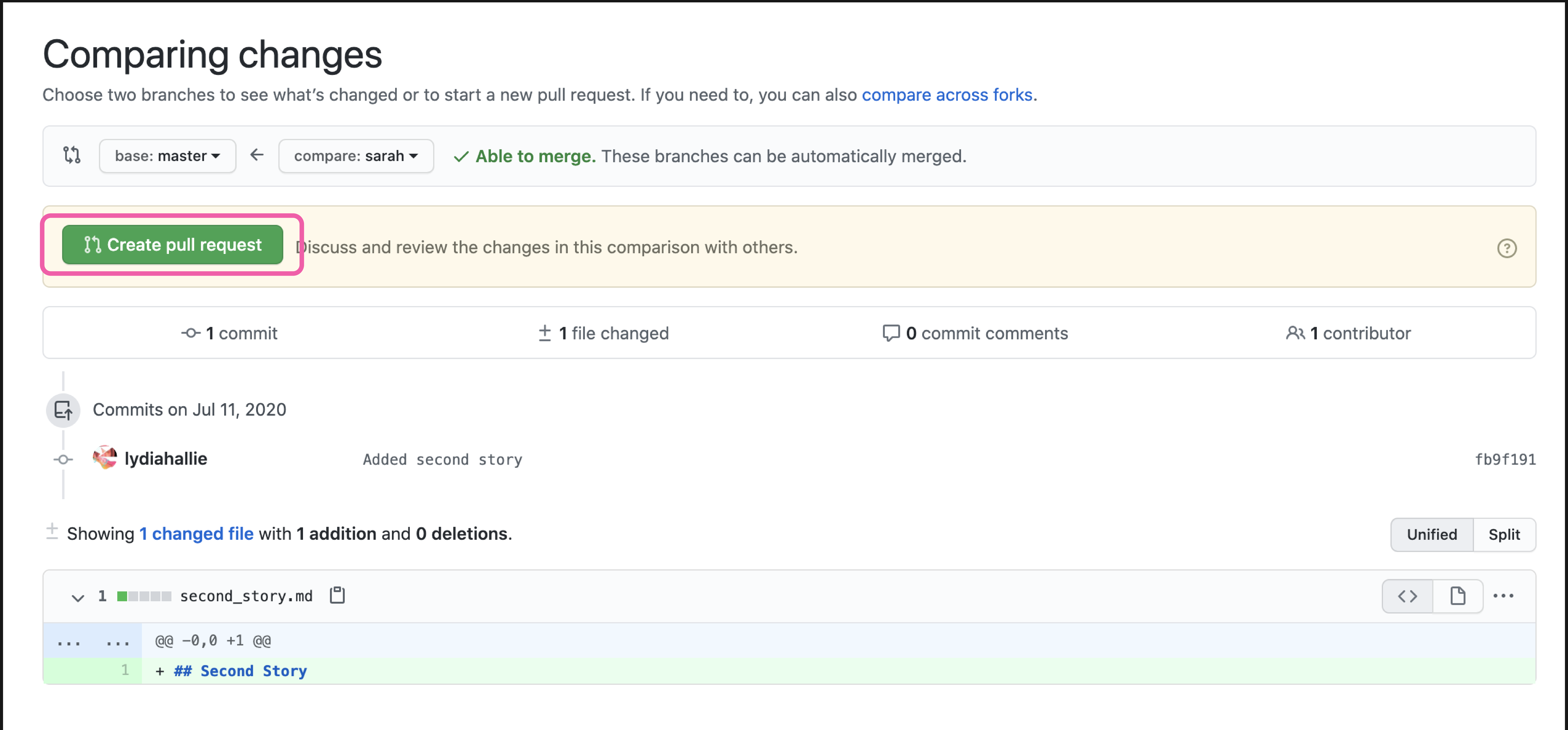
origin/master



This branch is 1 commit behind sarah.

lydiahallie Added first story dc9ad3c 2 minutes ago 1 commits

first_story.md Added first story 2 minutes ago



# Comparing changes

Choose two branches to see what's changed or to start a new pull request. If you need to, you can also compare across forks.

base: master ← compare: sarah ✓ **Able to merge.** These branches can be automatically merged.

Discuss and review the changes in this comparison with others.

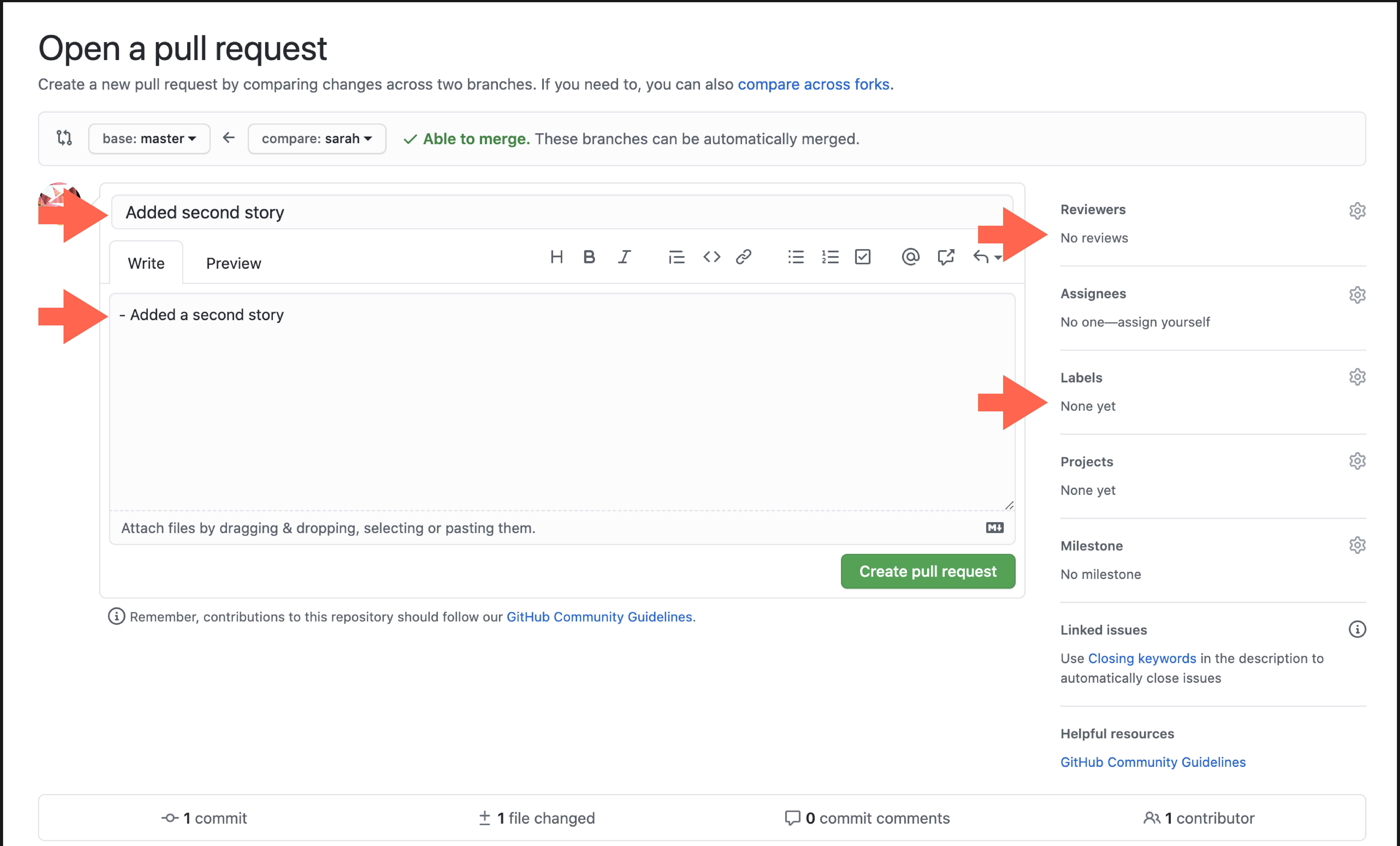
**1** commit **1** file changed **0** commit comments **1** contributor

Commits on Jul 11, 2020

lydiahallie `Added second story` `fb9f191`

Showing 1 changed file with **1 addition** and **0 deletions**.

```
1 second_story.md
... ... @@ -0,0 +1 @@
      1 + ## Second Story
```



# Open a pull request

Create a new pull request by comparing changes across two branches. If you need to, you can also compare across forks.

base: master ← compare: sarah ✓ Able to merge. These branches can be automatically merged.

Added second story

Write | Preview

- Added a second story

Attach files by dragging & dropping, selecting or pasting them.

Create pull request

Remember, contributions to this repository should follow our GitHub Community Guidelines.

**Reviewers**

No reviews

**Assignees**

No one—assign yourself

**Labels**

None yet

**Projects**

None yet

**Milestone**

No milestone

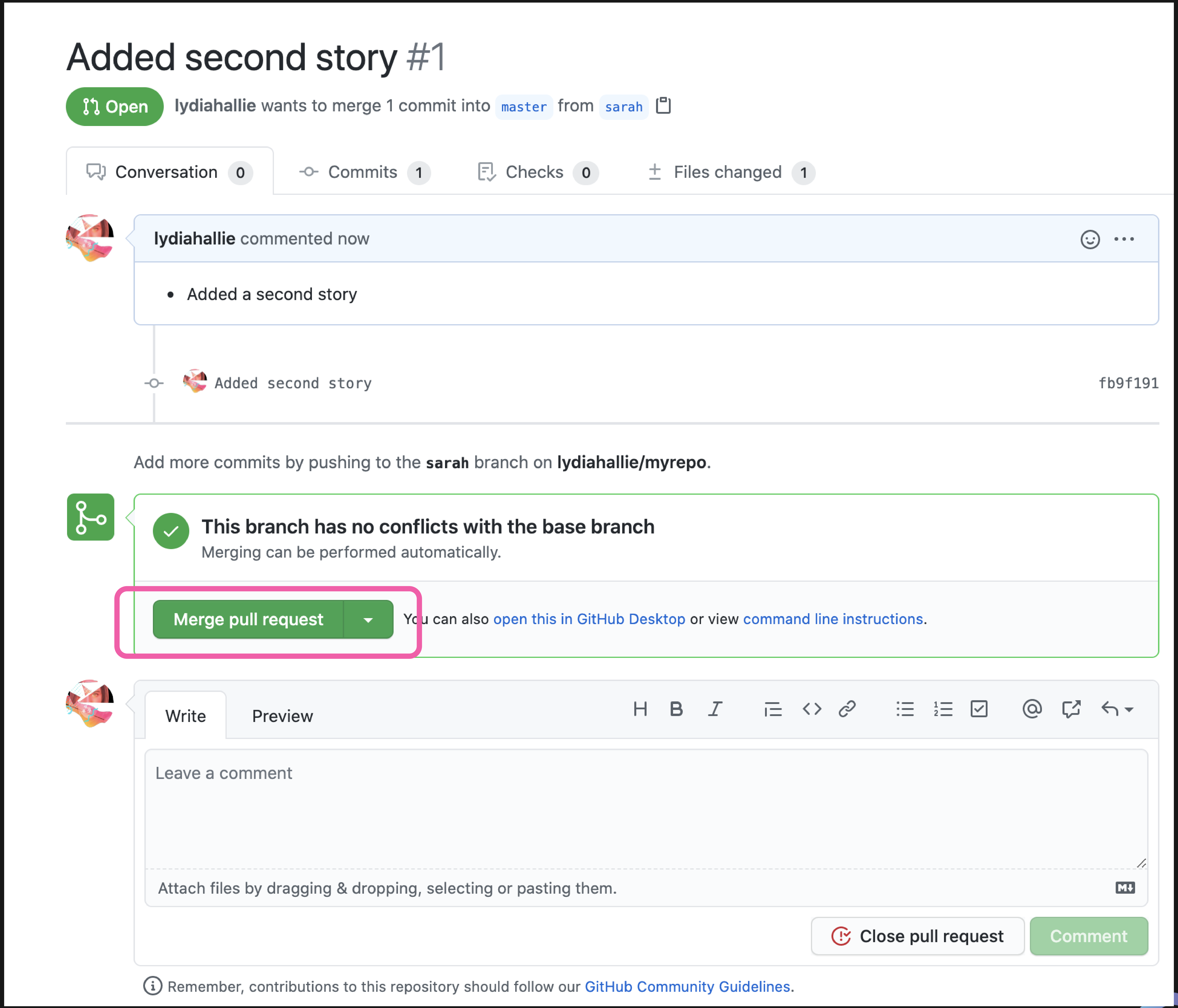
**Linked issues**

Use Closing keywords in the description to automatically close issues

**Helpful resources**

GitHub Community Guidelines

1 commit | 1 file changed | 0 commit comments | 1 contributor



# Added second story #1

Open lydiahallie wants to merge 1 commit into master from sarah

lydiahallie commented now

- Added a second story

Added second story fb9f191

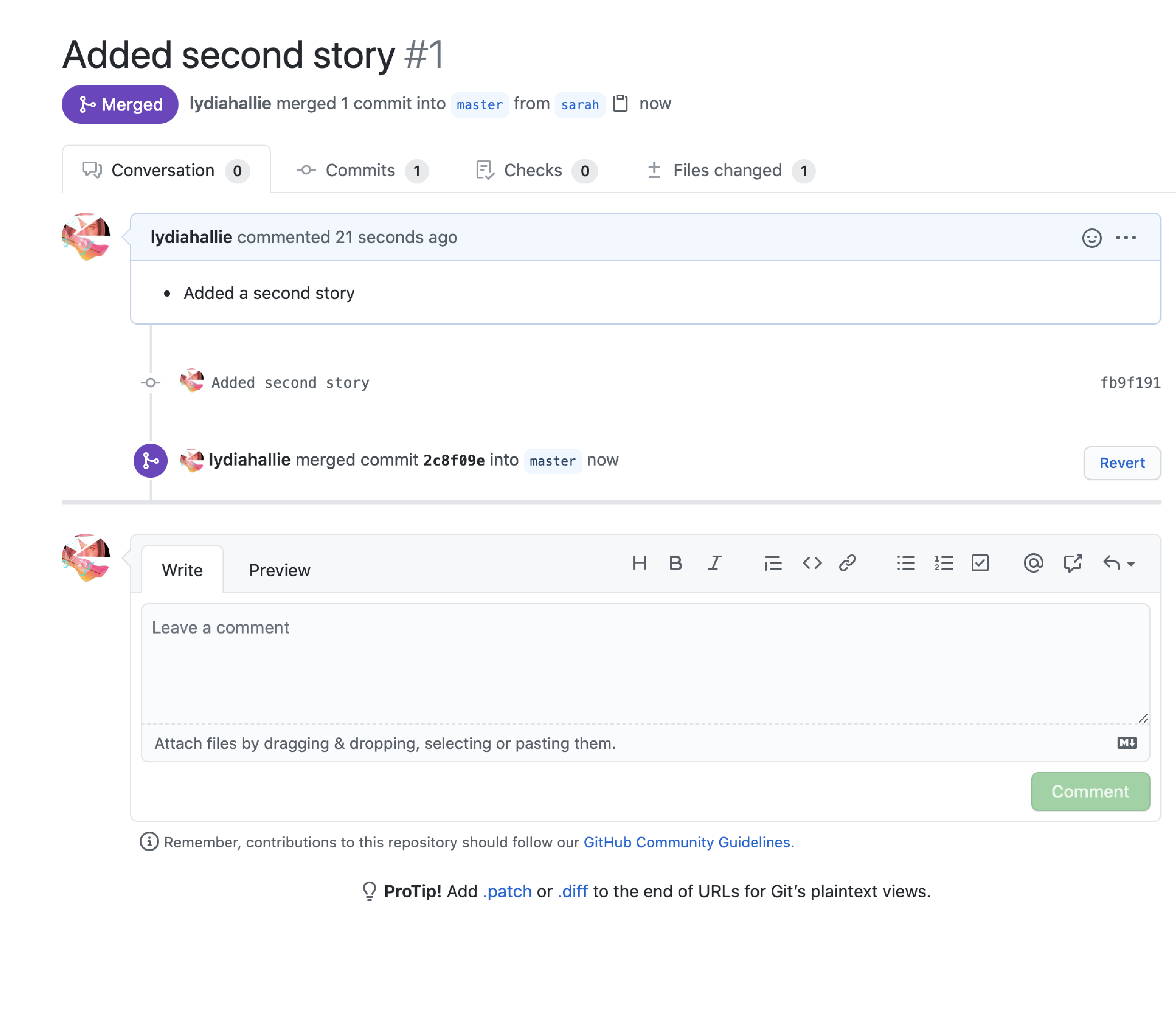
Add more commits by pushing to the **sarah** branch on **lydiahallie/myrepo**.

**This branch has no conflicts with the base branch**
Merging can be performed automatically.

You can also open this in GitHub Desktop or view command line instructions.

Write
Preview
Leave a comment
Attach files by dragging & dropping, selecting or pasting them.
Close pull request
Comment

Remember, contributions to this repository should follow our GitHub Community Guidelines.



# Added second story #1

Merged lydiahallie merged 1 commit into `master` from `sarah` now

lydiahallie commented 21 seconds ago

- Added a second story

`Added second story` fb9f191

lydiahallie merged commit **2c8f09e** into `master` now

Leave a comment

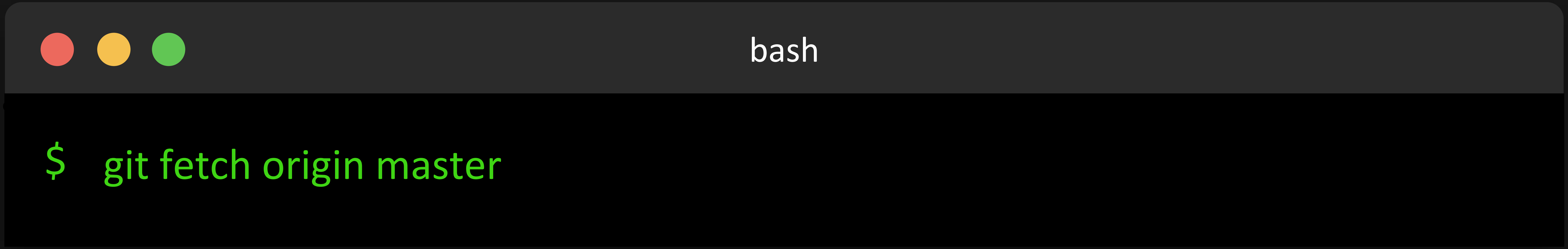
Attach files by dragging & dropping, selecting or pasting them.

Remember, contributions to this repository should follow our GitHub Community Guidelines.

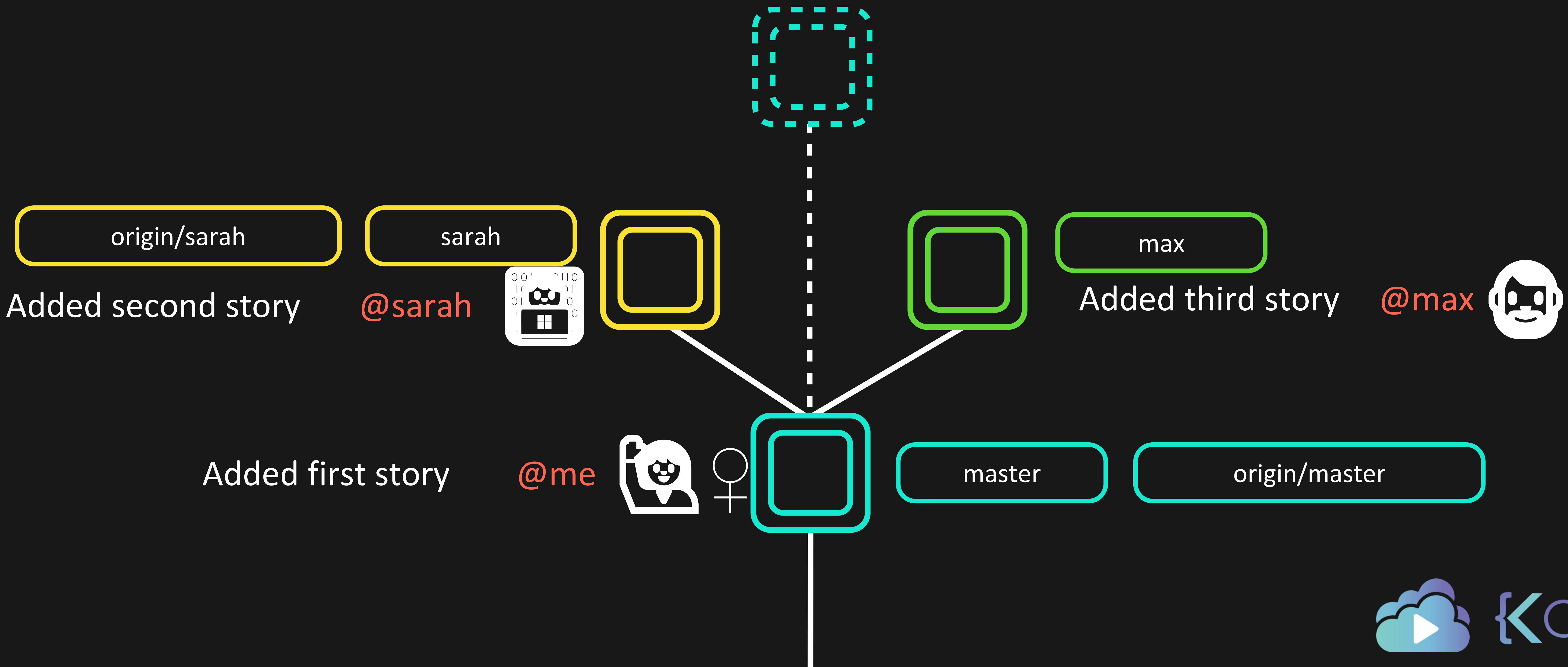
**ProTip!** Add .patch or .diff to the end of URLs for Git's plaintext views.

KODEKLOUD

# Fetching and Pulling



```
$ git fetch origin master
```



origin/sarah

sarah

Added second story

@sarah

max

Added third story

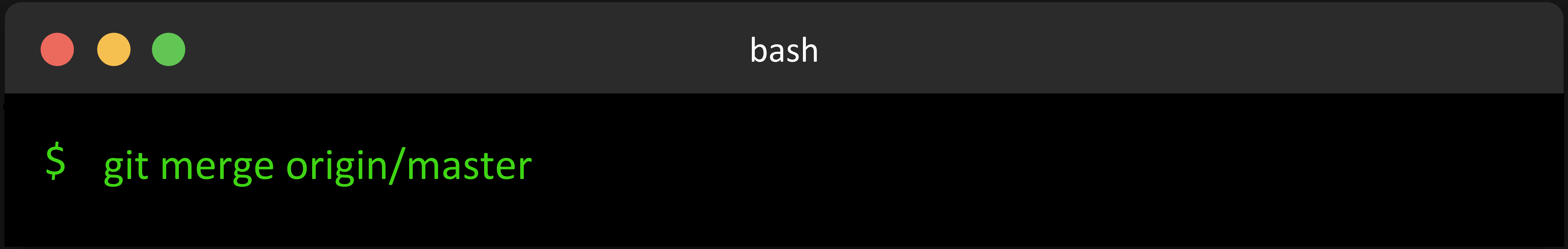
@max

Added first story

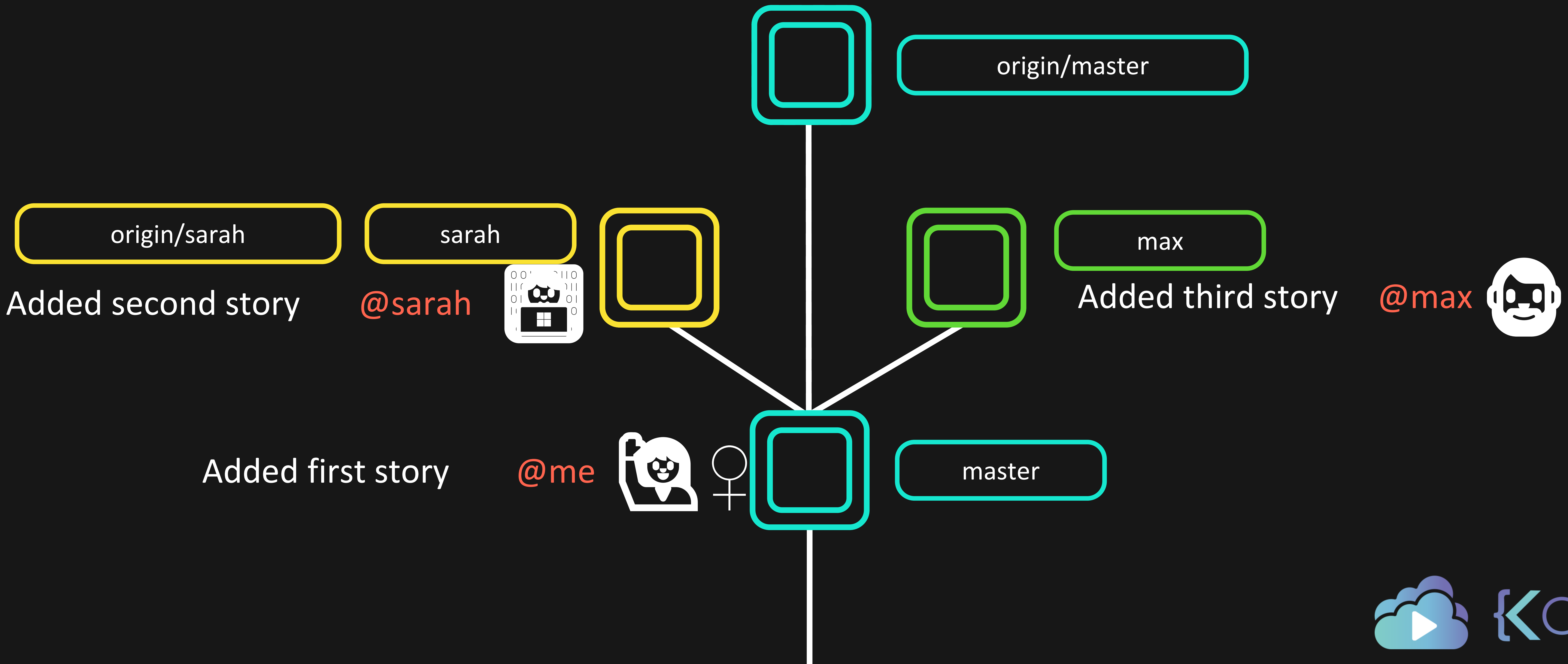
@me

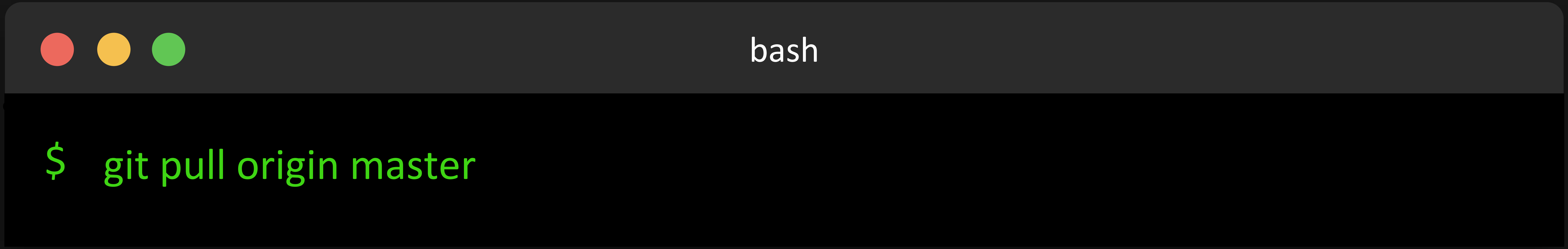
master

origin/master

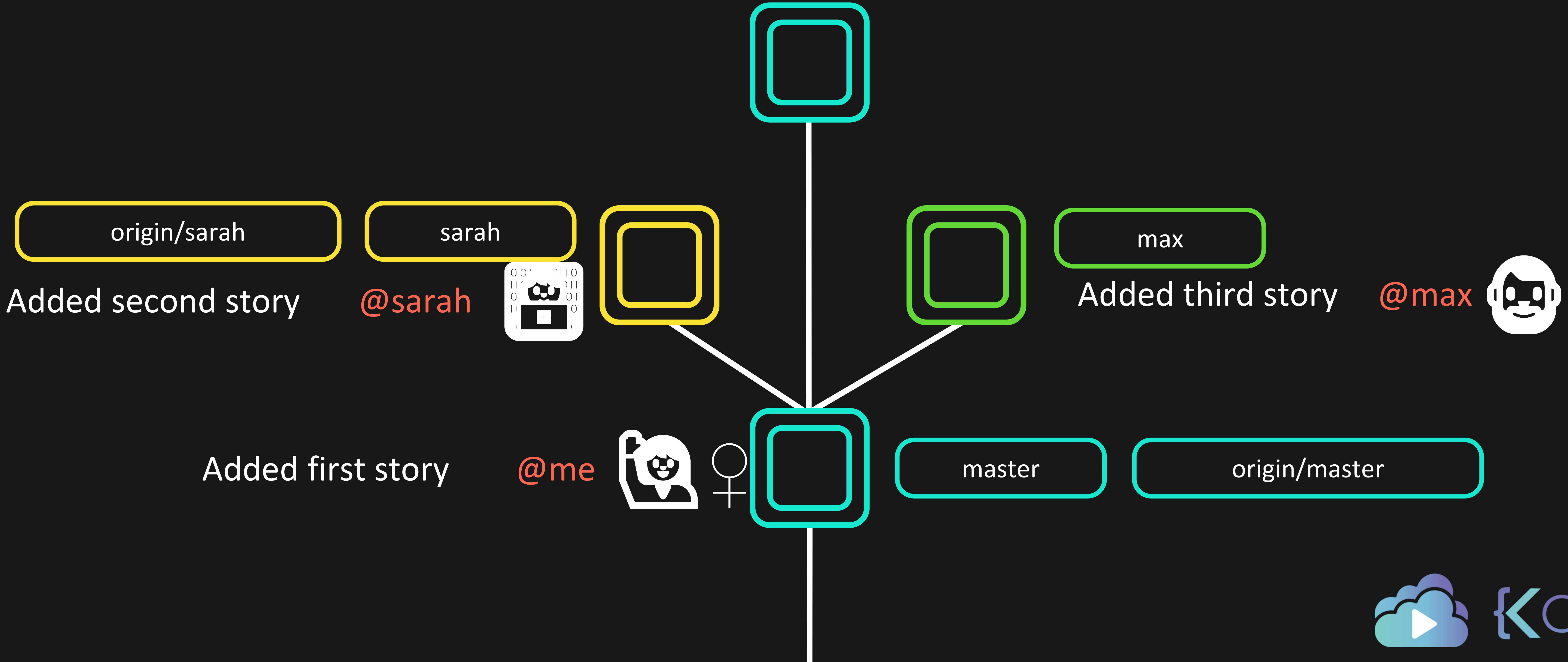


```
$ git merge origin/master
```



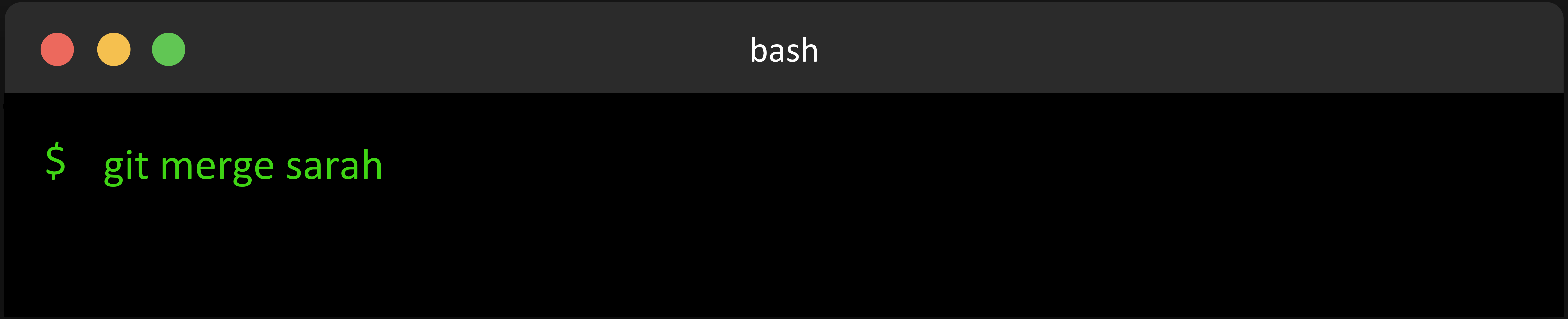


```
$ git pull origin master
```



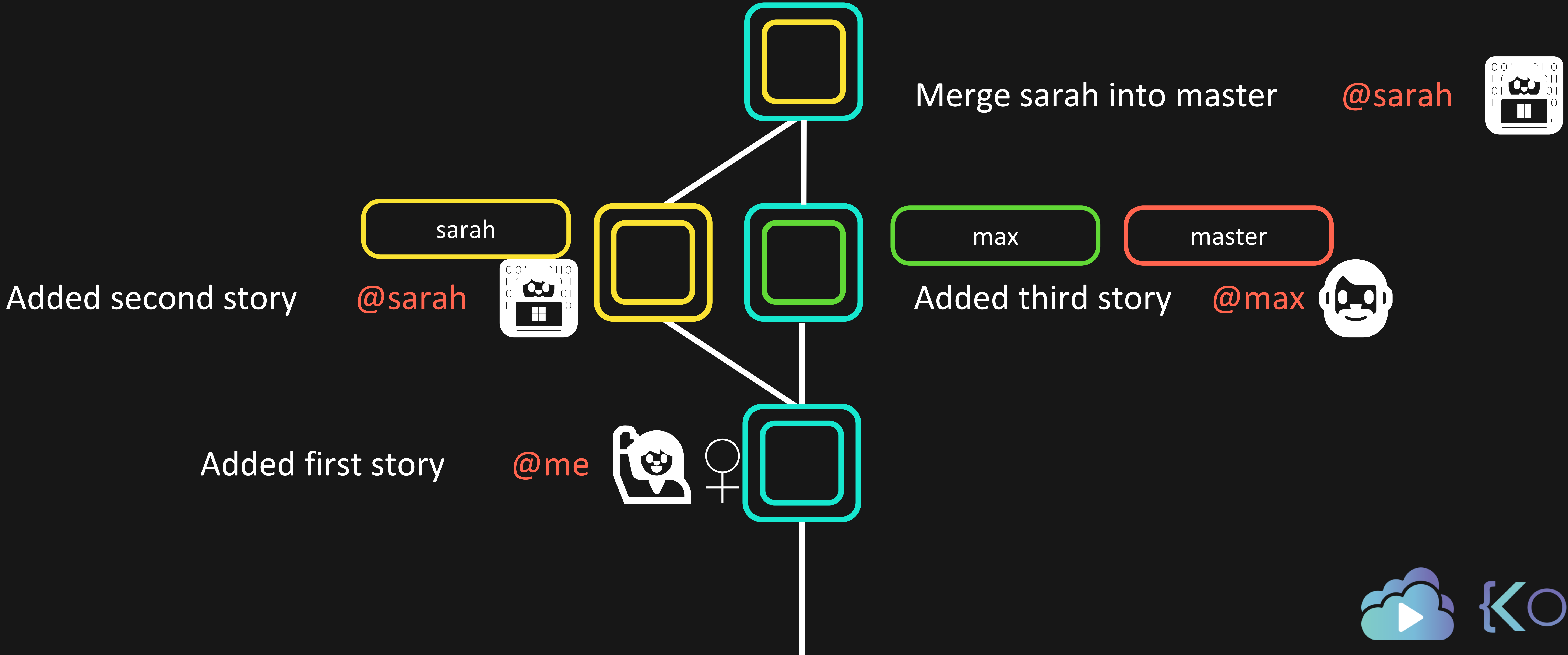
KODEKLOUD

# Rebasing



bash

```
$  git merge sarah
```



Merge sarah into master @sarah

sarah

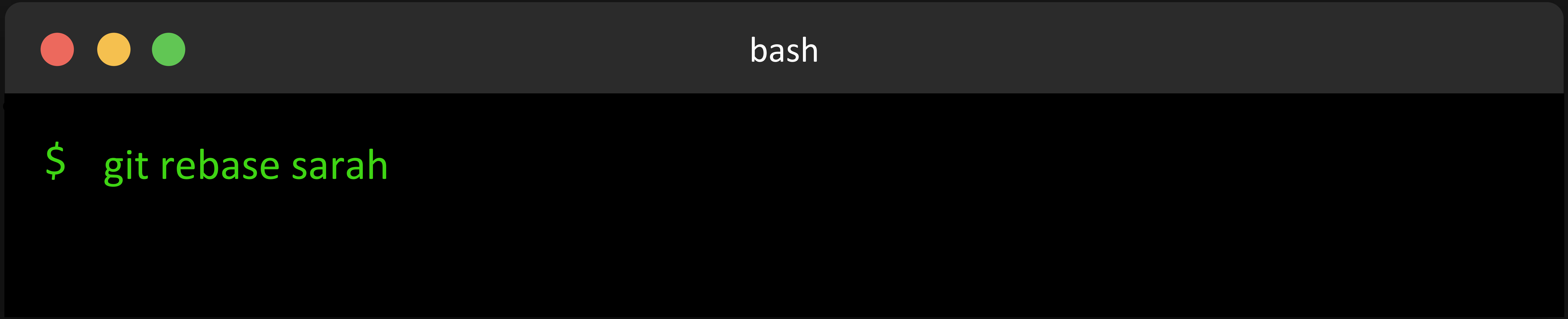
max

master

Added second story @sarah

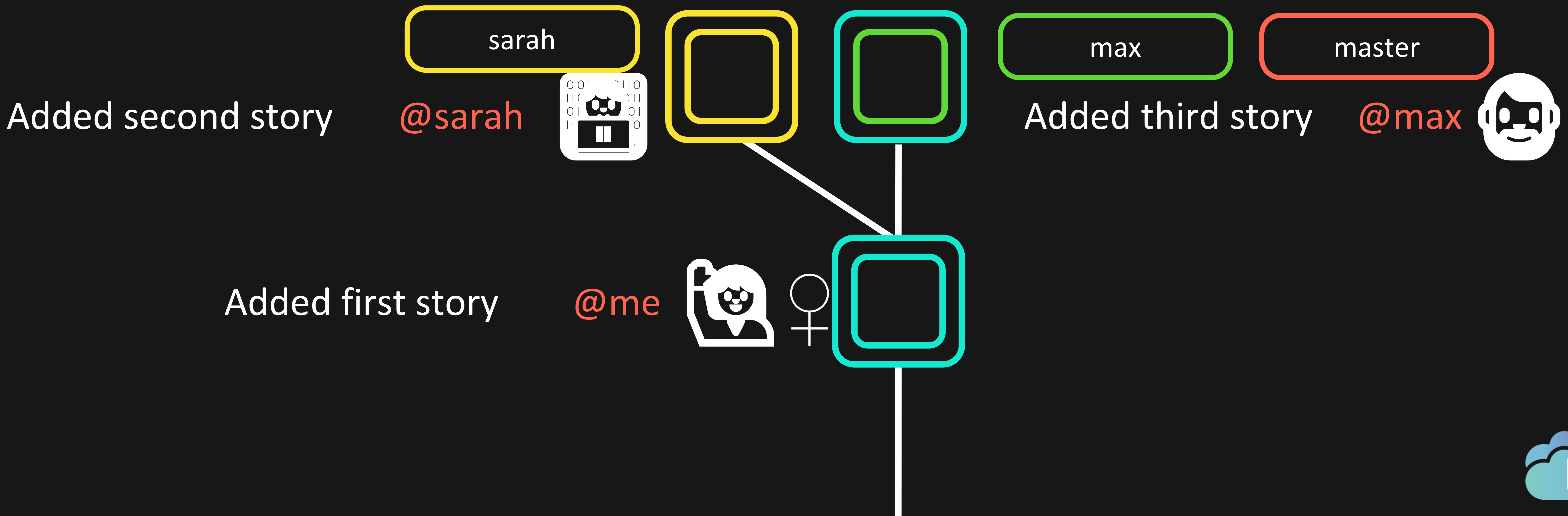
Added third story @max

Added first story @me ♀



bash

```
$ git rebase sarah
```



sarah

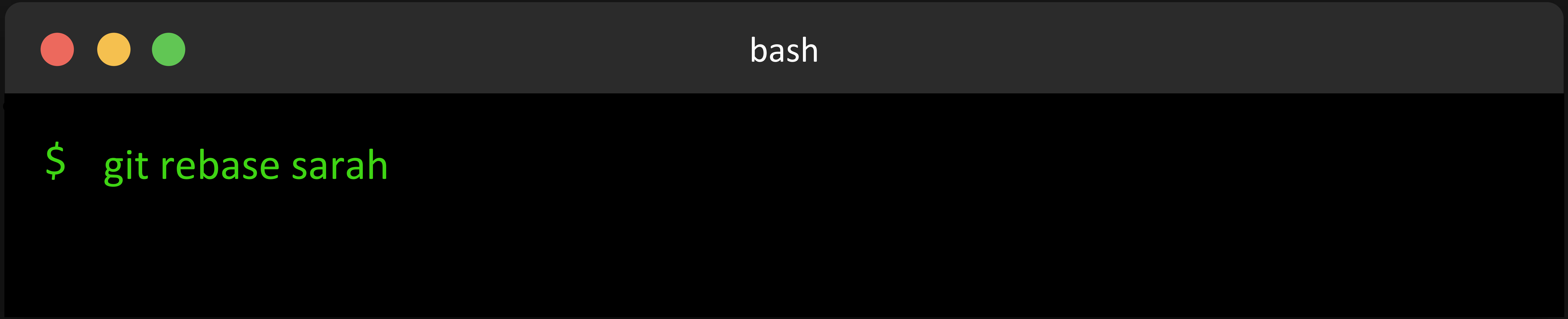
max

master

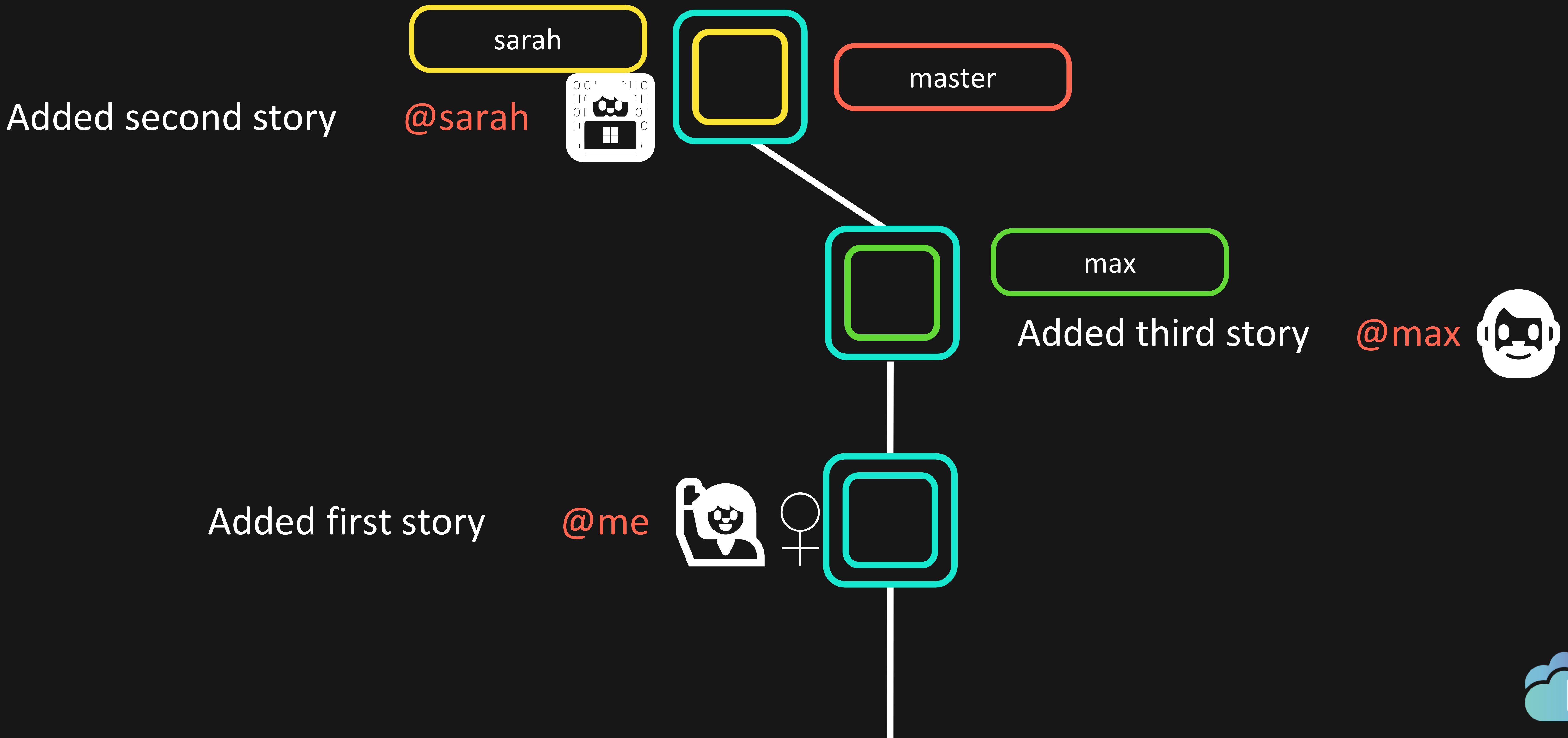
Added second story @sarah

Added third story @max

Added first story @me



```
$ git rebase sarah
```



sarah

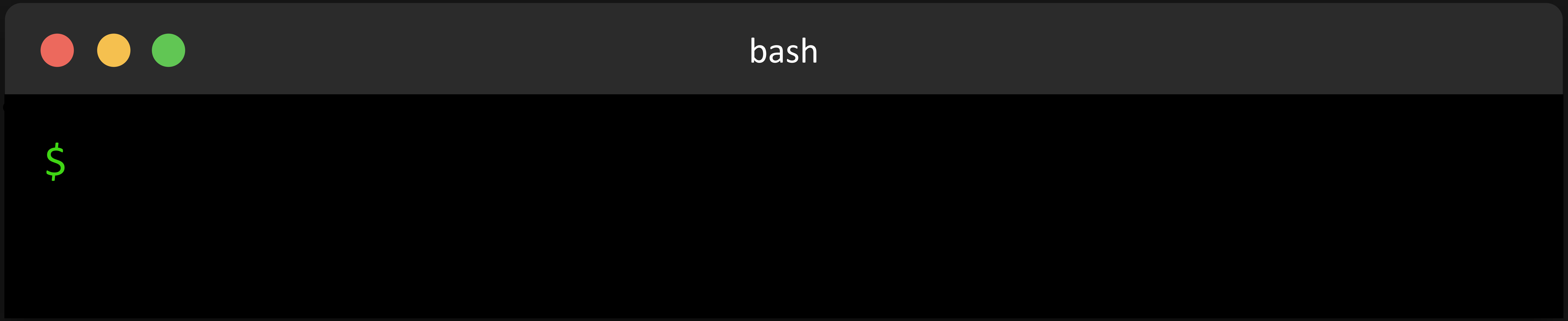
master

Added second story @sarah

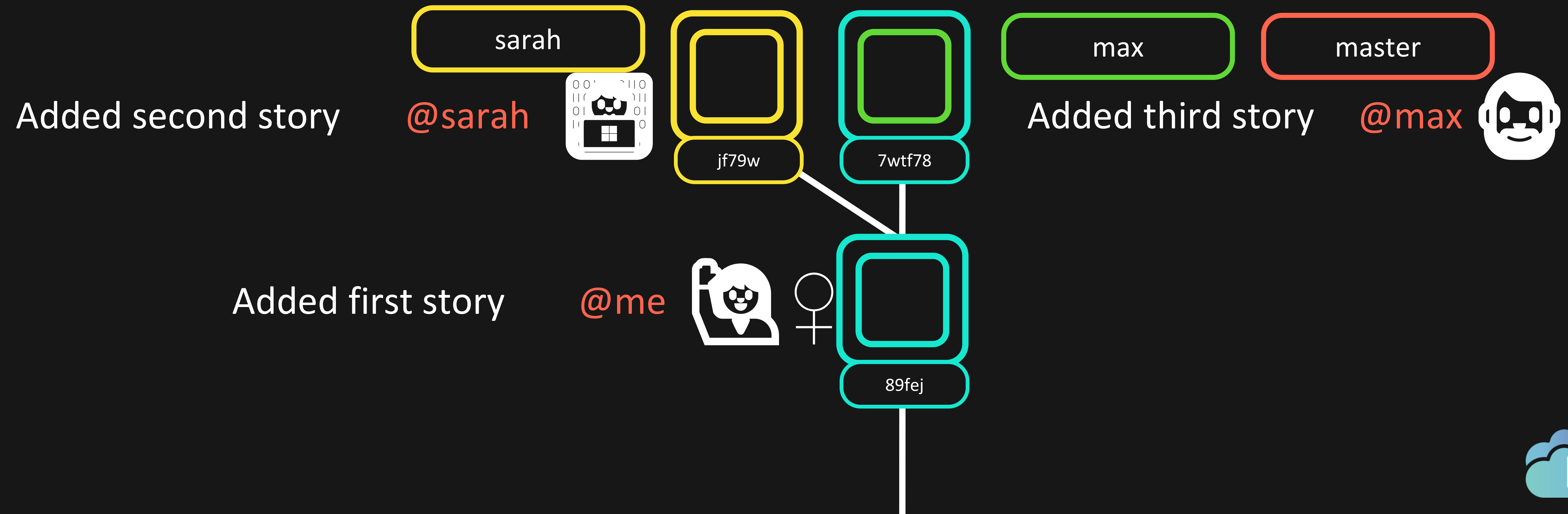
max

Added third story @max

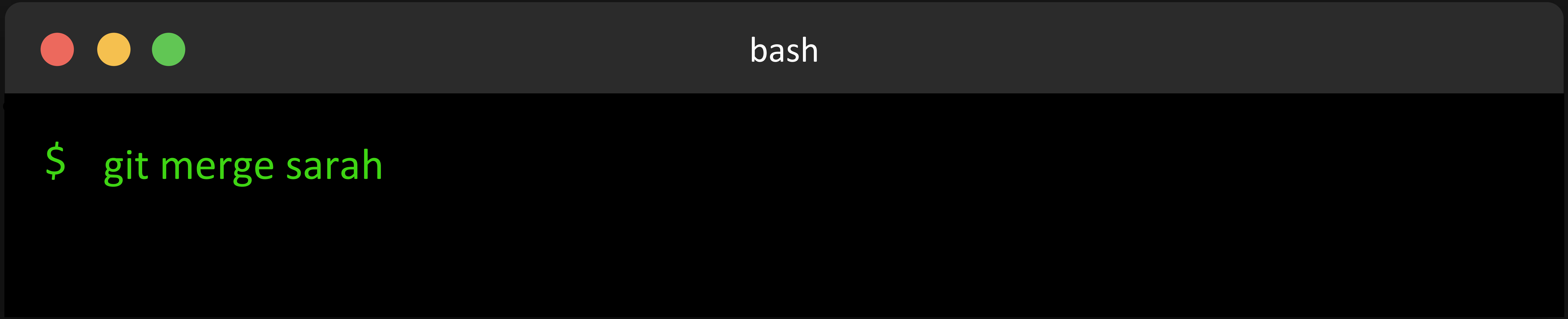
Added first story @me



```
$
```

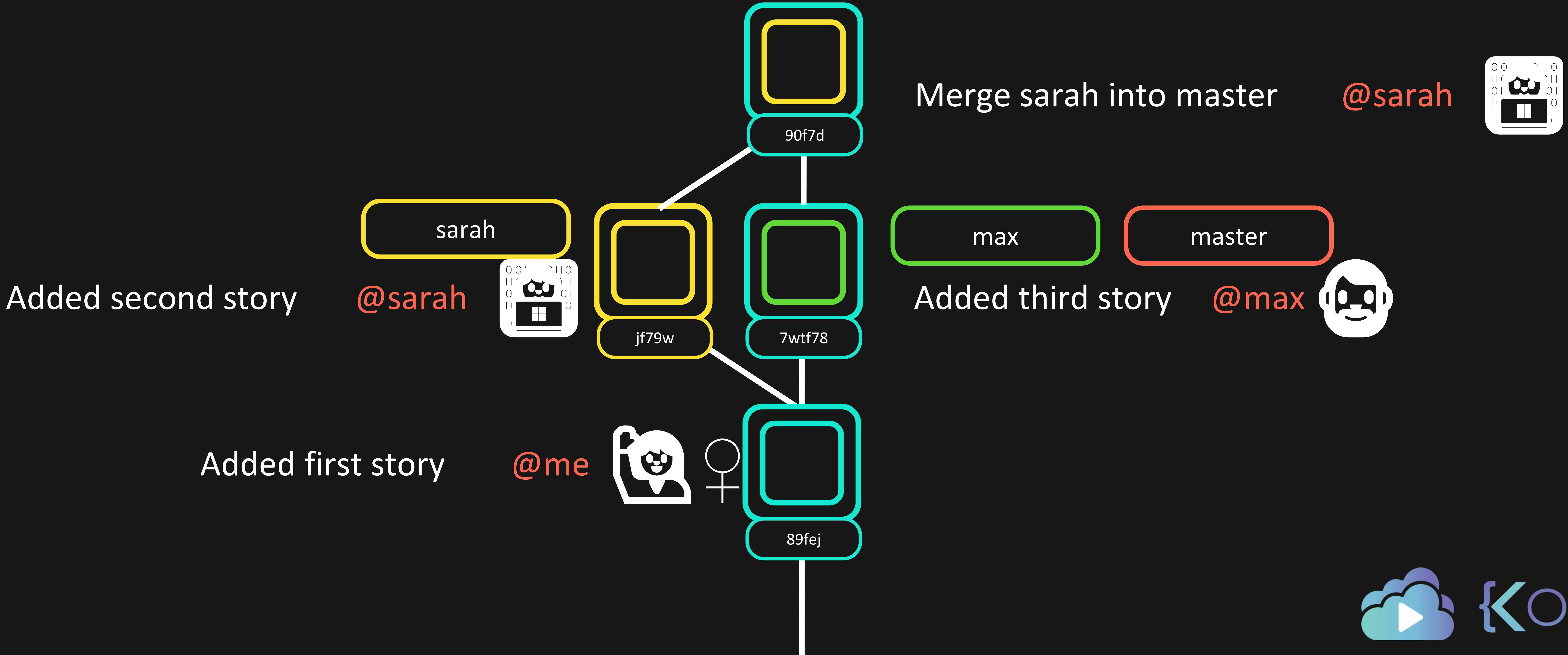


sarah
max
master
Added second story
@sarah
jf79w
7wtf78
Added third story
@max
Added first story
@me
89fej



bash

```
$ git merge sarah
```



Merge sarah into master @sarah

90f7d

sarah

max

master

Added second story @sarah

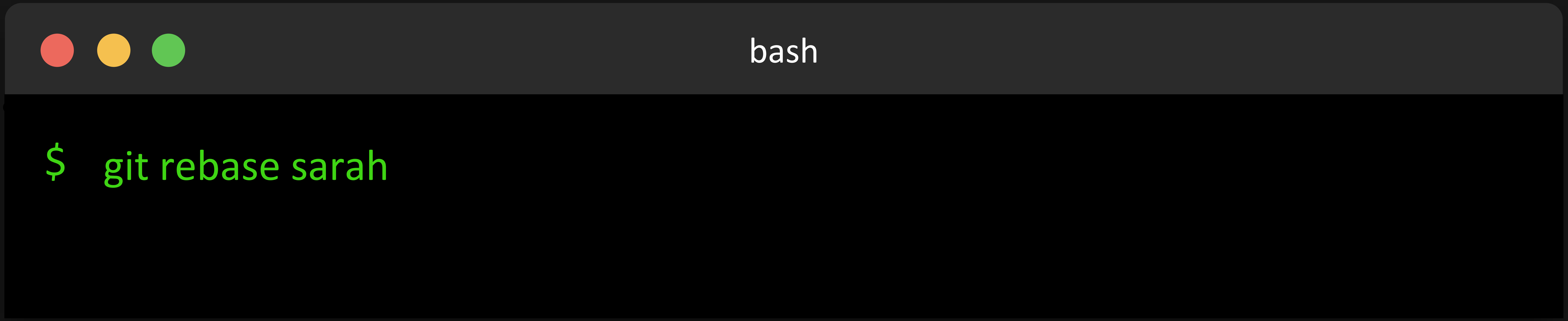
jf79w

7wtf78

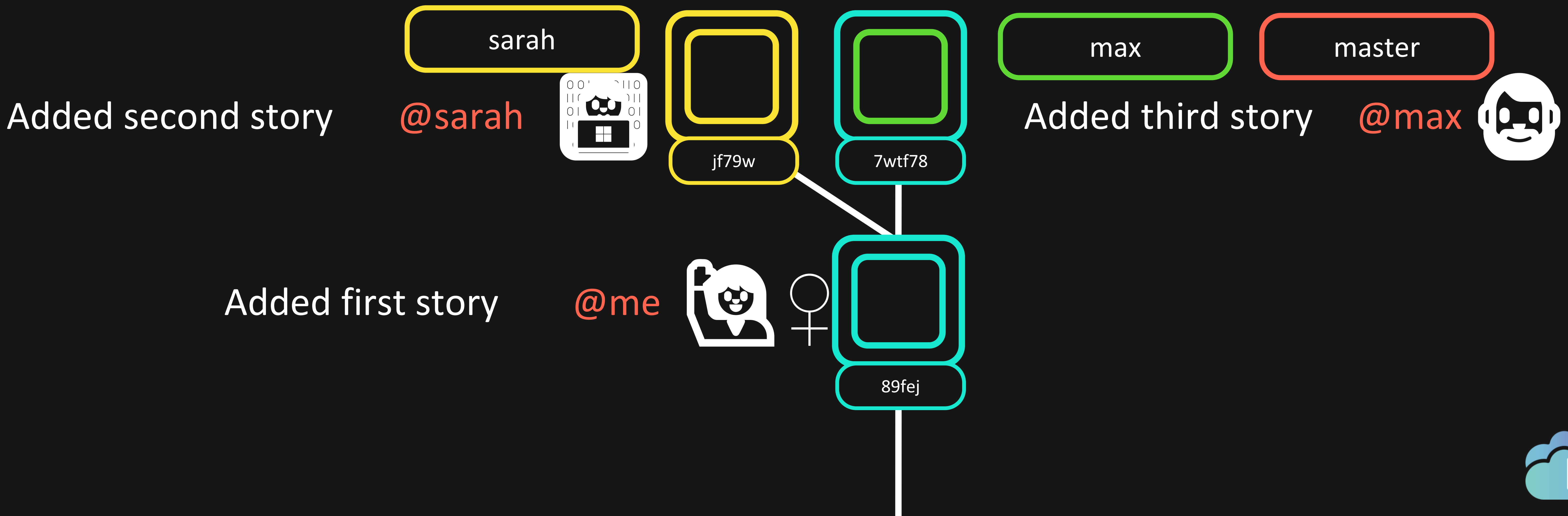
Added third story @max

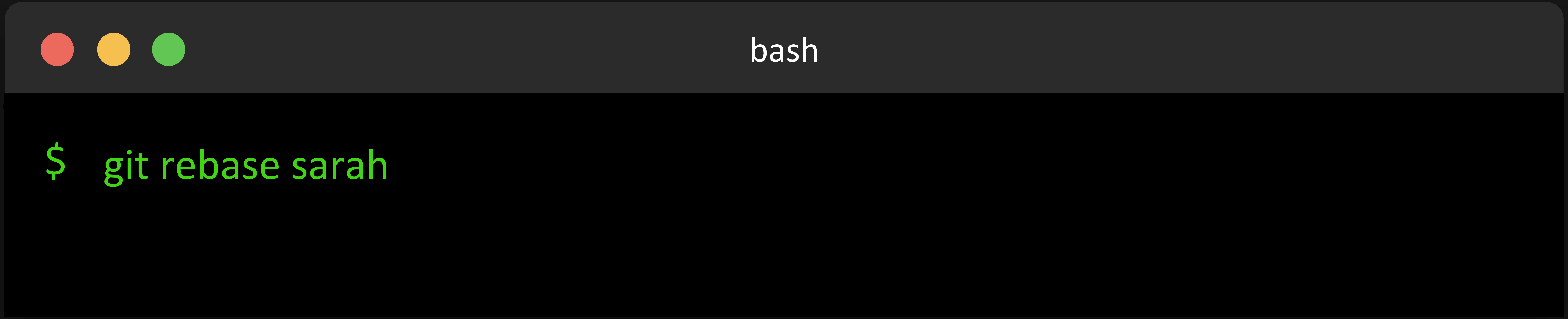
Added first story @me ♀

89fej



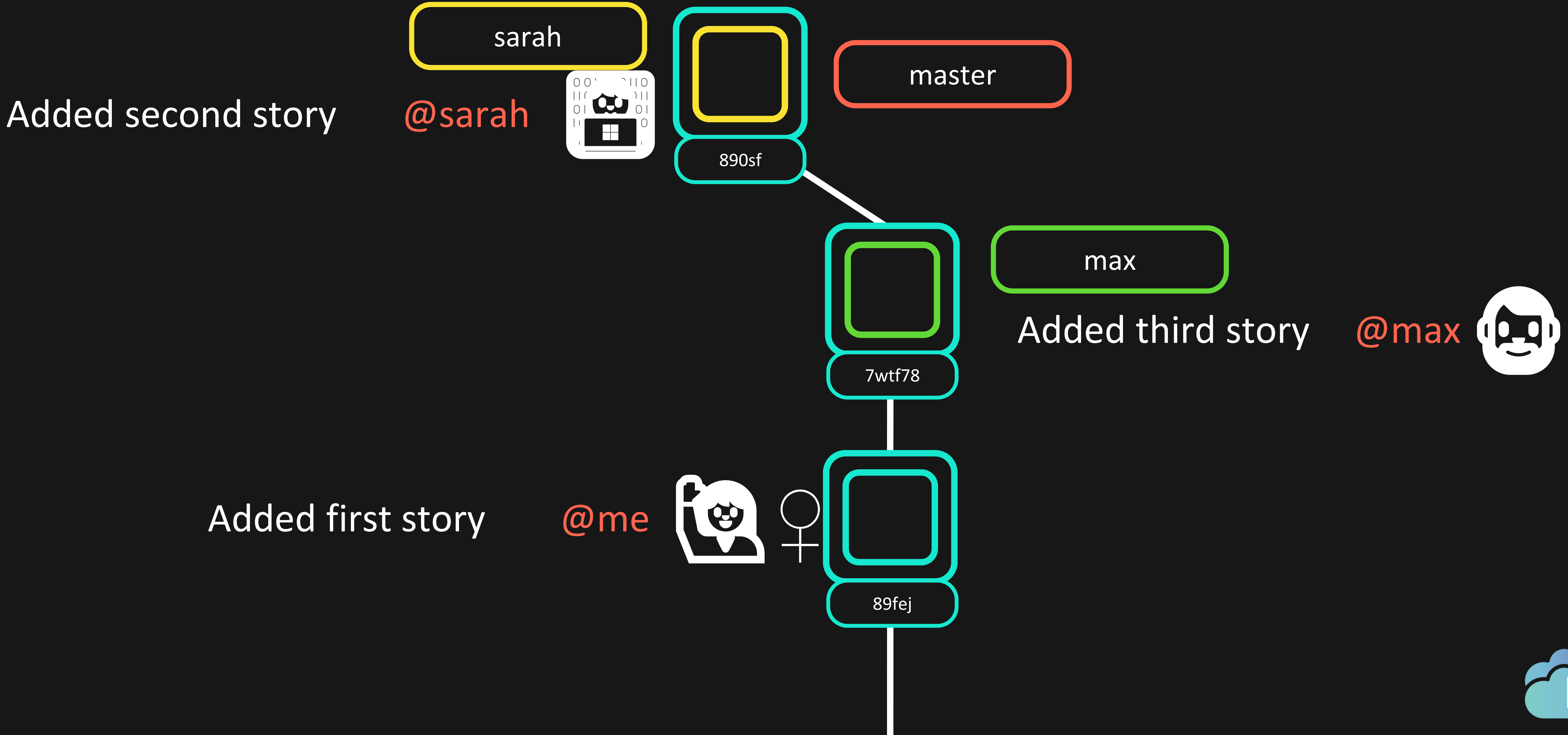
```
$ git rebase sarah
```





bash

```
$ git rebase sarah
```



sarah

master

Added second story @sarah

890sf

max

Added third story @max

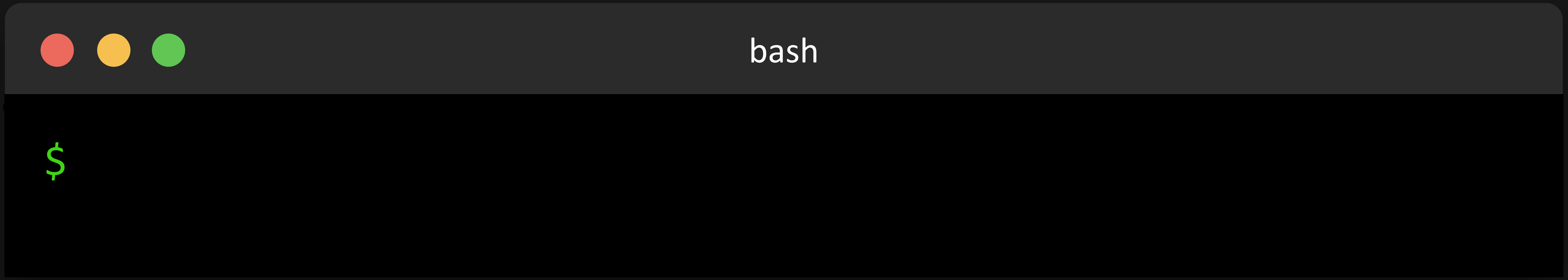
7wtf78

Added first story @me

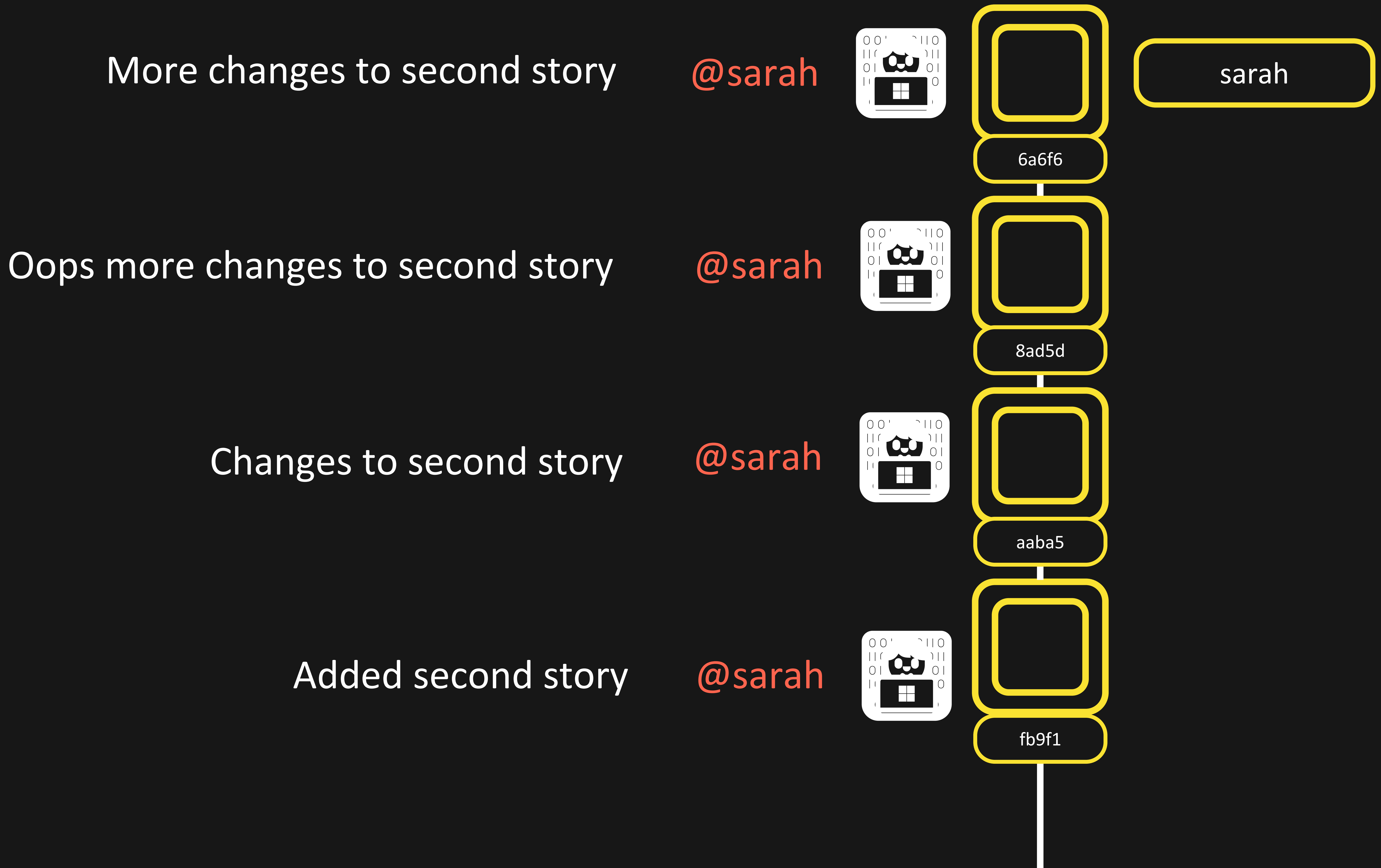
89fej

KODEKLOUD

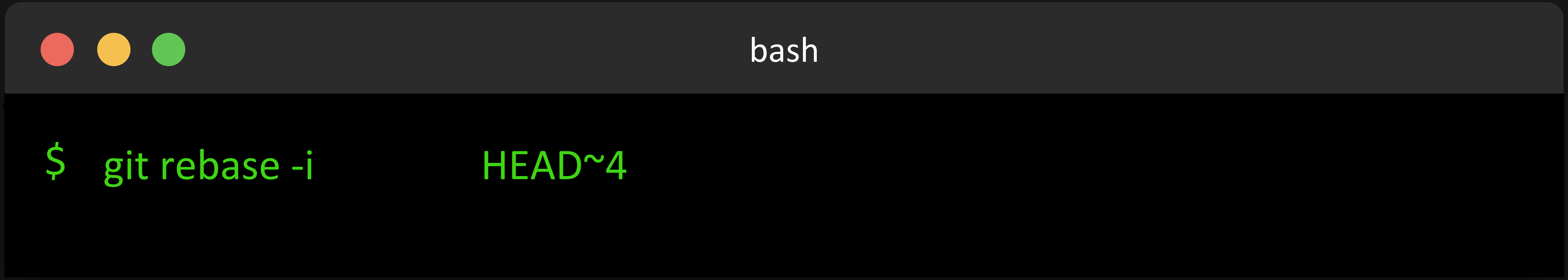
# Interactive Rebasing



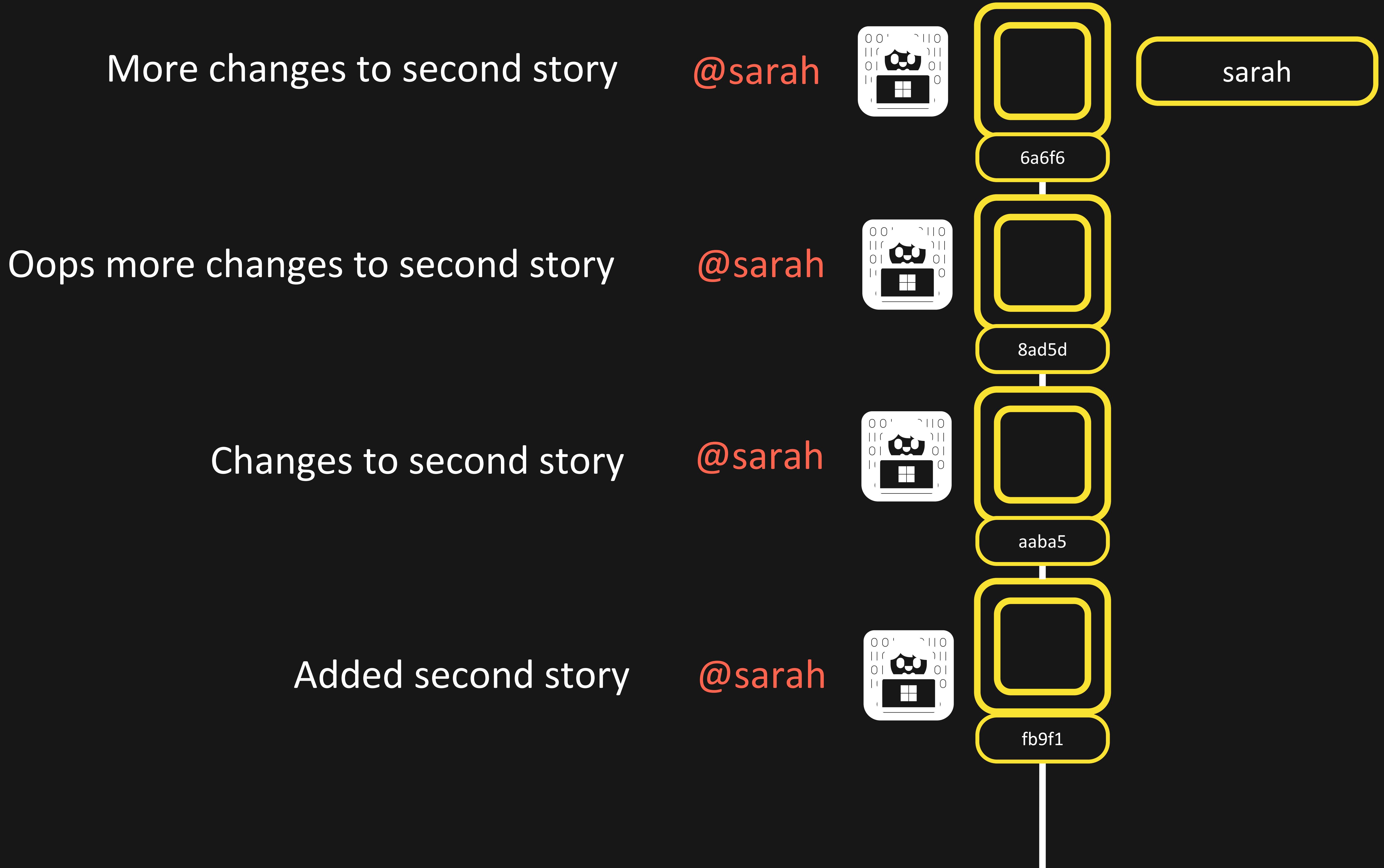
```
$
```

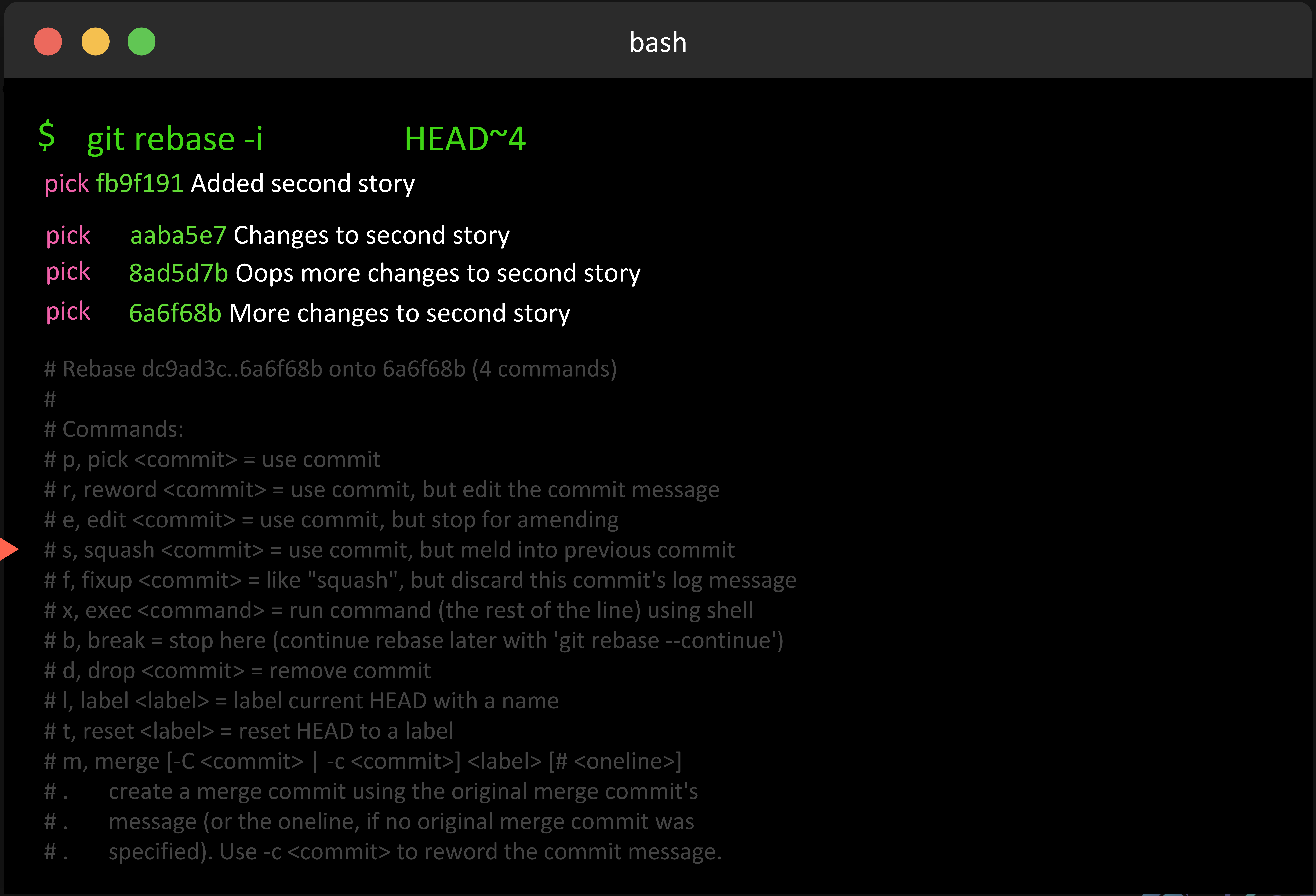


More changes to second story
@sarah
6a6f6
sarah
Oops more changes to second story
@sarah
8ad5d
Changes to second story
@sarah
aaba5
Added second story
@sarah
fb9f1

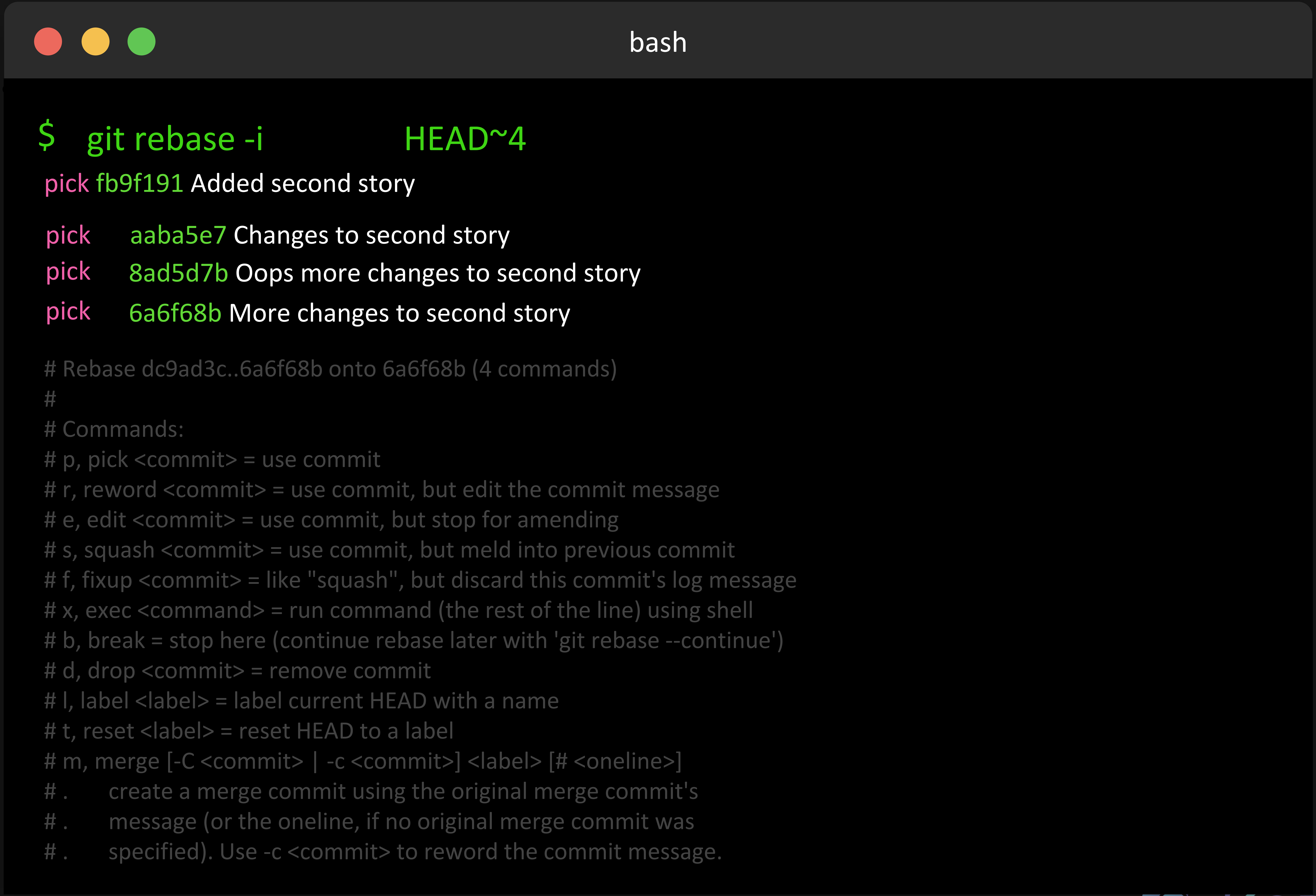


```
$  git rebase -i          HEAD~4
```

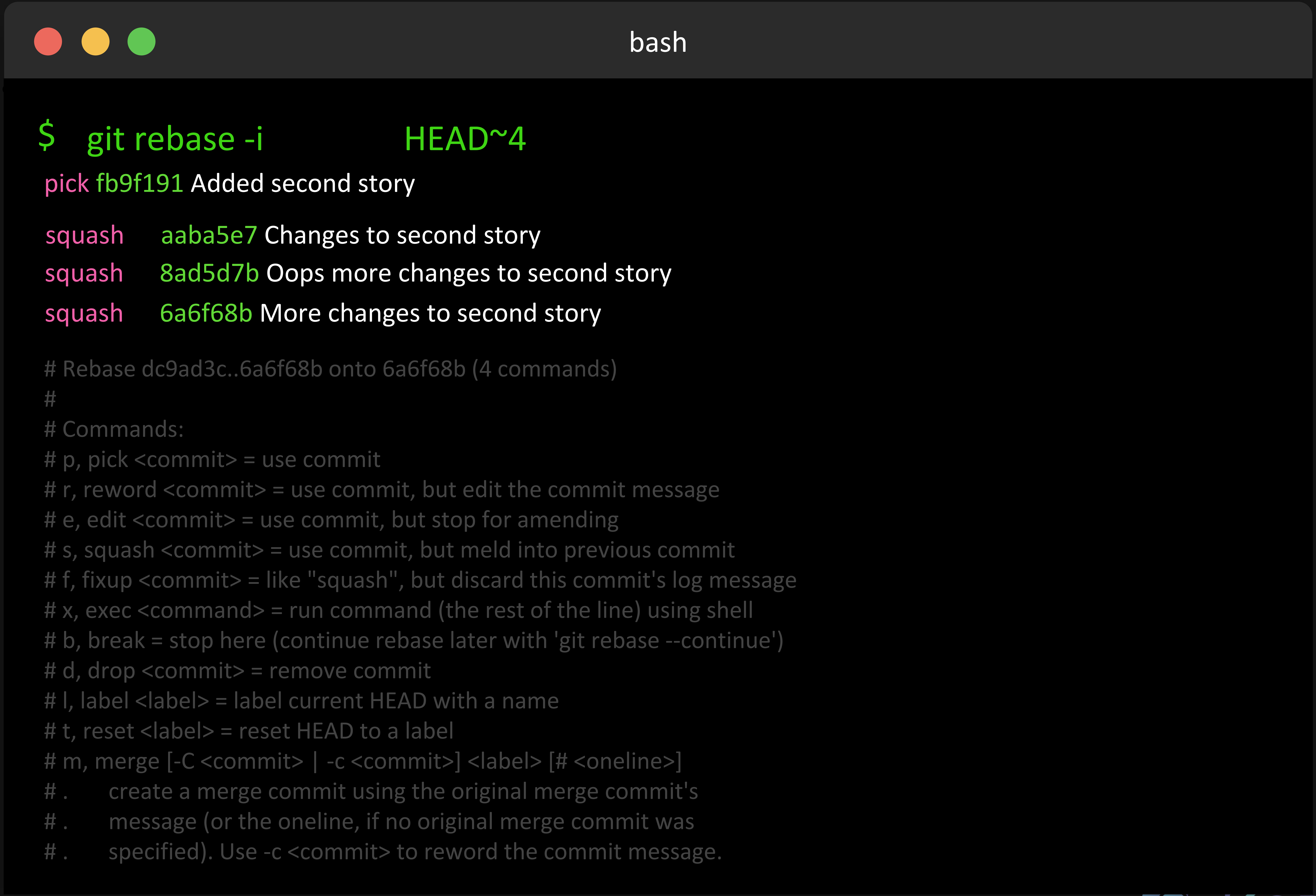




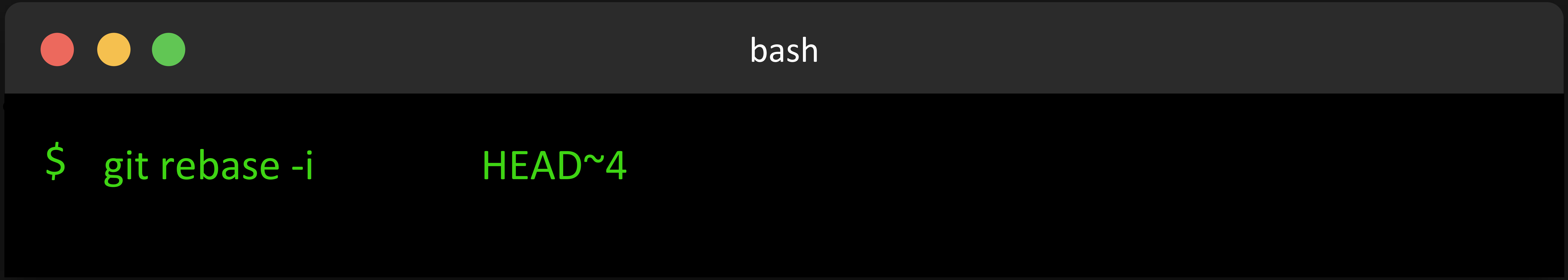
```
$  git rebase -i          HEAD~4
pick fb9f191 Added second story
pick    aaba5e7 Changes to second story
pick    8ad5d7b Oops more changes to second story
pick    6a6f68b More changes to second story

# Rebase dc9ad3c..6a6f68b onto 6a6f68b (4 commands)
#
# Commands:
# p, pick <commit> = use commit
# r, reword <commit> = use commit, but edit the commit message
# e, edit <commit> = use commit, but stop for amending
# s, squash <commit> = use commit, but meld into previous commit
# f, fixup <commit> = like "squash", but discard this commit's log message
# x, exec <command> = run command (the rest of the line) using shell
# b, break = stop here (continue rebase later with 'git rebase --continue')
# d, drop <commit> = remove commit
# l, label <label> = label current HEAD with a name
# t, reset <label> = reset HEAD to a label
# m, merge [-C <commit> | -c <commit>] <label> [# <oneline>]
# .      create a merge commit using the original merge commit's
# .      message (or the oneline, if no original merge commit was
# .      specified). Use -c <commit> to reword the commit message.
```



```
$   git rebase -i              HEAD~4
pick fb9f191 Added second story
pick     aaba5e7 Changes to second story
pick     8ad5d7b Oops more changes to second story
pick     6a6f68b More changes to second story

# Rebase dc9ad3c..6a6f68b onto 6a6f68b (4 commands)
#
# Commands:
# p, pick <commit> = use commit
# r, reword <commit> = use commit, but edit the commit message
# e, edit <commit> = use commit, but stop for amending
# s, squash <commit> = use commit, but meld into previous commit
# f, fixup <commit> = like "squash", but discard this commit's log message
# x, exec <command> = run command (the rest of the line) using shell
# b, break = stop here (continue rebase later with 'git rebase --continue')
# d, drop <commit> = remove commit
# l, label <label> = label current HEAD with a name
# t, reset <label> = reset HEAD to a label
# m, merge [-C <commit> | -c <commit>] <label> [# <oneline>]
# .       create a merge commit using the original merge commit's
# .       message (or the oneline, if no original merge commit was
# .       specified). Use -c <commit> to reword the commit message.
```

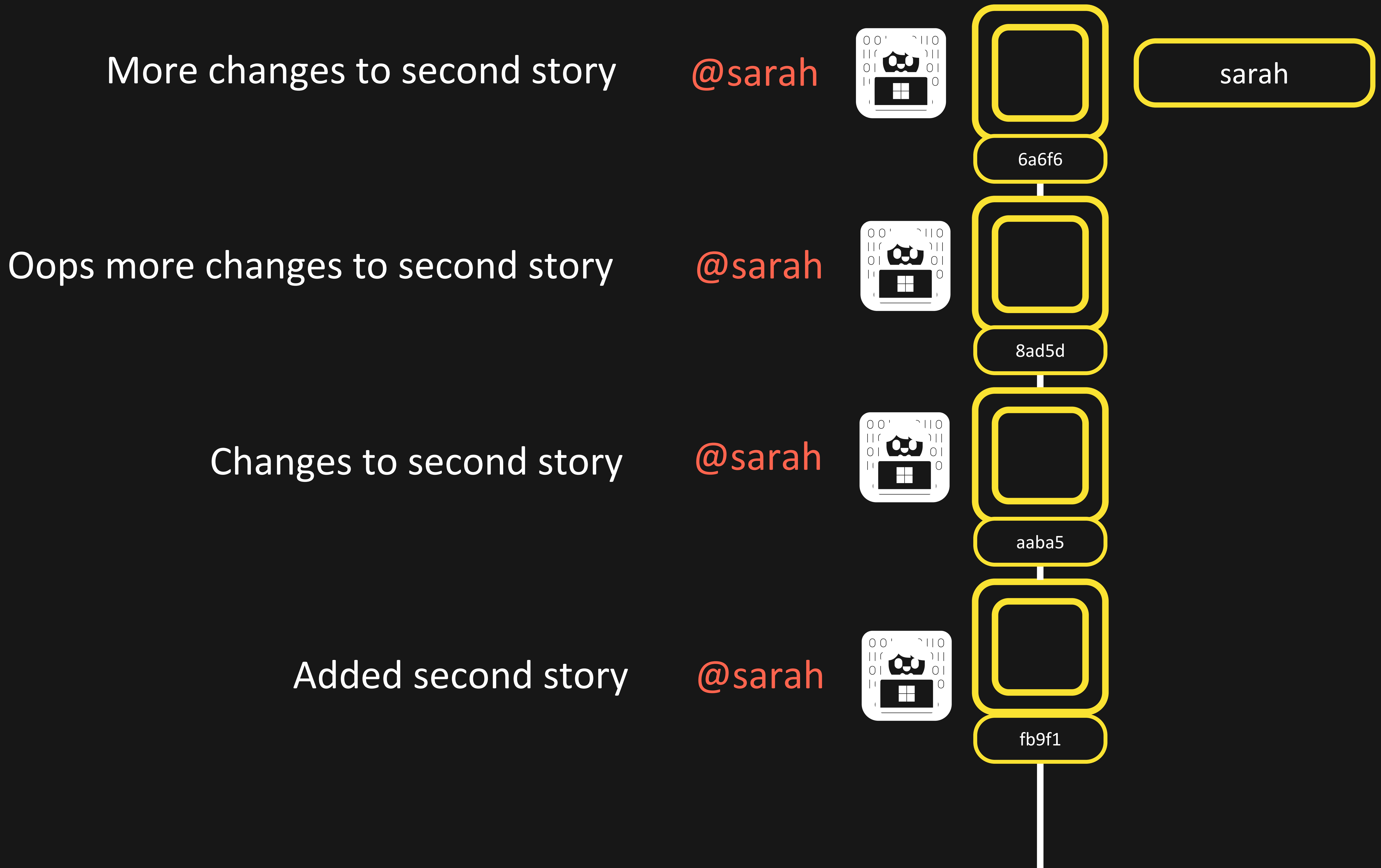


```
$  git rebase -i            HEAD~4
pick fb9f191 Added second story
squash   aaba5e7 Changes to second story
squash   8ad5d7b Oops more changes to second story
squash   6a6f68b More changes to second story

# Rebase dc9ad3c..6a6f68b onto 6a6f68b (4 commands)
#
# Commands:
# p, pick <commit> = use commit
# r, reword <commit> = use commit, but edit the commit message
# e, edit <commit> = use commit, but stop for amending
# s, squash <commit> = use commit, but meld into previous commit
# f, fixup <commit> = like "squash", but discard this commit's log message
# x, exec <command> = run command (the rest of the line) using shell
# b, break = stop here (continue rebase later with 'git rebase --continue')
# d, drop <commit> = remove commit
# l, label <label> = label current HEAD with a name
# t, reset <label> = reset HEAD to a label
# m, merge [-C <commit> | -c <commit>] <label> [# <oneline>]
# .      create a merge commit using the original merge commit's
# .      message (or the oneline, if no original merge commit was
# .      specified). Use -c <commit> to reword the commit message.
```



bash

```
$ git rebase -i          HEAD~4
```

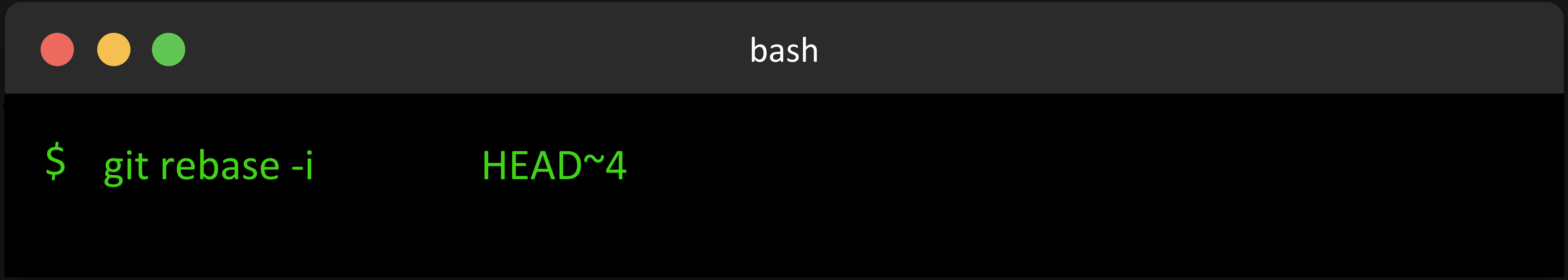


More changes to second story @sarah

Oops more changes to second story @sarah

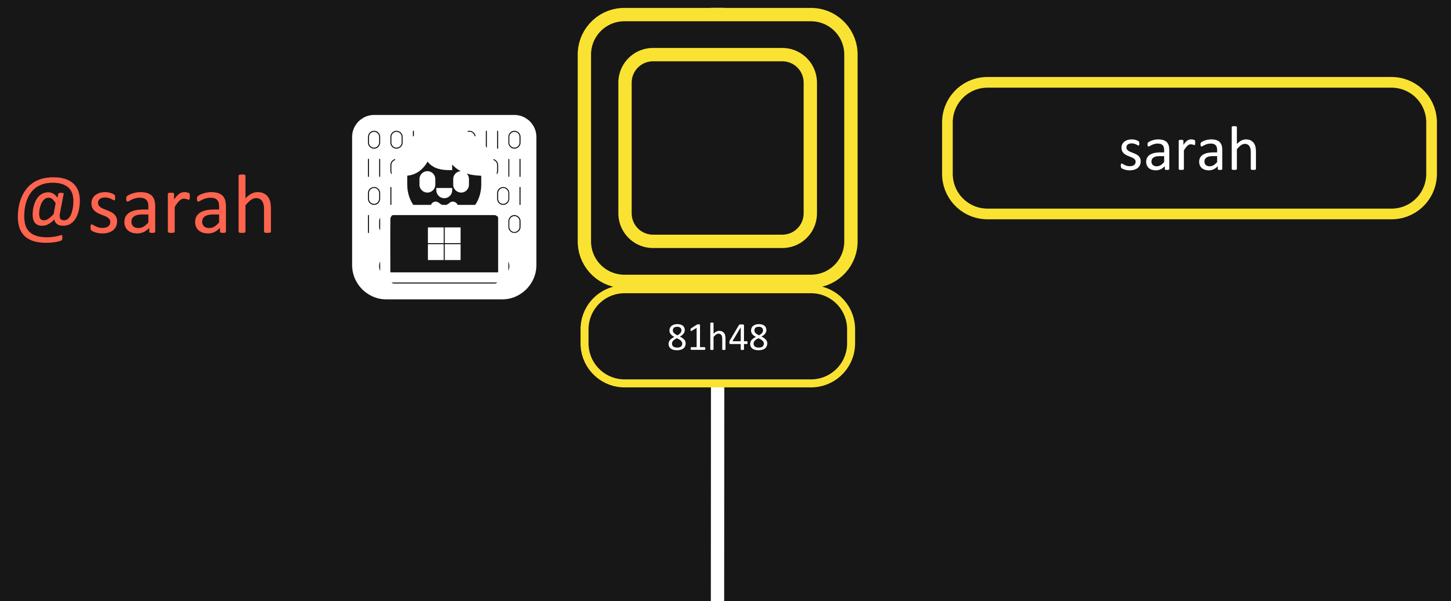
Changes to second story @sarah

Added second story @sarah



```
$ git rebase -i          HEAD~4
```

Added second story
Changes to second story
Oops more changes to second story
More changes to second story

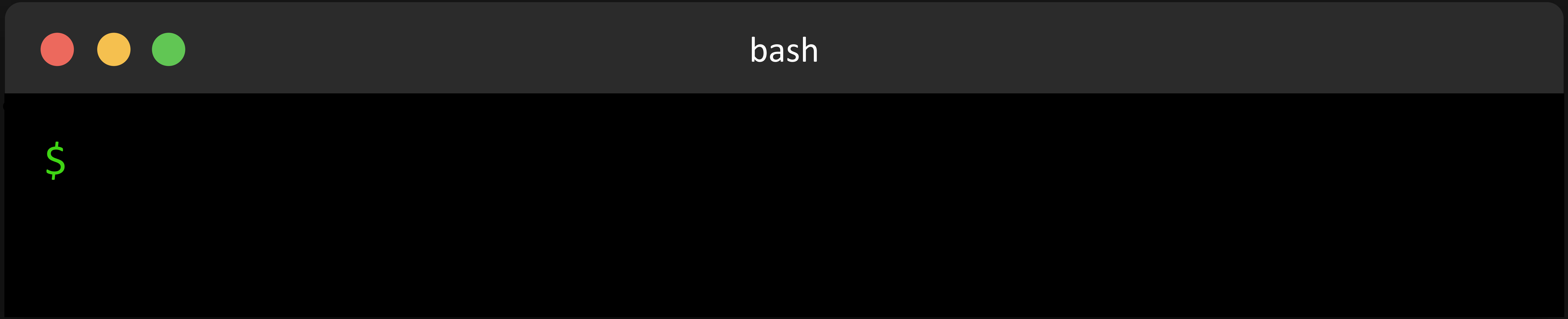

@sarah

81h48

sarah

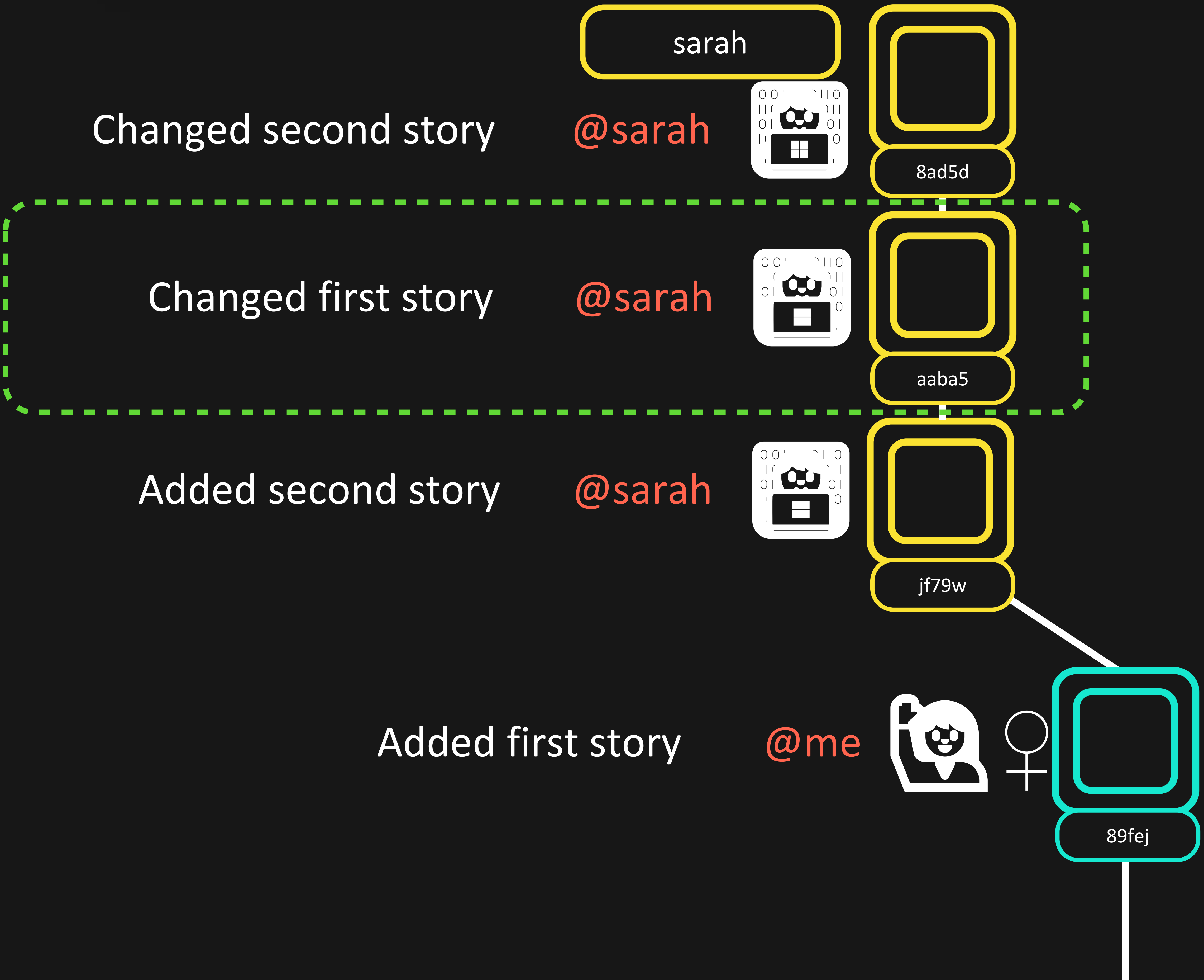
KODEKLOUD

# Cherry-Picking



bash

```
$
```



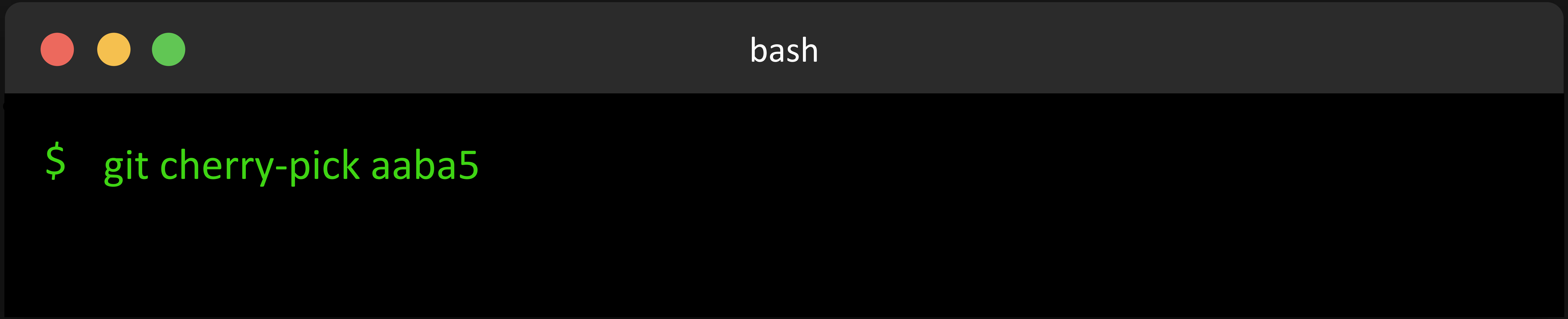
sarah

Changed second story @sarah 8ad5d

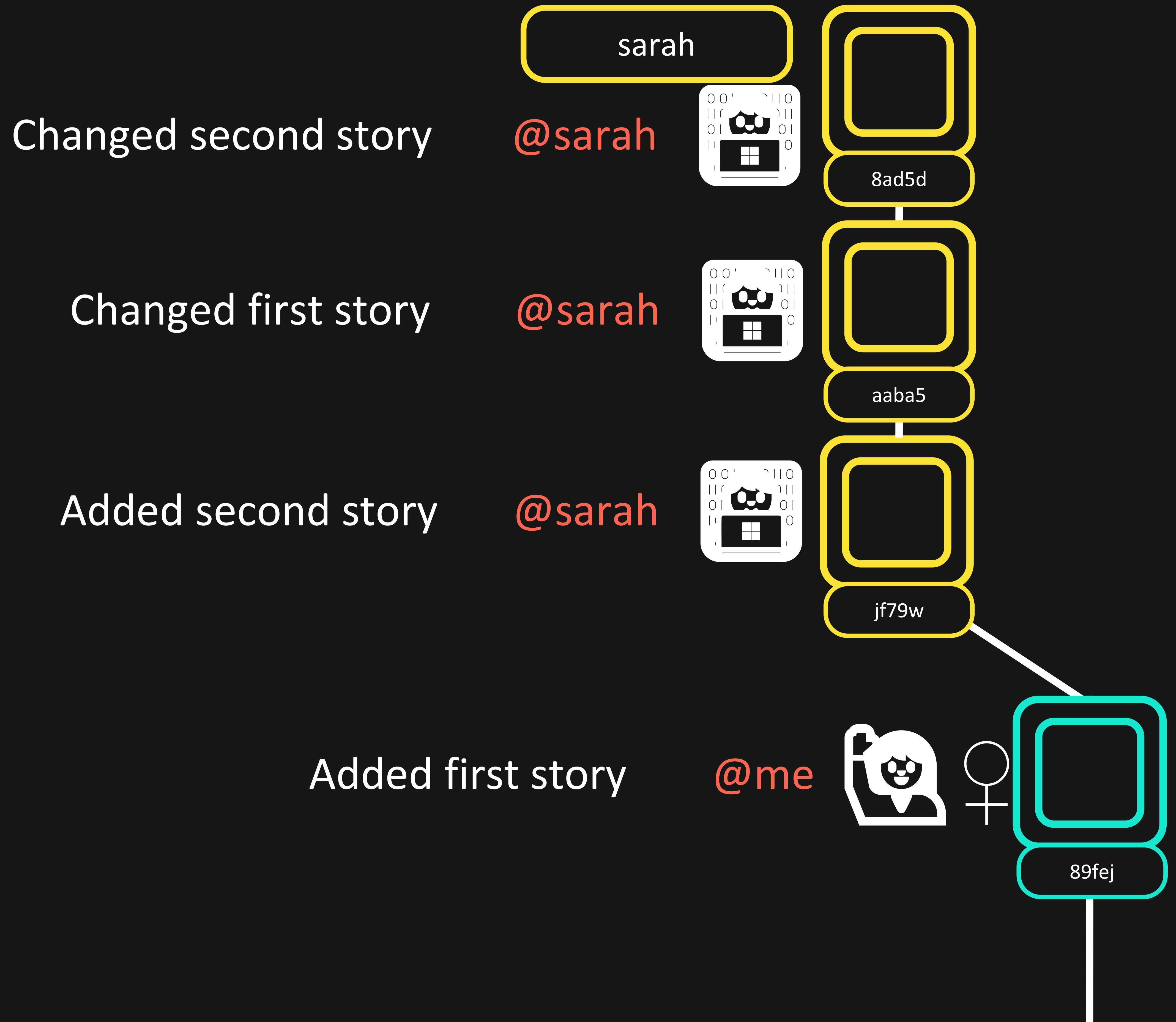
Changed first story @sarah aaba5

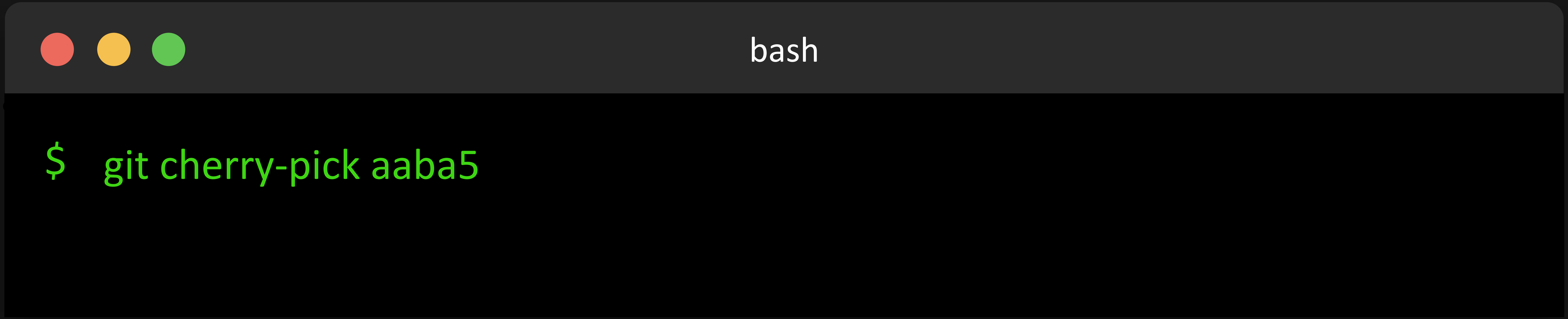
Added second story @sarah jf79w

Added first story @me 89fej

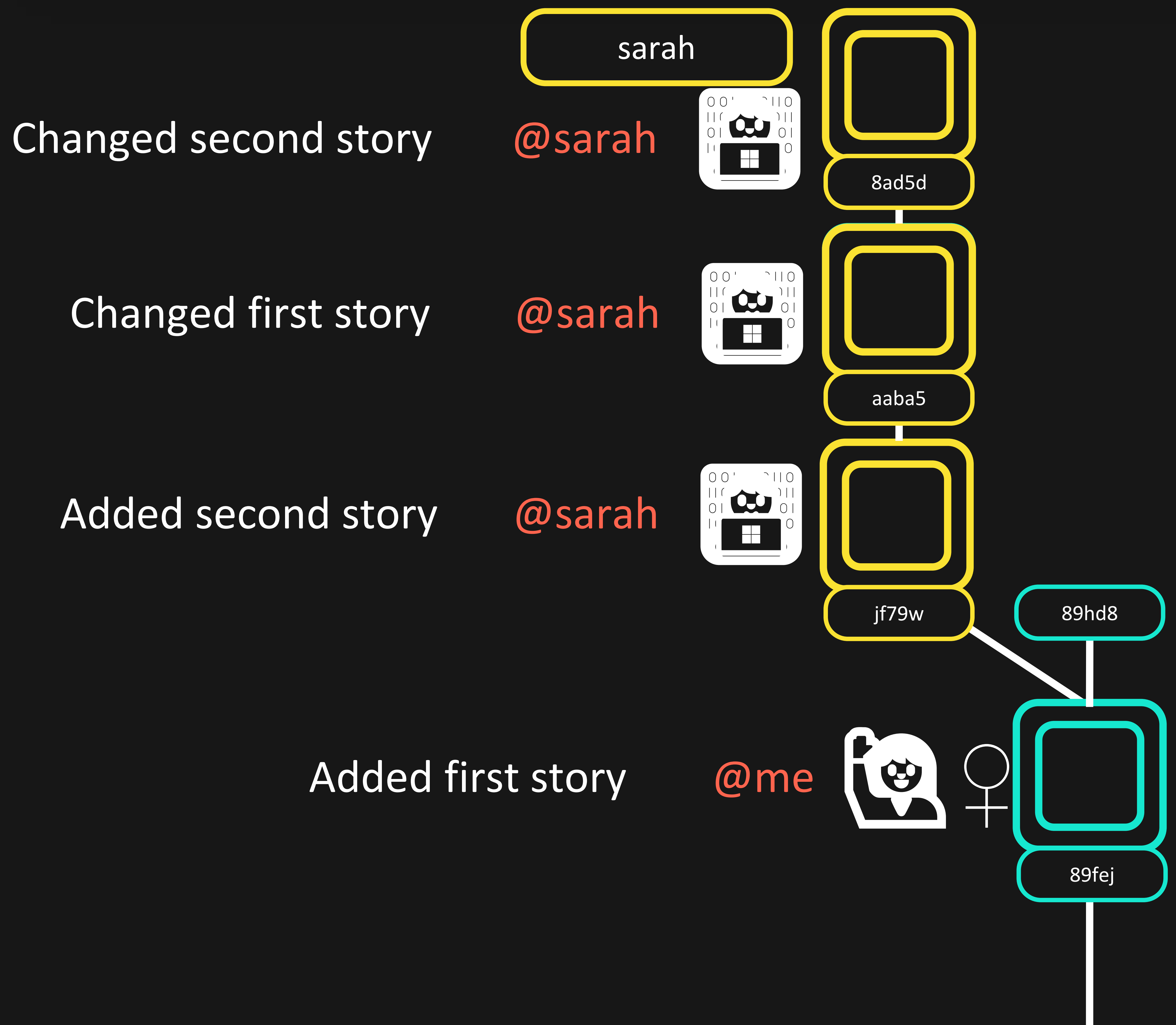


```
$  git cherry-pick aaba5
```





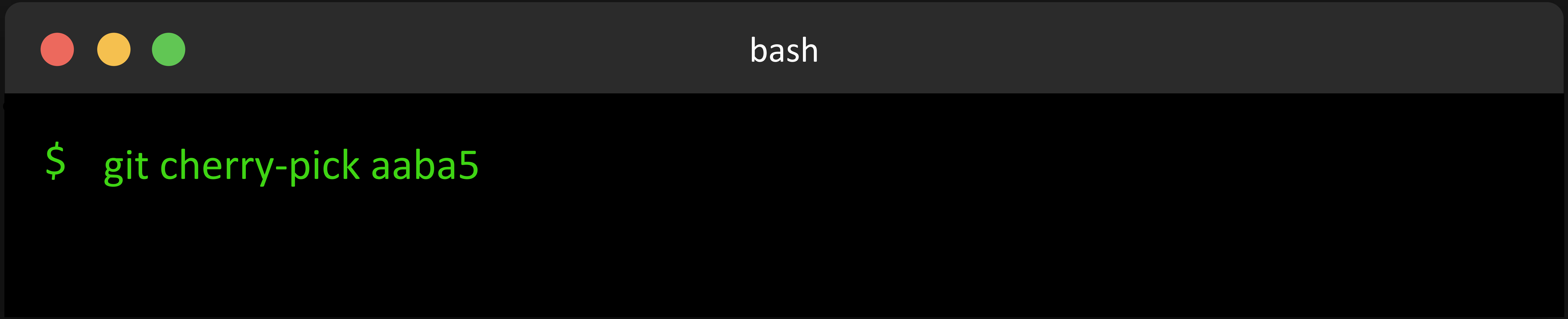
```
$ git cherry-pick aaba5
```


Changed second story @sarah

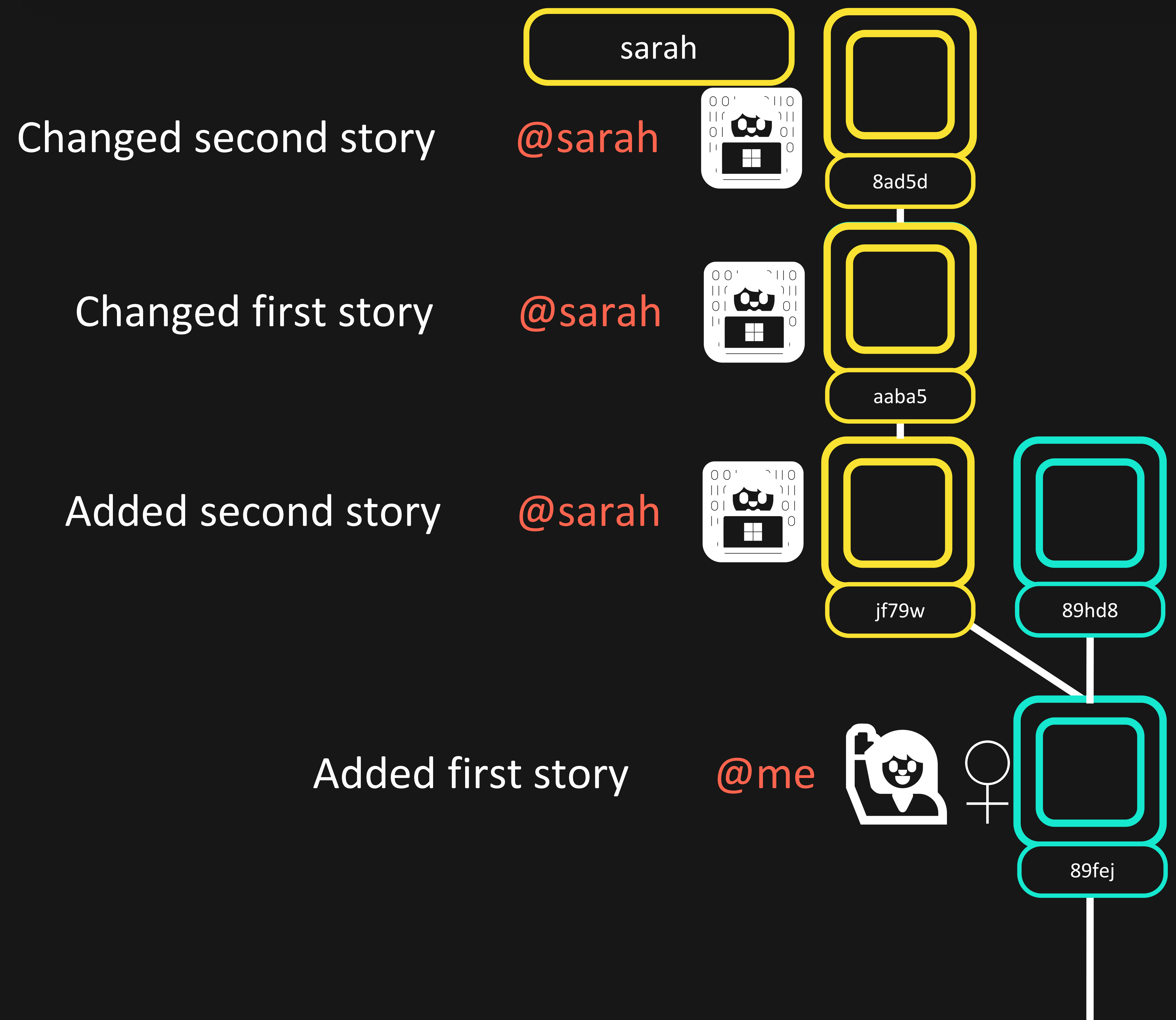
Changed first story @sarah

Added second story @sarah

Added first story @me



```
$ git cherry-pick aaba5
```



sarah

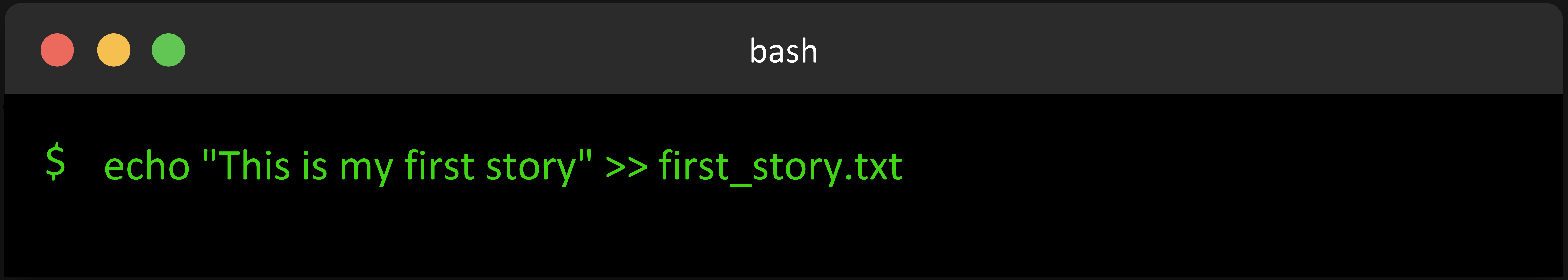
Changed second story @sarah 8ad5d

Changed first story @sarah aaba5

Added second story @sarah jf79w

89hd8

Added first story @me 89fej



```
$  echo "This is my first story" >> first_story.txt
```

## Porcelain Commands

git add

git status

git commit

git stash

…

## Plumbing Commands

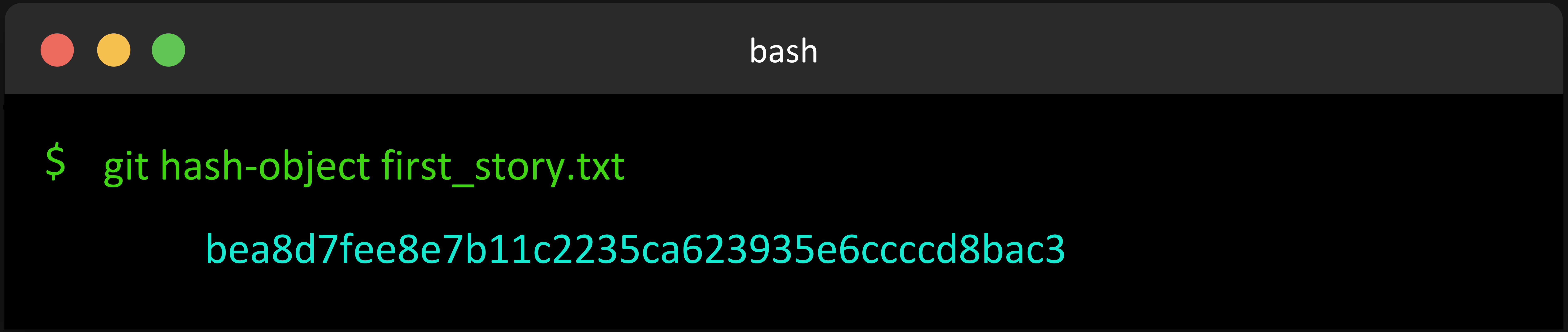
git hash-object

git ls-files

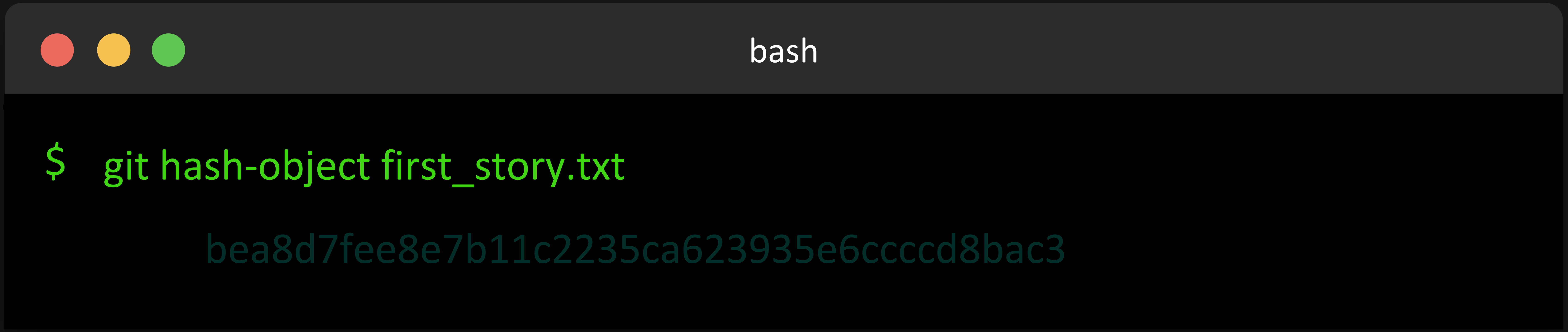
git rev-parse

git ls-remote

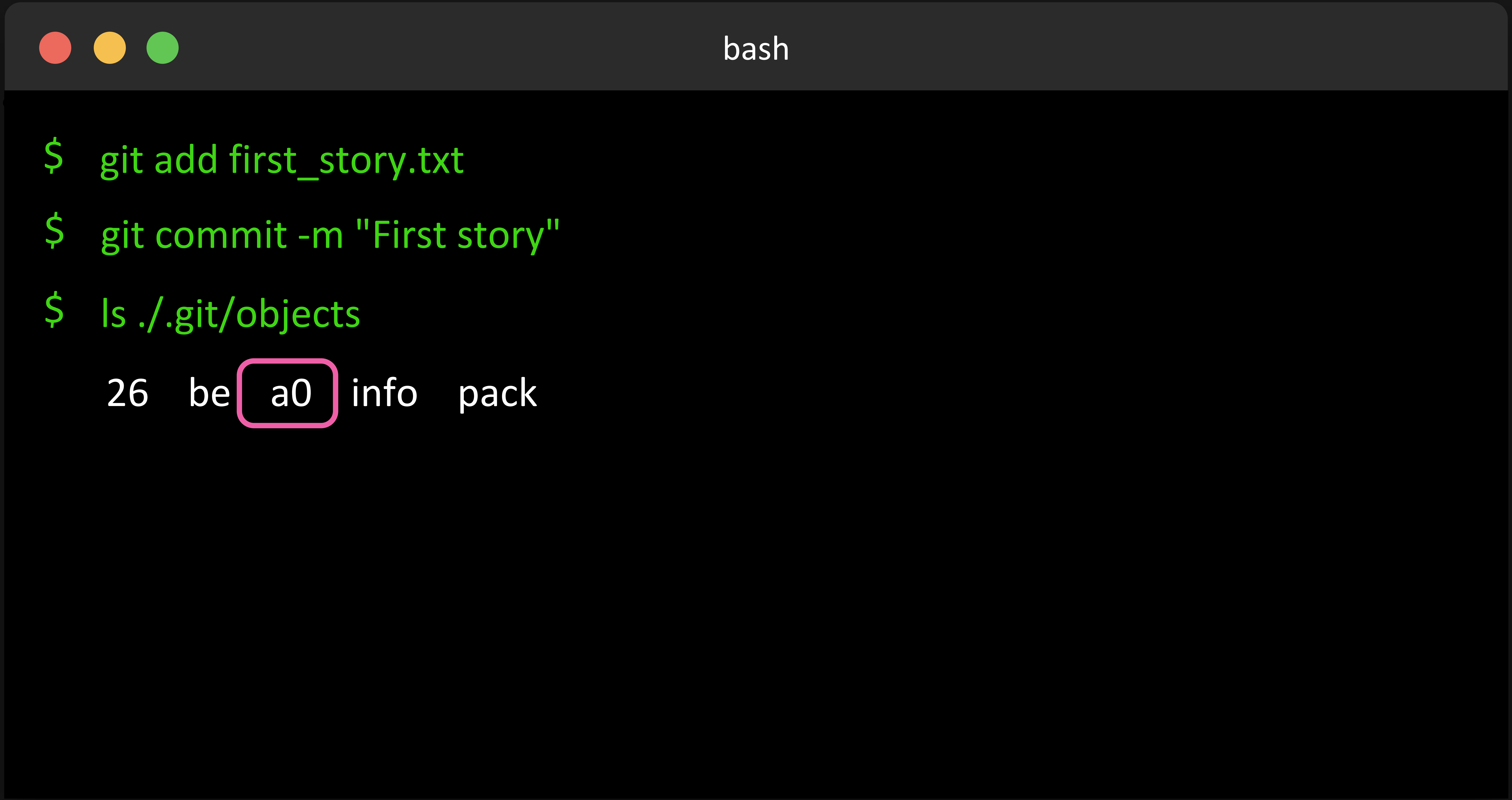
…



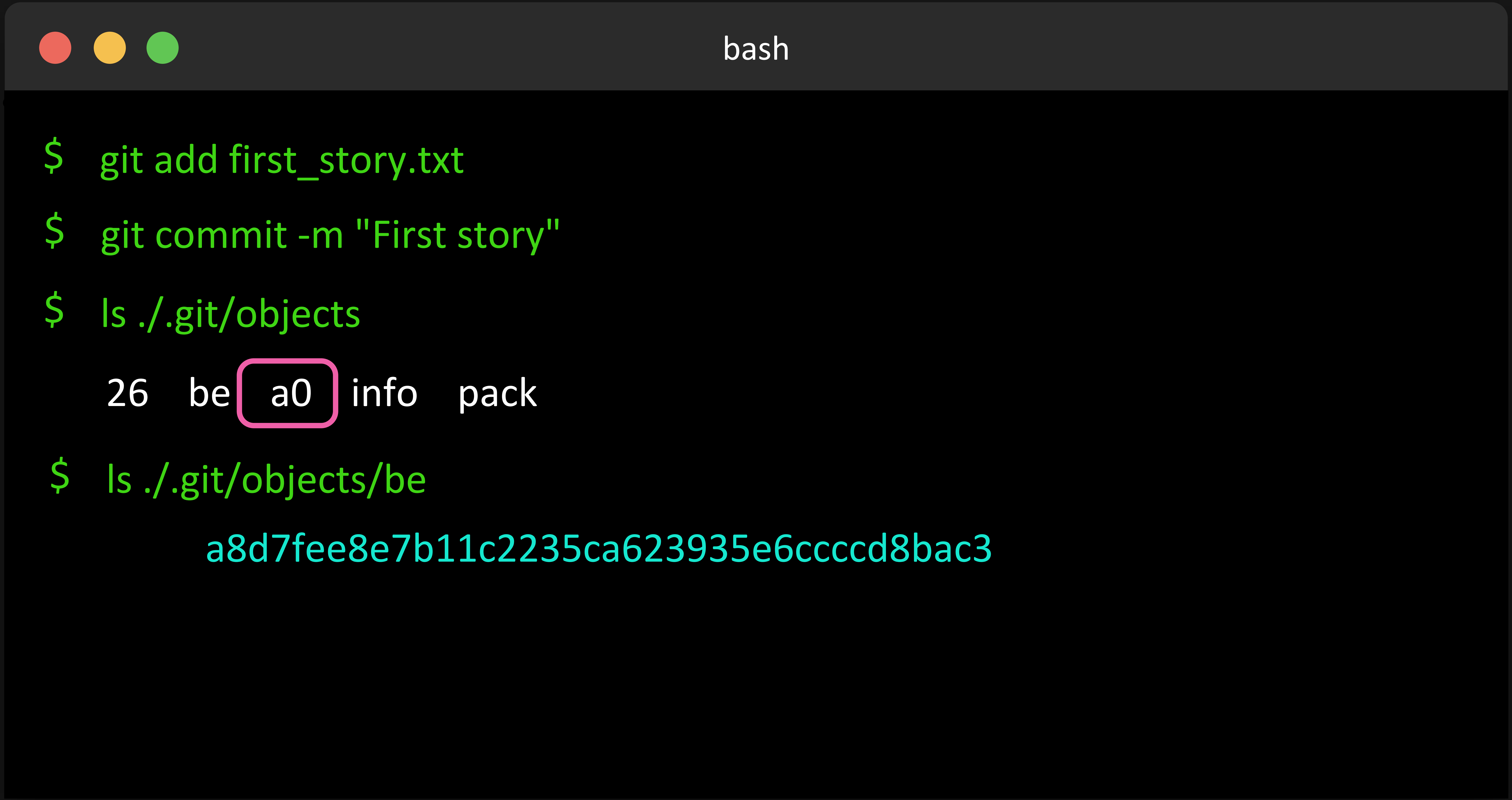
```
$  git hash-object first_story.txt

        bea8d7fee8e7b11c2235ca623935e6ccccd8bac3
```



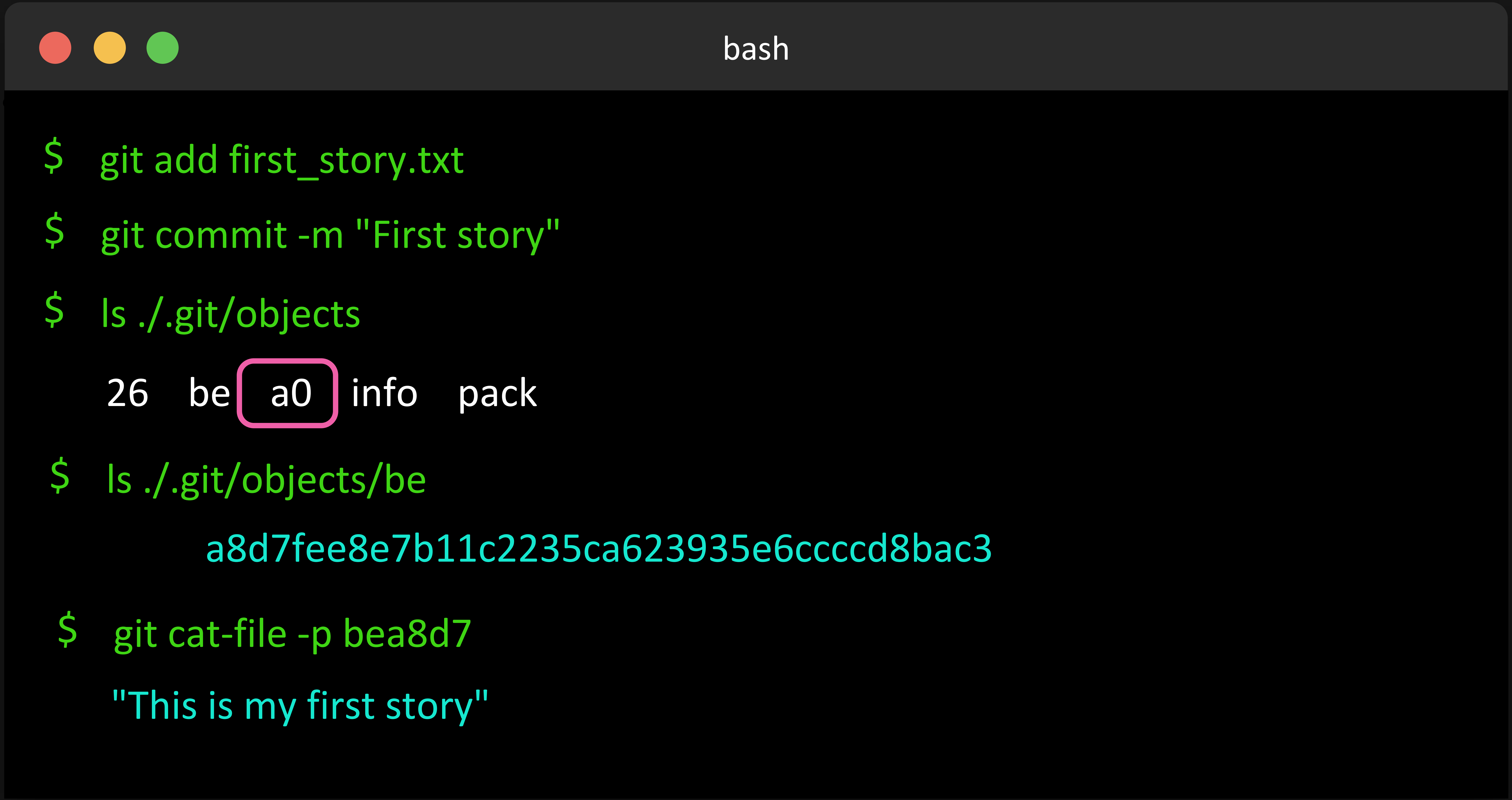
```
$  git hash-object first_story.txt

        bea8d7fee8e7b11c2235ca623935e6ccccd8bac3
```



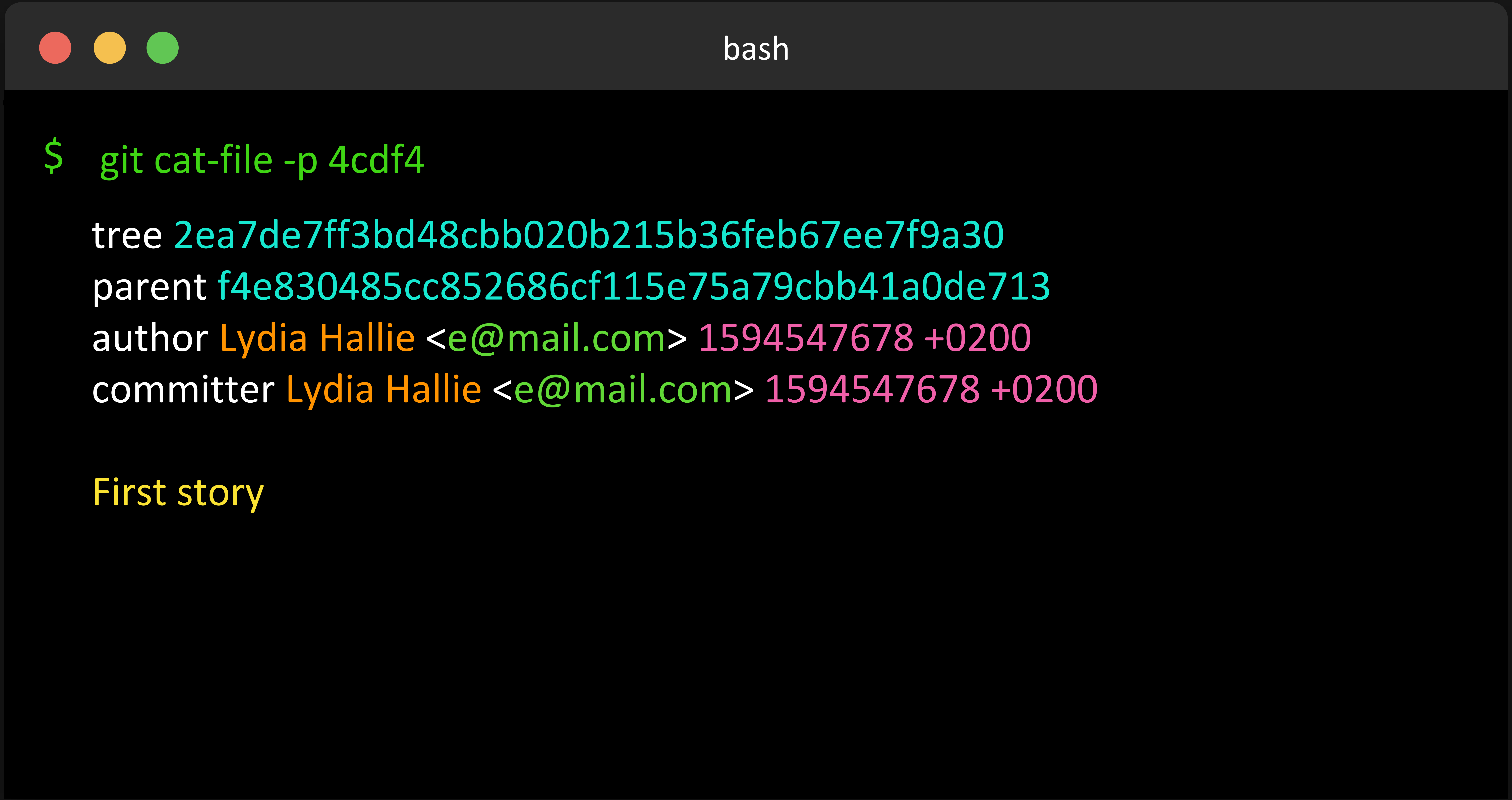
```
$  git add first_story.txt
$  git commit -m "First story"
$  ls ./.git/objects
    26   be   a0   info   pack
```



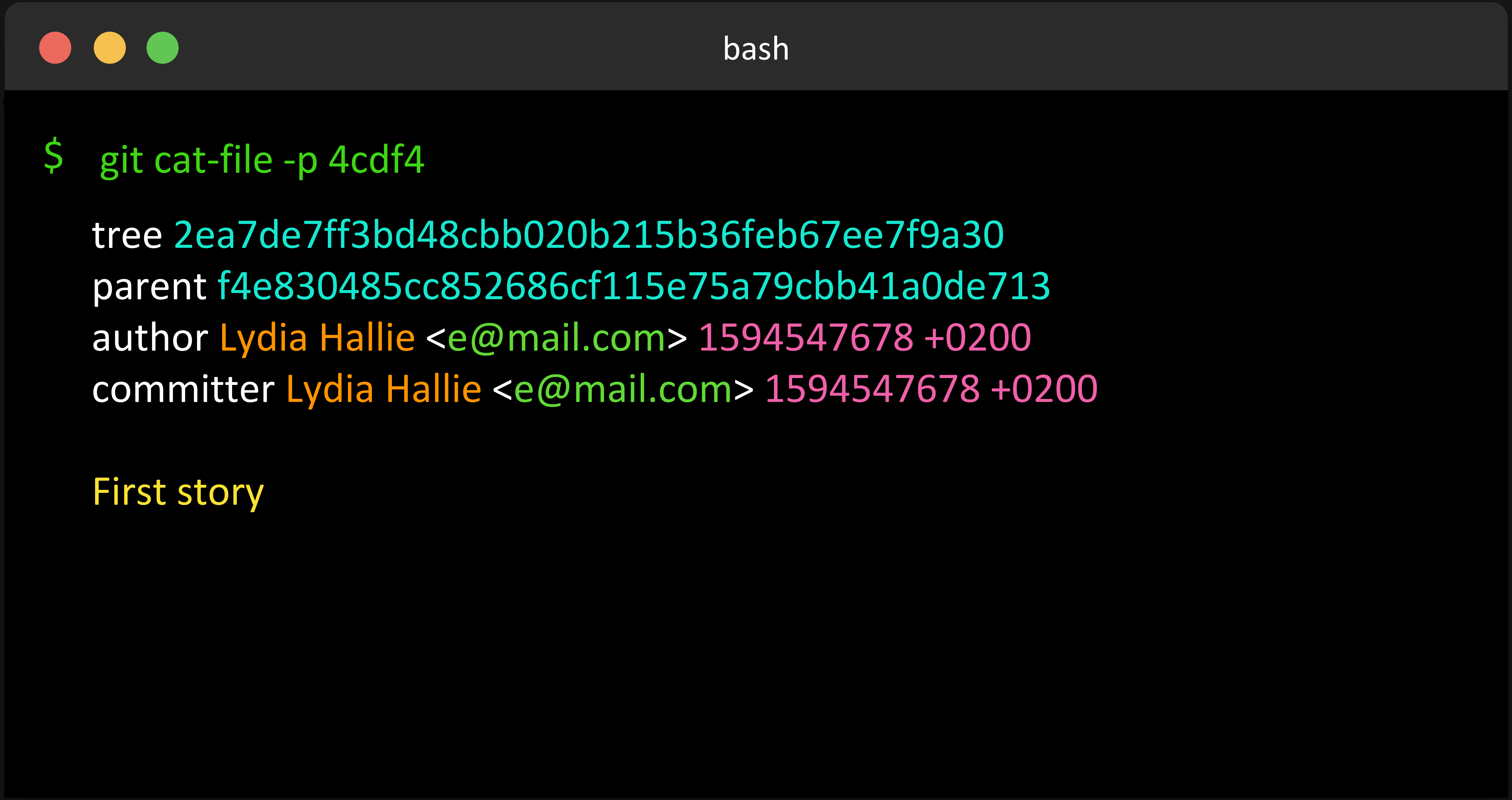
```
$  git add first_story.txt

$  git commit -m "First story"

$  ls ./.git/objects

   26   be   a0  info   pack

$  ls ./.git/objects/be

          a8d7fee8e7b11c2235ca623935e6ccccd8bac3
```



```
$  git add first_story.txt
$  git commit -m "First story"
$  ls ./.git/objects
    26   be   a0   info   pack
$  ls ./.git/objects/be
           a8d7fee8e7b11c2235ca623935e6ccccd8bac3
$  git cat-file -p bea8d7
   "This is my first story"
```



```
$  git cat-file -p 4cdf4

   tree 2ea7de7ff3bd48cbb020b215b36feb67ee7f9a30
   parent f4e830485cc852686cf115e75a79cbb41a0de713
   author Lydia Hallie <e@mail.com> 1594547678 +0200
   committer Lydia Hallie <e@mail.com> 1594547678 +0200

   First story
```



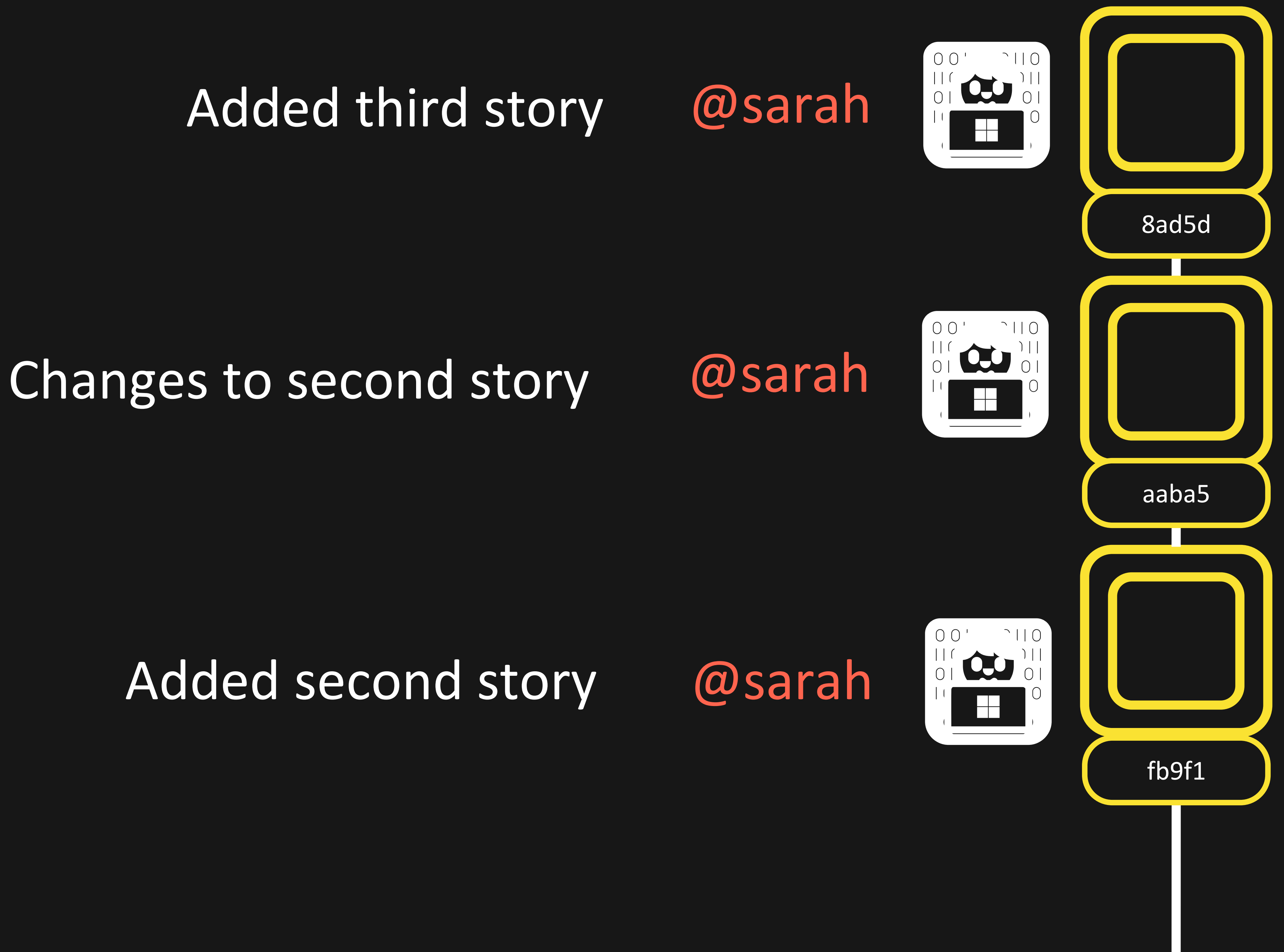
```
$  git cat-file -p 4cdf4

   tree 2ea7de7ff3bd48cbb020b215b36feb67ee7f9a30
   parent f4e830485cc852686cf115e75a79cbb41a0de713
   author Lydia Hallie <e@mail.com> 1594547678 +0200
   committer Lydia Hallie <e@mail.com> 1594547678 +0200

   First story
```

# Git Object Contents

commit

tree

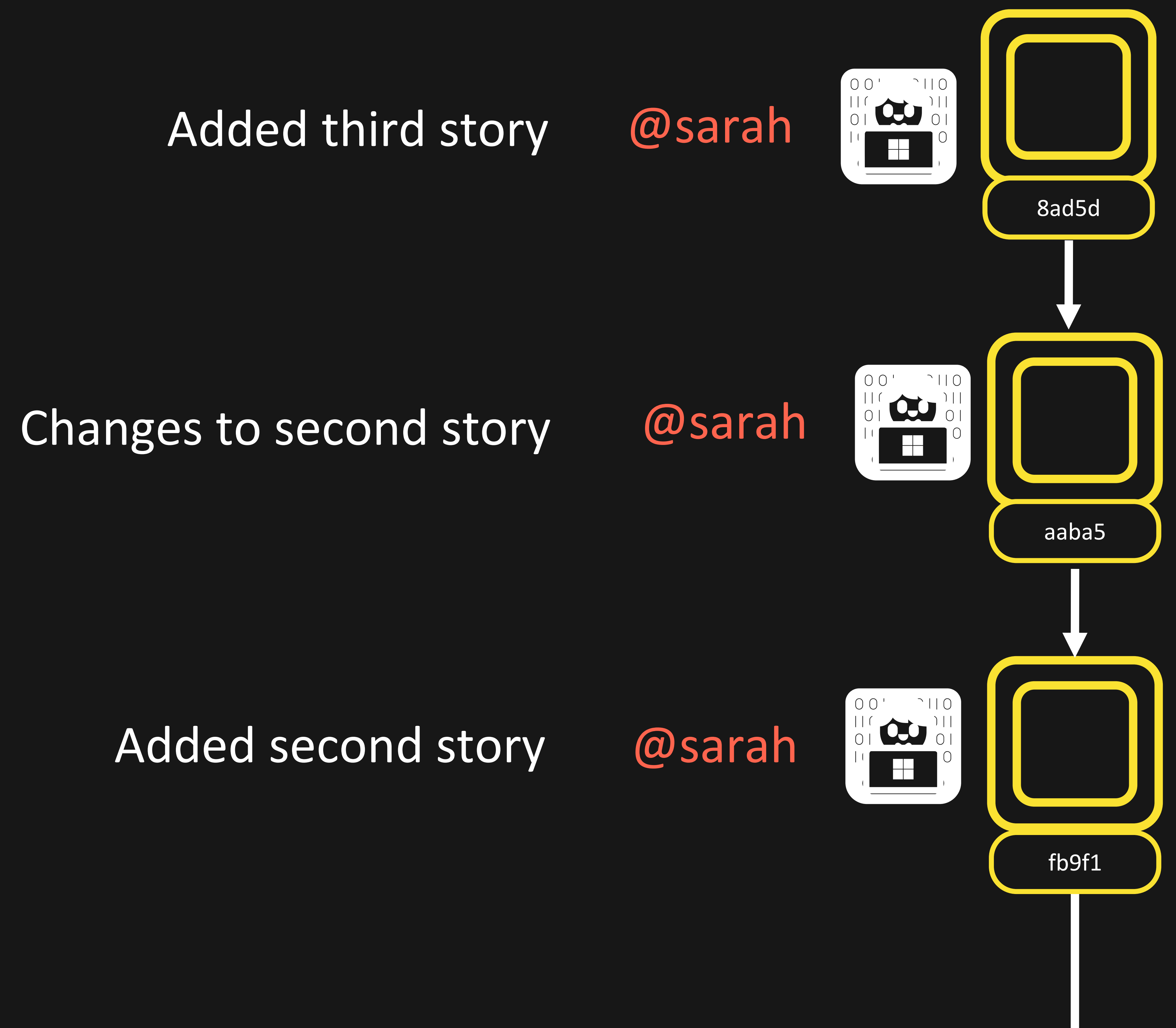
blob



Added third story @sarah 8ad5d

Changes to second story @sarah aaba5

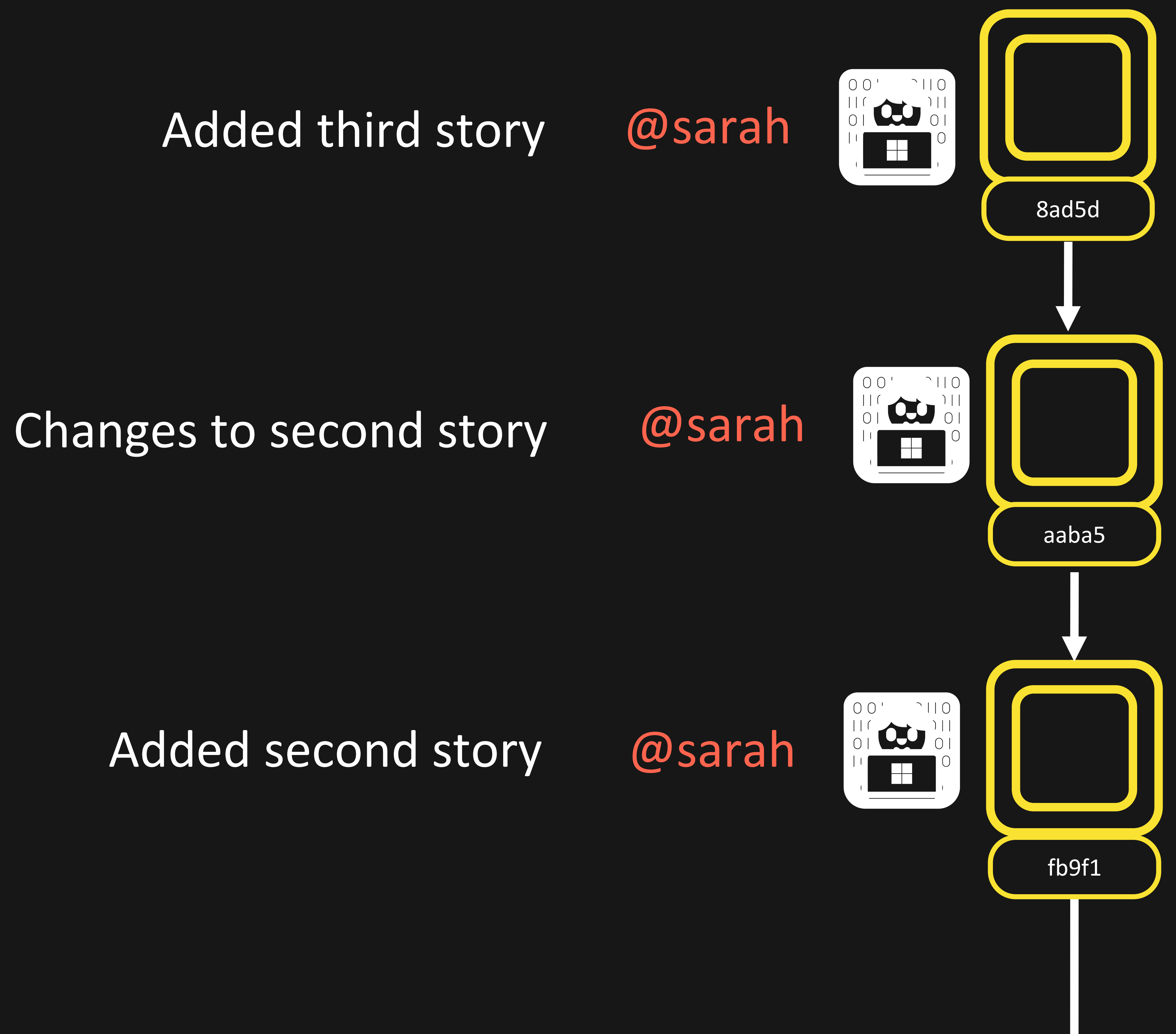
Added second story @sarah fb9f1



Added third story @sarah 8ad5d

Changes to second story @sarah aaba5

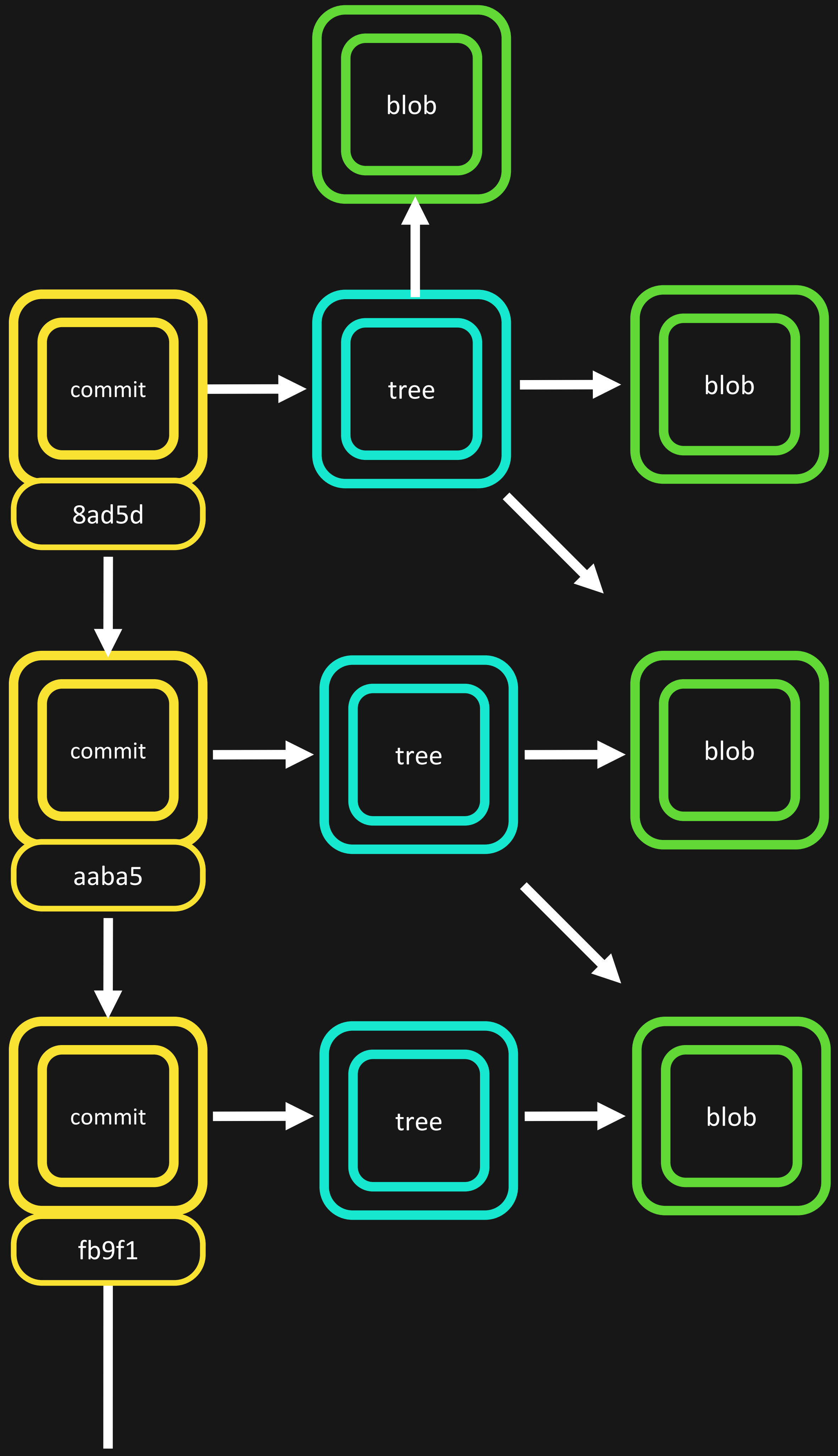
Added second story @sarah fb9f1

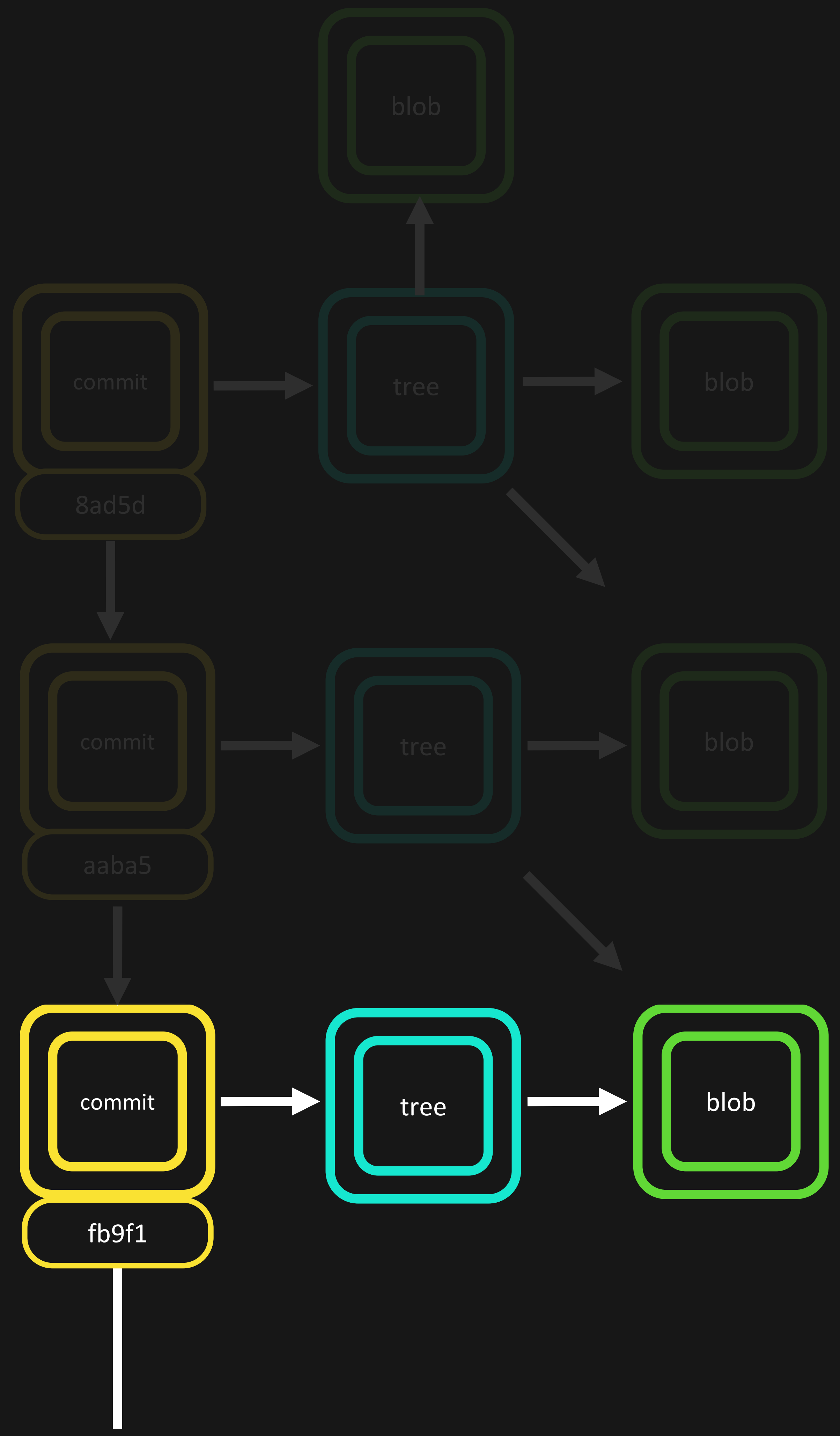


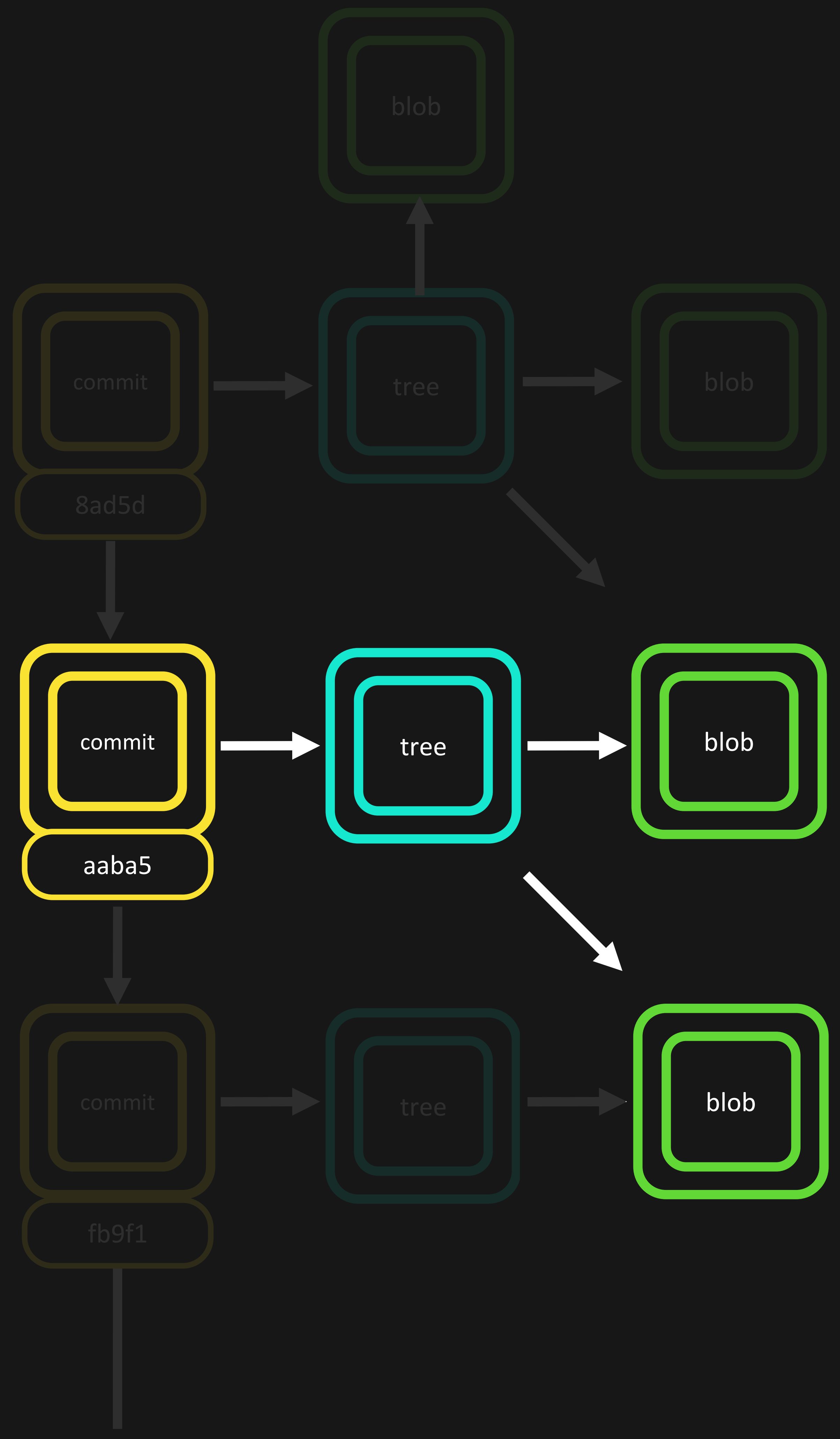
Added third story @sarah 8ad5d

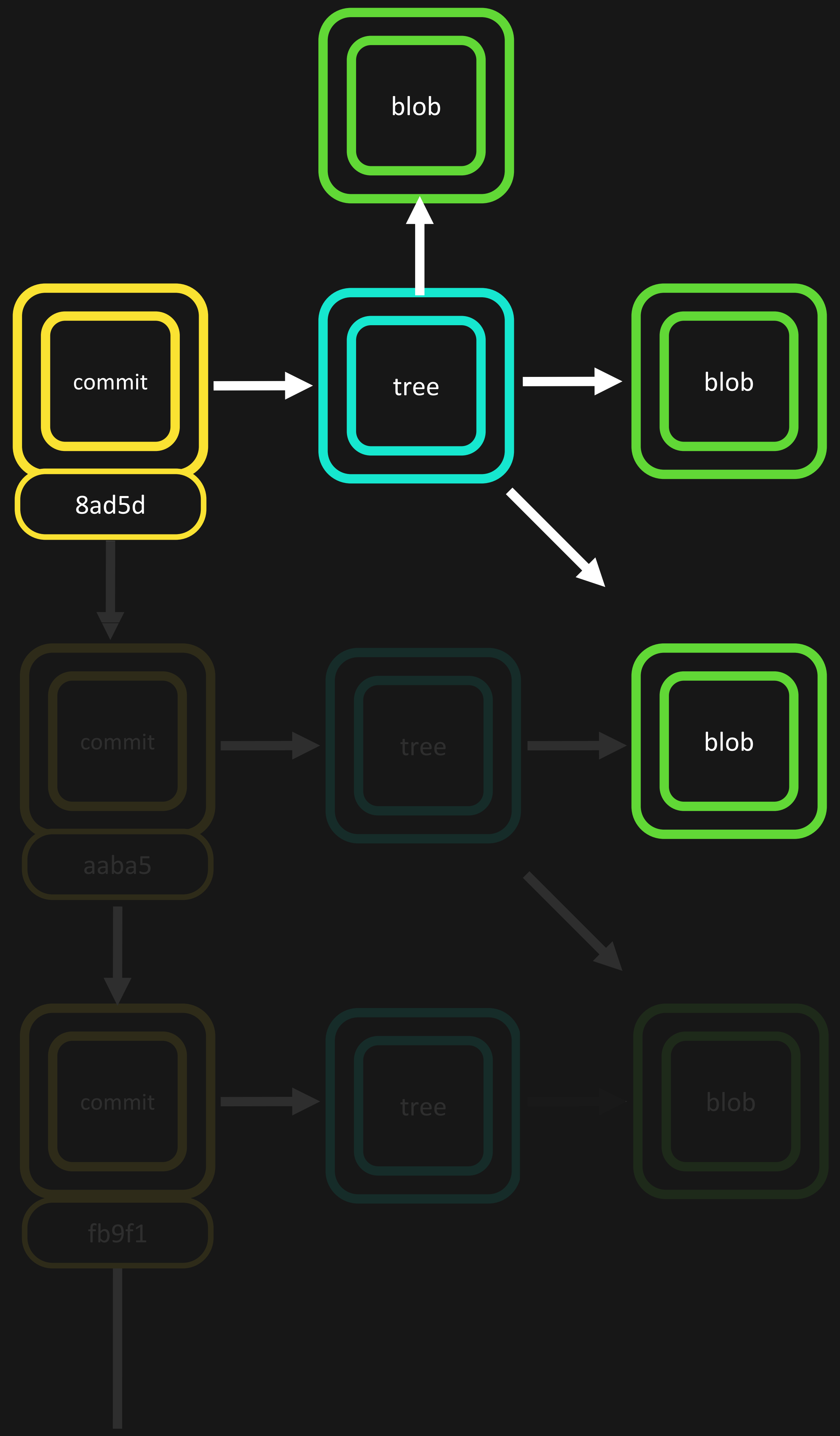
Changes to second story @sarah aaba5

Added second story @sarah fb9f1


blob
commit
tree
blob
8ad5d
commit
tree
blob
aaba5
commit
tree
blob
fb9f1

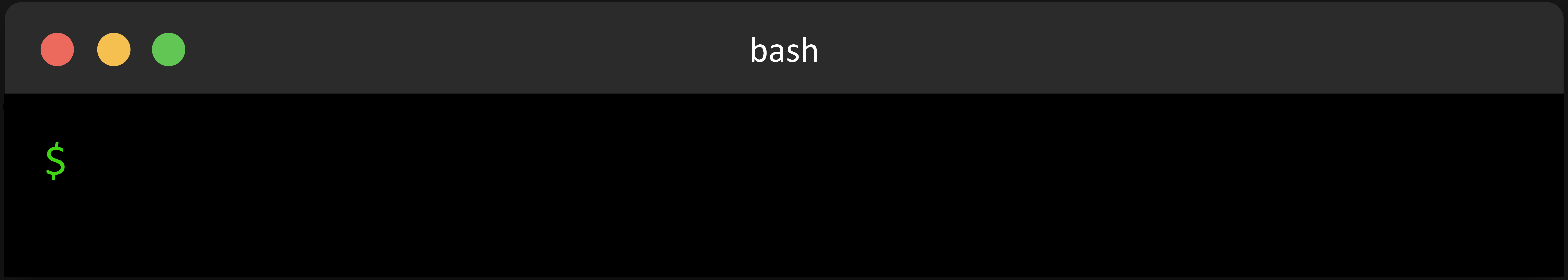

blob
commit
tree
blob
8ad5d
commit
tree
blob
aaba5
commit
tree
blob
fb9f1


blob
commit
tree
blob
8ad5d
commit
tree
blob
aaba5
blob
commit
tree
blob
fb9f1

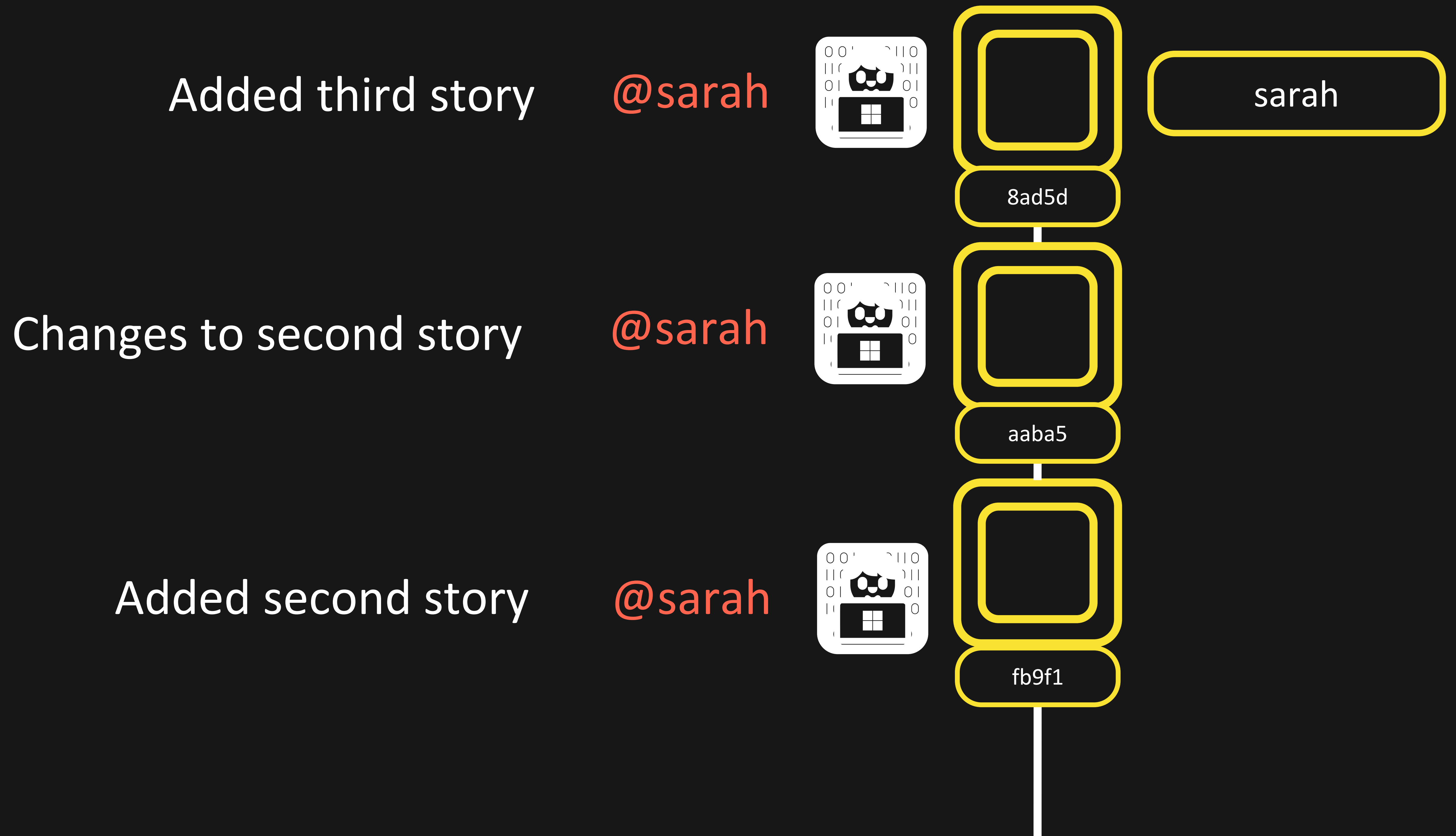

blob
commit
tree
blob
8ad5d
commit
tree
blob
aaba5
commit
tree
blob
fb9f1

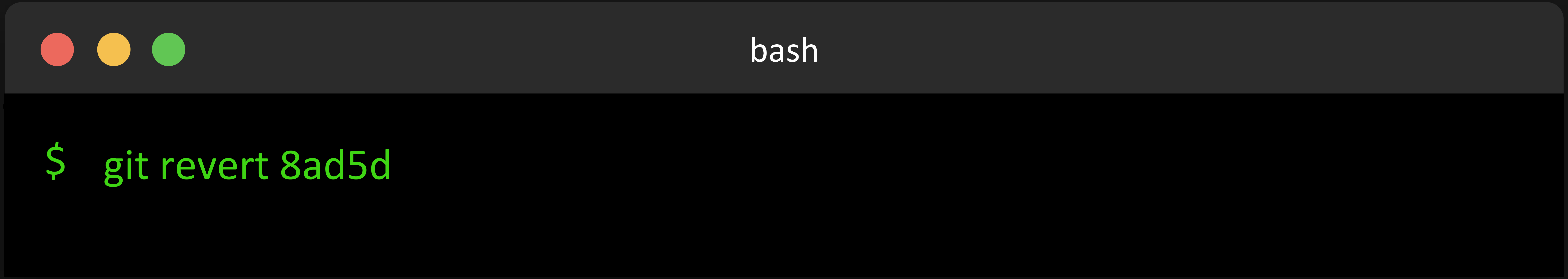
KODEKLOUD

# Resetting and Reverting


bash

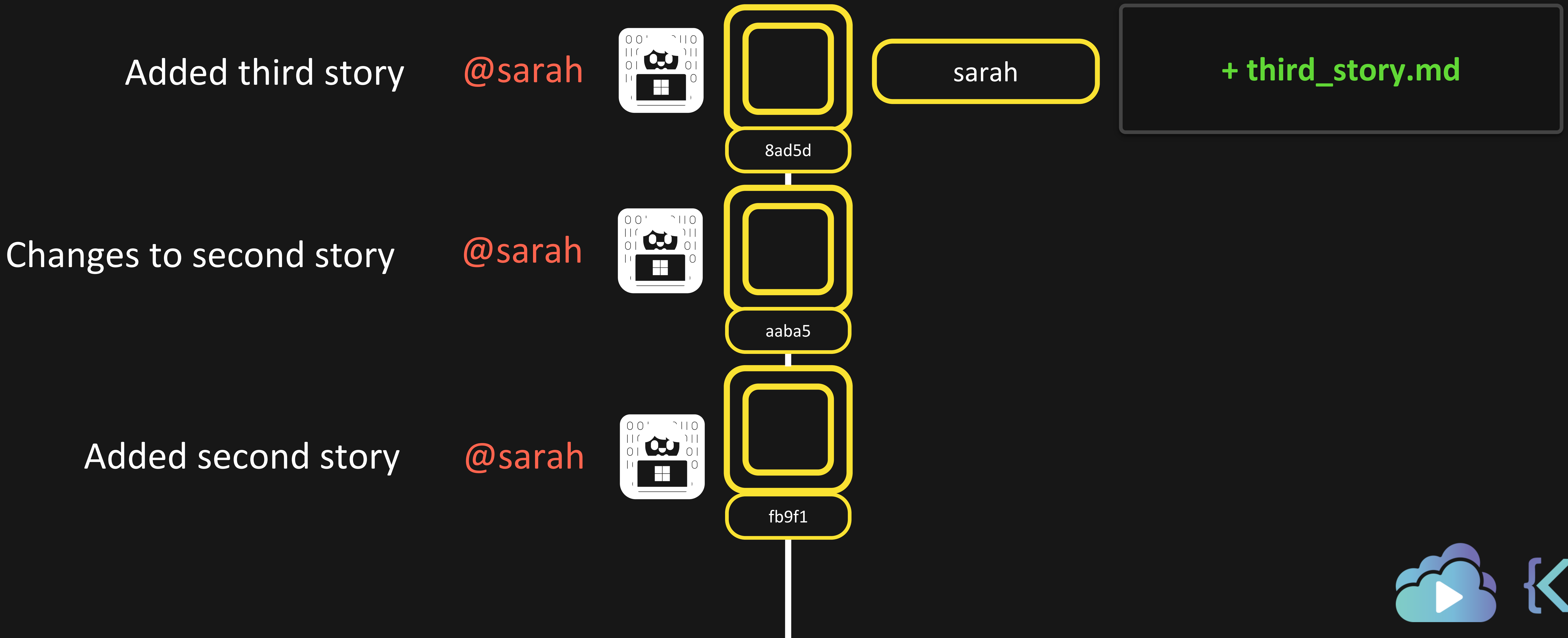
```
$
```


Added third story
@sarah
8ad5d
sarah
Changes to second story
@sarah
aaba5
Added second story
@sarah
fb9f1



bash

```
$ git revert 8ad5d
```



Added third story @sarah

8ad5d

sarah

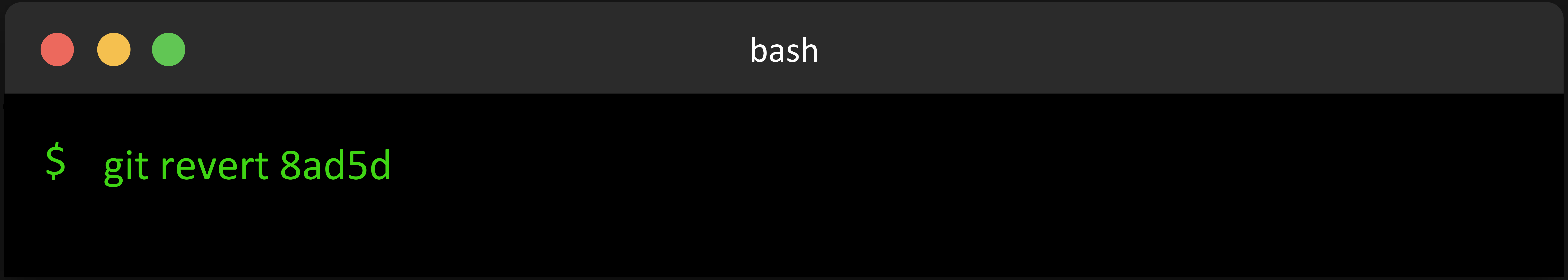
+ third_story.md

Changes to second story @sarah

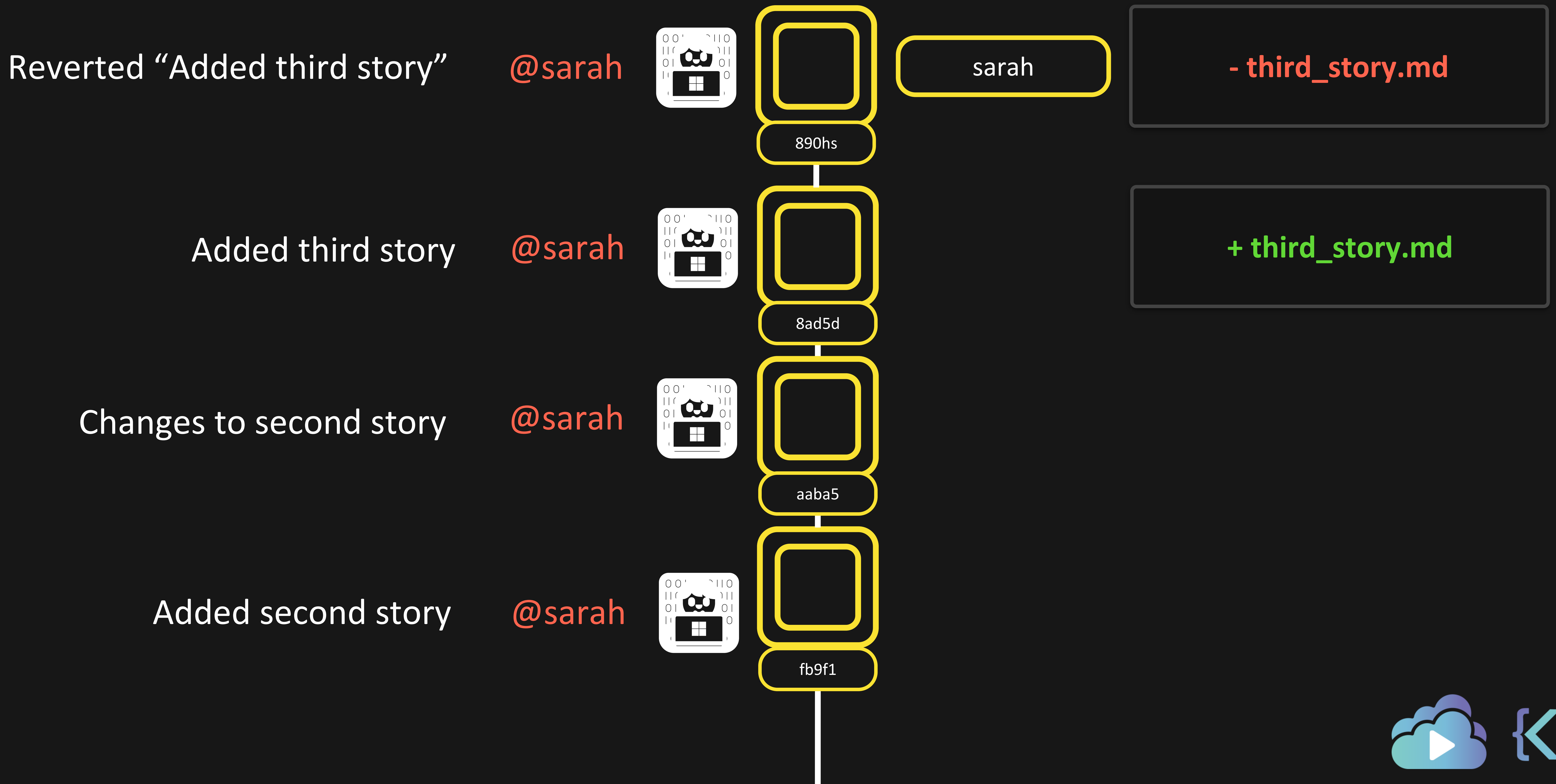
aaba5

Added second story @sarah

fb9f1



```
$ git revert 8ad5d
```

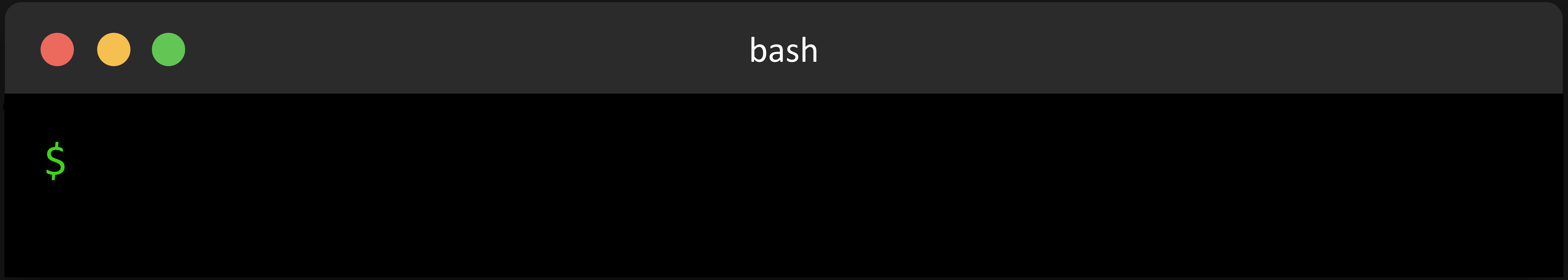


Reverted “Added third story” @sarah 890hs sarah - third_story.md

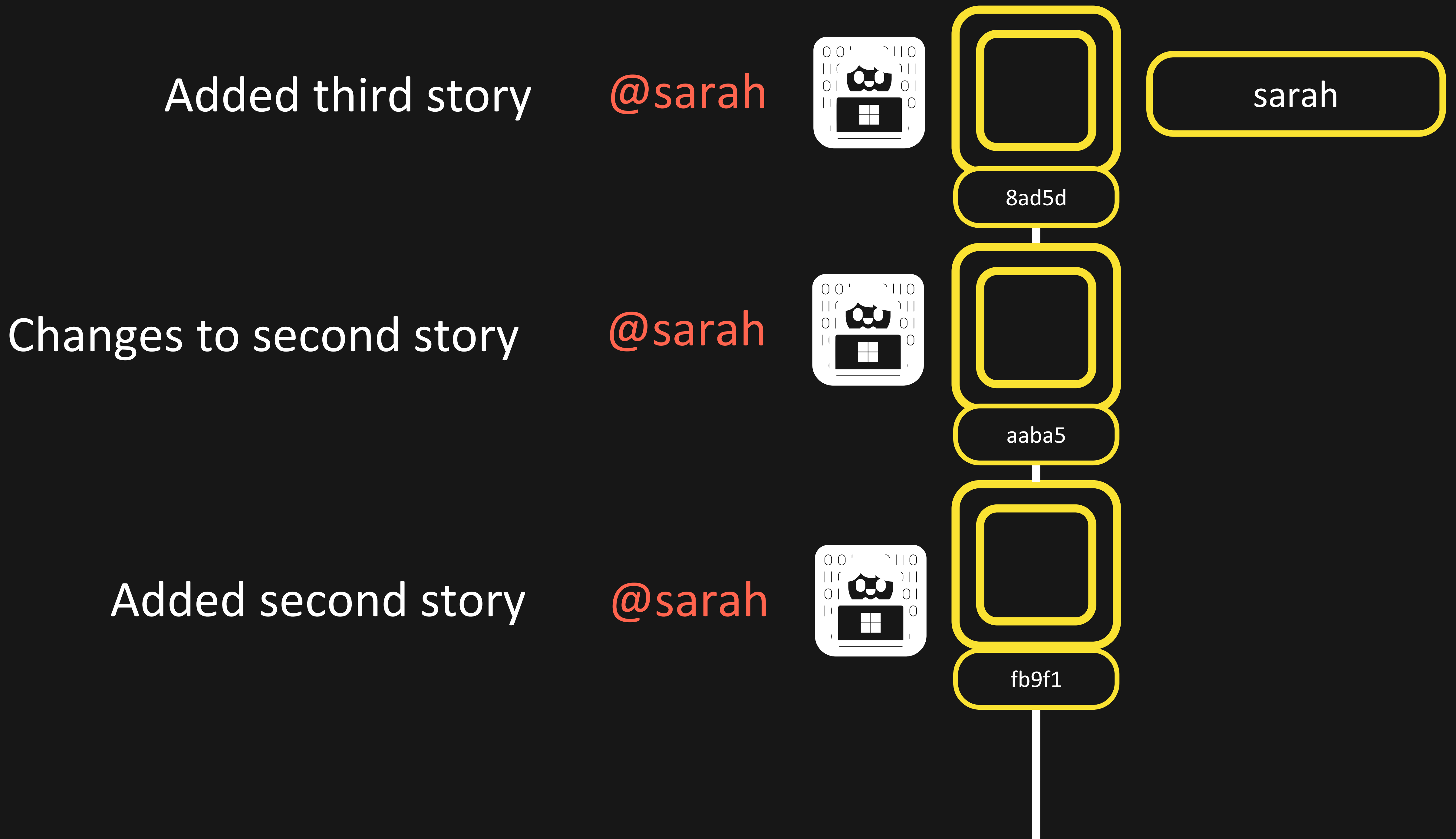
Added third story @sarah 8ad5d + third_story.md

Changes to second story @sarah aaba5

Added second story @sarah fb9f1

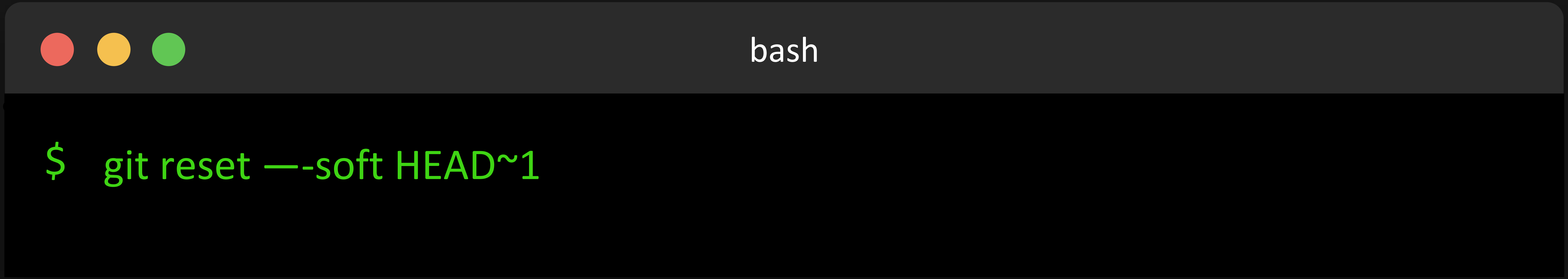


```
$
```

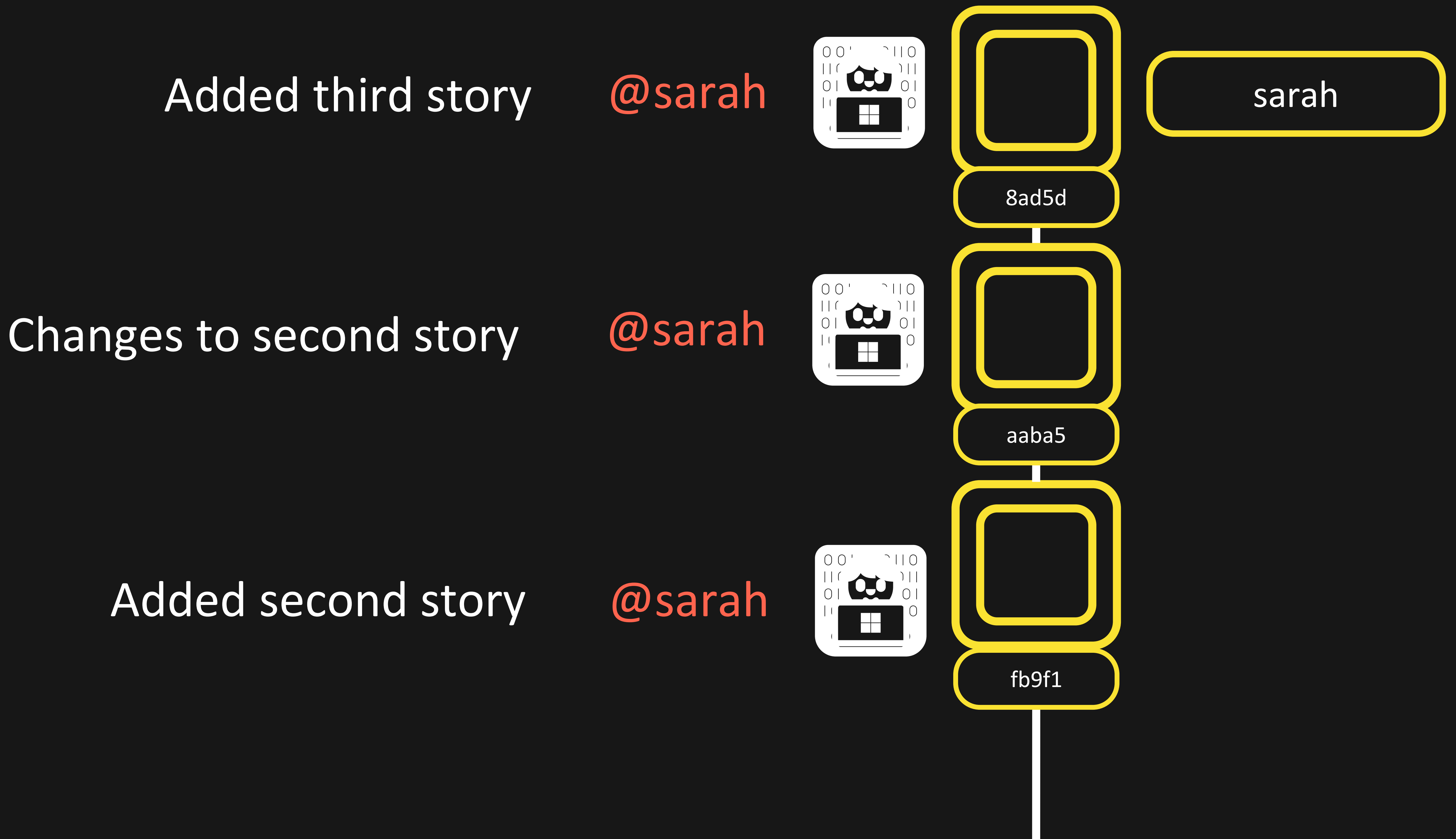

Added third story @sarah 8ad5d

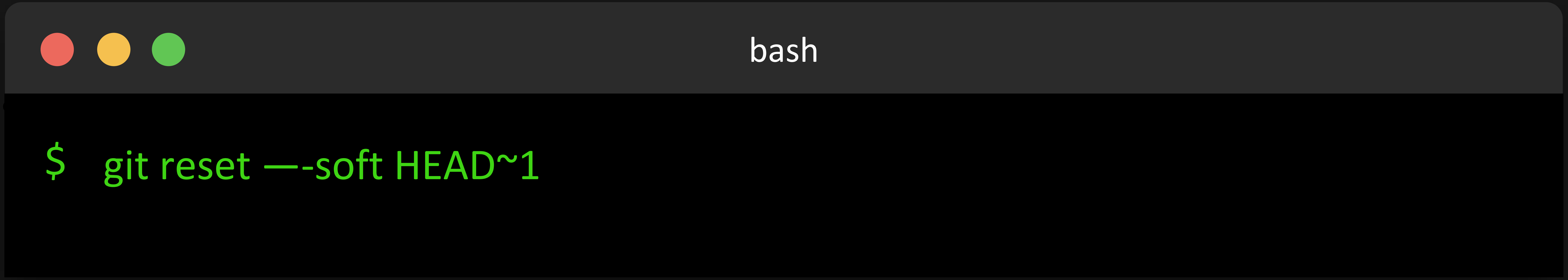
Changes to second story @sarah aaba5

Added second story @sarah fb9f1



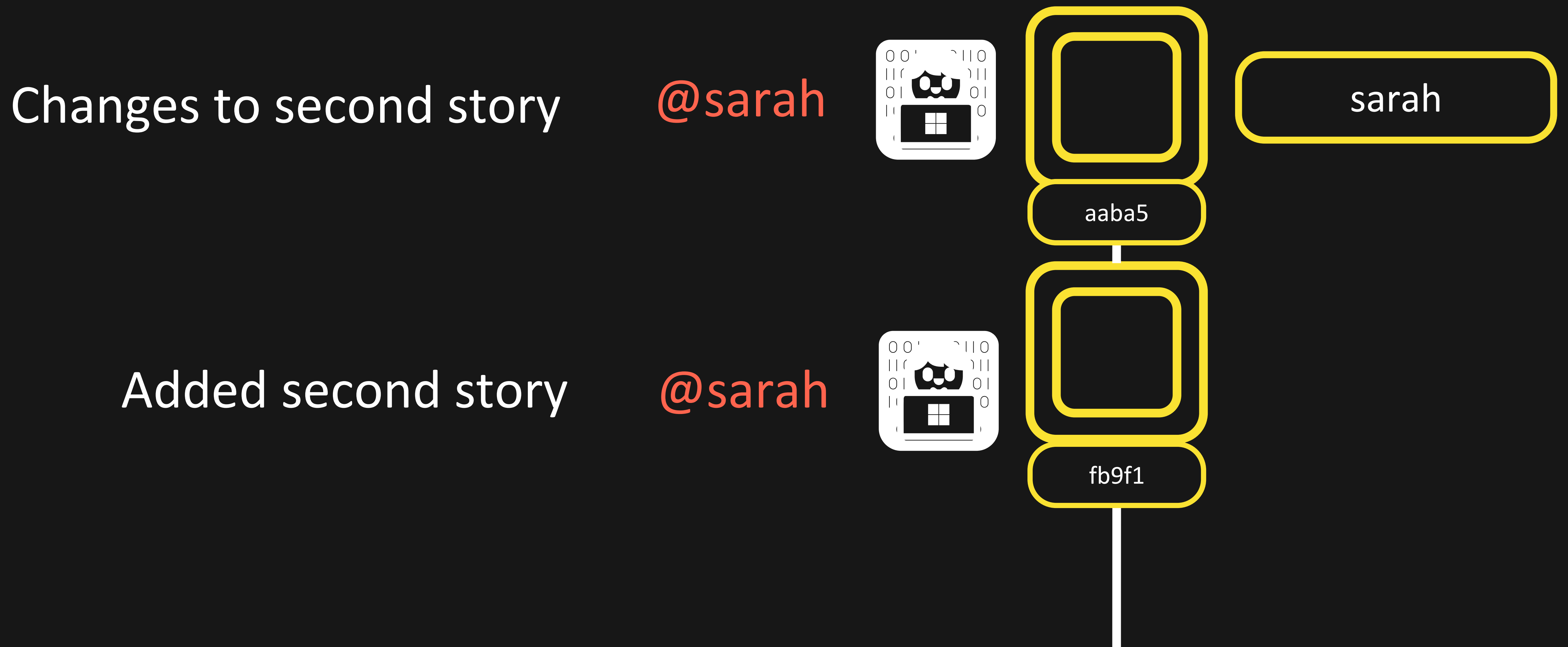
```
$  git reset —-soft HEAD~1
```





bash

```
$ git reset —-soft HEAD~1
```



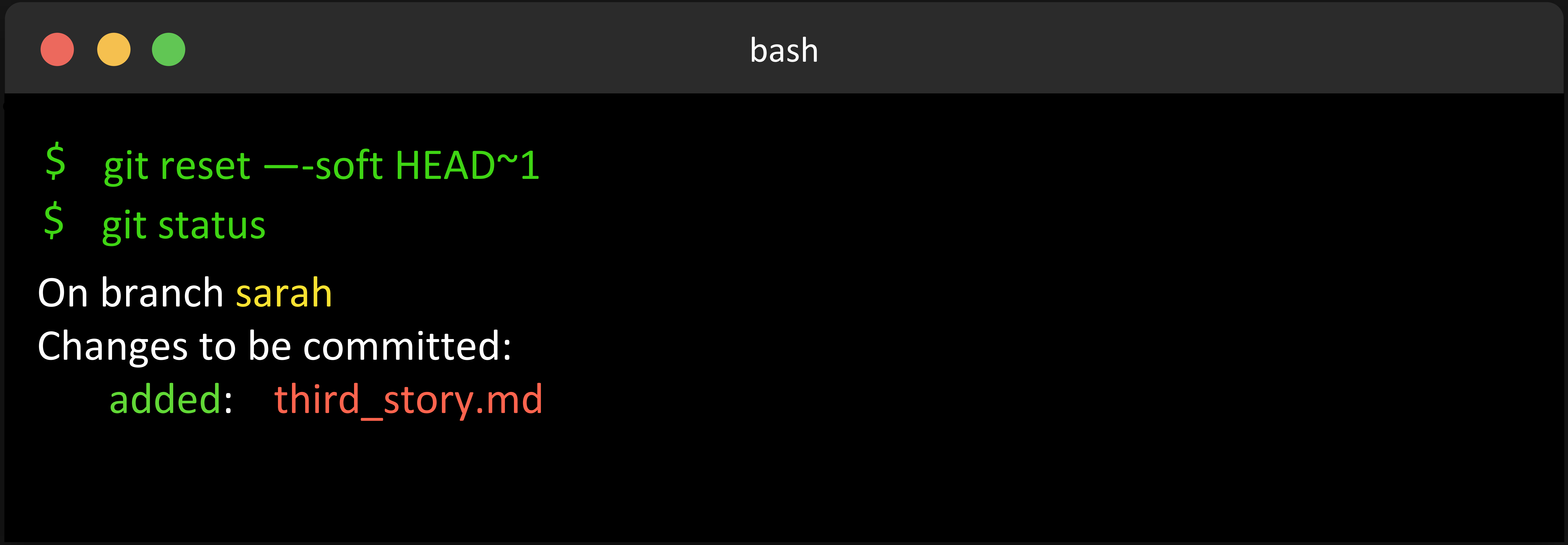
Changes to second story @sarah

aaba5

sarah

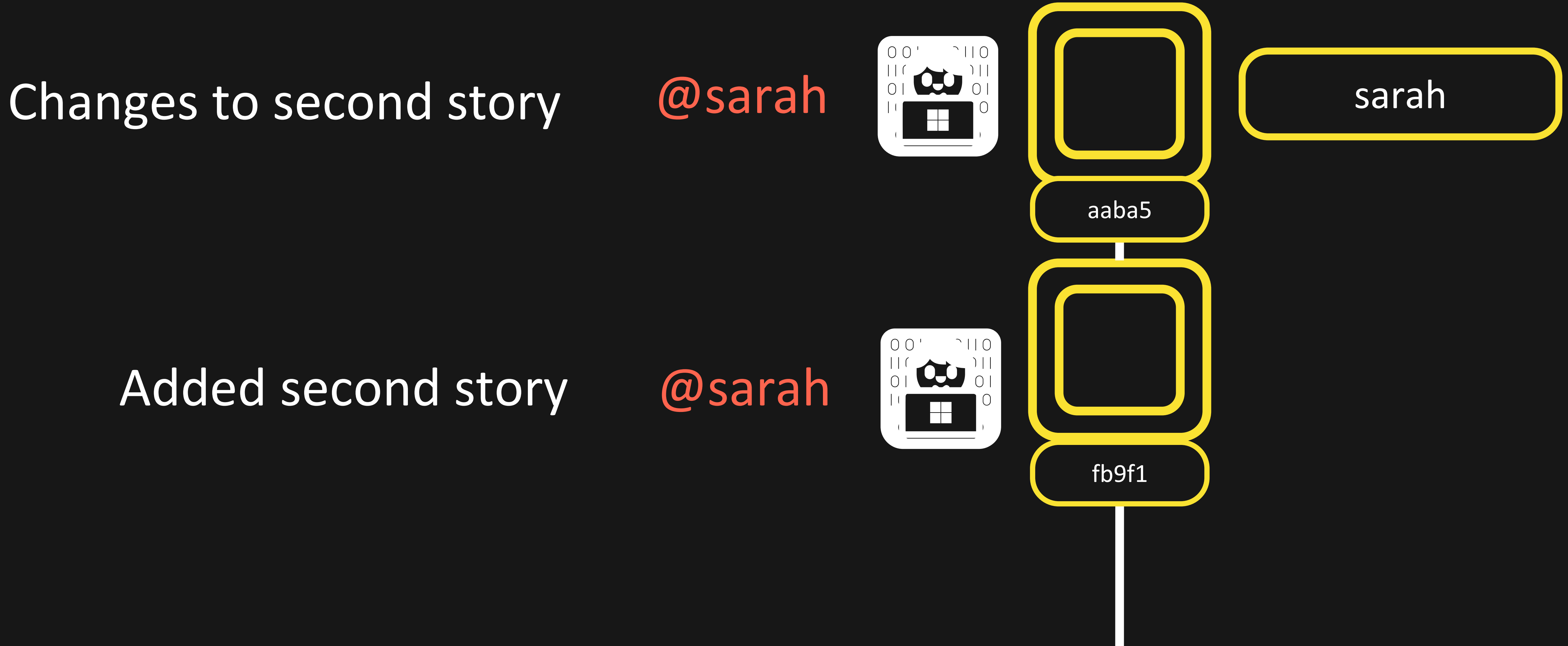
Added second story @sarah

fb9f1



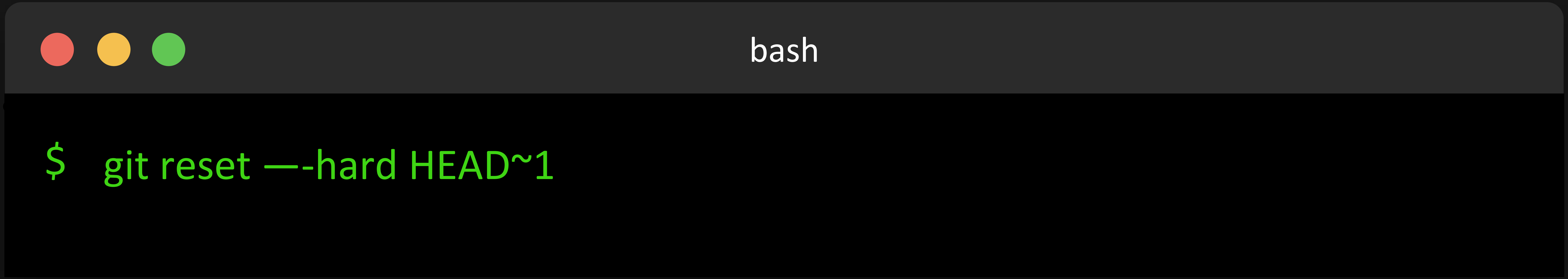
bash

```
$  git reset —-soft HEAD~1
$  git status
On branch sarah
Changes to be committed:
     added:   third_story.md
```

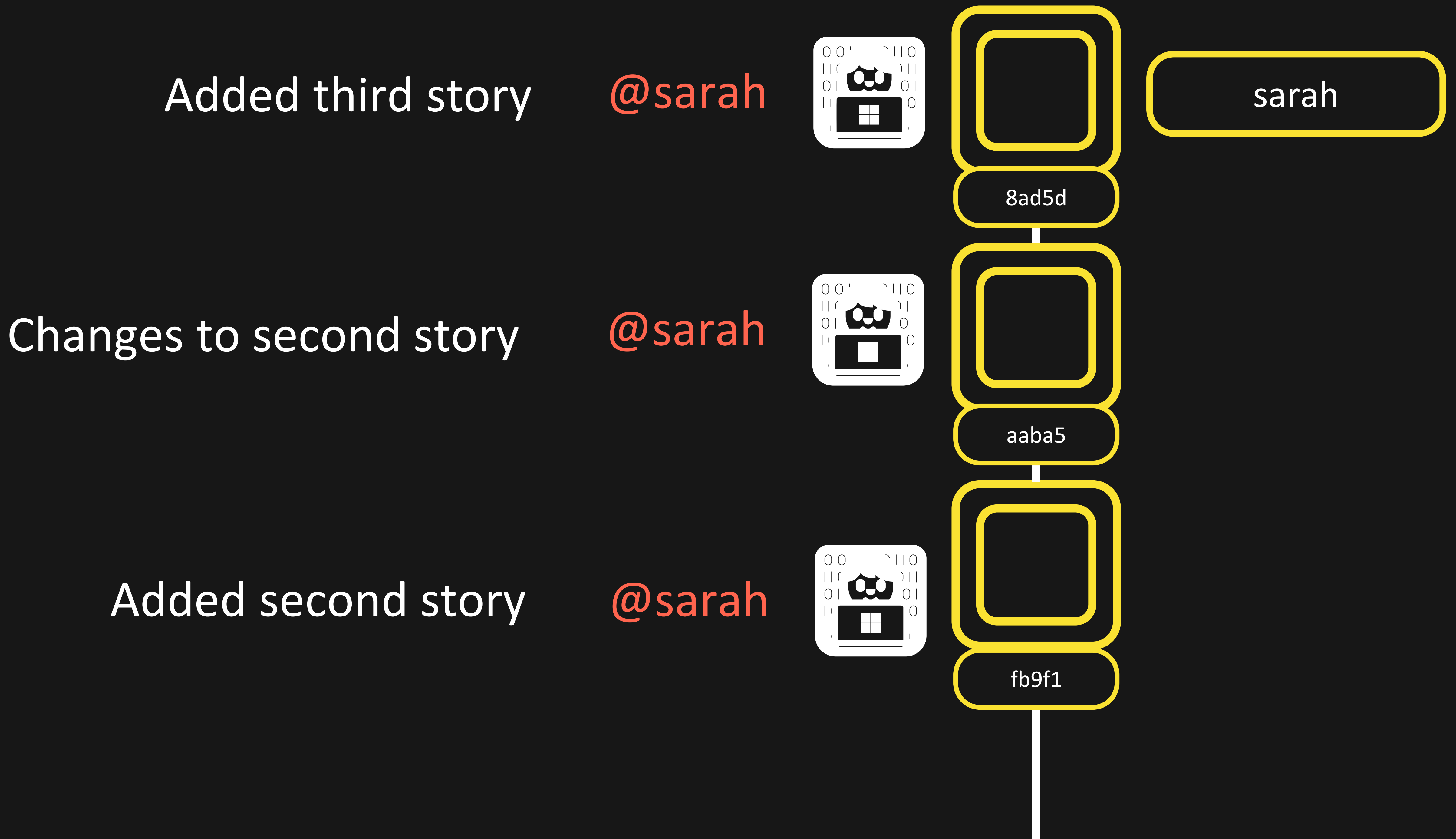


Changes to second story   @sarah   aaba5   sarah

Added second story   @sarah   fb9f1



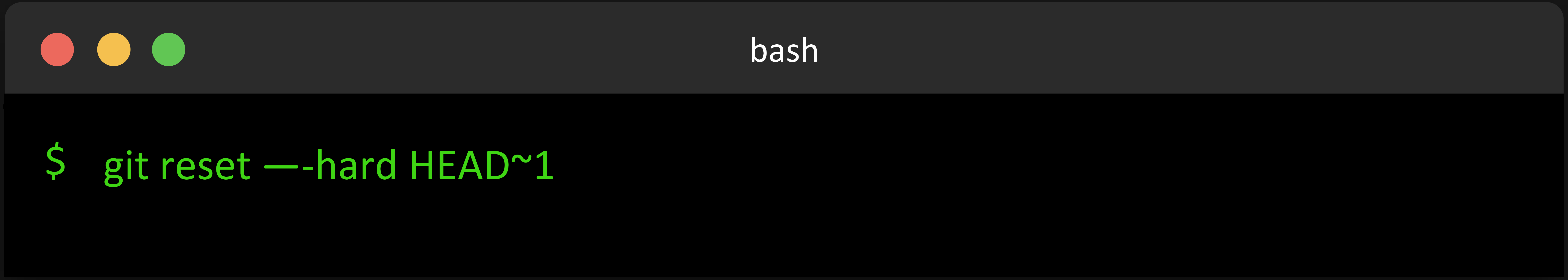
```
$  git reset —-hard HEAD~1
```



Added third story @sarah

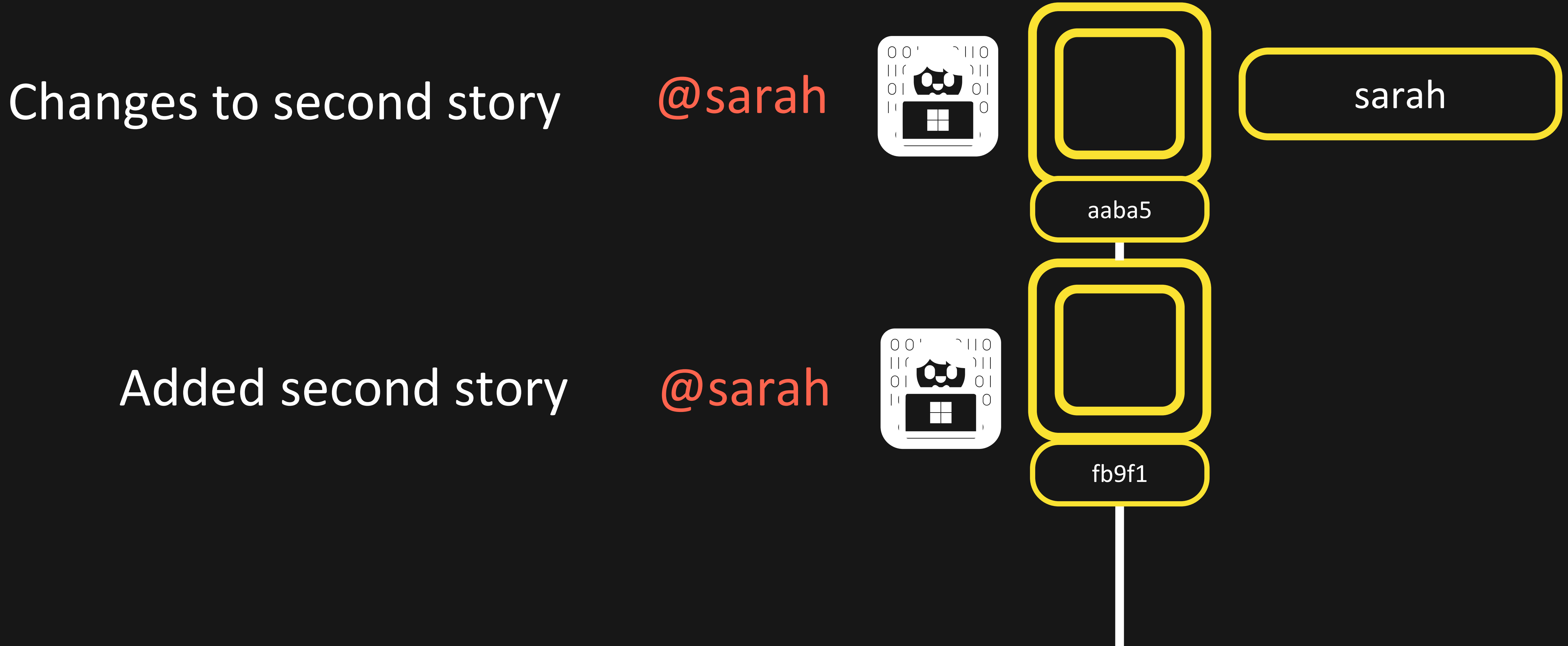
Changes to second story @sarah

Added second story @sarah



bash

```
$  git reset —-hard HEAD~1
```



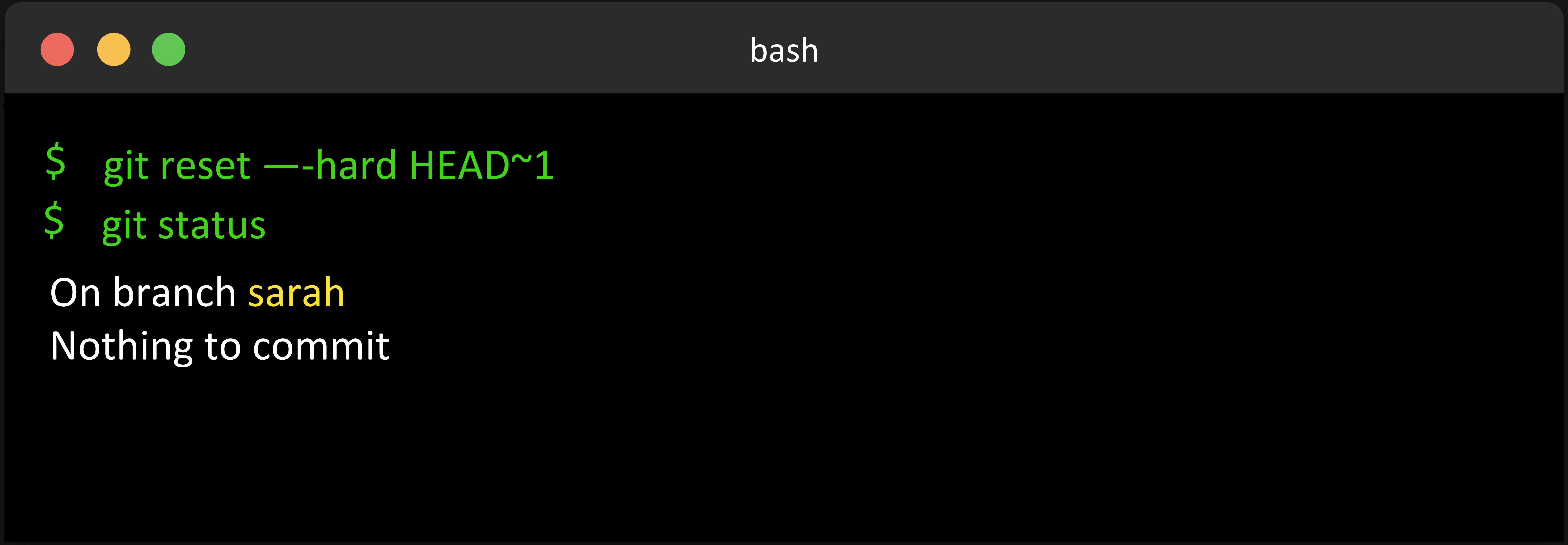
Changes to second story @sarah

aaba5

sarah

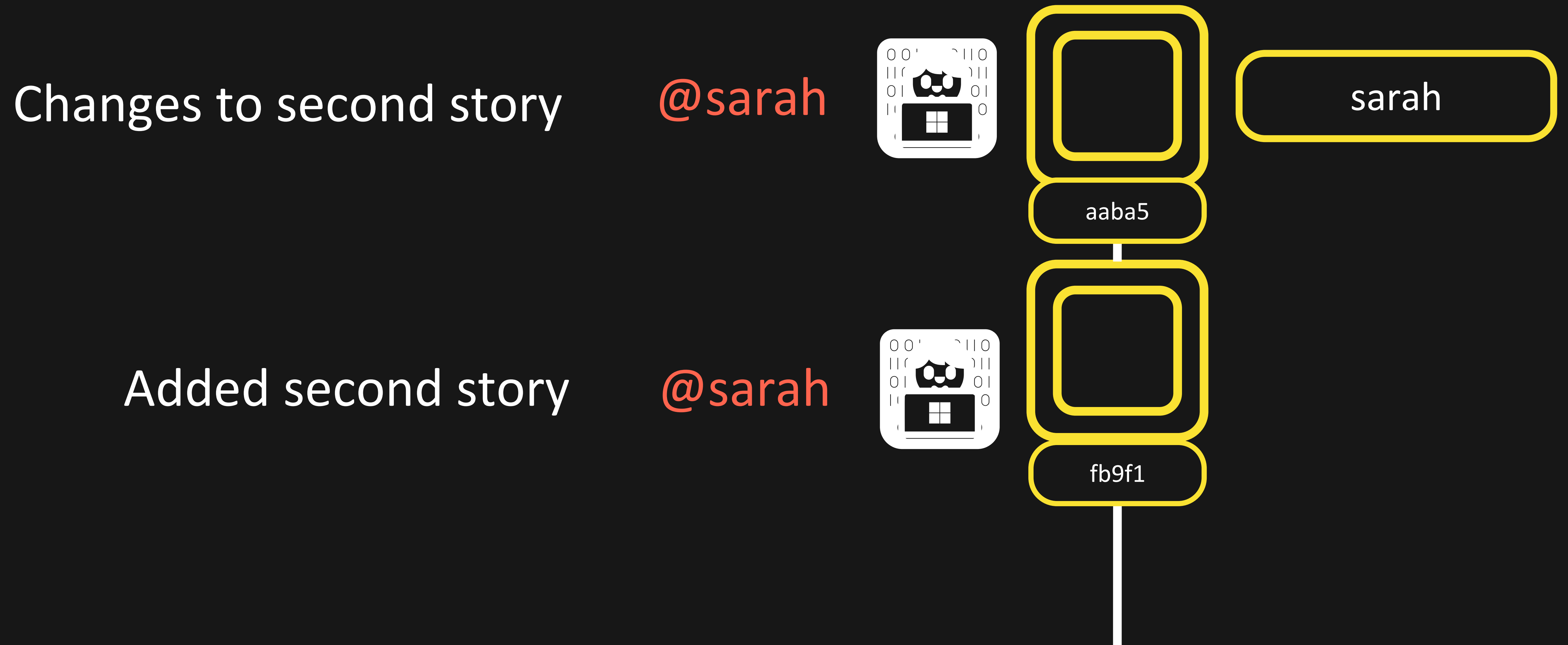
Added second story @sarah

fb9f1



bash

```
$  git reset —-hard HEAD~1
$  git status
On branch sarah
Nothing to commit
```



Changes to second story @sarah

aaba5

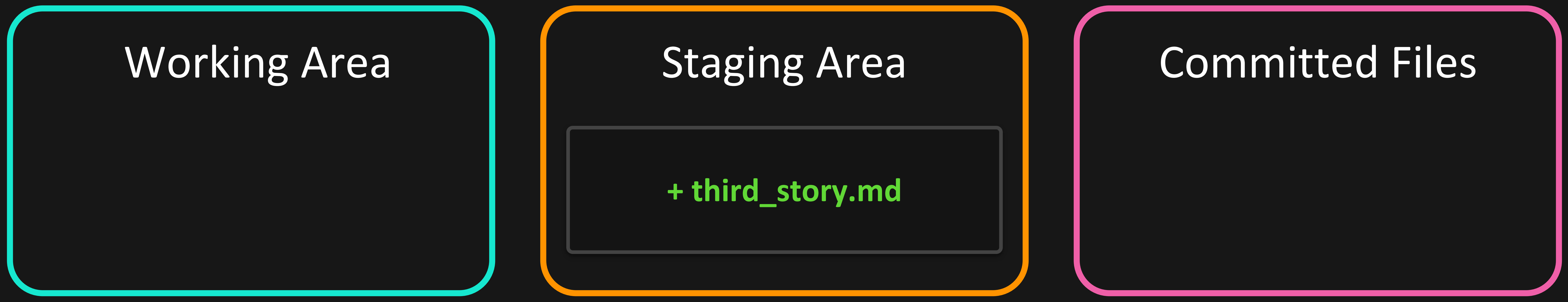
sarah

Added second story @sarah

fb9f1

KODEKLOUD

# Git Stash

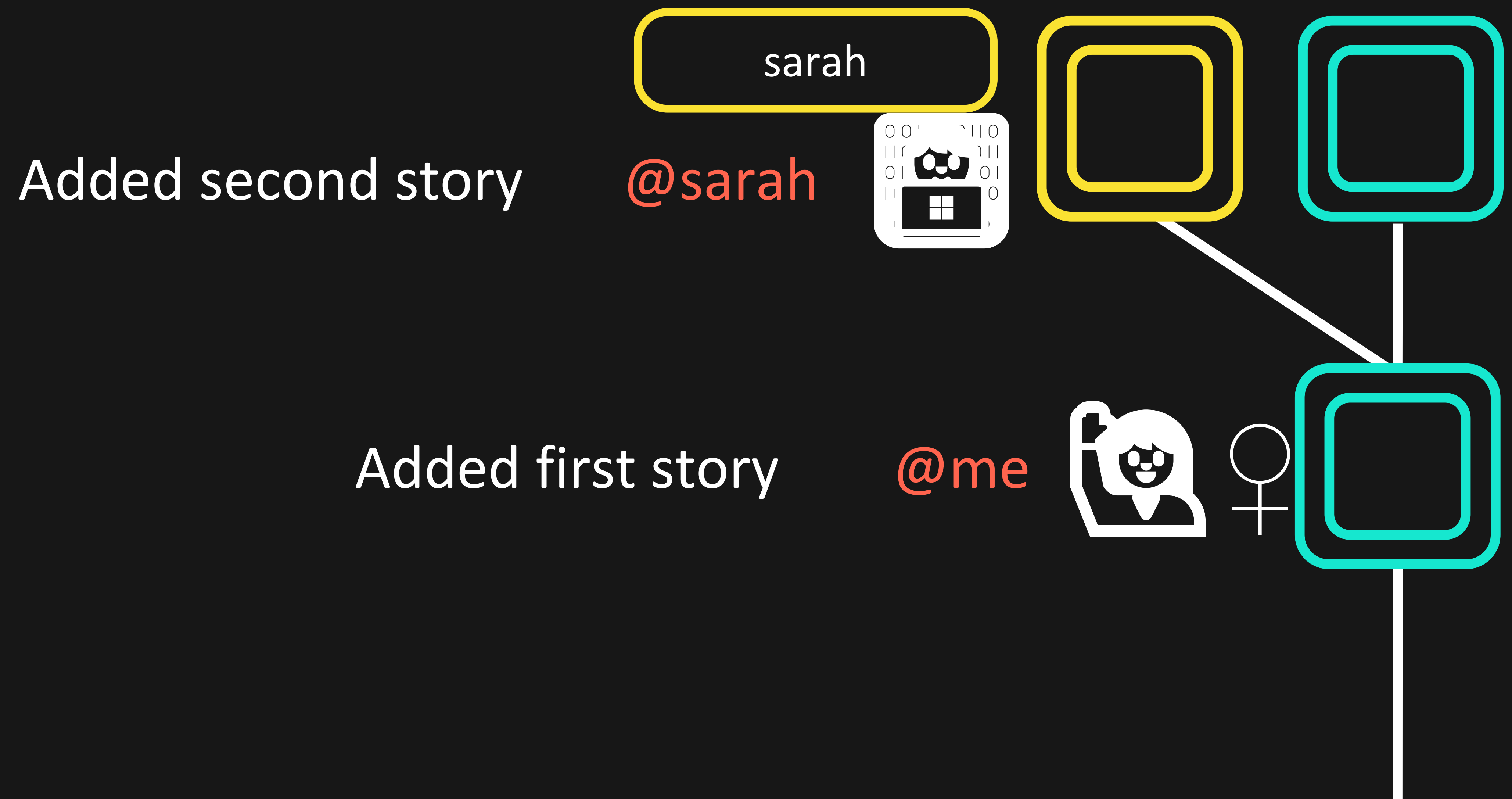


Working Area

Staging Area

+ third_story.md

Committed Files



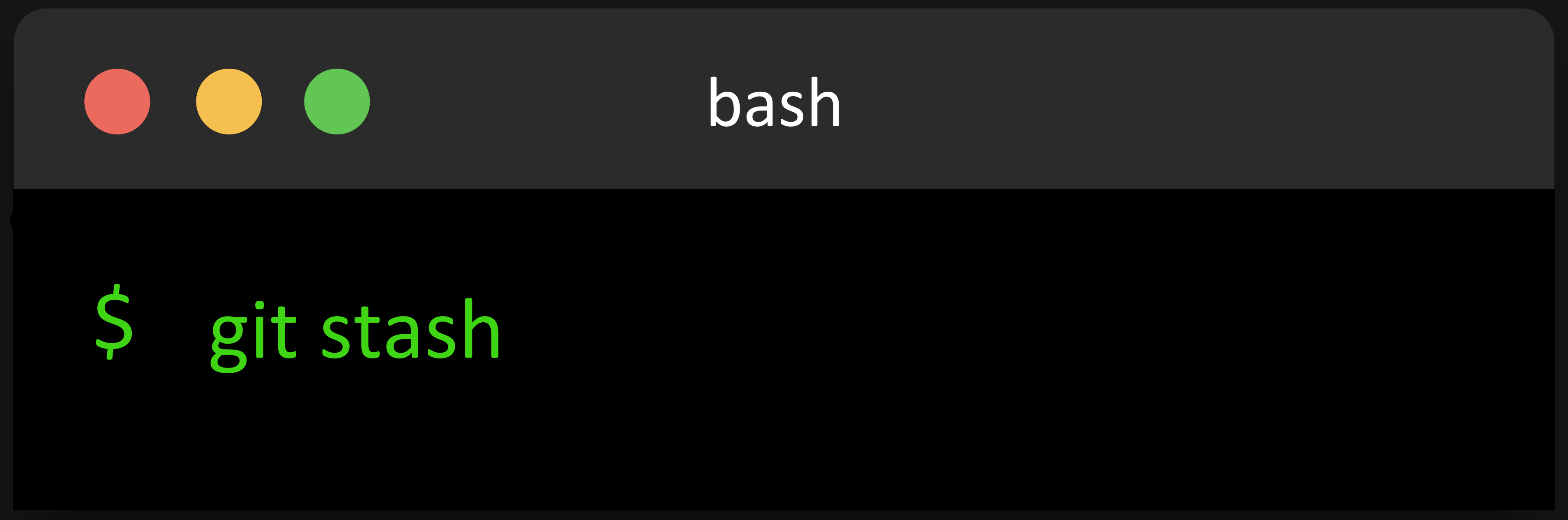
sarah

Added second story

@sarah

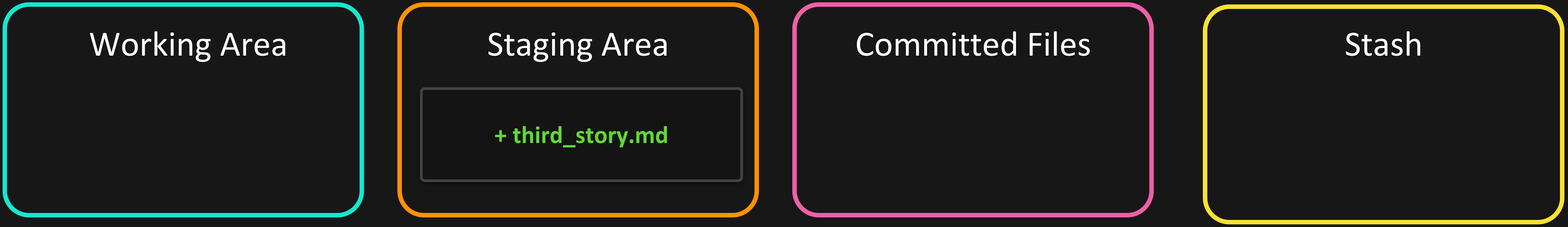
Added first story

@me



bash

```
$ git stash
```



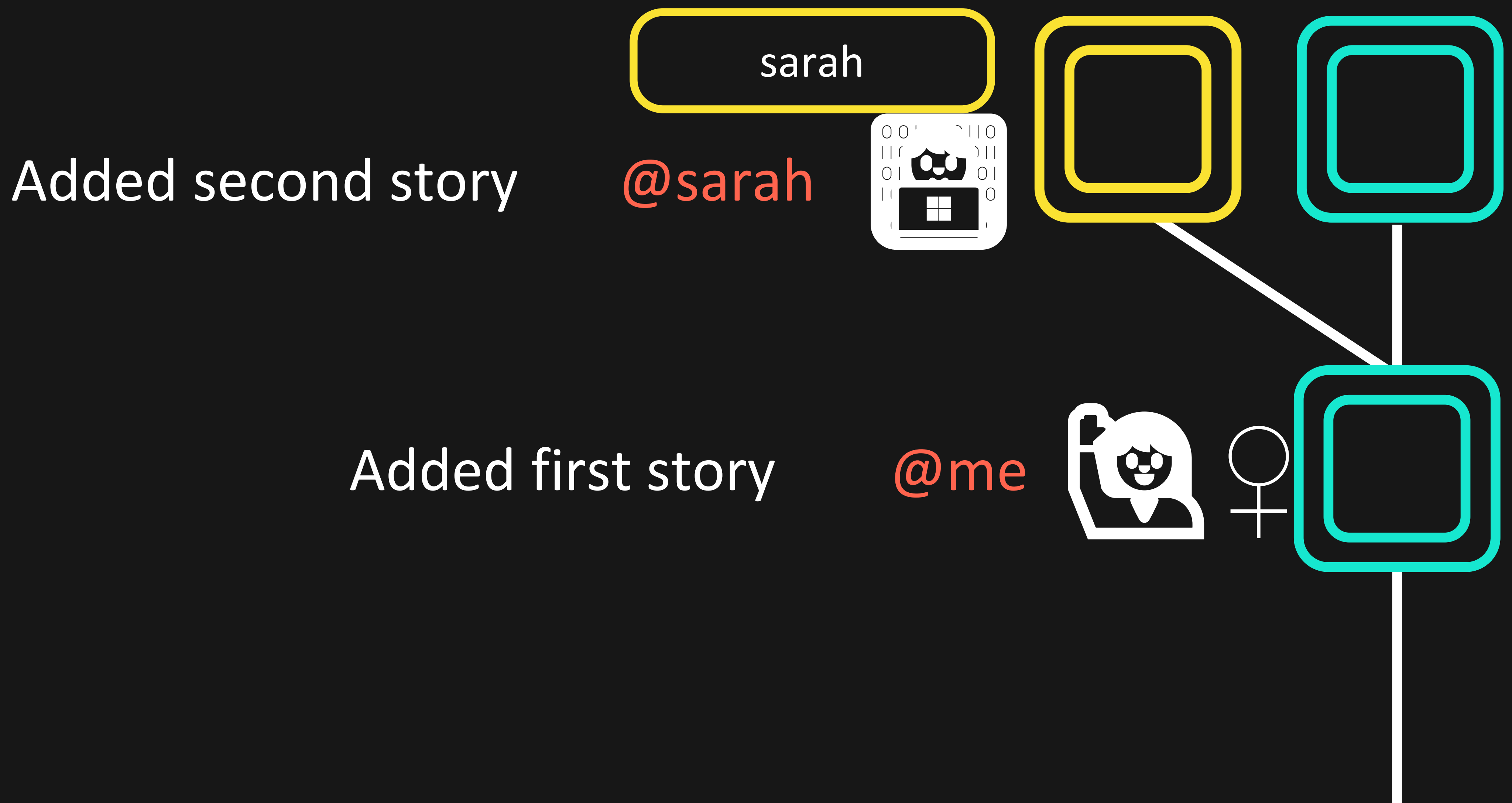
Working Area

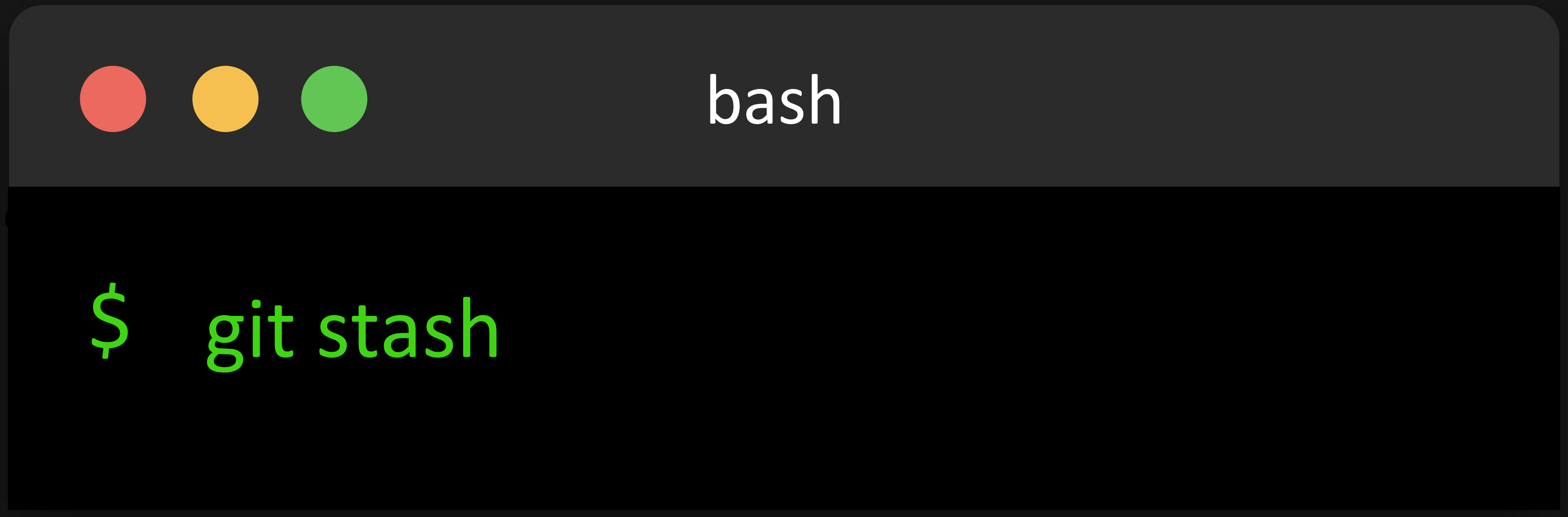
Staging Area

+ third_story.md

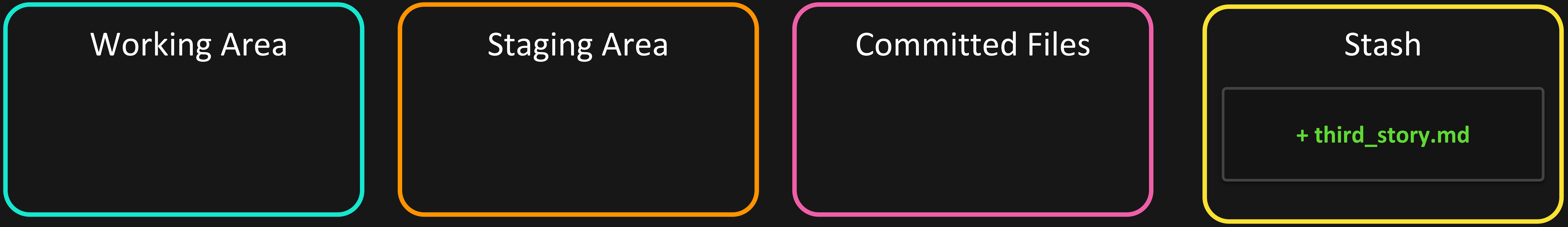
Committed Files

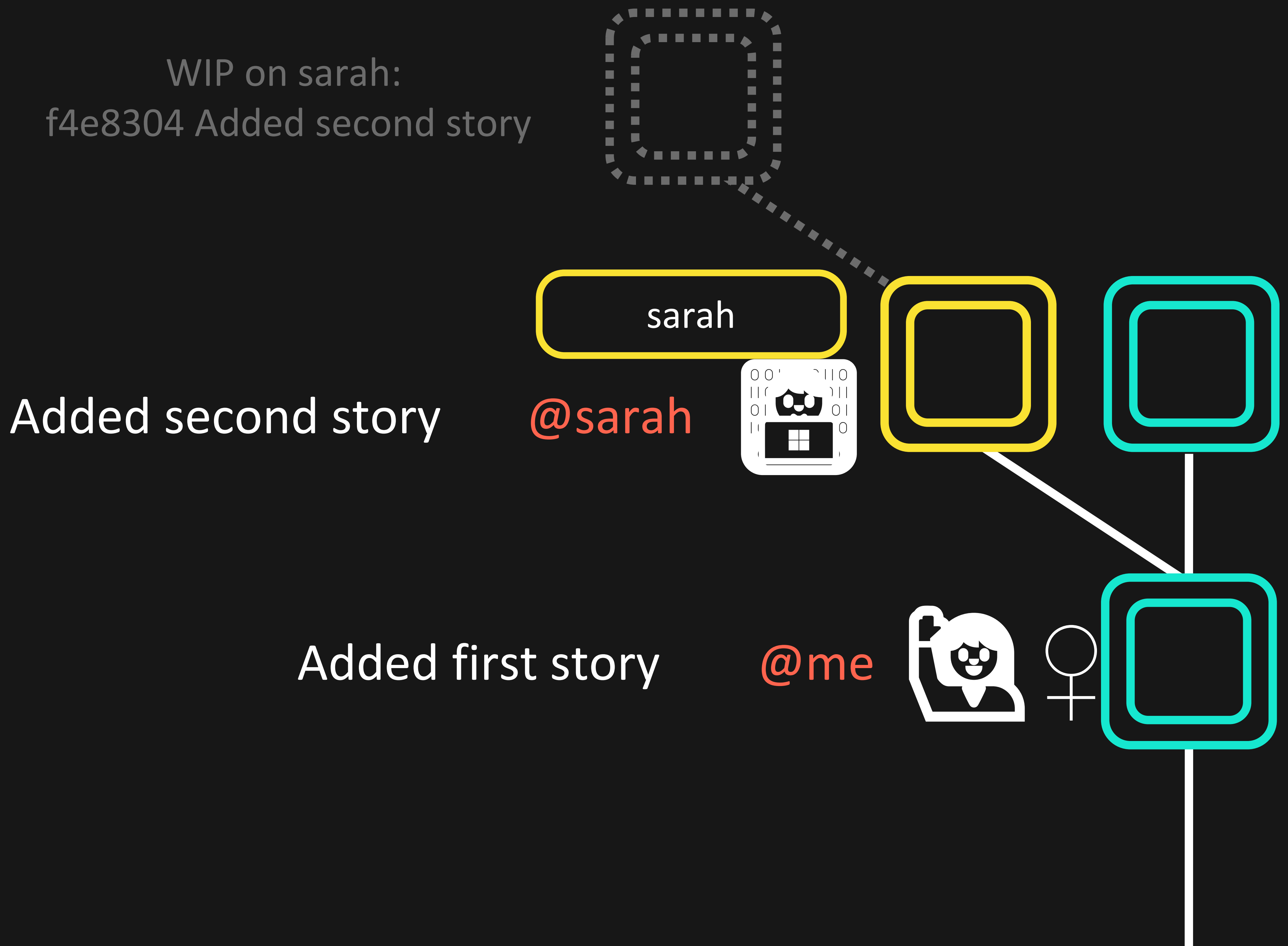
Stash

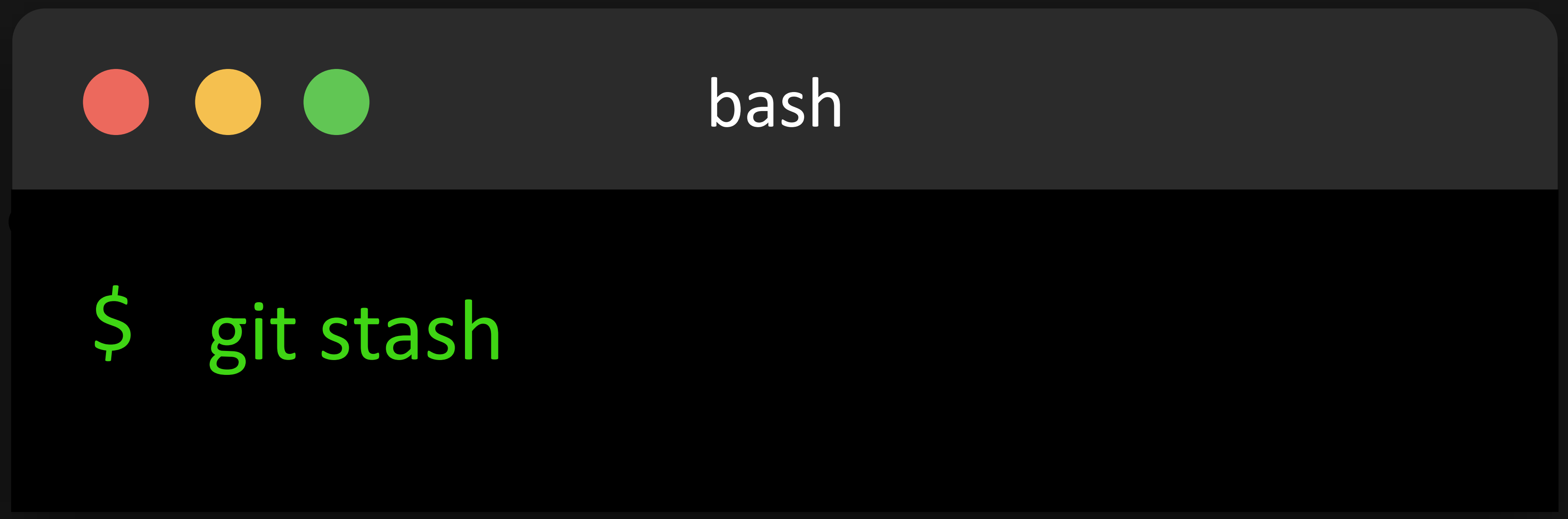




```
$ git stash
```


Working Area
Staging Area
Committed Files
Stash
+ third_story.md


WIP on sarah:
f4e8304 Added second story
sarah
Added second story
@sarah
Added first story
@me


bash

```
$ git stash
```

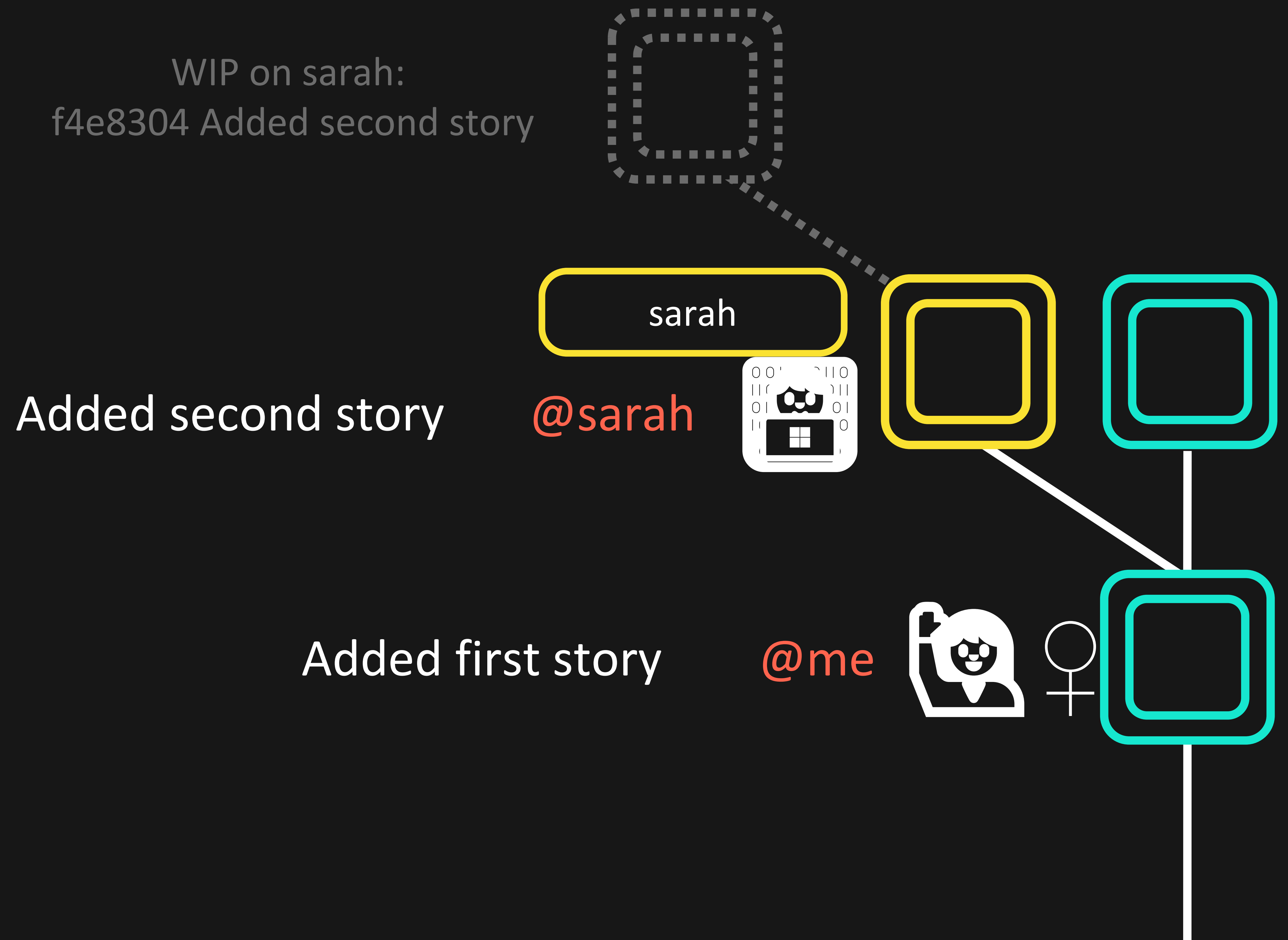
Working Area

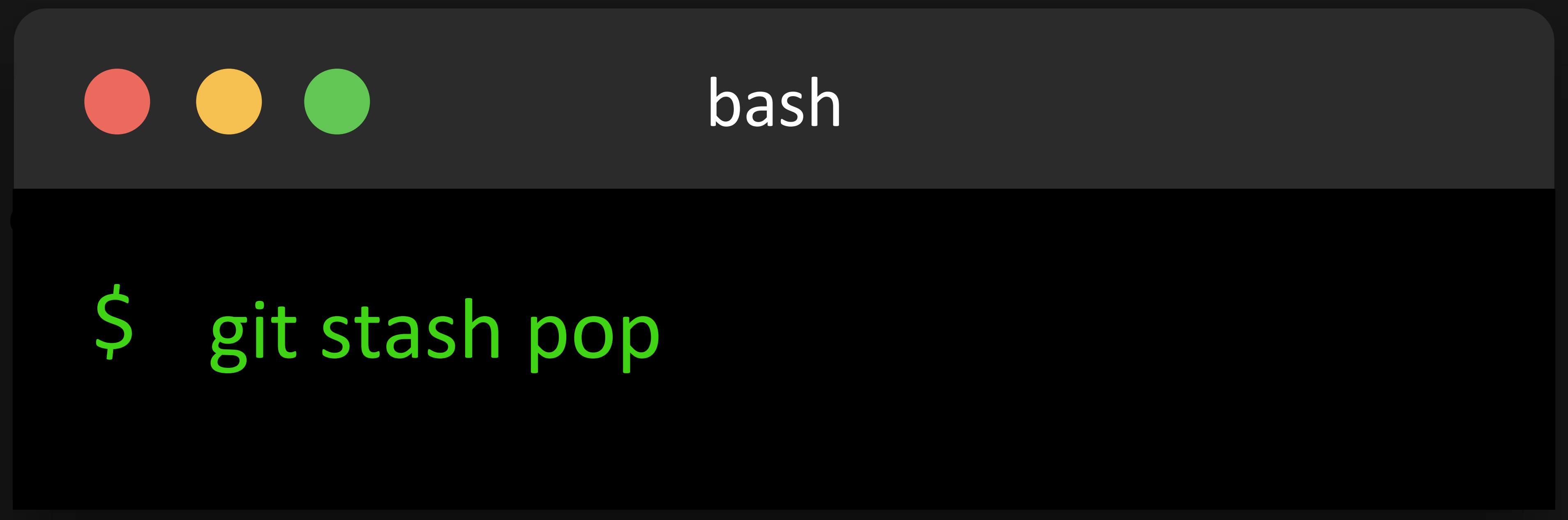
Staging Area

Committed Files

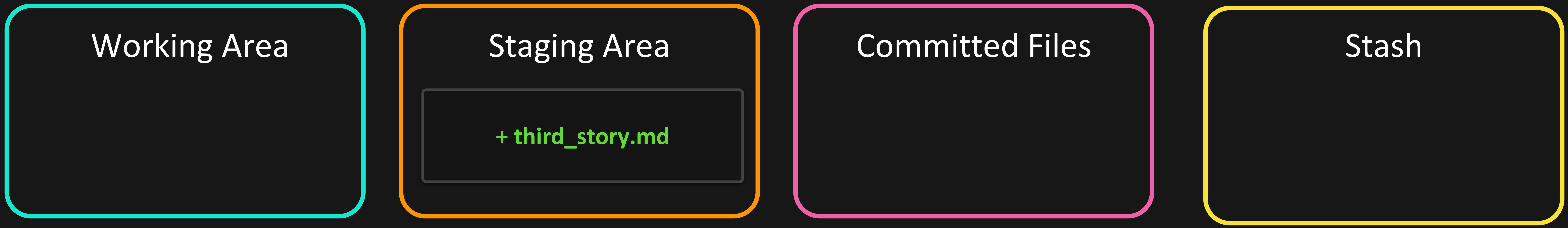
Stash

+ third_story.md





```
$ git stash pop
```



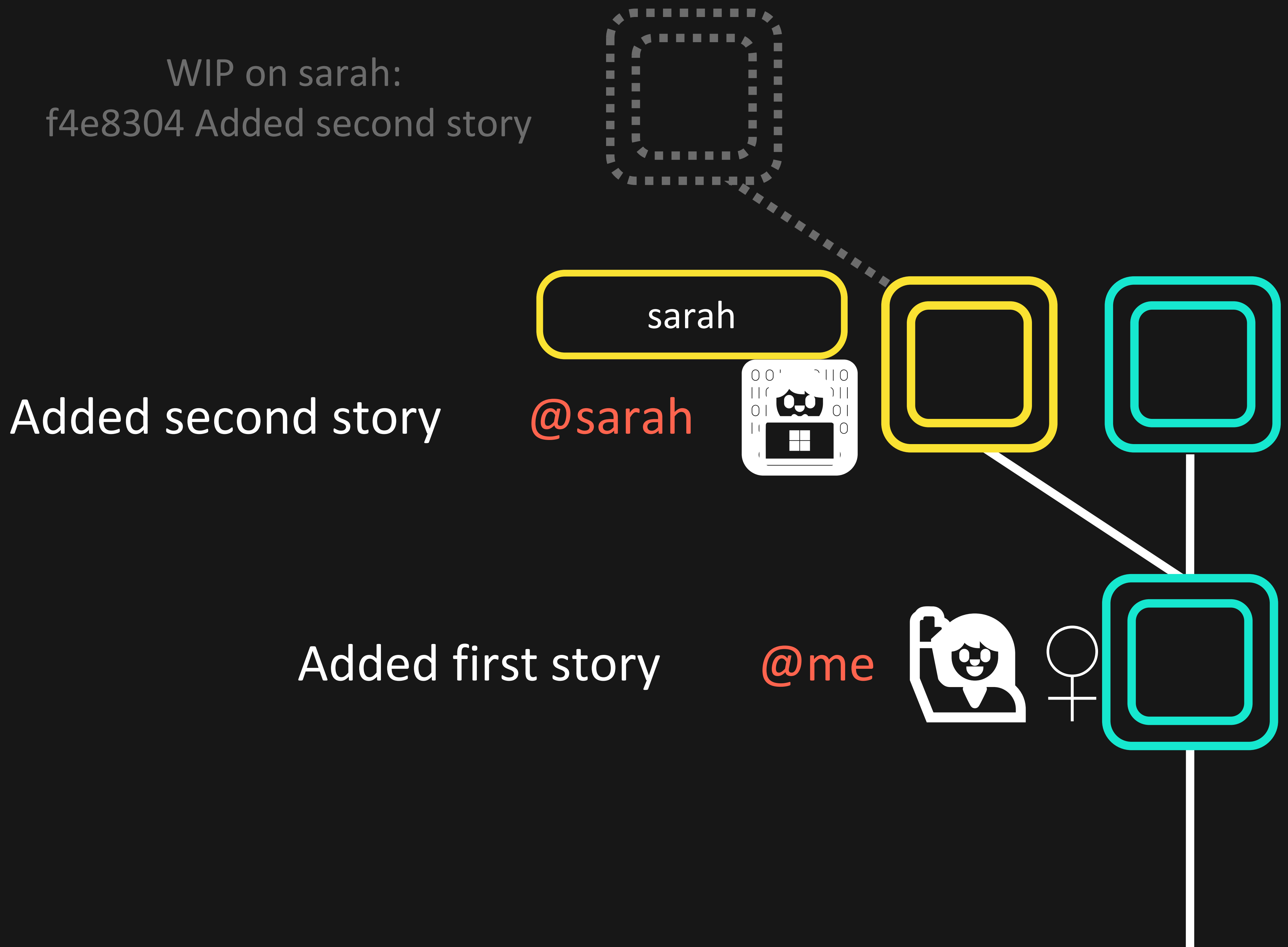
Working Area

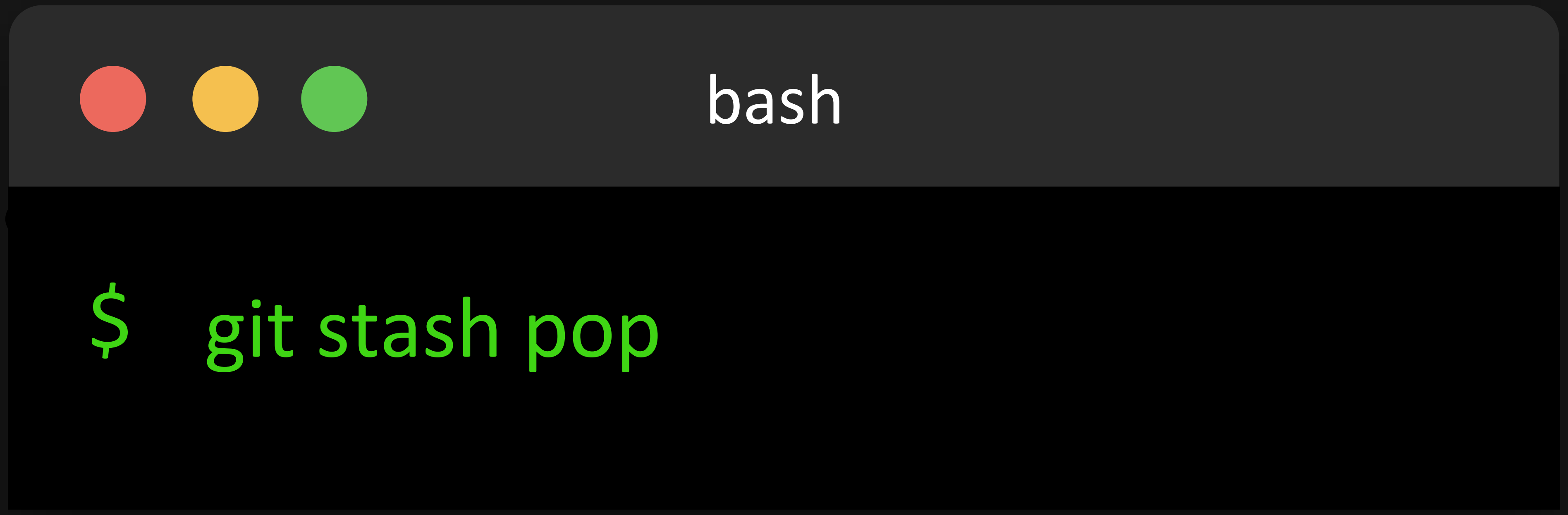
Staging Area

+ third_story.md

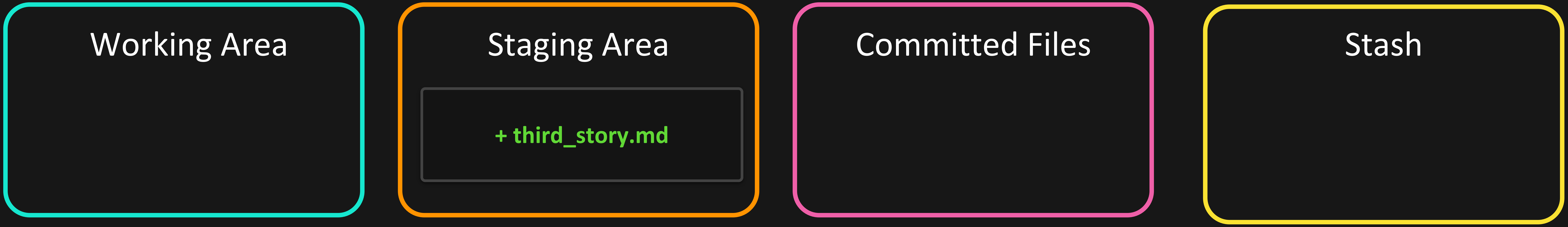
Committed Files

Stash





```
$ git stash pop
```



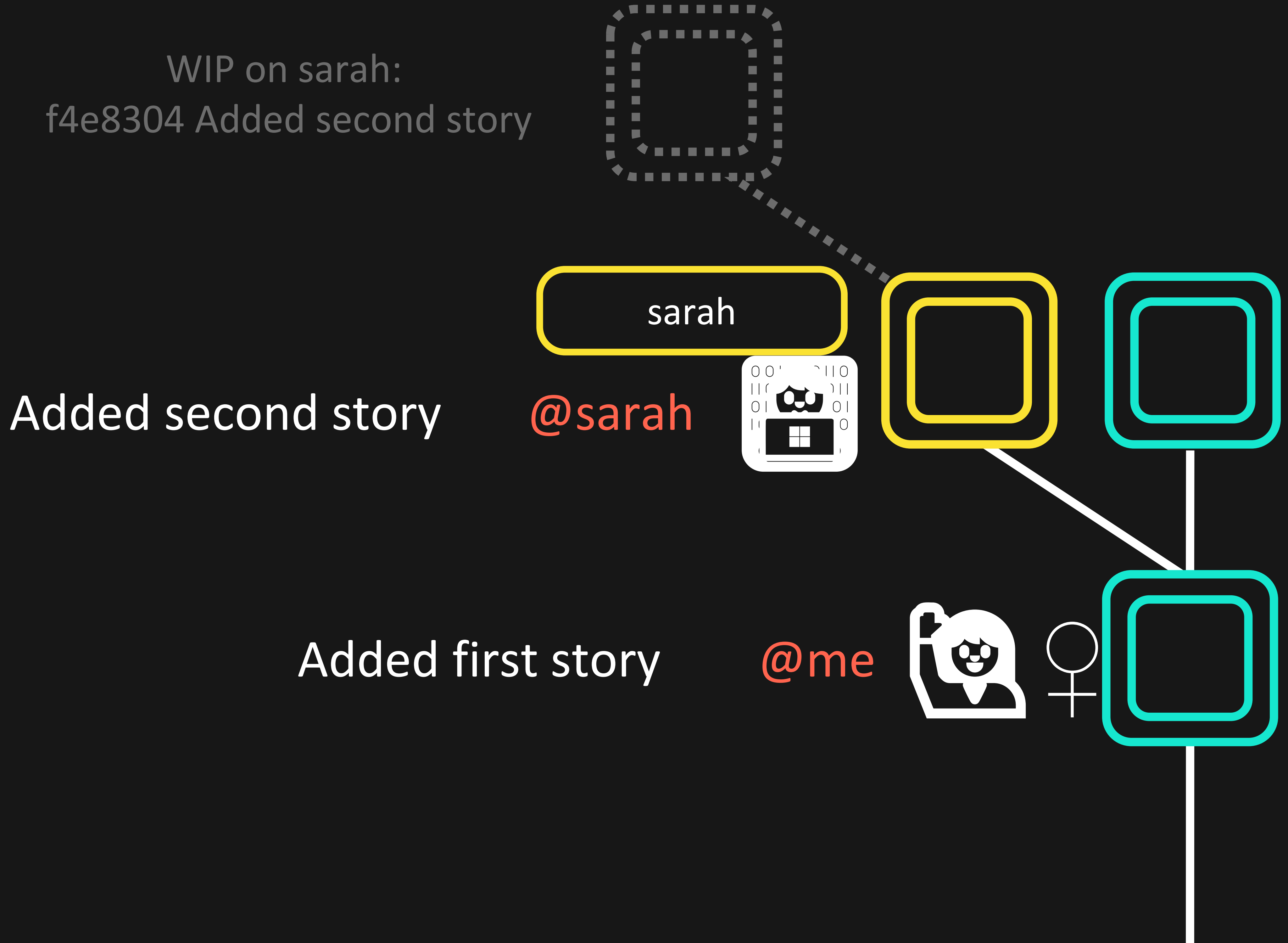
Working Area

Staging Area

+ third_story.md

Committed Files

Stash

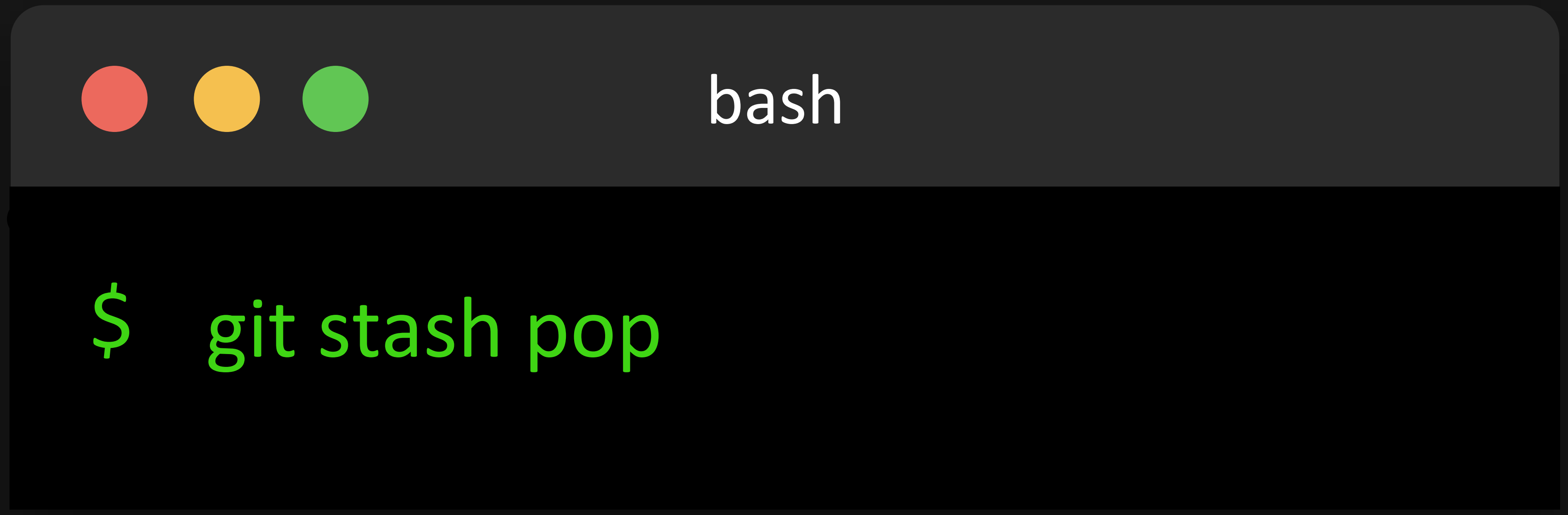


WIP on sarah:
f4e8304 Added second story

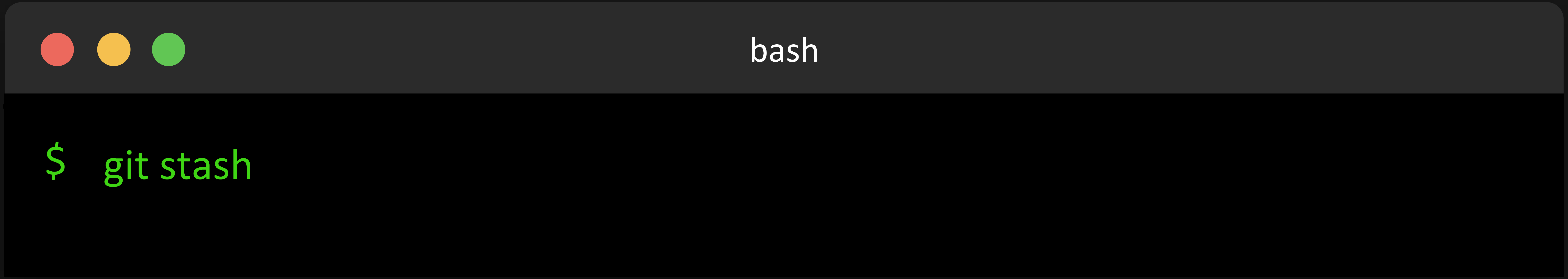
sarah

Added second story @sarah

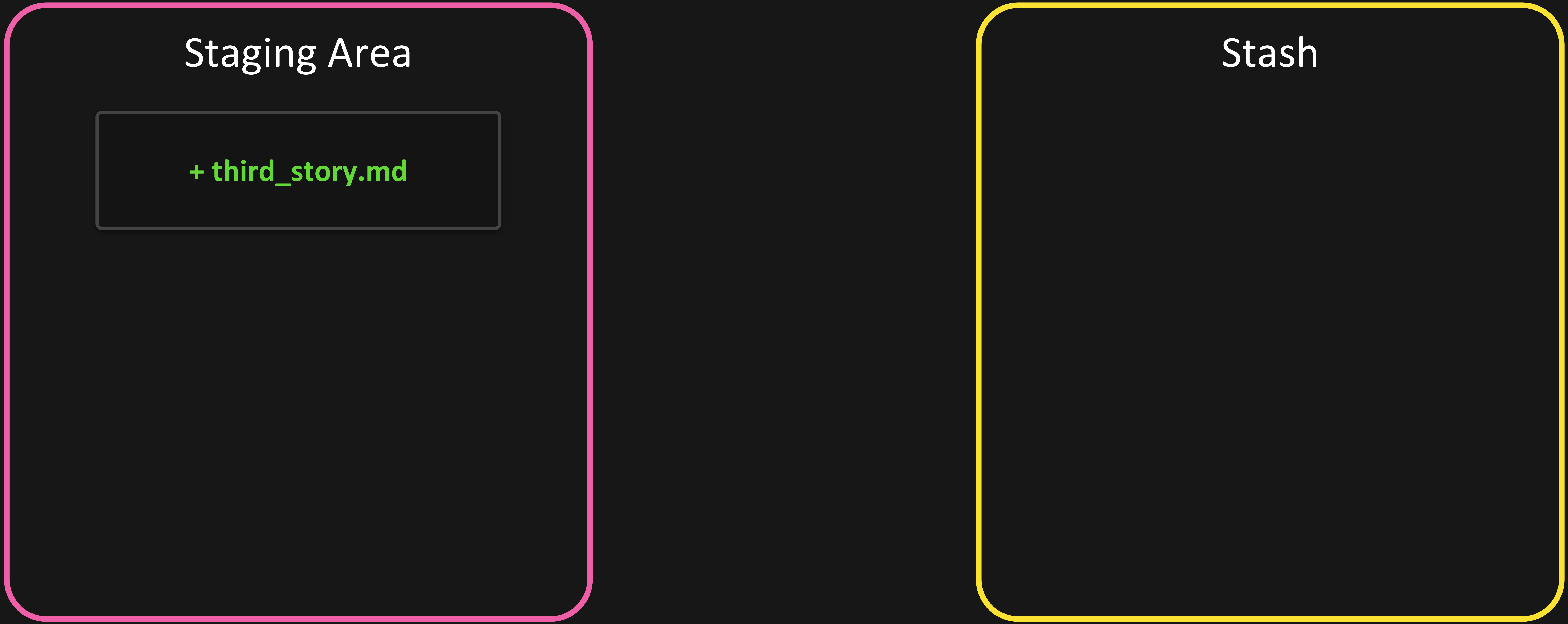
Added first story @me



```
$ git stash pop
```



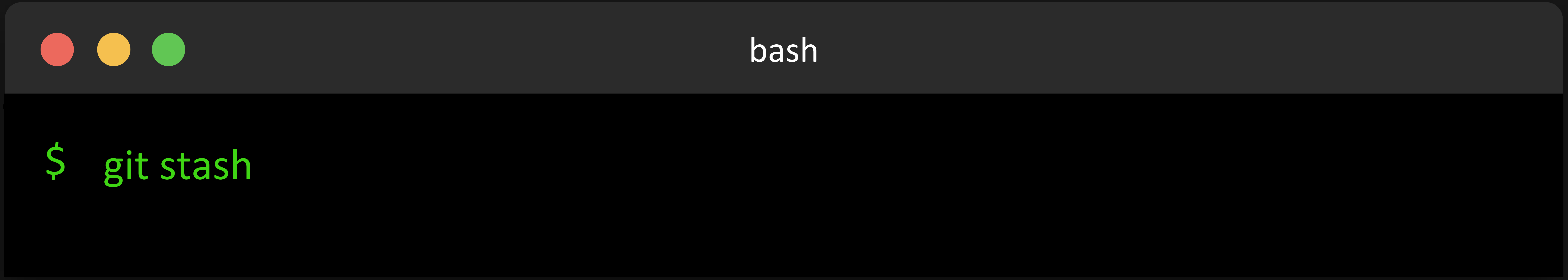
```
bash
$ git stash
```



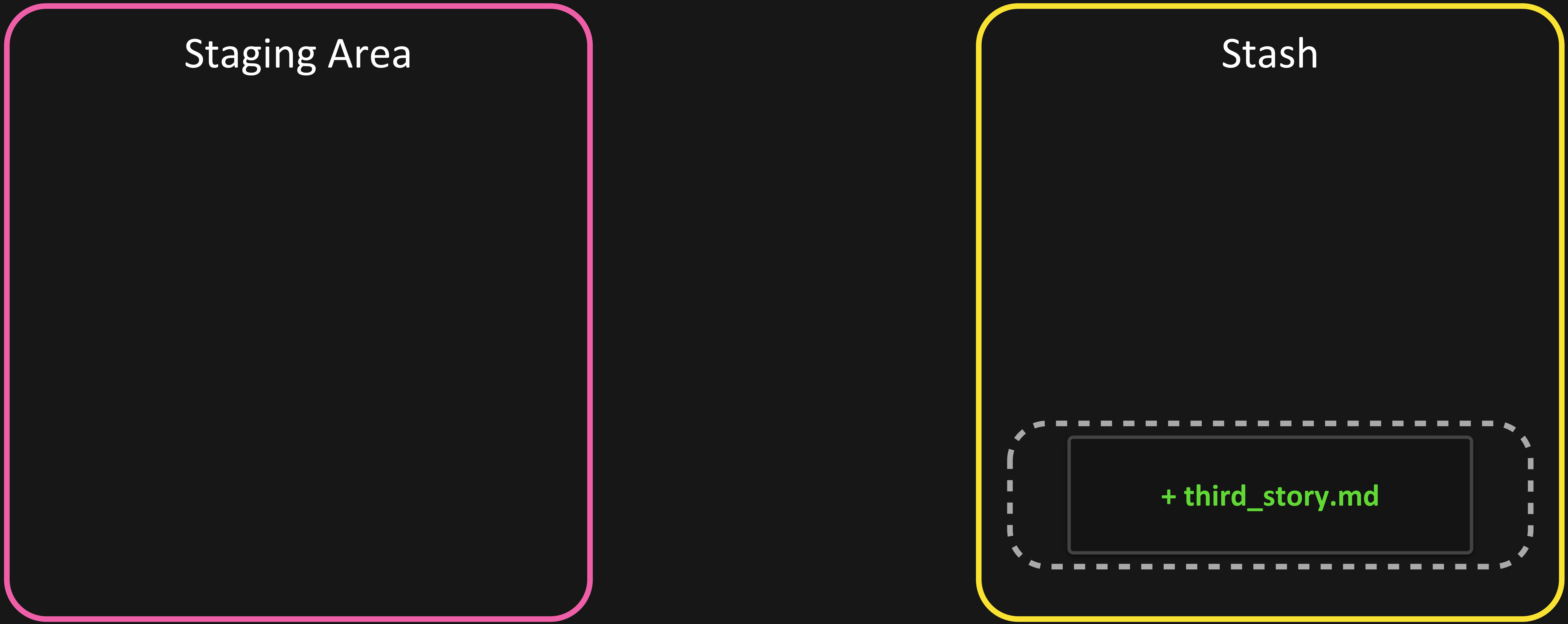
Staging Area

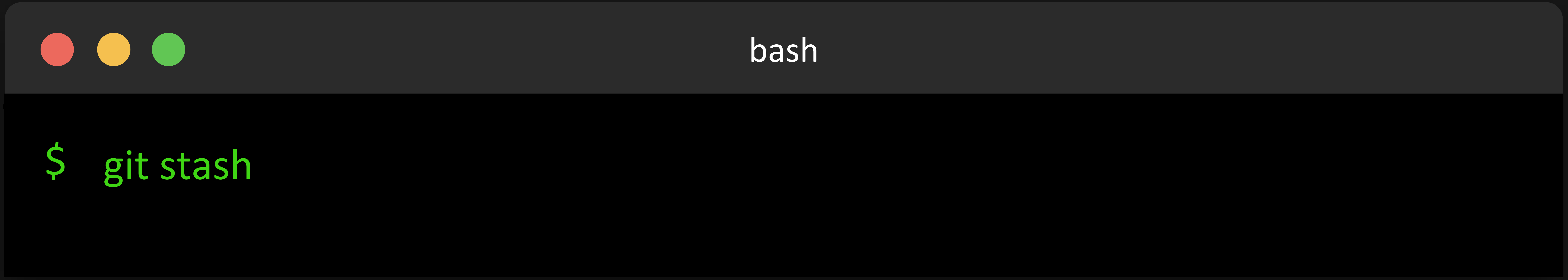
+ third_story.md

Stash



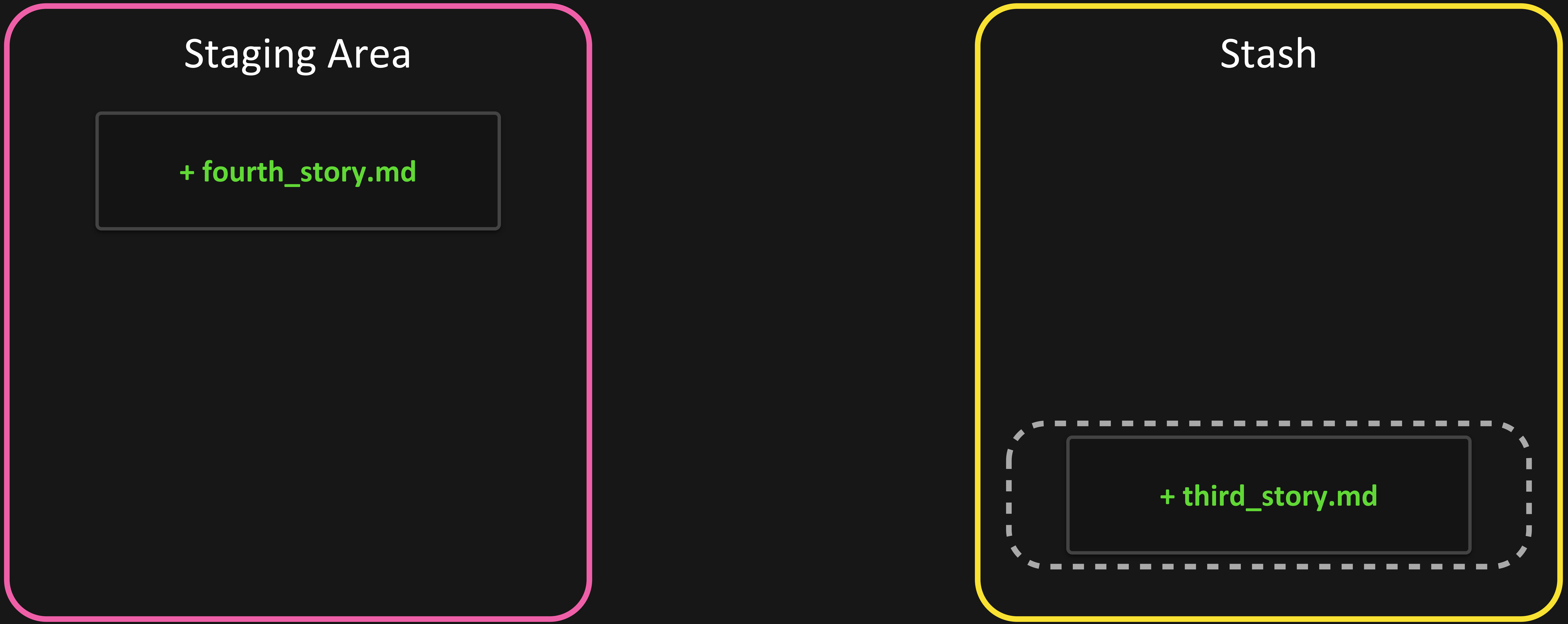
```
$ git stash
```





bash

```
$ git stash
```

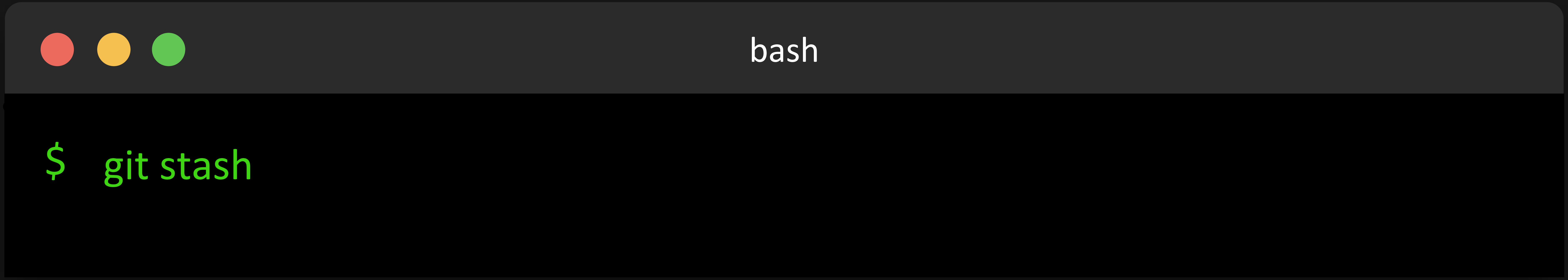


Staging Area

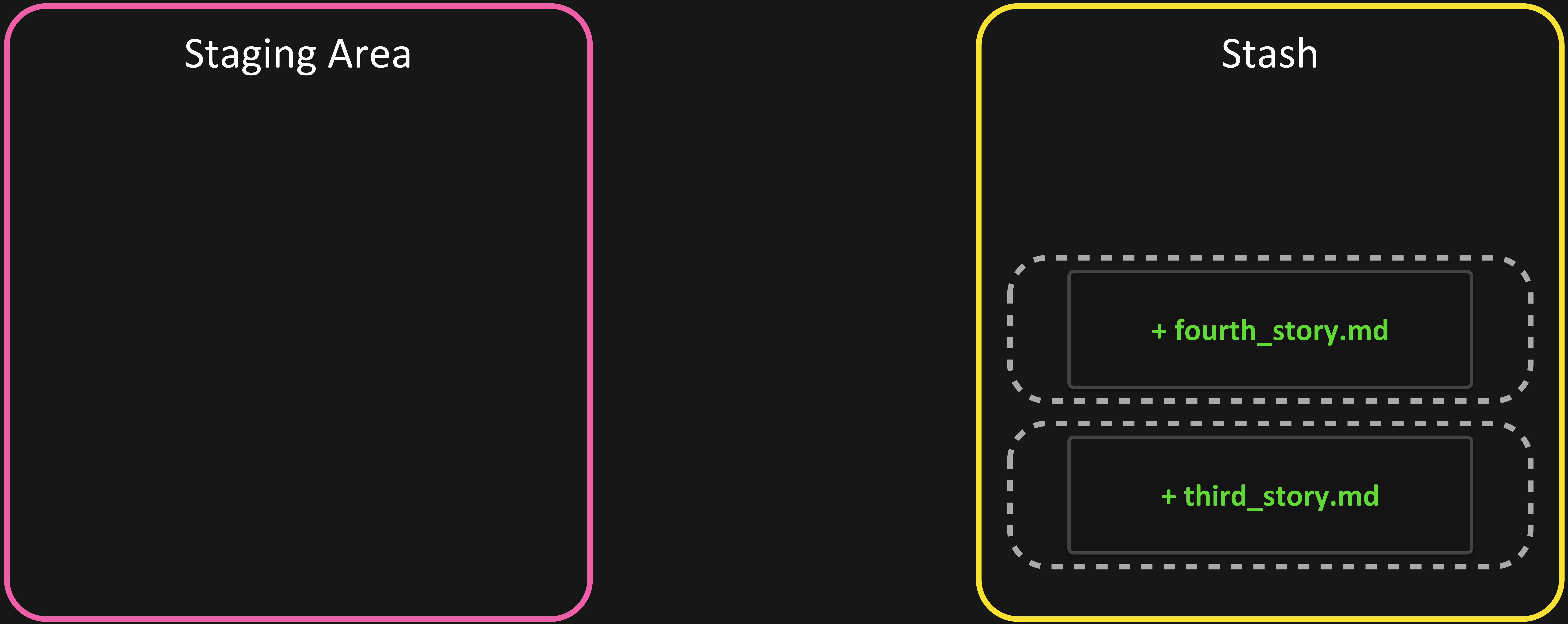
+ fourth_story.md

Stash

+ third_story.md



```
$ git stash
```

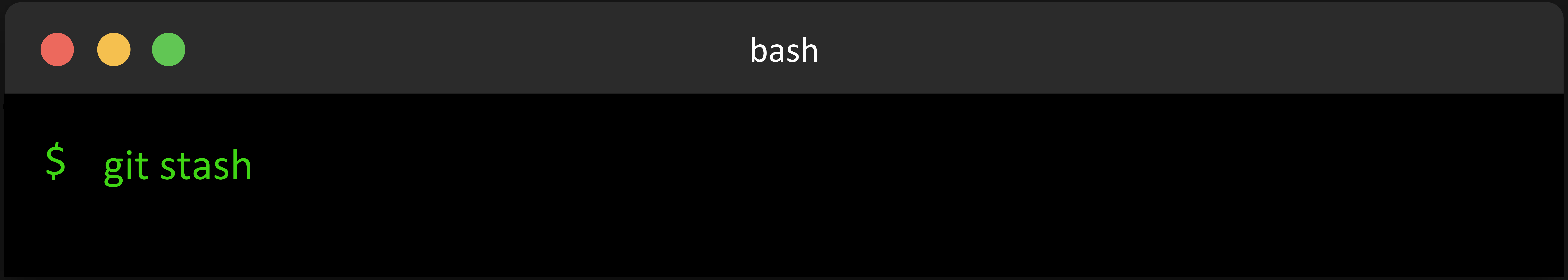


Staging Area

Stash

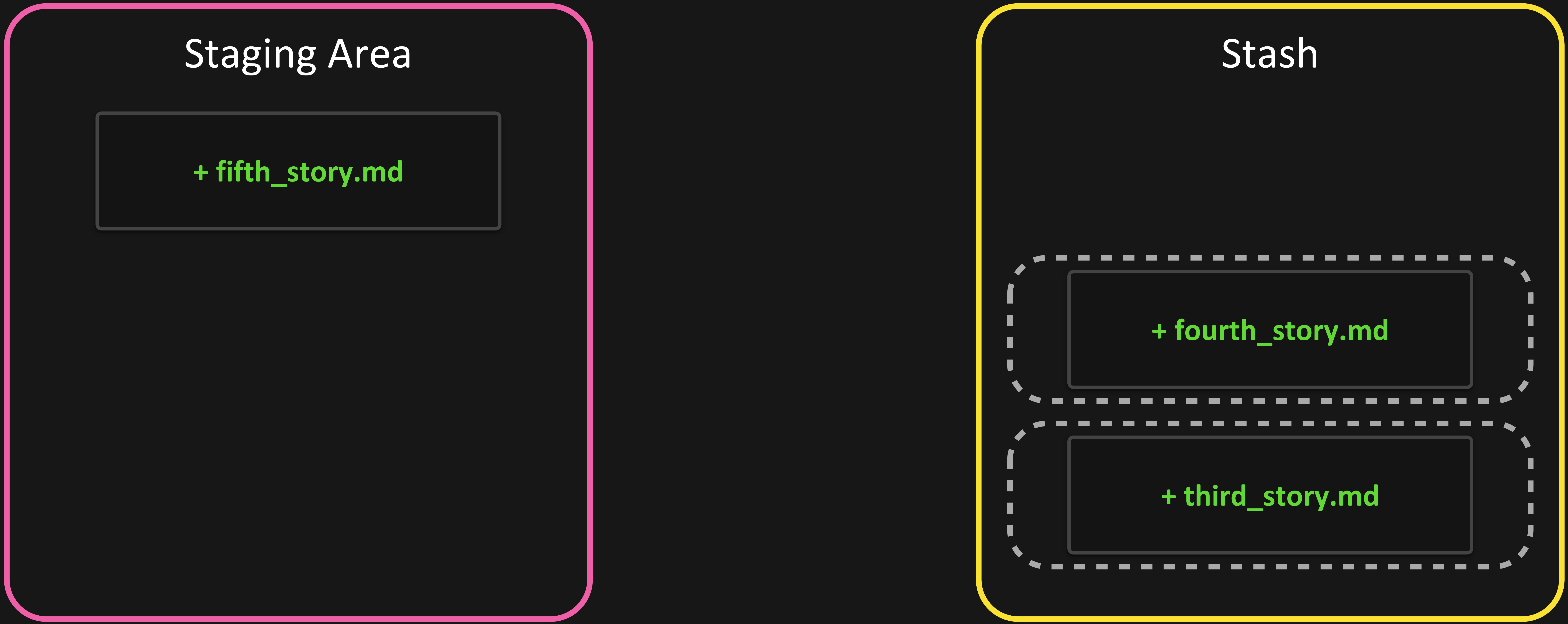
+ fourth_story.md

+ third_story.md



bash

```
$ git stash
```



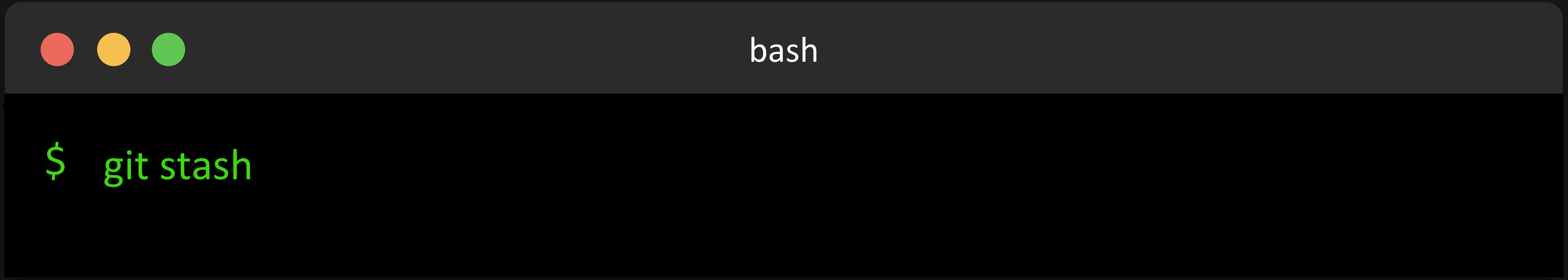
Staging Area

+ fifth_story.md

Stash

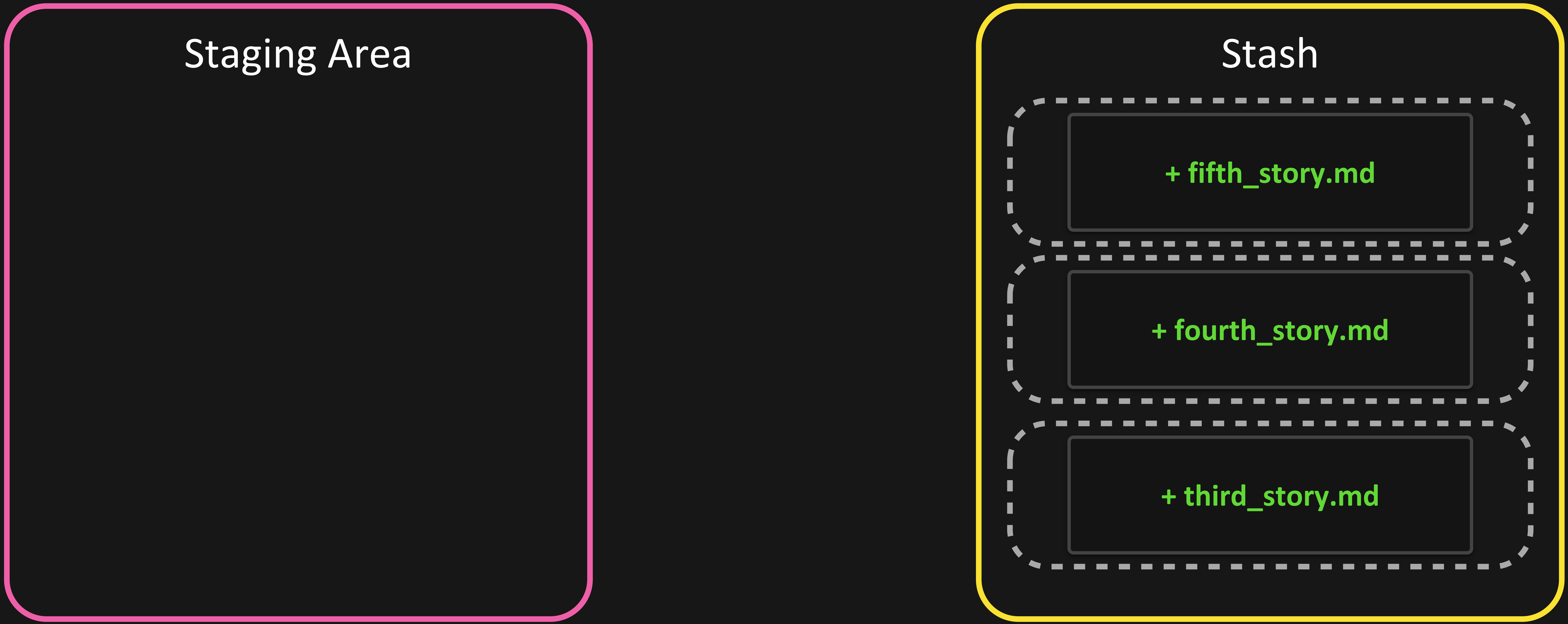
+ fourth_story.md

+ third_story.md



bash

```
$ git stash
```



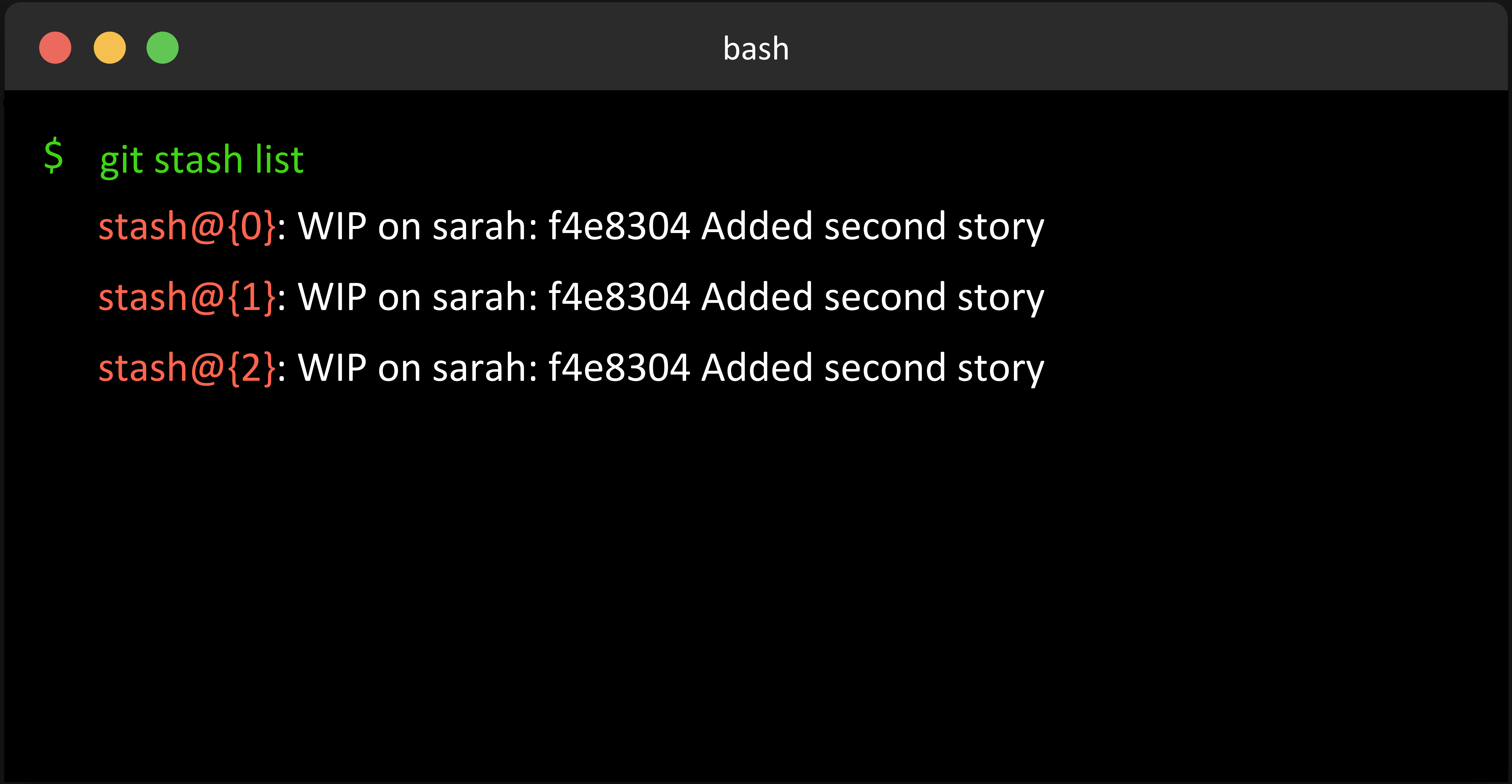
Staging Area

Stash

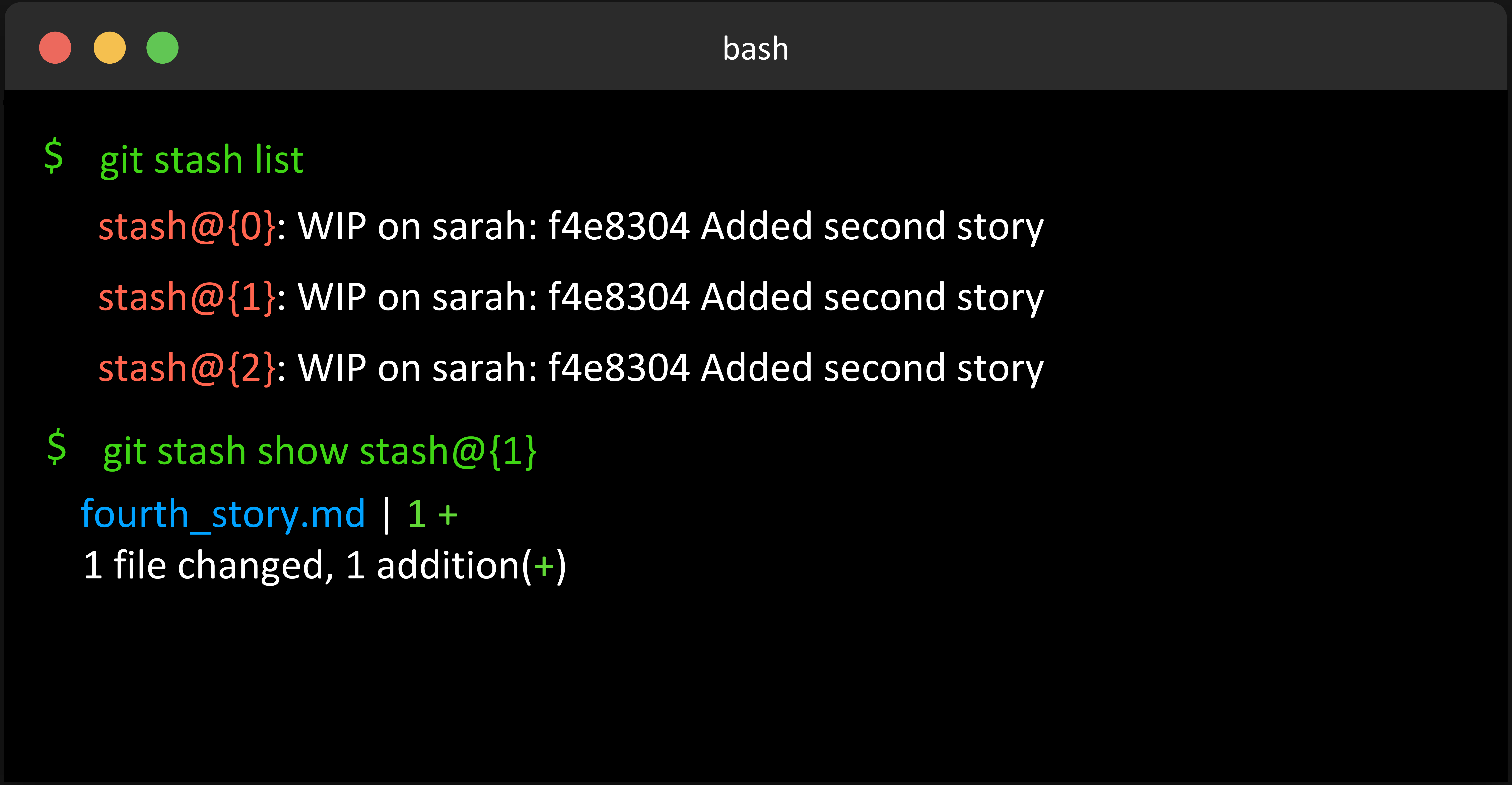
+ fifth_story.md

+ fourth_story.md

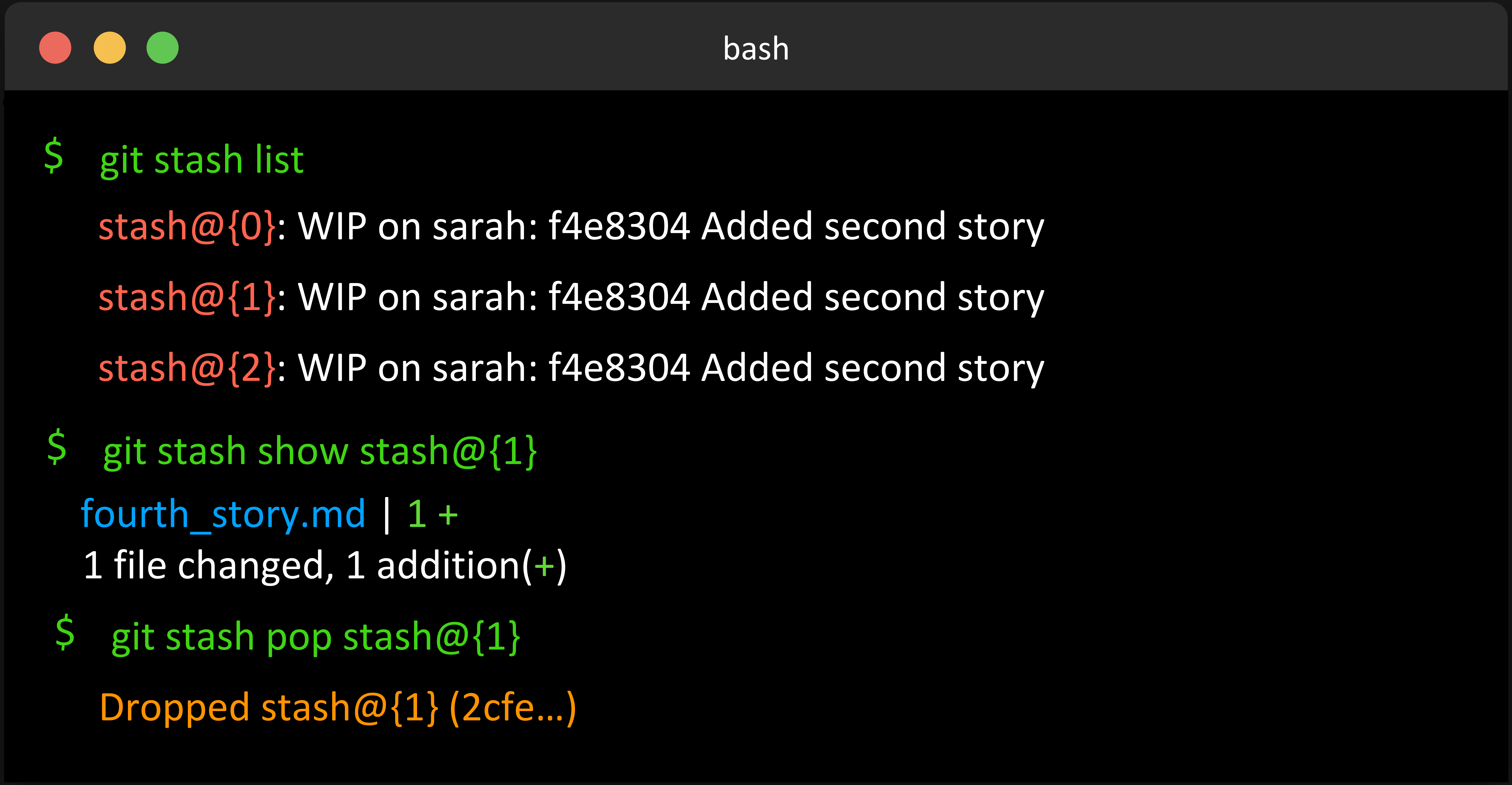
+ third_story.md



```
$  git stash list
   stash@{0}: WIP on sarah: f4e8304 Added second story
   stash@{1}: WIP on sarah: f4e8304 Added second story
   stash@{2}: WIP on sarah: f4e8304 Added second story
```



```
$  git stash list
   stash@{0}: WIP on sarah: f4e8304 Added second story
   stash@{1}: WIP on sarah: f4e8304 Added second story
   stash@{2}: WIP on sarah: f4e8304 Added second story
$  git stash show stash@{1}
  fourth_story.md | 1 +
  1 file changed, 1 addition(+)
```



```
$  git stash list
    stash@{0}: WIP on sarah: f4e8304 Added second story
    stash@{1}: WIP on sarah: f4e8304 Added second story
    stash@{2}: WIP on sarah: f4e8304 Added second story

$  git stash show stash@{1}
   fourth_story.md | 1 +
   1 file changed, 1 addition(+)

$  git stash pop stash@{1}
    Dropped stash@{1} (2cfe…)
```

KODEKLOUD