

SCM
CON



git

SOFTWARE CONTROL MANAGEMENT (SCM)

Software que se encarga de administrar cambios en documentos, como por ejemplo archivos de código fuente (Wikipedia)





100%

Total: 2 edits

Only show named versions

Stanford Digital Civil Society Lab—Fellowship Proposal

Civic CrowdAnalytics: Machine Learning to Synthesize and Analyze Crowdsourced Civic Contributions

Civic organizations and governments worldwide increasingly use crowdsourced civic participation to allow citizens to share their ideas and have a binding influence on public policies. The more actively the crowd participates, the more data that need to be processed. Tools to effectively analyze citizen contributions are critical to the success of crowdsourced participatory processes. Without efficient analysis tools, crowdsourced civic participation efforts result in data loss and obscurity, preventing citizens from examining the extent to which their voices are reflected in the policies. The lack of transparency might paralyze the crowdsourced civic participation process. Using the preliminary results on the use of artificial intelligence (AI) to enhance crowdsourcing for democratic practices, I aim in this project to expand our understanding of how natural language processing (NLP) and machine learning (ML) can help civic organizations and governments synthesize and analyze civic input. The goal is to study how ML and NLP techniques can enable more analytically rigorous, transparent, and inclusive civic participation and use the results to develop an analytics platform using NLP and ML and interactive visualizations of the crowdsourced civic data, with an output mechanism that is easy to interpret and share.

Introduction

Crowdsourced civic participation is a novel democratic process that allows citizens to share ideas and have influence on public policies and initiatives [1]. The more actively the citizens participate, the more data the government officials or the NGO representatives have to process. Tools to effectively synthesize and analyze citizen contributions are critical for crowdsourced participatory processes to succeed [2]. Without efficient processing tools, citizen input is often lost in the absence of a meaningful summary, and transparency is diminished. Citizens cannot trace the history of their contributions to see how their voices impacted the resulting budgets, plans, and policies [3]. As a result, citizens may lose trust in participatory processes.

The Problem

Synthesizing a large volume of textual and unstructured citizen contributions is labor intensive because it involves a substantial human effort to perform tasks that are hard to automate or require advanced technical skills. NLP and ML can be useful in the synthesis of citizen contributions; however, more research is needed to understand how the potential of ML and NLP can best fit the analysis practices of crowdsourcing organizers.

January

▶ January 30, 2:29 PM

Current version

■ Jorge Saldivar

▶ January 30, 12:58 PM

■ Jorge Saldivar

▶ January 13, 11:52 AM

■ Jorge Saldivar

▶ January 13, 9:27 AM

■ Jorge Saldivar

▶ January 12, 10:11 PM

■ Jorge Saldivar

▶ January 12, 6:21 PM

■ All anonymous users

■ Jorge Saldivar

January 12, 3:56 PM

■ Jorge Saldivar

January 12, 1:16 PM

■ Jorge Saldivar

▶ January 12, 11:39 AM

■ Jorge Saldivar

▶ January 12, 10:04 AM

■ Jorge Saldivar

▶ January 12, 12:48 AM

■ Jorge Saldivar

▶ January 11, 9:47 PM

■ Jorge Saldivar

 Show changes

MODELOS DE SCM

Centralizado: Todos los usuarios se conectan a repositorio central (master)

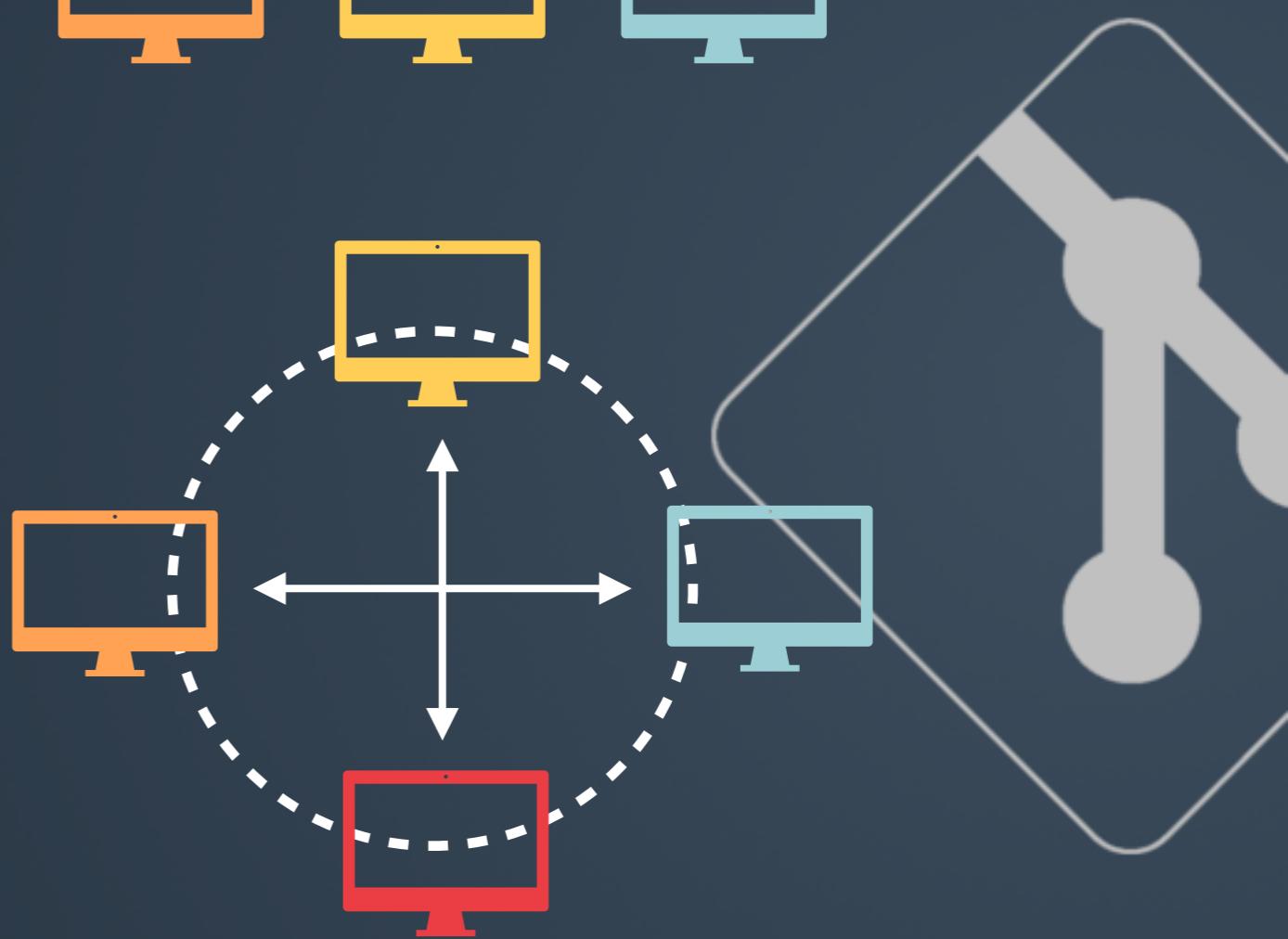


MODELOS DE SCM

Centralizado: Todos los usuarios se conectan a repositorio central (master)



Descentralizado: Cada usuario tiene una copia del repositorio entero en su computadora local



EJEMPLOS DE SCM



Descentralizado



Descentralizado



Centralizado

HERRAMIENTAS



git

SCM



GitHub

Servicio web para
alojar proyectos git



axosoft
GitKraken

Cliente gráfico de git

FUNDAMENTOS

Repository

Working directory



HTML



CSS



JS

Staging Index



FUNDAMENTOS

Repository

Working directory



HTML



CSS



JS

Staging Index



HTML



CSS



JS



FUNDAMENTOS

Repository



Working directory



Staging Index



FUNDAMENTOS

Repository



HTML



CSS



JS

Working directory



HTML



CSS



JS

Staging Index

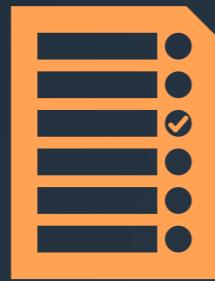


FUNDAMENTOS

Repository



HTML



CSS



JS

Working directory



HTML



CSS



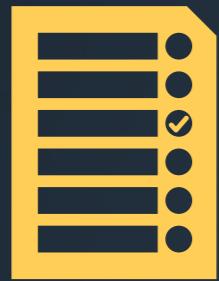
JS

Staging Index



FUNDAMENTOS

Repository



HTML



CSS



JS

Working directory



HTML



CSS



JS

Staging Index



CSS



FUNDAMENTOS

Repository



HTML



CSS



JS



CSS

Working directory



HTML



CSS



JS

Staging Index



FUNDAMENTOS

Repository



HTML



CSS



JS



CSS

Working directory



HTML



CSS



JS

Staging Index

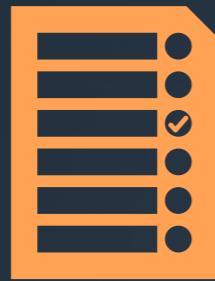


FUNDAMENTOS

Repository



HTML



CSS



JS



CSS

Working directory



HTML



CSS



JS

Staging Index



FUNDAMENTOS

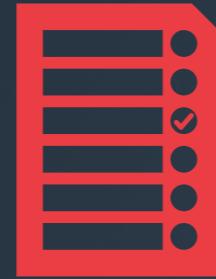
Repository



HTML



CSS



JS



CSS

Working directory



HTML



CSS



JS

Staging Index



HTML



CSS



FUNDAMENTOS

Repository



HTML



CSS



JS



CSS



HTML



CSS

Working directory



HTML



CSS



JS

Staging Index

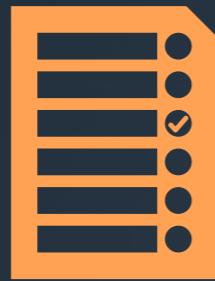


FUNDAMENTOS

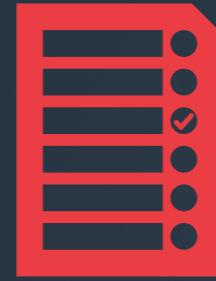
Repository



HTML



CSS



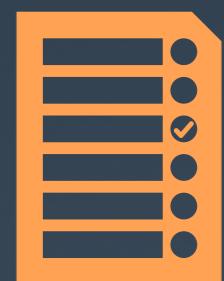
JS



CSS



HTML



CSS

Working directory



HTML



CSS



JS

Staging Index



FUNDAMENTOS



HTML CSS JS
commit: 90bcec3

Working directory

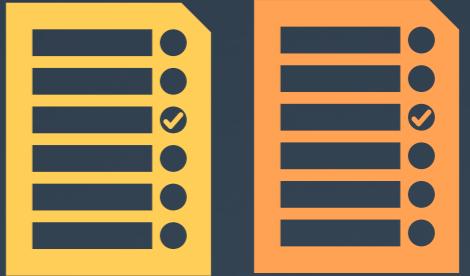


HTML CSS JS

Repository



commit: a826aa1

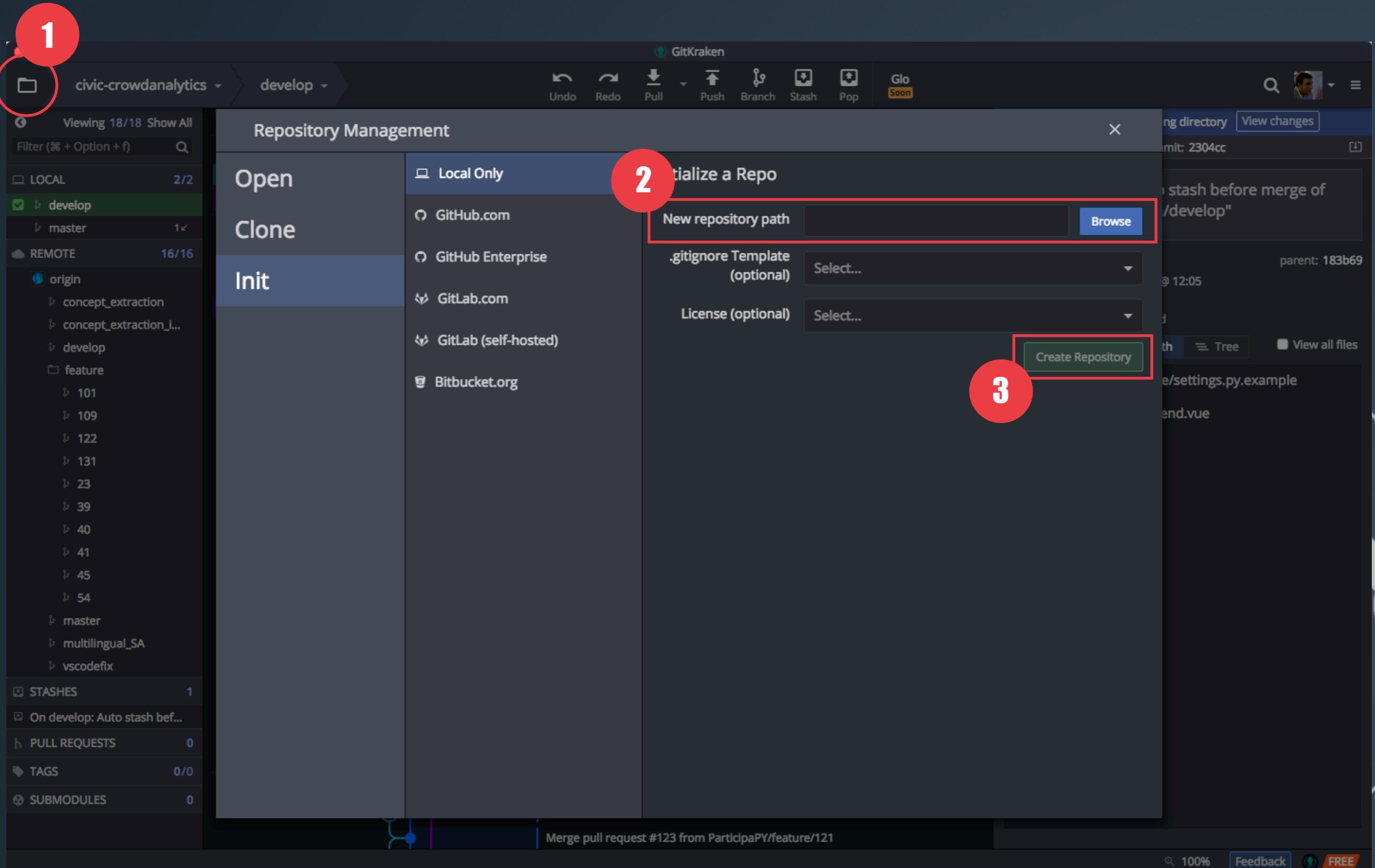


HTML CSS
commit: cafd7e7

Staging Index

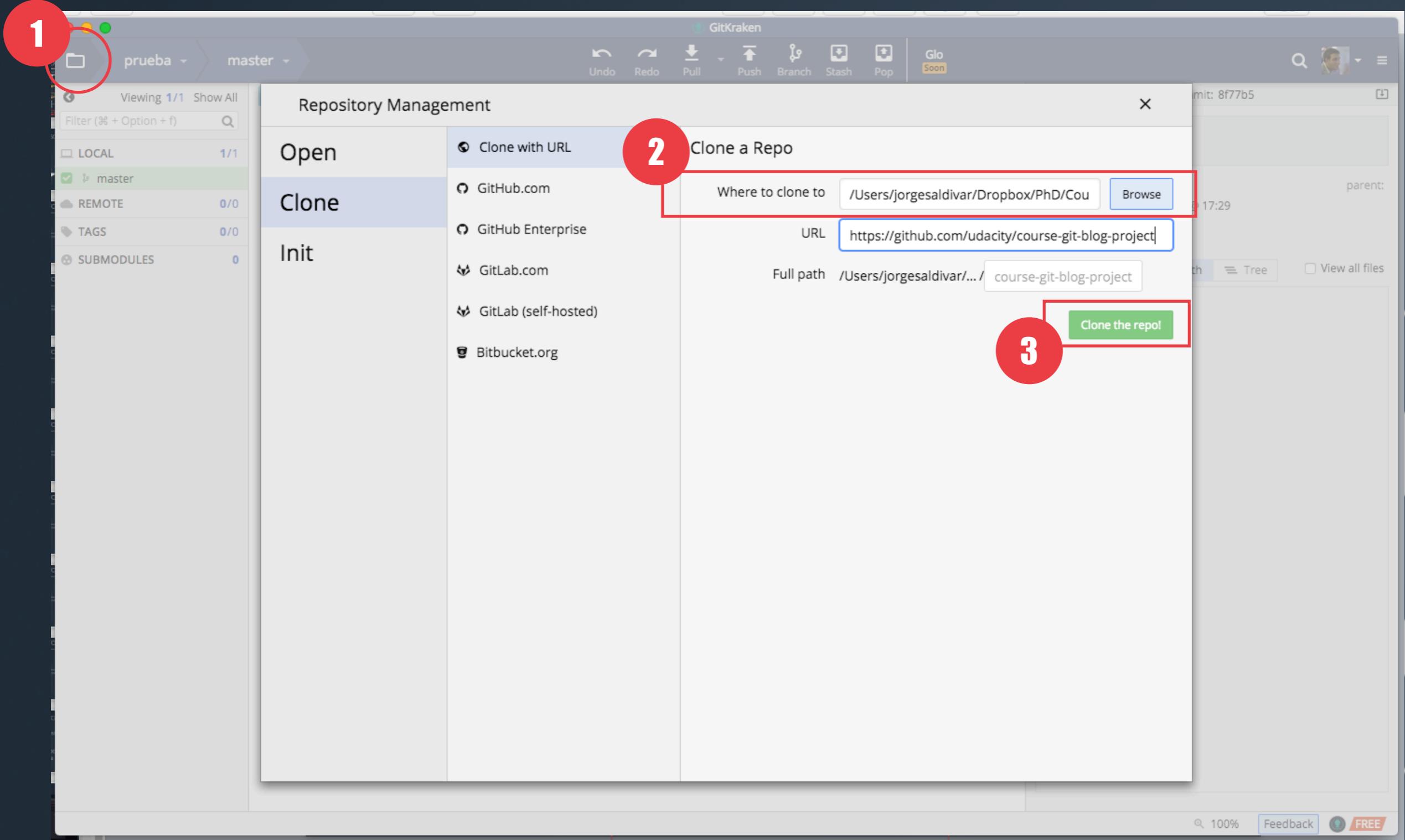


CREAR REPOSITORIO - INIT



CREAR REPOSITORIO - CLONE

<https://github.com/joausaga/course-git-blog-project>



VERIFICAR ESTADO

The screenshot shows the GitKraken interface with the project 'course-git-blog-project' and the 'master' branch selected. A red box highlights the commit history for the 'master' branch, and another red box highlights the details of the last commit.

Historial de commits (log)

Último commit

commit: a3dc99
Center content on page
Richard Kalehoff authored 5/12/2016 @ 18:34
parent: 6f04dd
1 modified
Name ▾ Path Tree View all files
css/app.css

undo redo pull push branch stash pop glo soon

course-git-blog-project master

Viewing 2/2 Show All

Filter (⌘ + Option + f)

LOCAL 1/1

master

REMOTE 1/1

origin master

PULL REQUESTS 1

TAGS 0/0

SUBMODULES 0

Center content on page
Add breakpoint for large-sized screens
Add breakpoint for medium-sized screens
Add space around page edge
Style page header
Convert social links from text to images
Add divider between content/footer
Add divider between main/side content
Add missing profile picture
Style 'read more' links
Set paragraph line-height
Set default text color
Set article timestamp color
Align article header content
Make article images responsive
Add 'visuallyhidden' helper class
Add article images
Set default fonts
Give body a default color
Add Normalize.css CSS reset to project
Add colors & set better box-sizing
Add sidebar content
Update article dates
Add article content
Add starting HTML structure
Add starter files
Initial commit

VERIFICAR MODIFICACIONES

The screenshot shows the GitKraken interface. On the left, a diff view for the file `index.html` is displayed, comparing two versions of the code. The top section of the diff shows the initial state of the file, while the bottom section shows the state after changes. The changes are color-coded: deleted text is shown in red, and added text is shown in green. The word "borrado" (deleted) is overlaid on the red-highlighted area, and the word "nuevo" (new) is overlaid on the green-highlighted area. On the right, the commit history for the branch `master` is shown. A single commit is listed, authored by Richard Kalehoff on May 12, 2016, at 18:30. The commit message is "Add breakpoint for large-sized screens". The commit details show that two files were modified: `css/app.css` and `index.html`. The file `index.html` is highlighted with a red border. A red box labeled "modificaciones" covers the commit details and the right-hand sidebar.

commit: 6f04dd

Add breakpoint for large-sized screens

Richard Kalehoff authored 5/12/2016 @ 18:30 parent: 50d835

2 modified

Name ↗ Path Tree View all files

css/app.css

index.html

modificaciones

Diff View File View

Ignore white space

Undo Redo Pull Push Branch Stash Pop Glo Soon

course-git-blog-project master

index.html

@@ -15,83 +15,85 @@

```
15      15      <h1>Expedition</h1>
16      16      </header>
17      17
18      <main>
19          <h2 class="visuallyhidden">Articles</h2>
20      +<div class="container">
21          +<main>
22              <h2 class="visuallyhidden">Articles</h2>
23
24      -<article>
25          <header>
26              <h3>Chasing the Snow</h3>
27              <time datetime="2016-05-12T08:00">May 12</time>
28          </header>
29          <article>
30              <header>
31                  <h3>Chasing the Snow</h3>
32                  <time datetime="2016-05-12T08:00">May 12</time>
33          </header>
34
35          
36          +
37
38          <p>Lorem ipsum dolor sit amet, consectetur adipisicing elit. Nisi, laborum dolorem, dolor error nihil vitae si
39          +<p>Lorem ipsum dolor sit amet, consectetur adipisicing elit. Nisi, laborum dolorem, dolor error nihil vita
40
41          <a class="read-more" href="#">Read more</a>
42      </article>
43          <a class="read-more" href="#">Read more</a>
44      </article>
45
46      <article>
47          <header>
48              <h2>Seeing Clearly</h2>
```

100% Feedback FREE

AGREGAR CAMBIOS (STAGE)

Repository

Working directory



HTML



CSS



JS

Staging Index

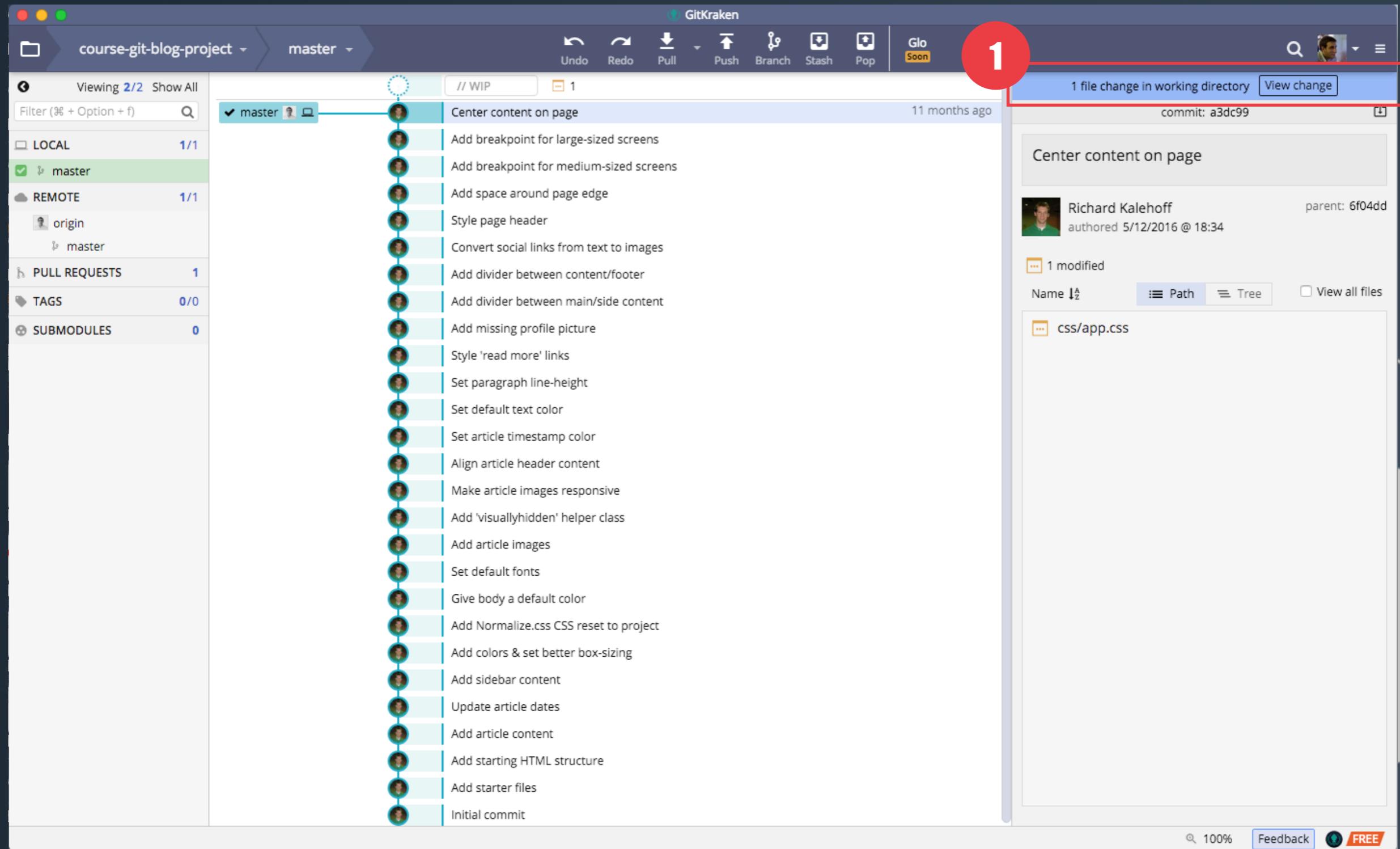


HTML

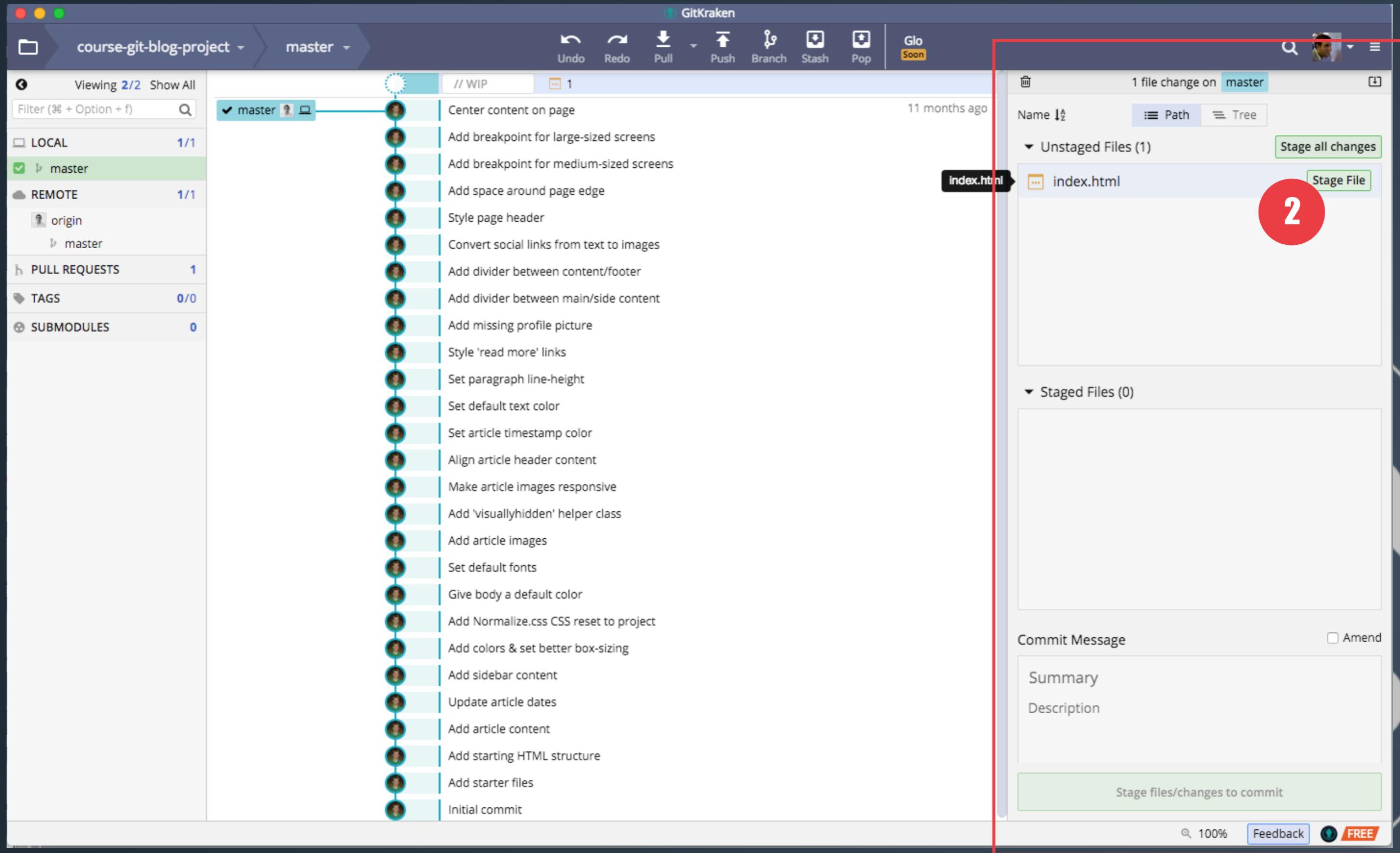
Agregar



AGREGAR CAMBIOS (STAGE)



AGREGAR CAMBIOS (STAGE)



ENVIAR AL REPO (COMMIT)

Repository



HTML

Working directory



HTML



CSS



JS

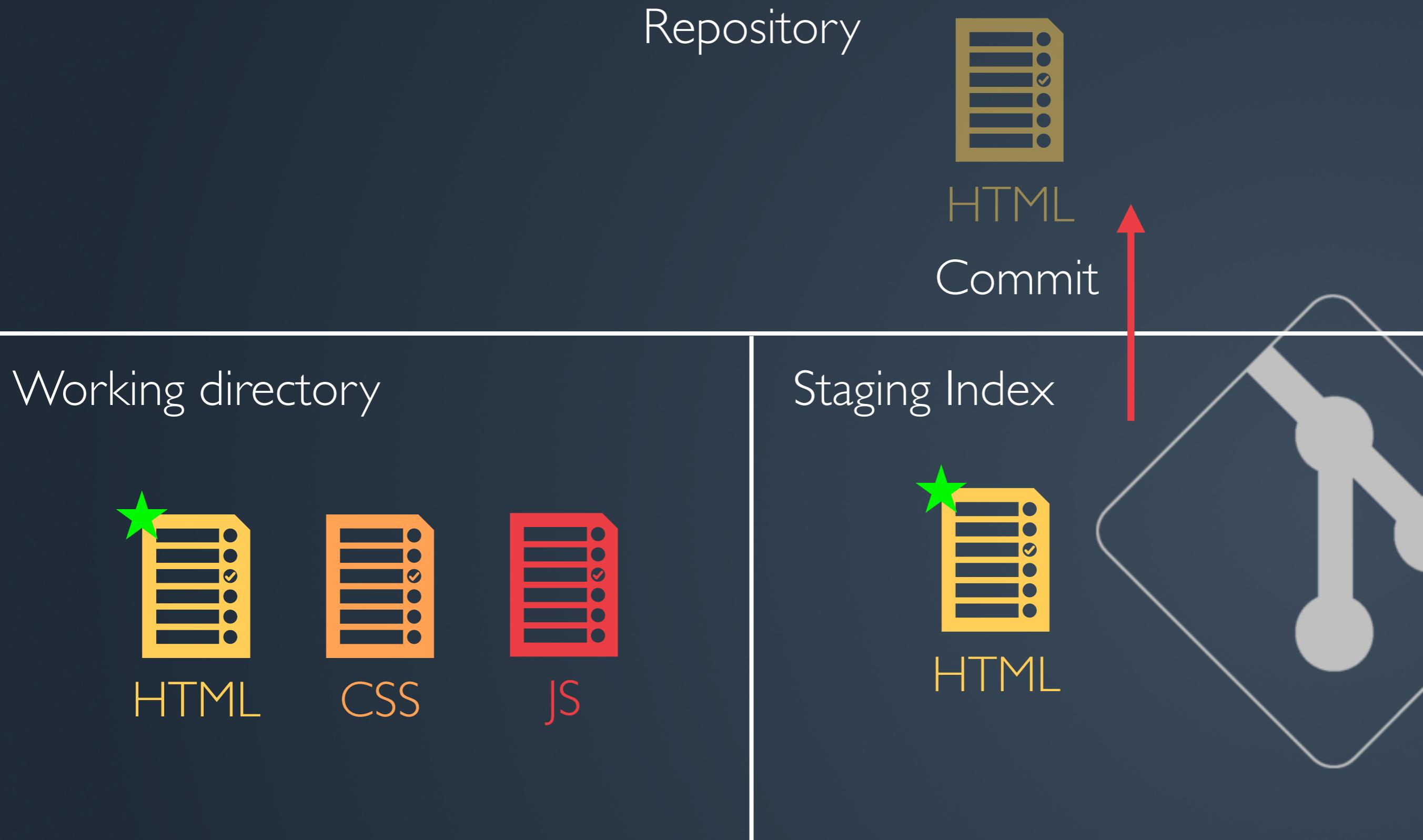
Staging Index



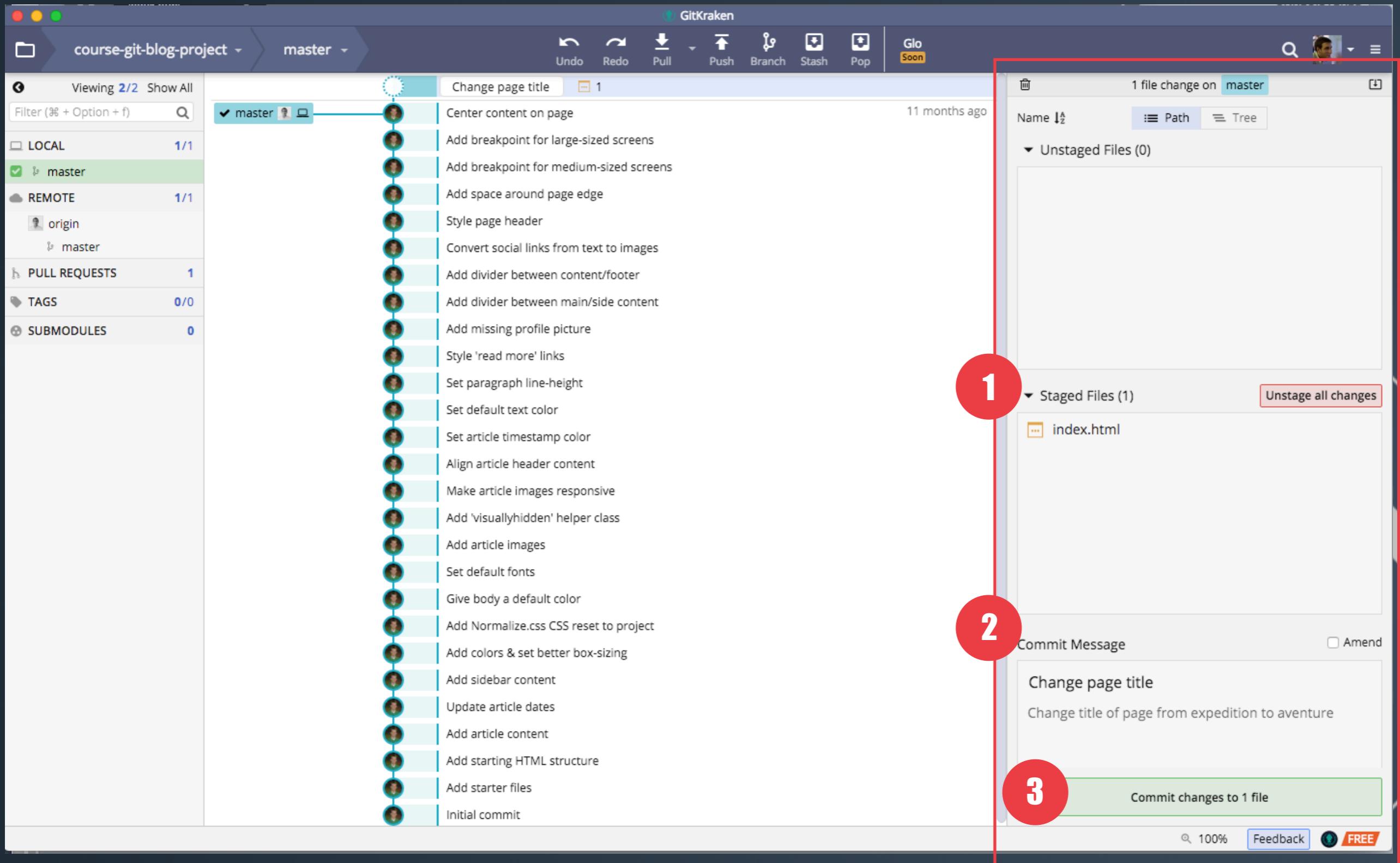
HTML



ENVIAR AL REPO (COMMIT)



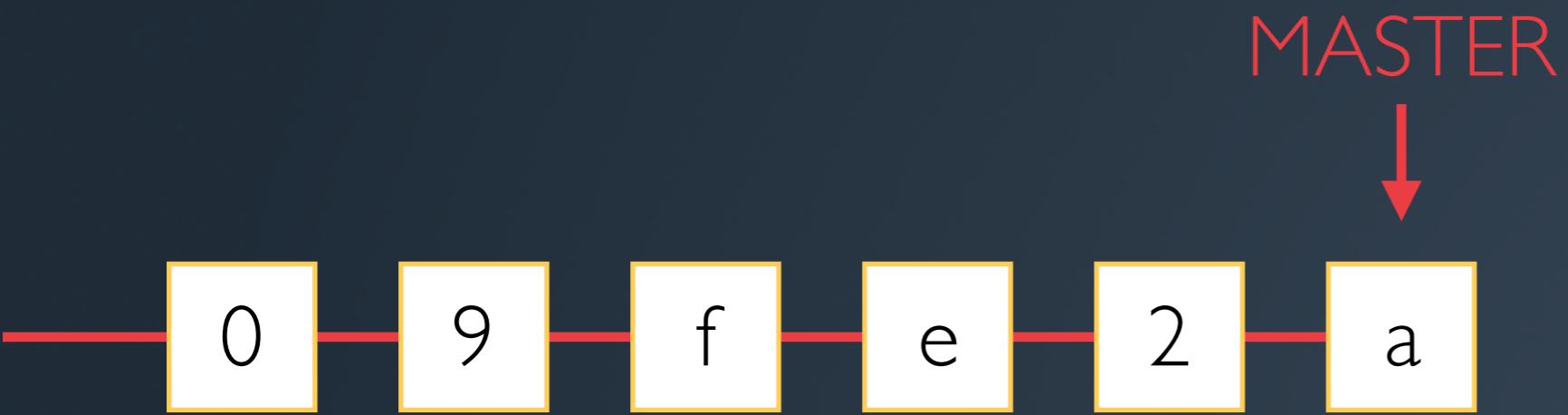
ENVIAR AL REPO (COMMIT)



COMMIT, BUENAS PRÁCTICAS

- Cada commit debería ser **auto-contenido** y **coherente**. Debe incluir todos los archivos de cambios relacionados entre si
- Mensajes de commit deben ser breves (menos de 60 caracteres) y explicar el QUE del commit no el COMO ni el PORQUE. De ser necesario el porque podría explicarse en el cuerpo del mensaje
- Si los mensajes contienen la conjunción Y, probablemente se este incluyendo en el commit demasiados cambios, lo cual no es recomendable

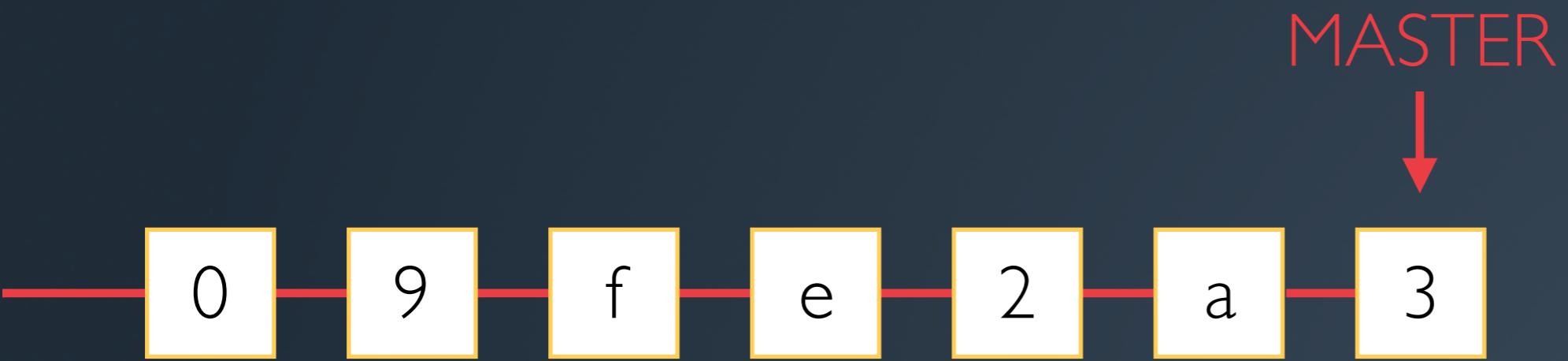
BRANCHING



Puntero al último commit



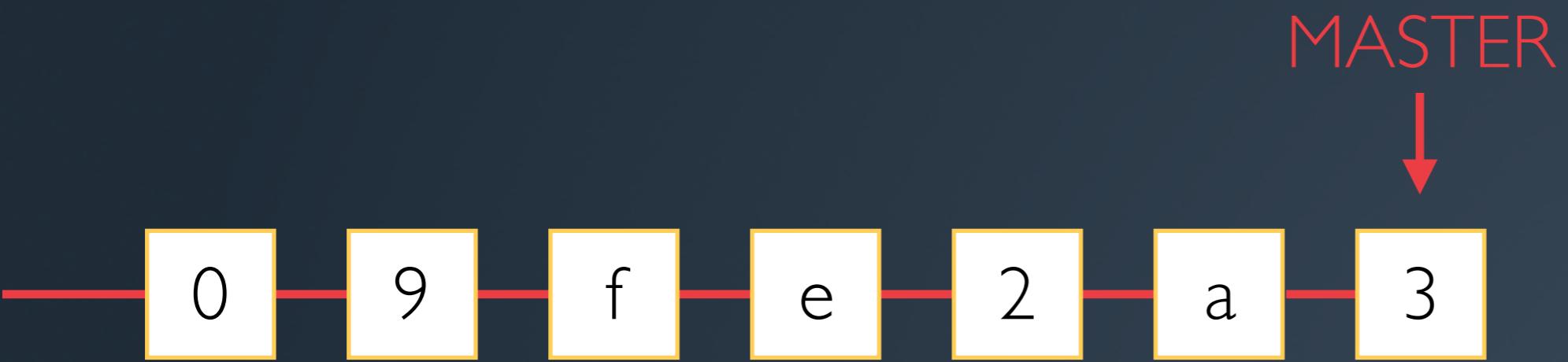
BRANCHING



Puntero al último commit



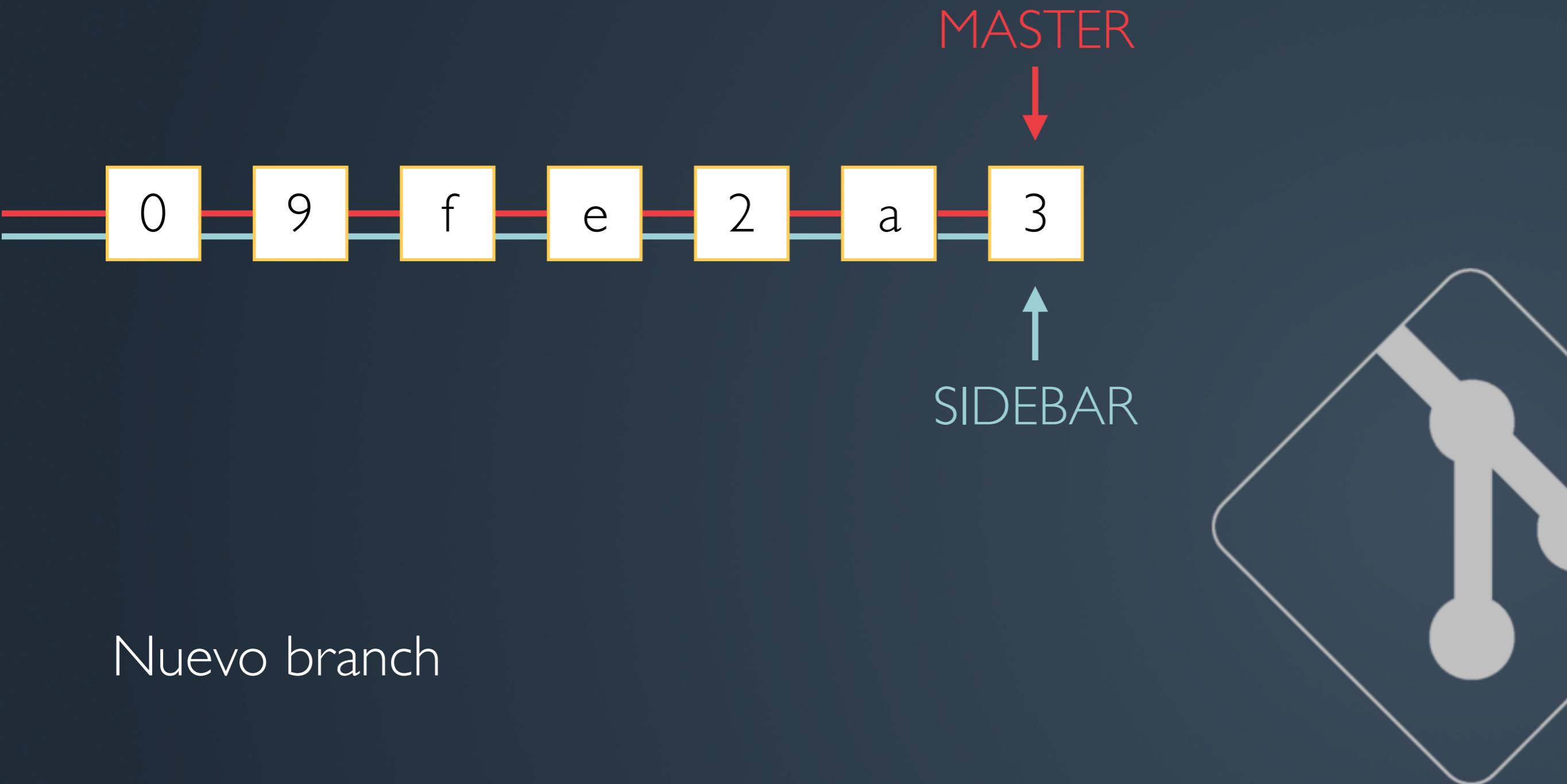
BRANCHING



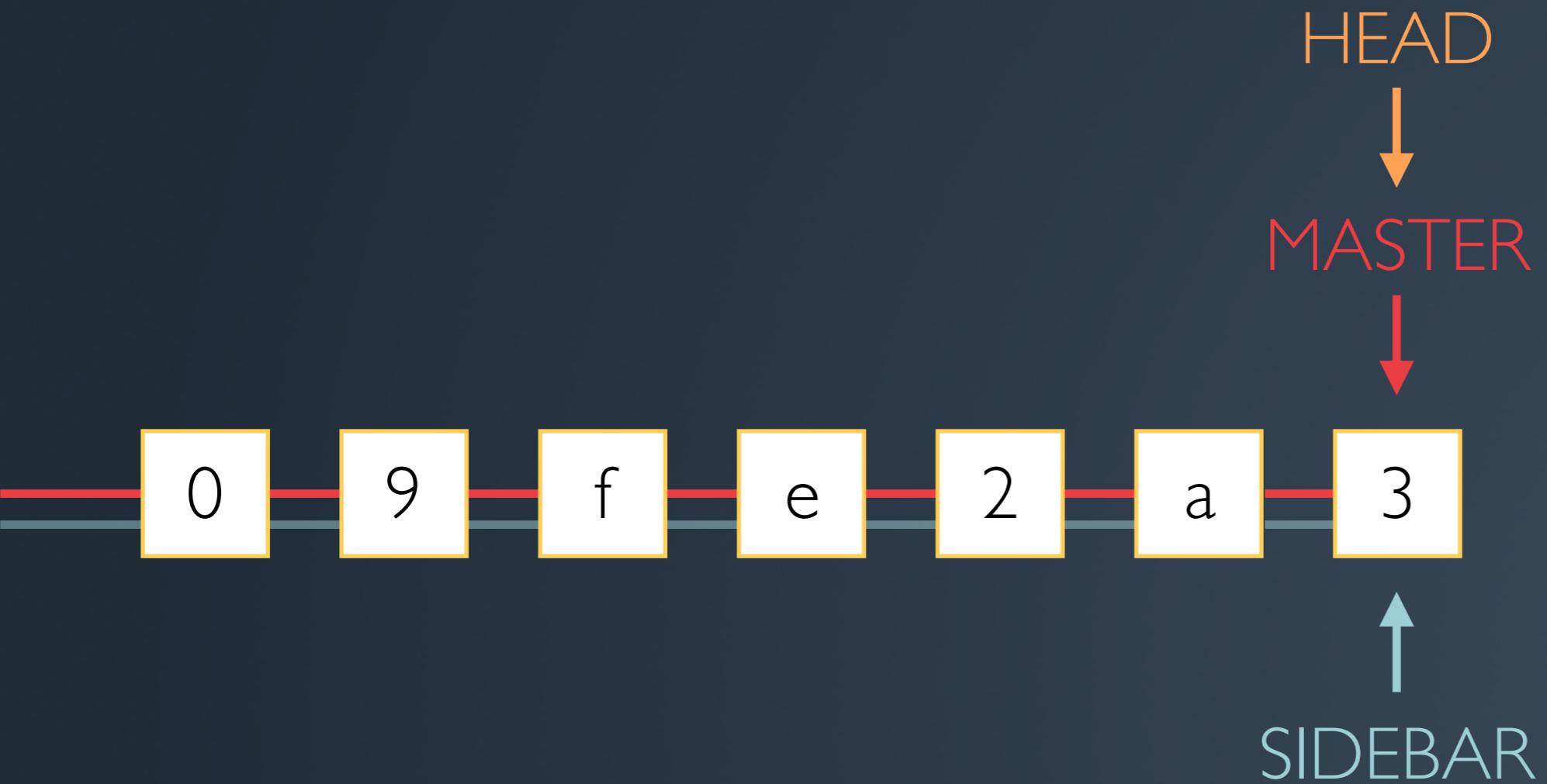
Nuevo branch



BRANCHING

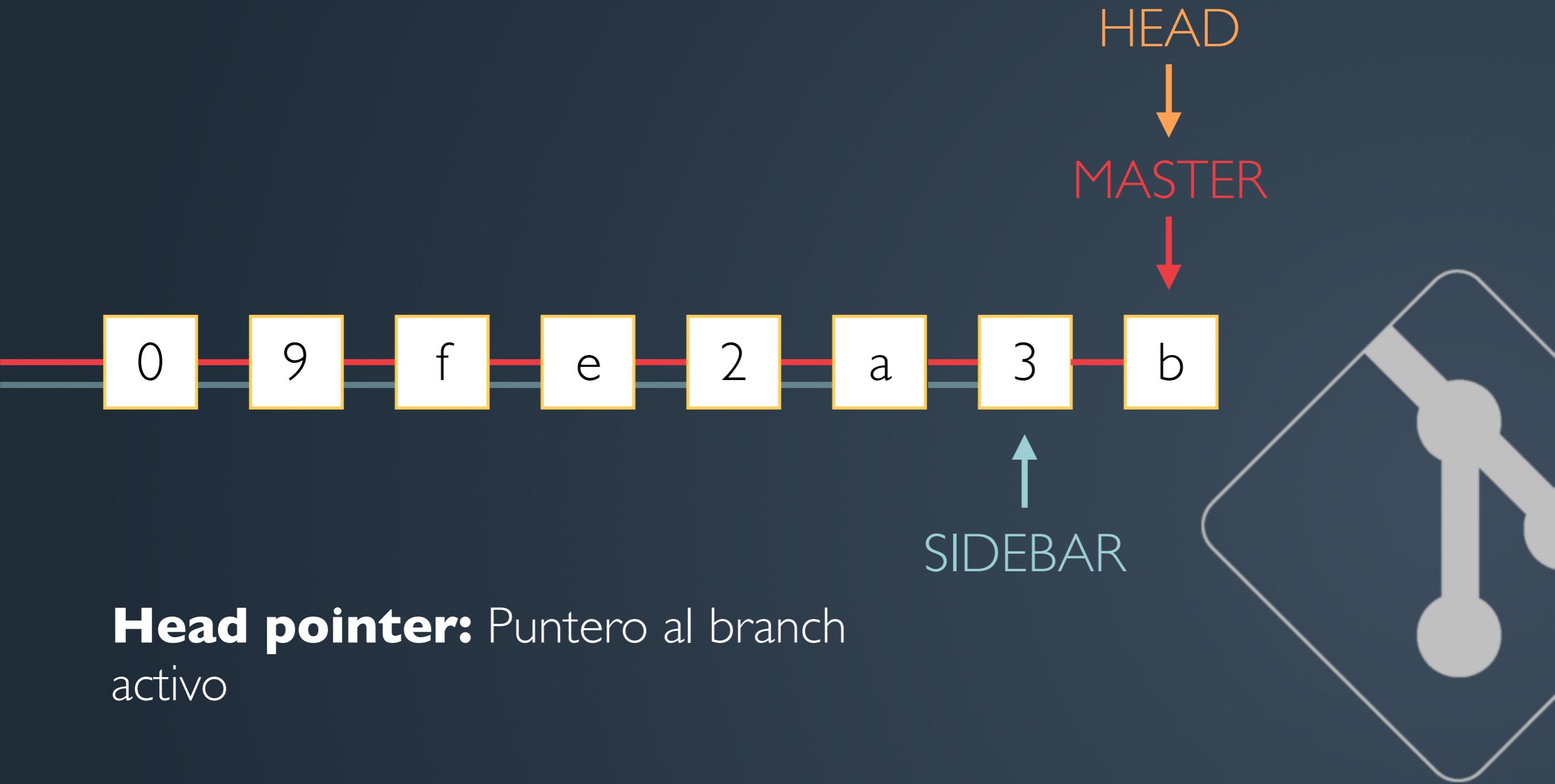


BRANCHING



Head pointer: Puntero al branch activo

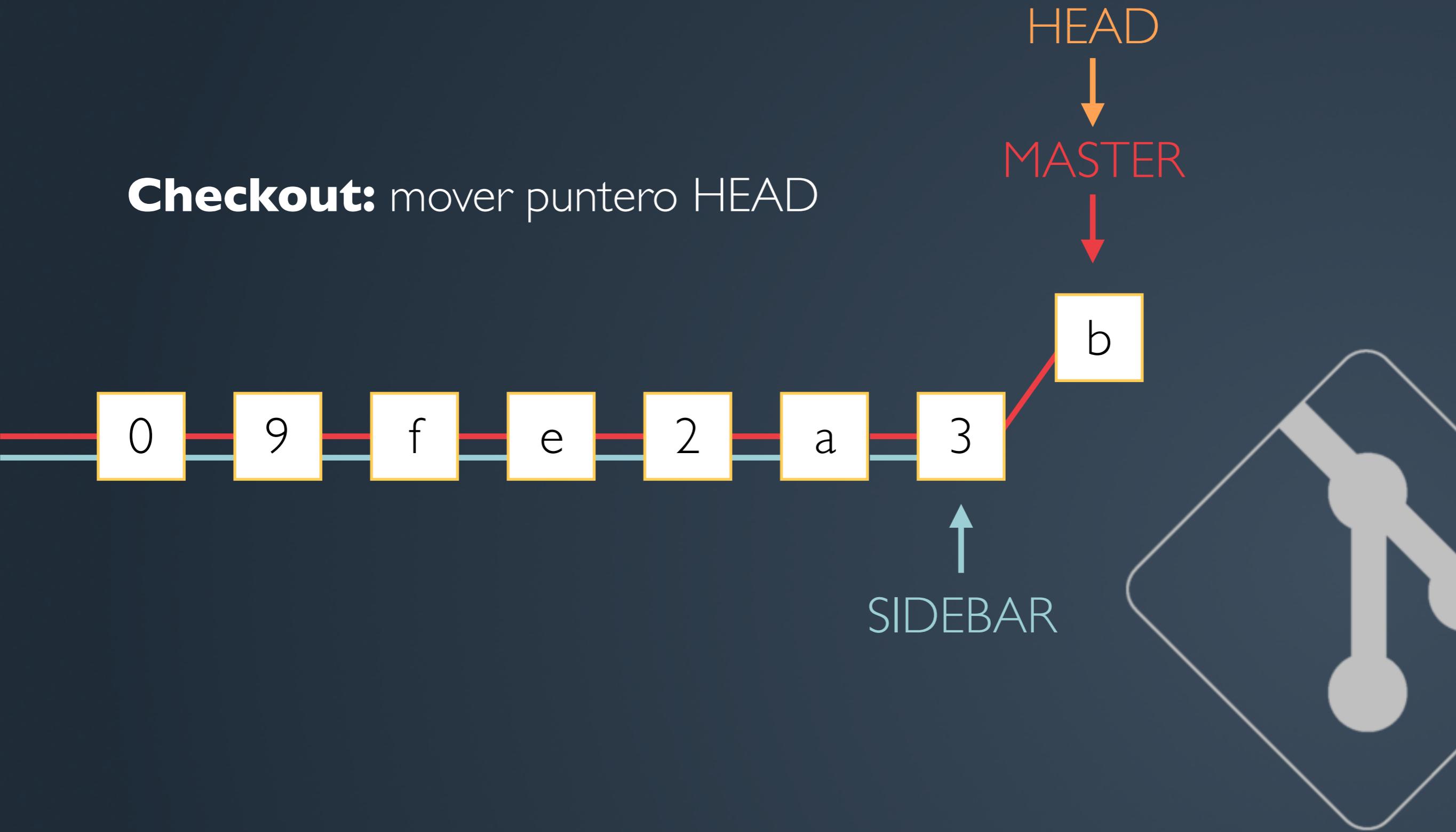
BRANCHING



Head pointer: Puntero al branch activo

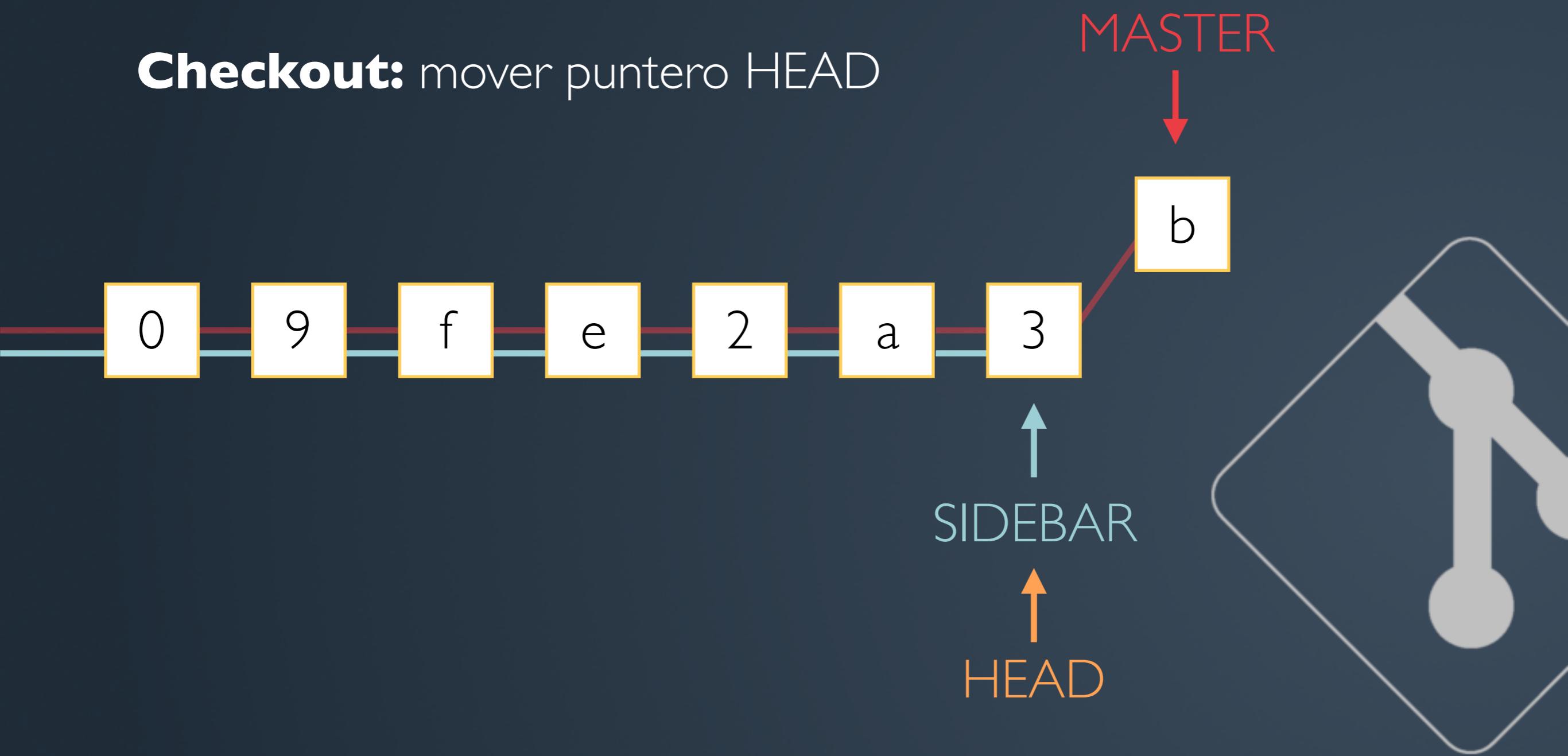
BRANCHING

Checkout: mover puntero HEAD

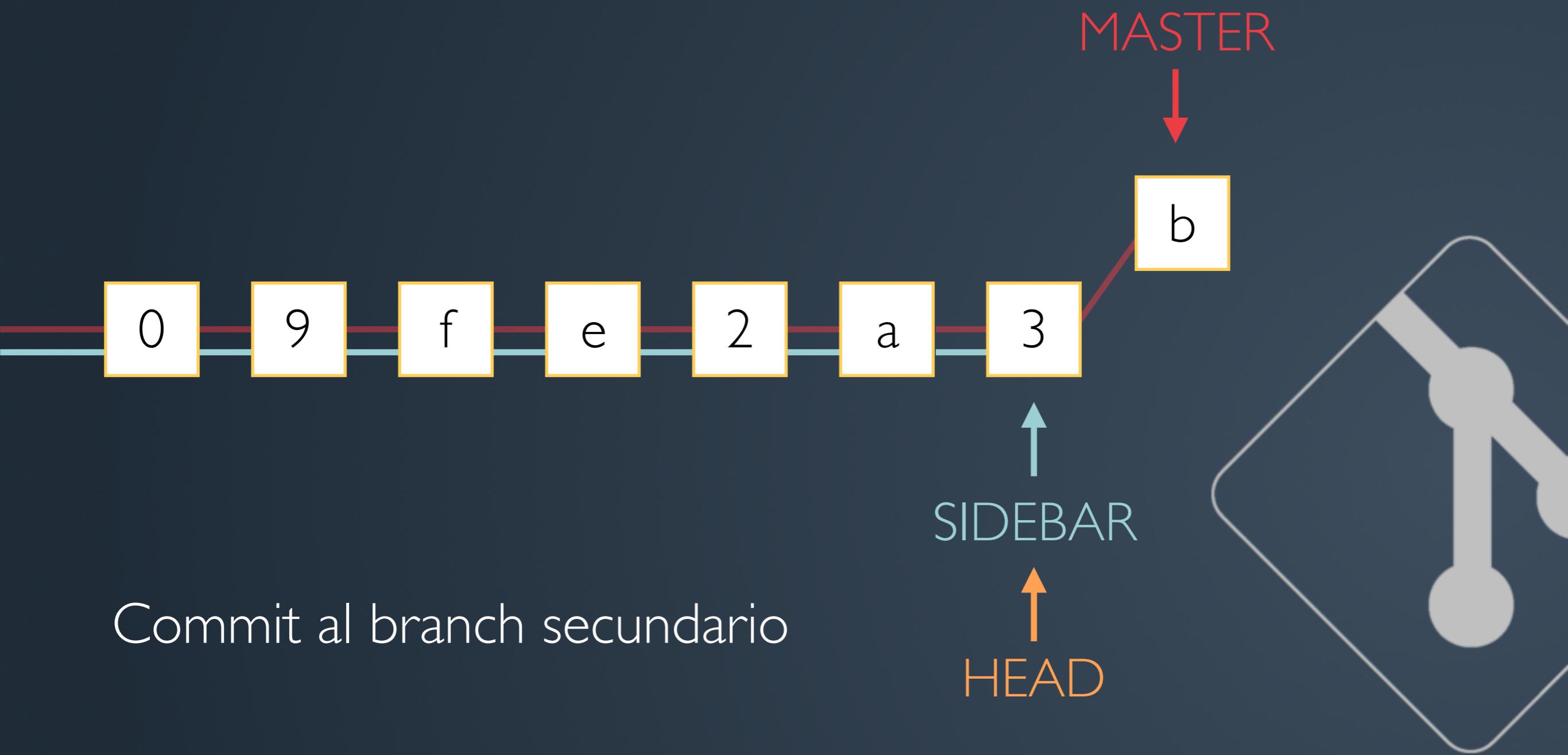


BRANCHING

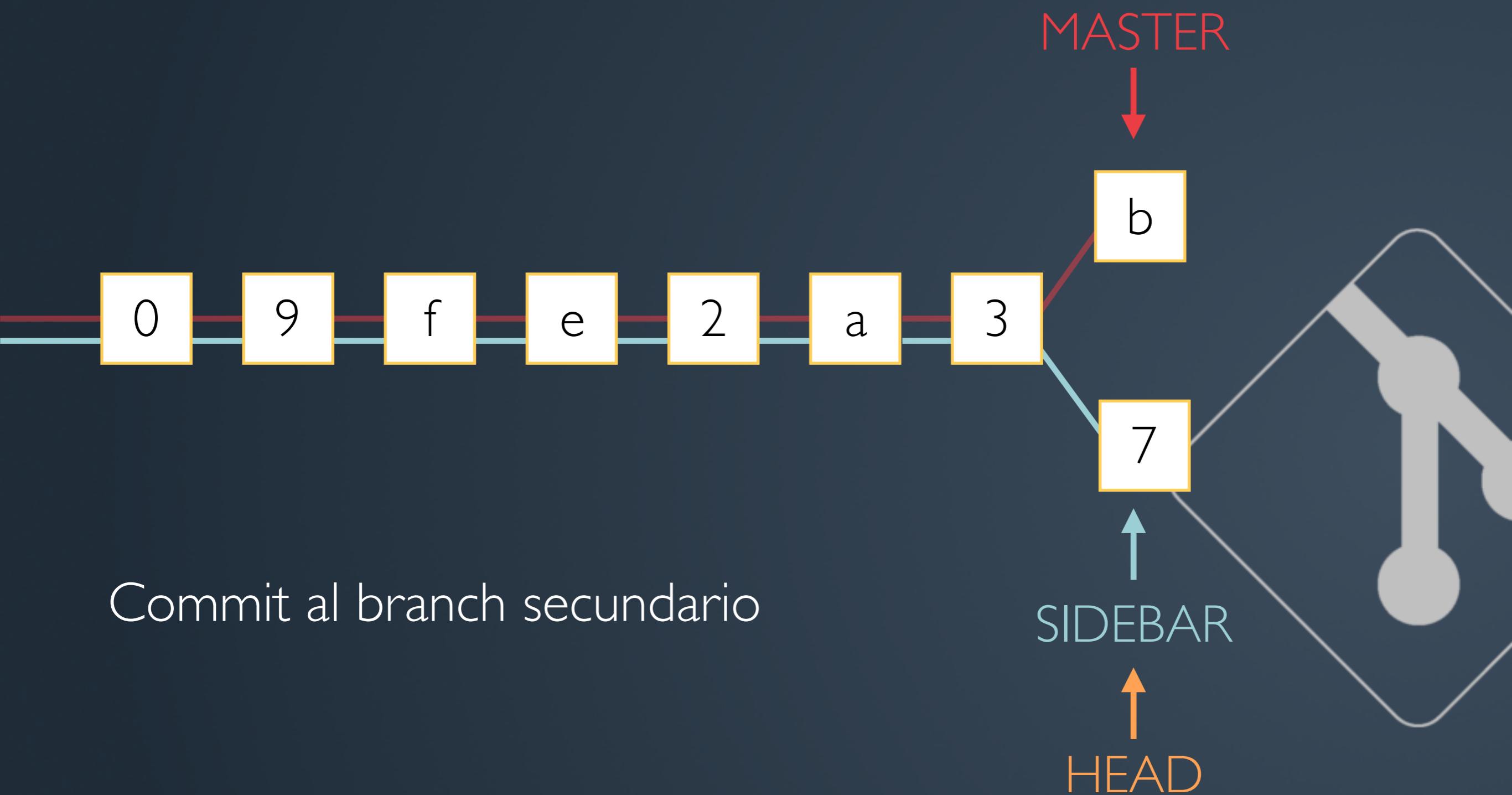
Checkout: mover puntero HEAD



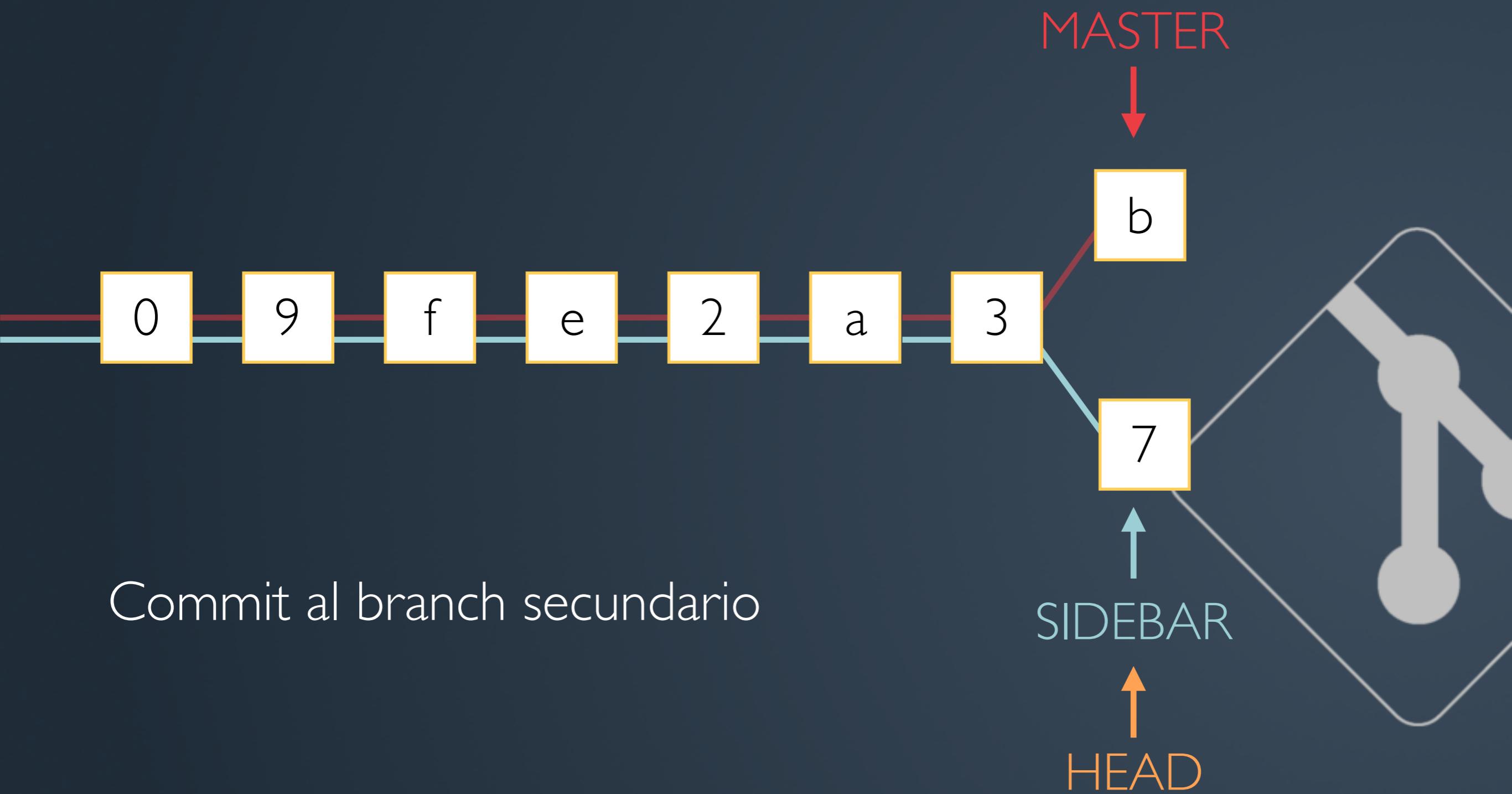
BRANCHING



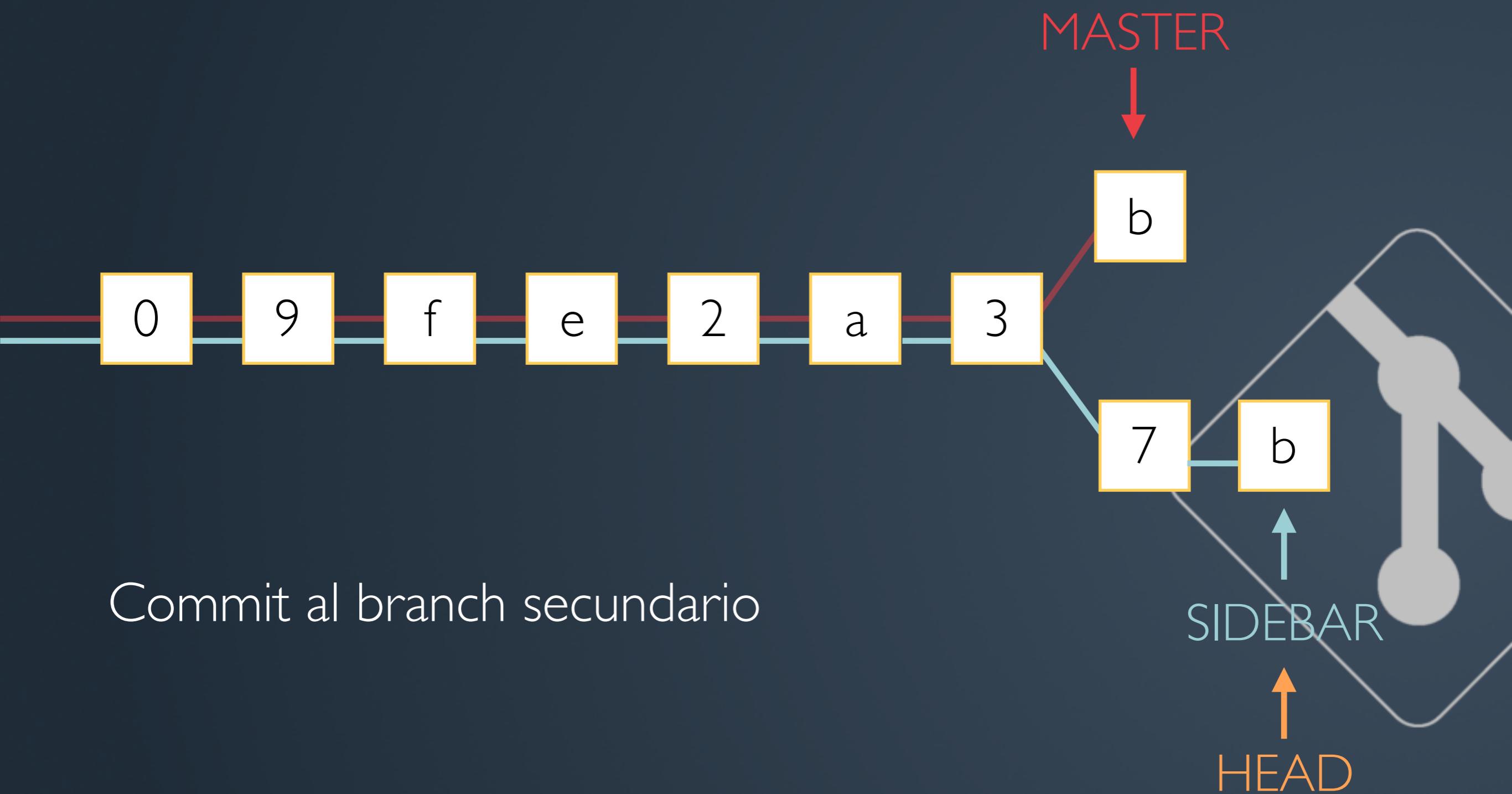
BRANCHING



BRANCHING

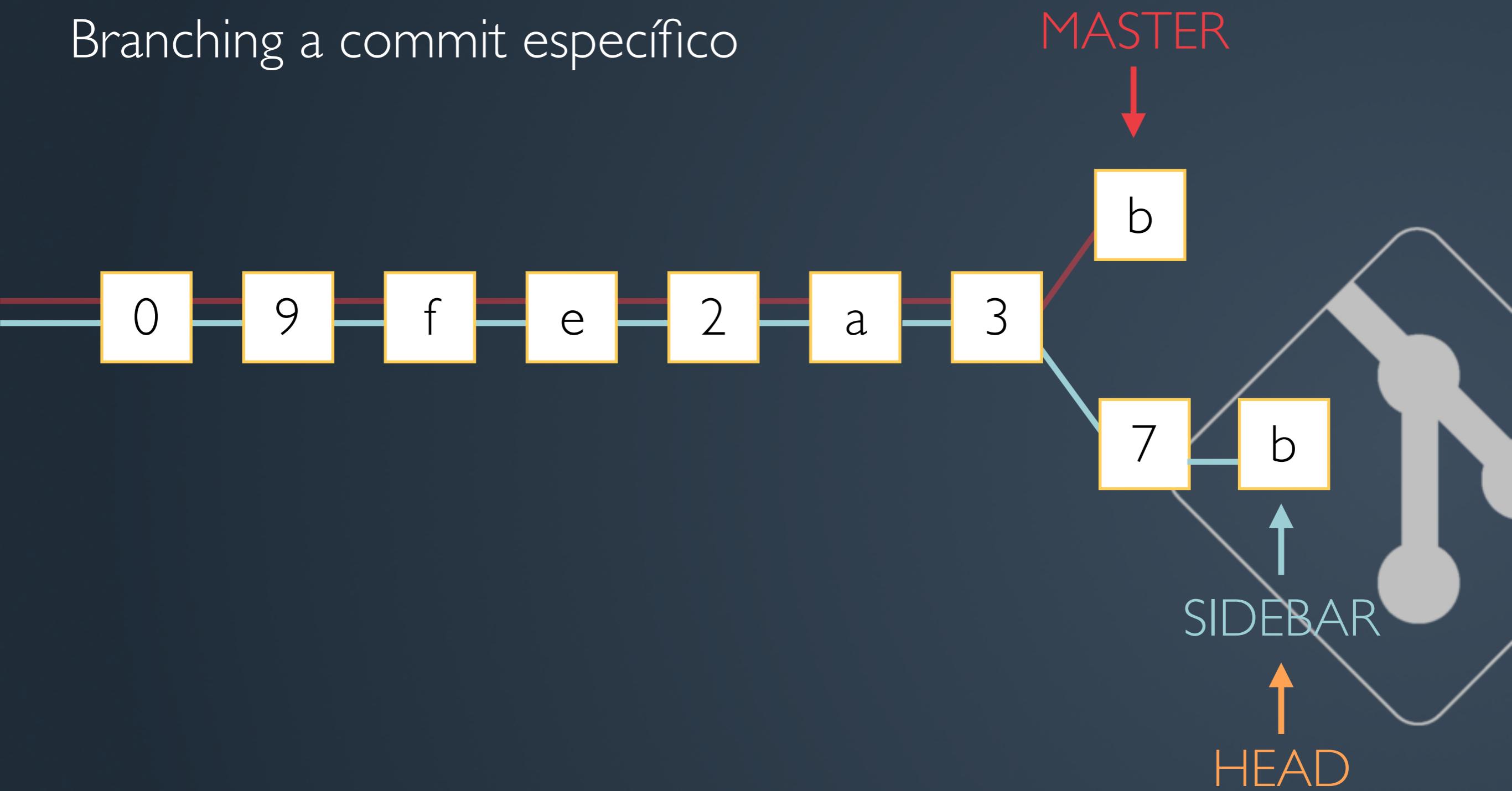


BRANCHING



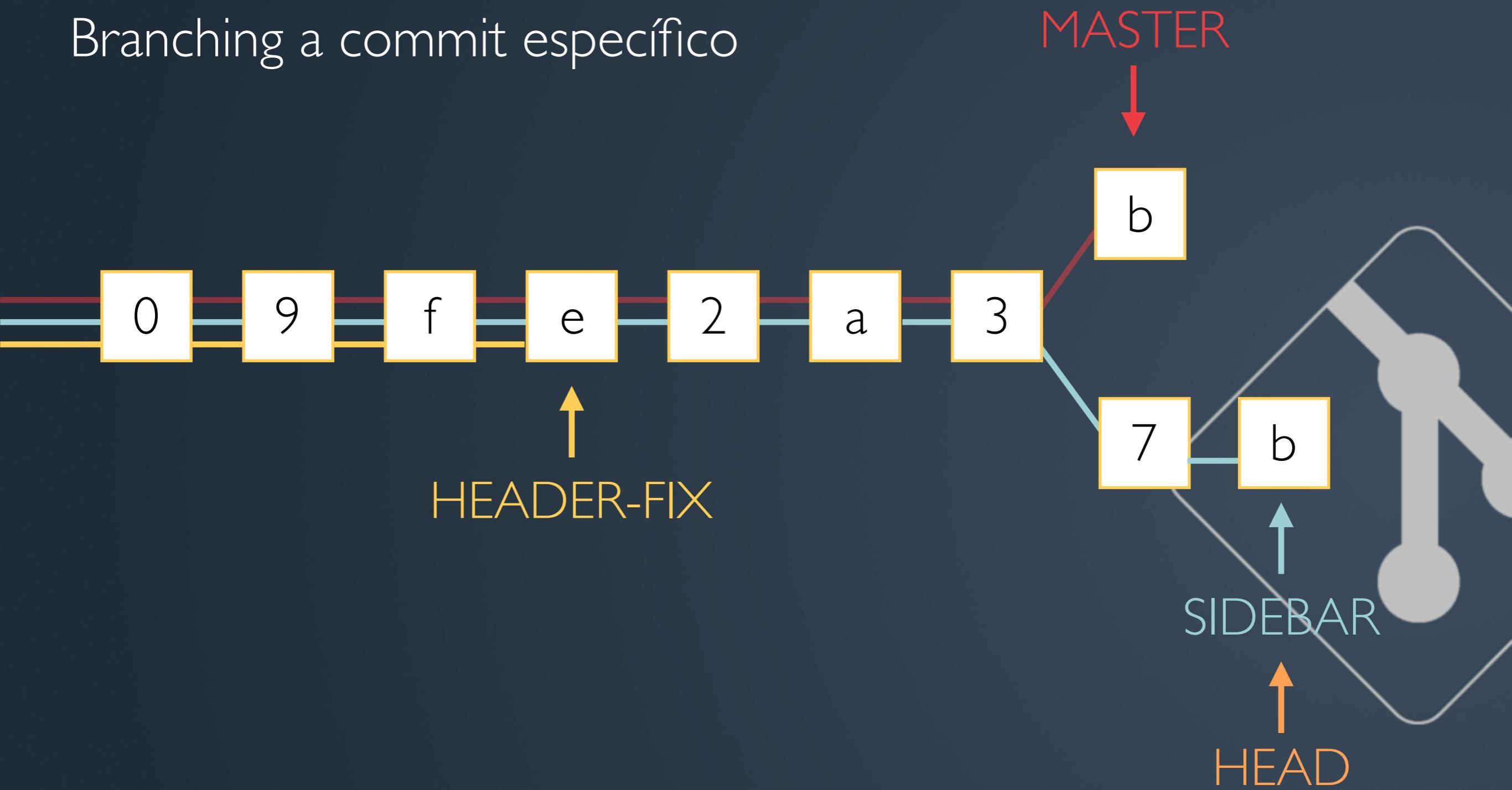
BRANCHING

Branching a commit específico



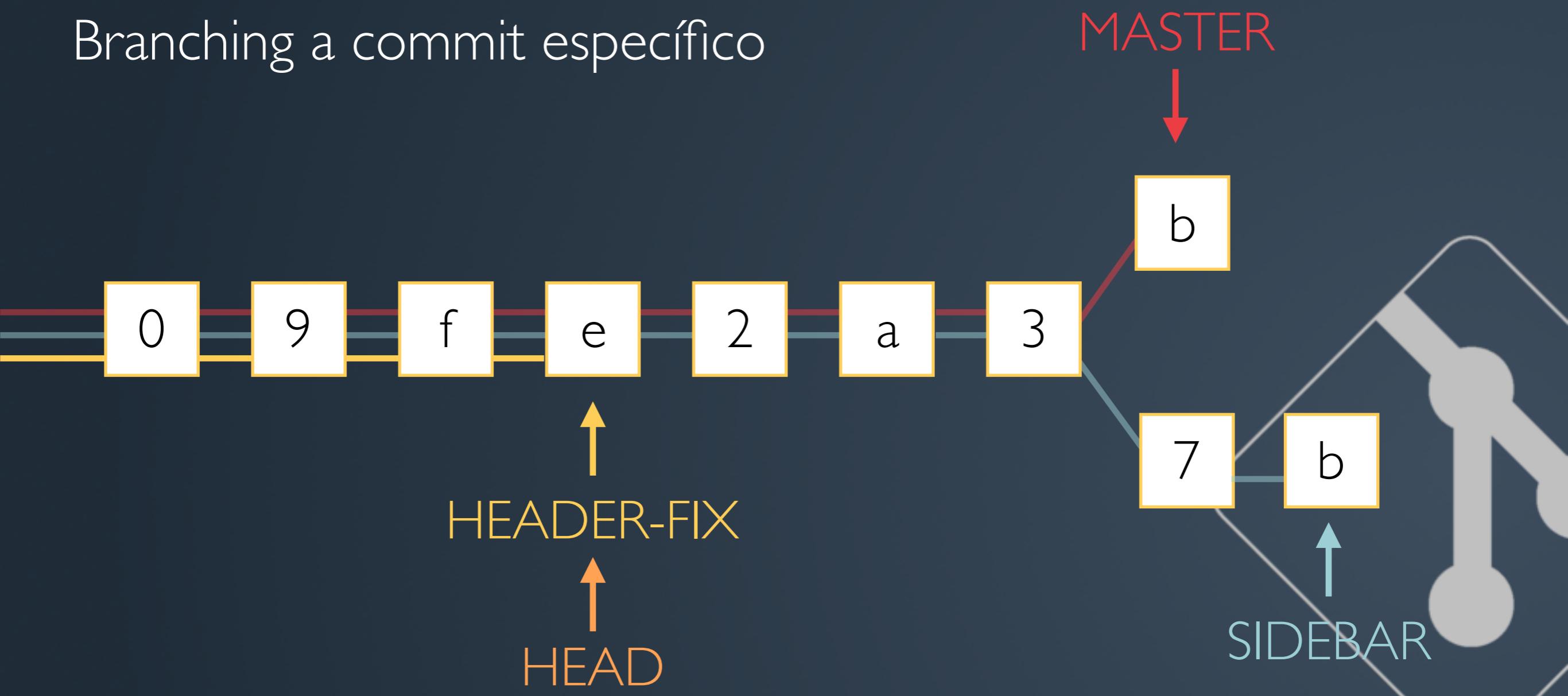
BRANCHING

Branching a commit específico



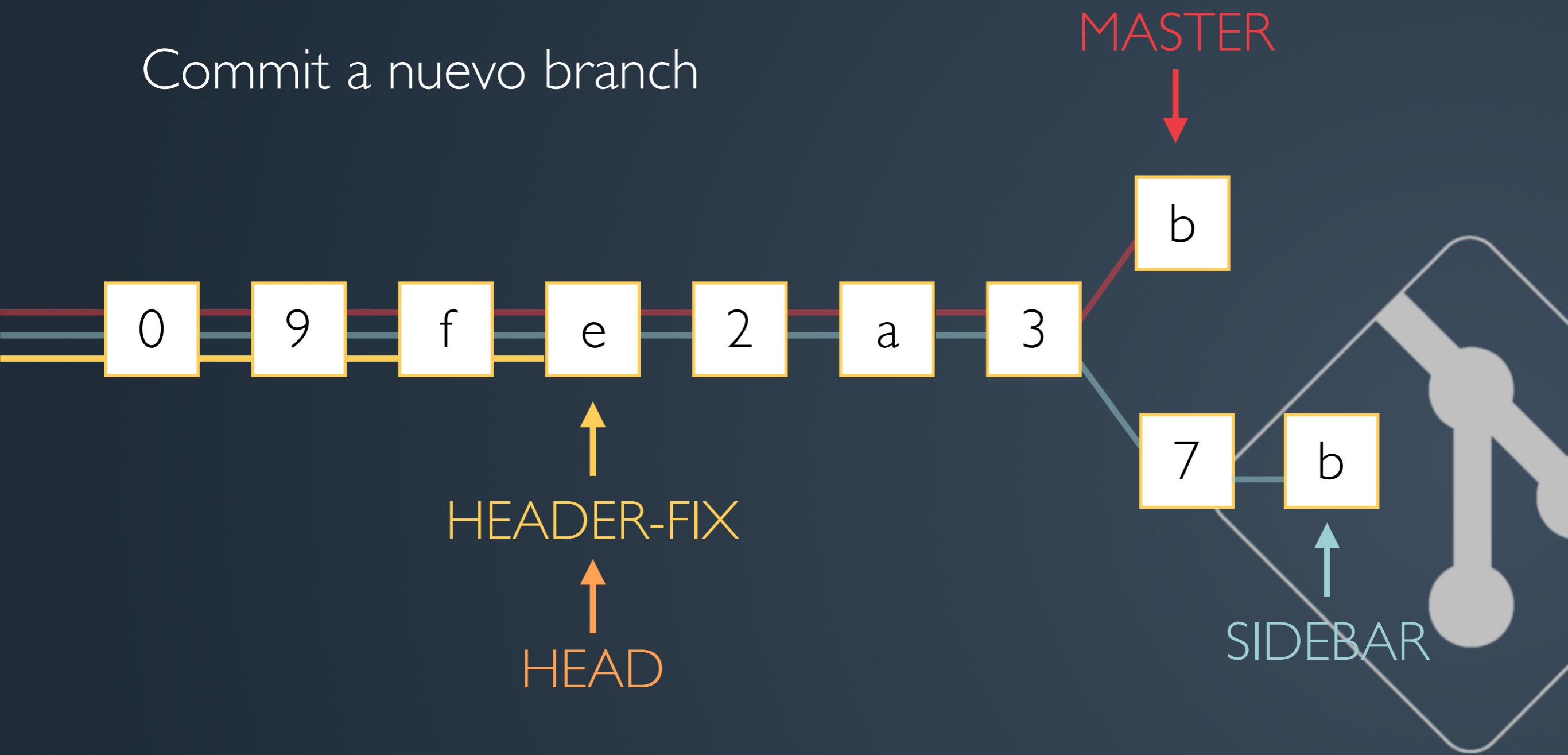
BRANCHING

Branching a commit específico



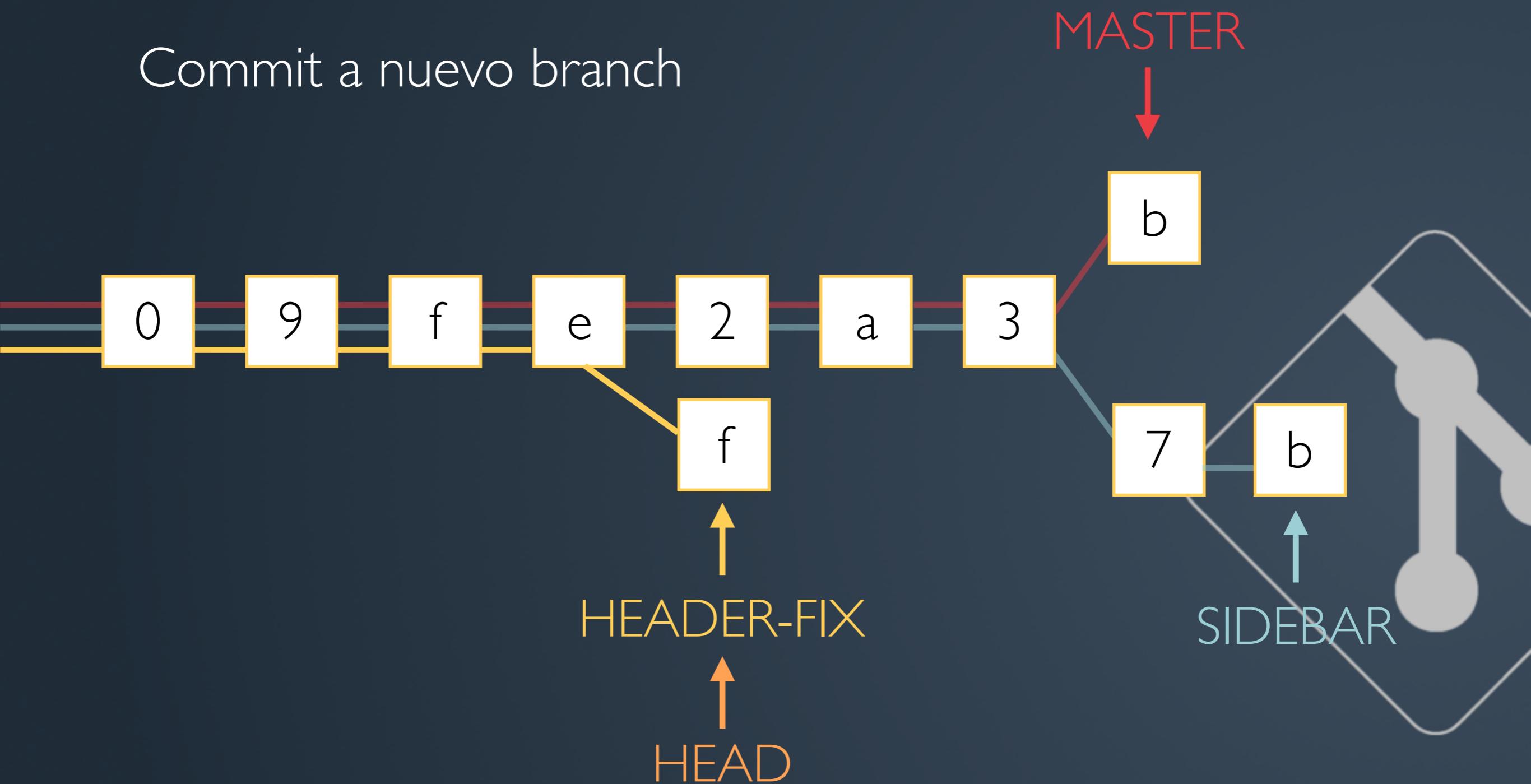
BRANCHING

Commit a nuevo branch



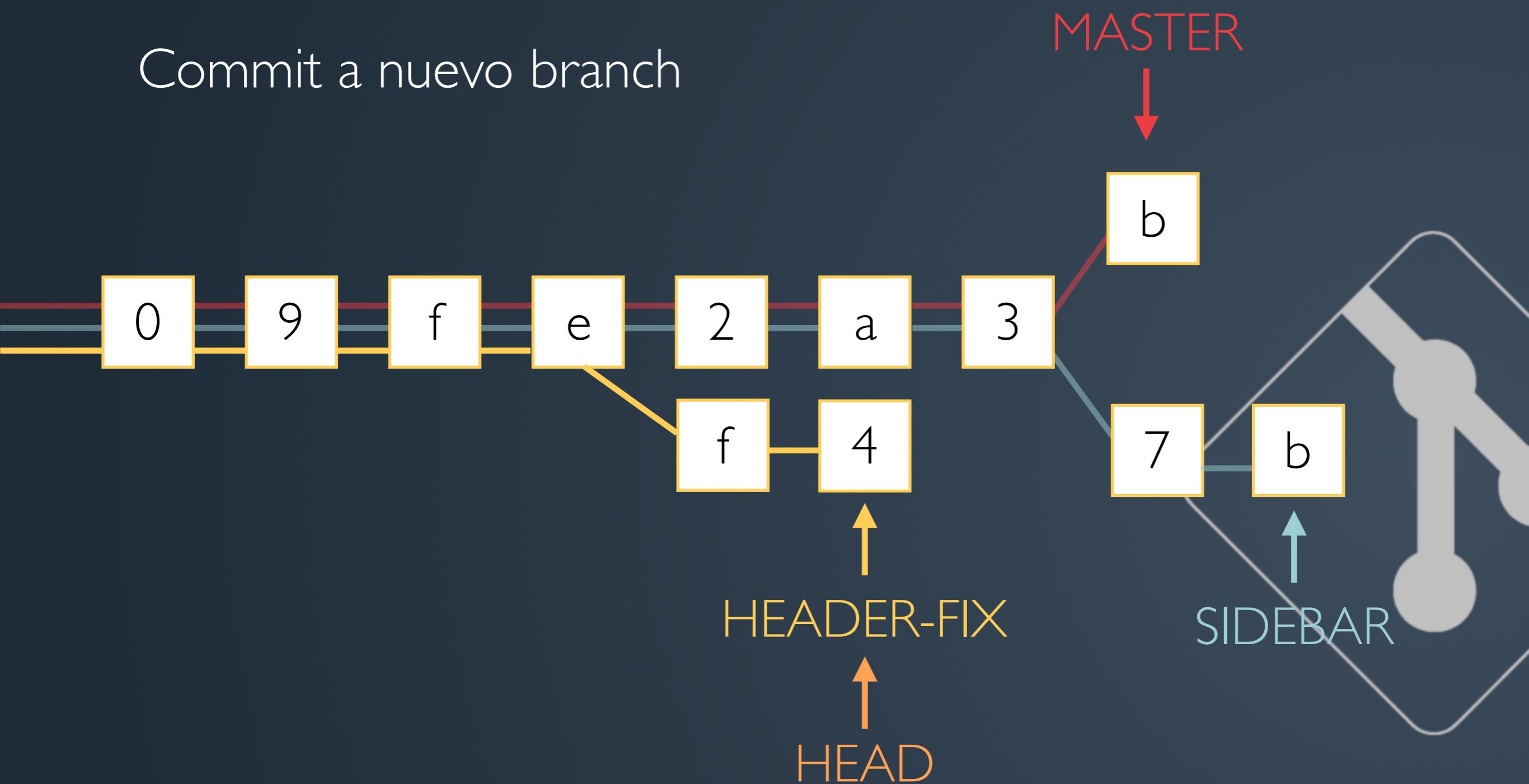
BRANCHING

Commit a nuevo branch

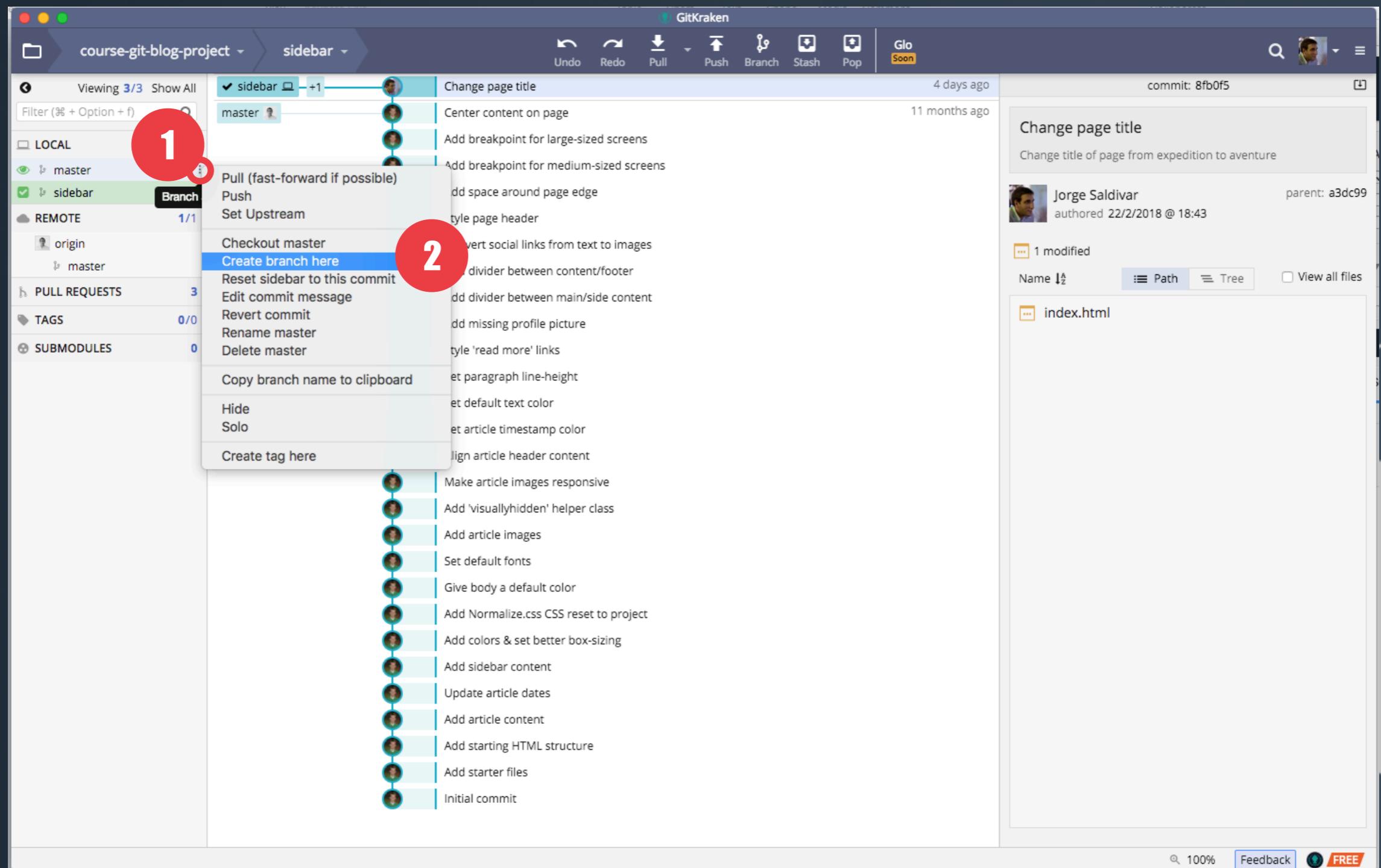


BRANCHING

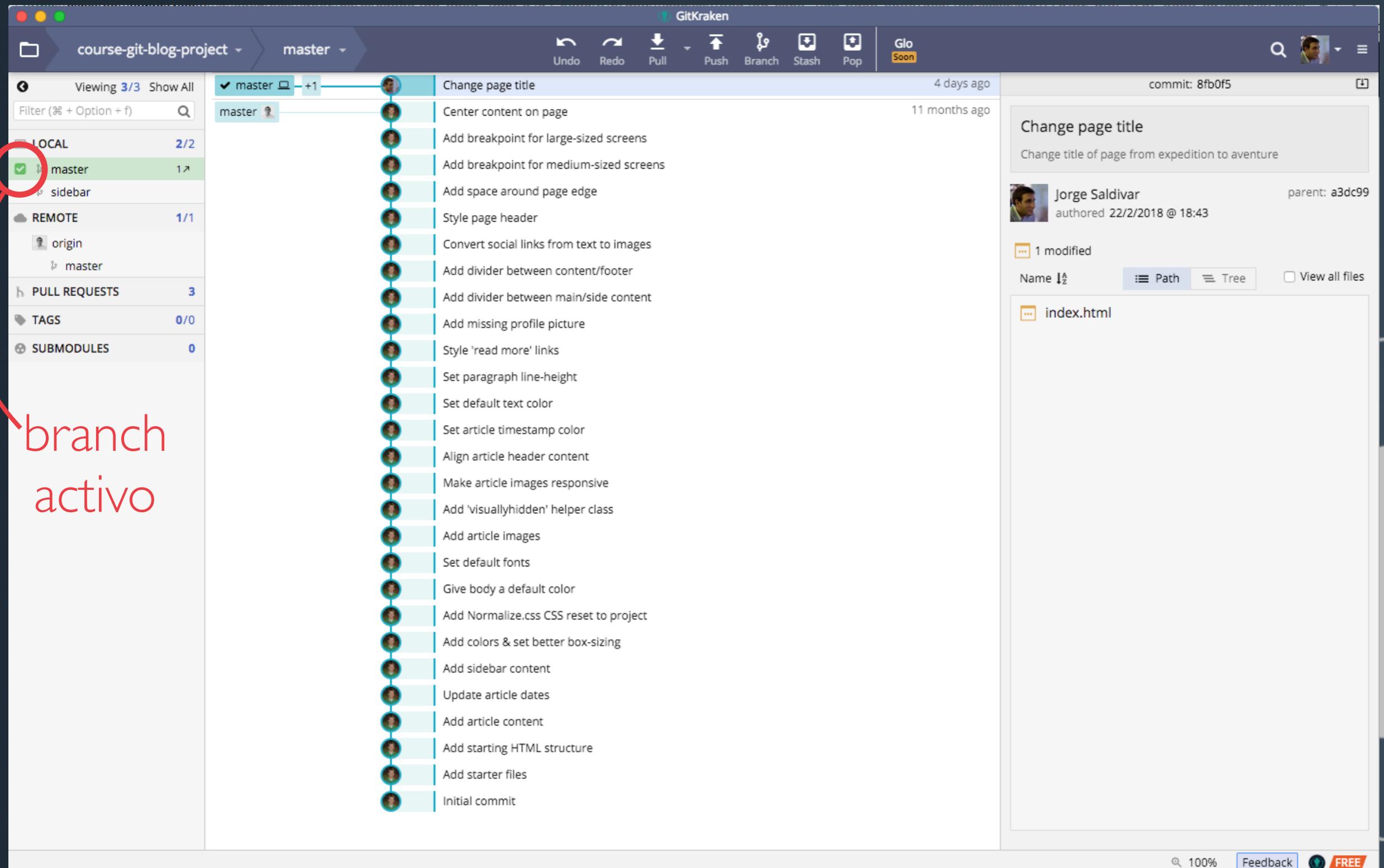
Commit a nuevo branch



BRANCHING (NEW BRANCH)



BRANCHING (HEAD POINTER)



branch activo

GitKraken

course-git-blog-project > master

undo redo pull push branch stash pop glo soon

Viewing 3/3 Show All

Filter (⌘ + Option + f)

LOCAL 2/2

master (checked) 1 ↗ sidebar 1 ↗

REMOTE 1/1

origin master

PULL REQUESTS 3

TAGS 0/0

SUBMODULES 0

master

+1 Change page title 4 days ago

master Center content on page 11 months ago

Add breakpoint for large-sized screens

Add breakpoint for medium-sized screens

Add space around page edge

Style page header

Convert social links from text to images

Add divider between content/footer

Add divider between main/side content

Add missing profile picture

Style 'read more' links

Set paragraph line-height

Set default text color

Set article timestamp color

Align article header content

Make article images responsive

Add 'visuallyhidden' helper class

Add article images

Set default fonts

Give body a default color

Add Normalize.css CSS reset to project

Add colors & set better box-sizing

Add sidebar content

Update article dates

Add article content

Add starting HTML structure

Add starter files

Initial commit

commit: 8fb0f5

Change page title

Change title of page from expedition to aventure

Jorge Saldivar authored 22/2/2018 @ 18:43 parent: a3dc99

1 modified

Name ↓z Path Tree View all files

index.html

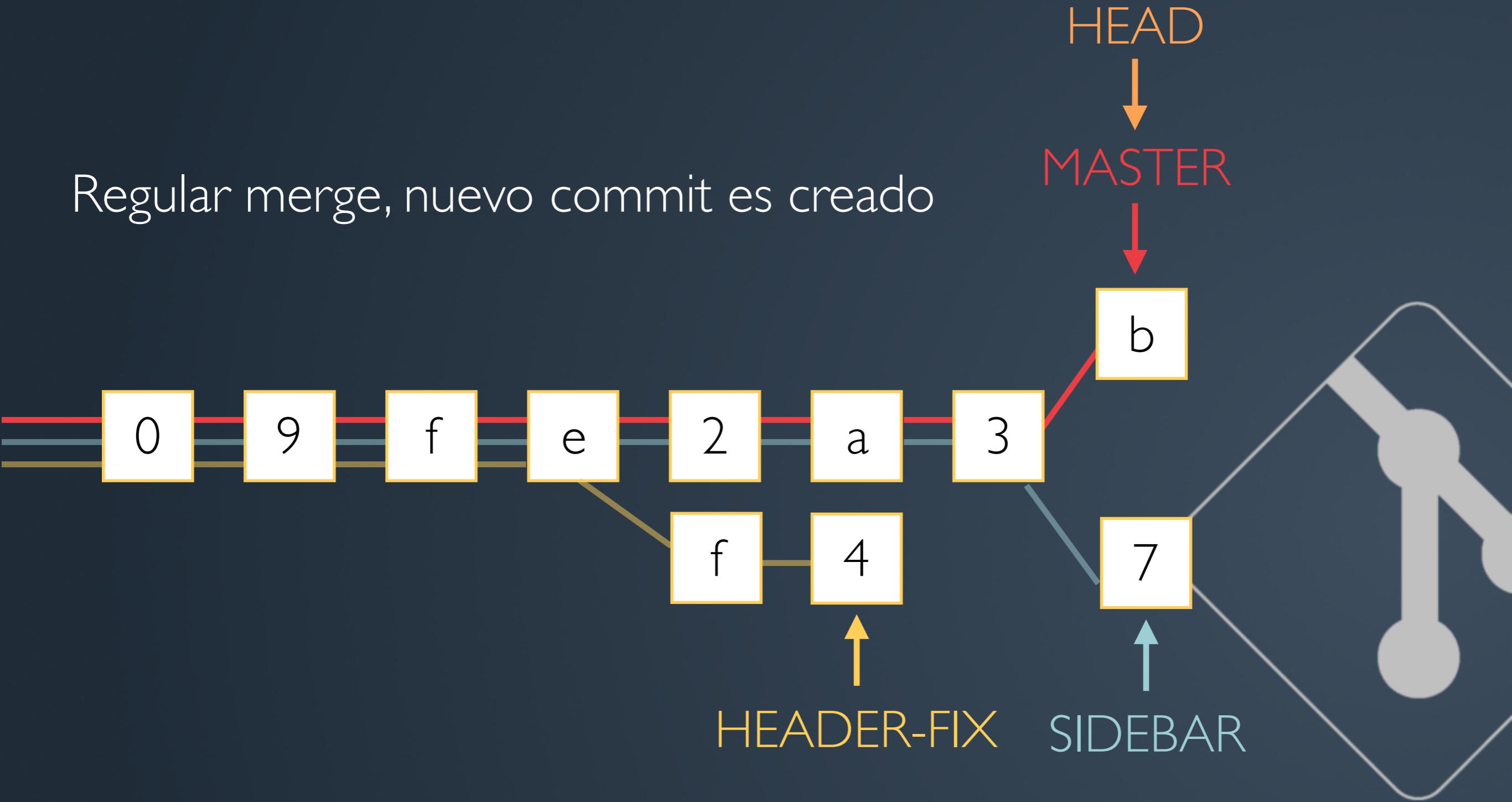
100% Feedback FREE

EJERCICIO - BRANCHING

1. En el **branch master** cambiar el color de fondo de la página al color #00CAE4 para ello modificar *background-color* en *body* (archivo a modificar: css/app.css) Guardar los cambios, agregar el archivo al stage, y hacer commit.
2. Crear un branch llamado **sidebar** desde el commit previo al cambio de color de fondo
3. Cambiar del branch master al **branch sidebar**
4. Agregar al sidebar (tag <aside>) la fecha del día de hoy. **Ejemplo: <p>28-02-2018</p>** (archivo a modificar: index.html) Guardar los cambios, agregar el archivo al stage, y hacer commit
5. Cambiar del branch sidebar al **branch master**
6. Cambiar el texto contenido en el tag <h1> en la sección <header> de Explore a Adventure (archivo a modificar: index.html) Guardar los cambios, agregar el archivo al stage, y hacer commit
7. Desde master crear un branch llamado **footer**
8. En el **branch footer** cambiar el texto contenido en la etiqueta <footer> por la hora y temperatura actual (archivo a modificar: index.html) Guardar los cambios, agregar el archivo al stage, y hacer commit

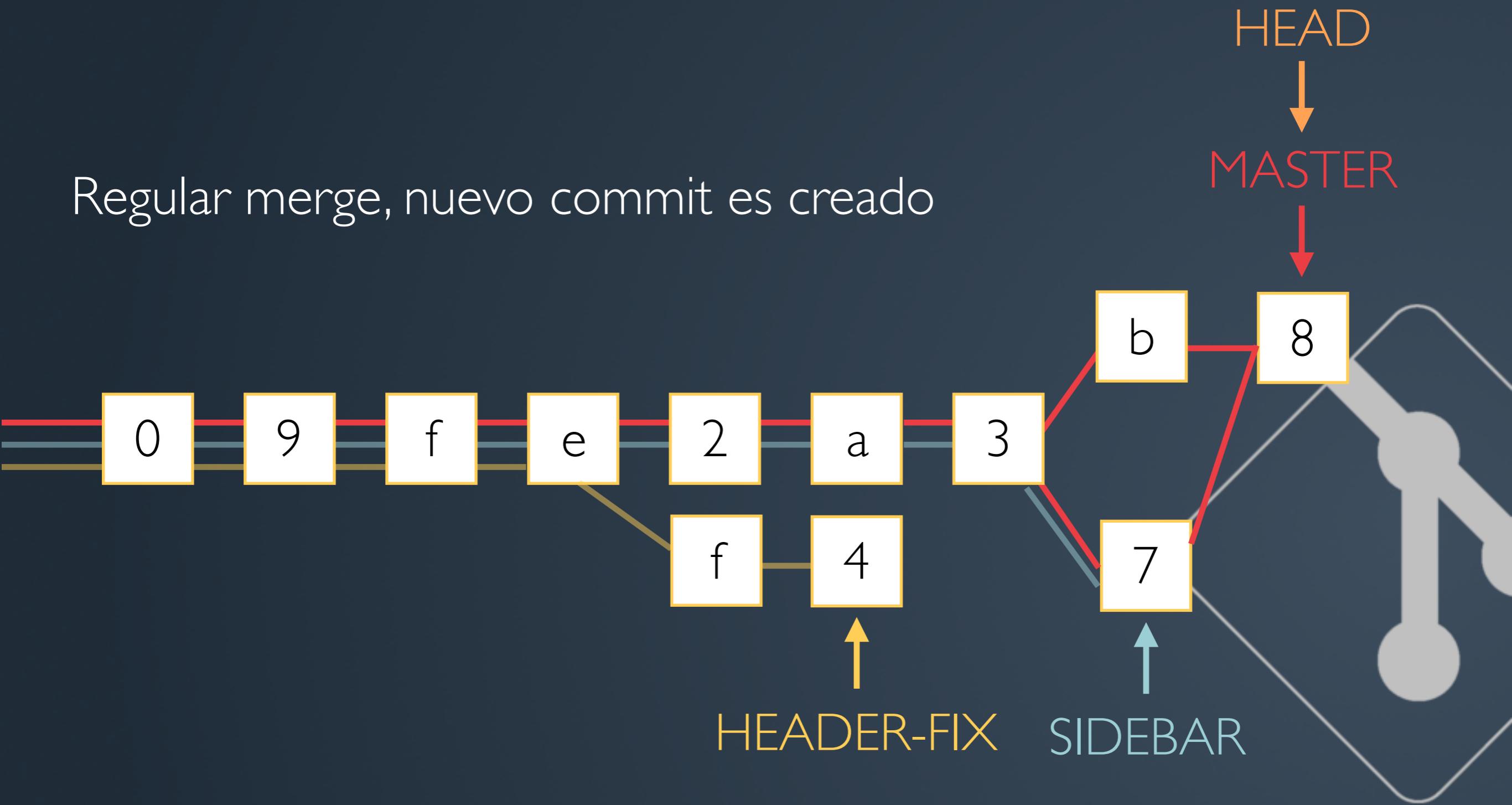
MERGING

Regular merge, nuevo commit es creado



MERGING

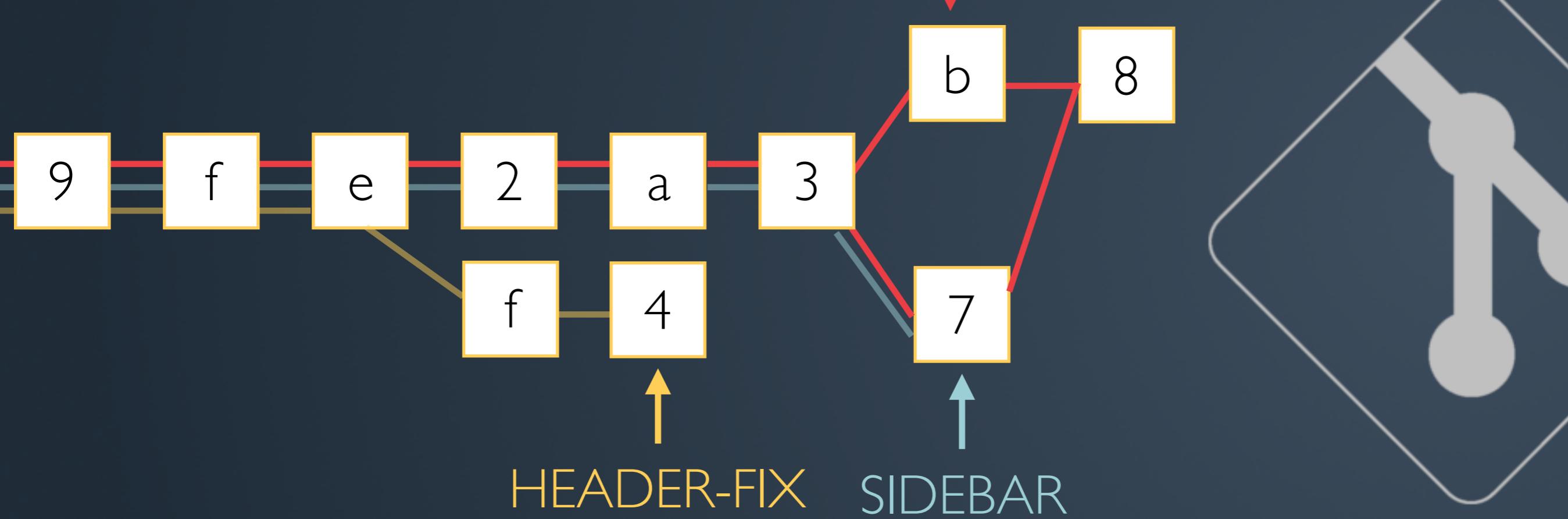
Regular merge, nuevo commit es creado



MERGING

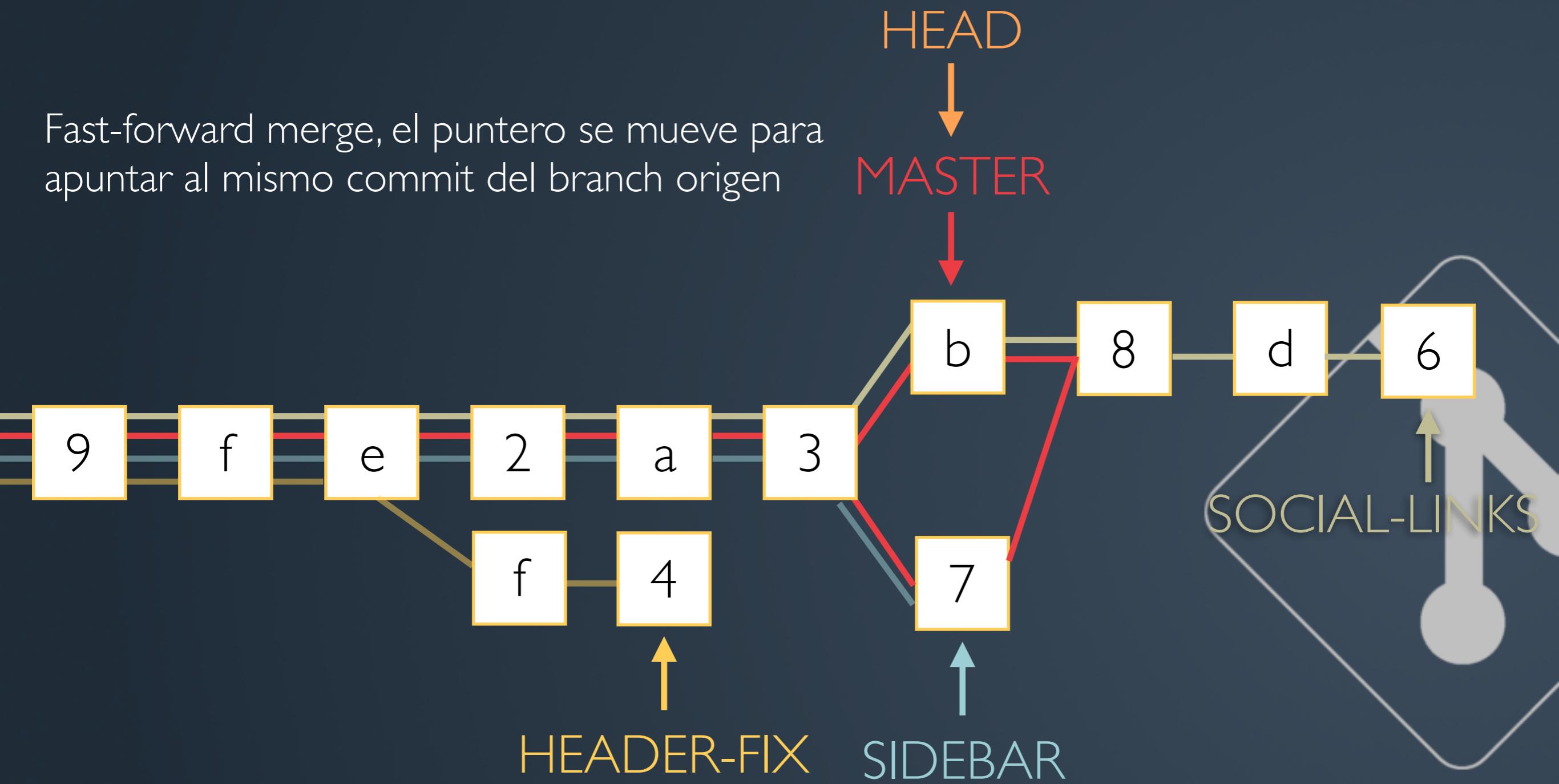
Fast-forward merge, el puntero se mueve para apuntar al mismo commit del branch origen

HEAD
↓
MASTER



MERGING

Fast-forward merge, el puntero se mueve para apuntar al mismo commit del branch origen



MERGING

Fast-forward merge, el puntero se mueve para apuntar al mismo commit del branch origen



MERGING

The screenshot shows the GitKraken interface with the following elements:

- Branch Selection:** On the left, the "master" branch is selected in the sidebar, indicated by a red circle labeled **1**.
- Context Menu:** A context menu is open over a commit in the "master" branch, with the "Merge footer into master" option highlighted, indicated by a red circle labeled **2**.
- Commit Details:** To the right of the menu, a commit titled "Change page title from Adventure to Adventures" is shown, authored by Jorge Saldivar on 28/2/2018 at 23:27, with a parent commit ID of 223d86. It shows 1 modified file, "index.html".
- Log:** The main pane displays the commit history for the "master" branch, listing various commits related to footer and sidebar changes.
- Annotations:** Red annotations include:
 - A red arrow points from the "branch activo" text down to the "master" branch in the sidebar.
 - A red circle labeled **1** is placed around the "master" branch in the sidebar.
 - A red circle labeled **2** is placed around the "Merge footer into master" option in the context menu.
 - A red circle labeled **3** is placed around the "Merge footer into master" option in the context menu.

MERGING

The screenshot shows the GitKraken interface with the following details:

- Project:** course-git-blog-project
- Branch:** master
- Commits:** 3/3 (Viewing 3/3)
- Local Branches:** master (checked), sidebar
- Remote Branches:** origin/master
- Pull Requests:** 4
- Tags:** 0/0
- Submodules:** 0

A context menu is open over the sidebar branch, with the following options:

1. Pull (fast-forward if possible)
2. Push
- Set Upstream
- Rebase master onto sidebar
- Fast-forward sidebar to master
- Merge master into sidebar
- Checkout sidebar
- Create branch here
- Cherrypick commit
- Reset master to this commit
- Revert commit
- Rename sidebar
- Delete sidebar** (highlighted with a blue background)
- Copy branch name to clipboard
- Hide
- Solo
- Create tag here

To the right, a detailed view of the commit `commit: 7b7a28` is shown:

- Merge branch 'sidebar'**
- Jorge Saldivar** authored `1/3/2018 @ 00:35`
- parent: d3eb47, 8dbbc9**
- 1 modified**
- Name ↗** **Path** **Tree** View all files
- index.html**

Red circles with numbers 1 and 2 are overlaid on the interface to indicate specific steps:

- 1 is over the "Delete sidebar" option in the context menu.
- 2 is over the "branch activo" label.

Red text "branch activo" is overlaid on the left side of the interface.

EJERCICIO - MERGING

1. Desde el **branch master**, hacer merge del **branch footer**
2. Desde el **branch master**, hacer merge del **branch sidebar**
3. Eliminar **branch footer**
4. Eliminar **branch sidebar**



EJERCICIO - MERGE CONFLICTS

1. Desde el **branch master**, cambiar el texto contenido en el tag `<h1>` en la sección `<header>` de Adventure a Quest (archivo a modificar: index.html)
Guardar los cambios, agregar el archivo al stage, y hacer commit
2. Crear el branch **conflicto** desde el penúltimo commit. El anterior al que contiene el cambio de Adventure a Quest
3. Desde el branch **conflicto**, cambiar el el texto contenido en el tag `<h1>` en la sección `<header>` de Adventure a Crusade (archivo a modificar: index.html)
Guardar los cambios, agregar el archivo al stage, y hacer commit
4. Cambiar al branch **master**, y hacer merge del branch **conflicto**
5. Resolver conflicto en favor del título Crusade y hacer commit
6. Eliminar branch **conflicto**

MERGE CONFLICTS

The screenshot shows the GitKraken interface with the following details:

- Project:** course-git-blog-project
- Branch:** master
- Conflict Message:** A file conflict was found when attempting to merge into master (highlighted by a red box).
- Local Changes:** 2/2 (conflicto, master)
- Remote Changes:** 1/1 (origin master)
- Pull Requests:** 4
- Tags:** 0/0
- Submodules:** 0

The timeline shows the merge process:

- The 'conflicto' branch has 8 commits.
- The 'master' branch has 22 commits.
- A merge commit from 'conflicto' into 'master' is shown, containing 10 of the 'conflicto' commits.
- The 'master' branch continues with 12 more commits.

Conflict Details:

- Commit:** Change page title from Adventures to Quest (commit: f5c33b)
- Author:** Jorge Saldivar (authored 1/3/2018 @ 00:44)
- Parents:** parent: 7b7a28
- Status:** 1 modified (index.html)

File Conflict: index.html

MERGE CONFLICTS

The screenshot shows the GitKraken interface with a project named "course-git-blog-project" on the "master" branch. A conflict is present in the file "index.html".

Commit A: Commit f5c33b on **master**

```
4 <meta charset="UTF-8">
5 <title>Blog Project</title>
6 <meta name="viewport" content="width=device-width, initial-scale=1">
7 <meta name="description" content="">
8 <link rel="stylesheet" href="https://fonts.googleapis.com/css?family=Montserrat|Open+Sans">
9 <link rel="stylesheet" href="css/normalize.min.css">
10 <link rel="stylesheet" href="css/app.css">
11 </head>
12 <body>
13
14 <header class="page-header">
15   <h1>Quest</h1>
16 </header>
17
18 <div class="container">
19   <main>
20     <h2 class="visuallyhidden">Articles</h2>
21
22     <article>
23       <header>
24         <h3>Chasing the Snow</h3>
25         <time datetime="2016-05-12T08:00">May 12</time>
26
```

Commit B: Commit on **conflicto**

```
4 <meta charset="UTF-8">
5 <title>Blog Project</title>
6 <meta name="viewport" content="width=device-width, initial-scale=1">
7 <meta name="description" content="">
8 <link rel="stylesheet" href="https://fonts.googleapis.com/css?family=Montserrat|Open+Sans">
9 <link rel="stylesheet" href="css/normalize.min.css">
10 <link rel="stylesheet" href="css/app.css">
11 </head>
12 <body>
13
14 <header class="page-header">
15   <h1>Crusade</h1>
16 </header>
17
18 <div class="container">
19   <main>
20     <h2 class="visuallyhidden">Articles</h2>
21
22     <article>
23       <header>
24         <h3>Chasing the Snow</h3>
25         <time datetime="2016-05-12T08:00">May 12</time>
26
```

Output:

```
4 <meta charset="UTF-8">
5 <title>Blog Project</title>
6 <meta name="viewport" content="width=device-width, initial-scale=1">
7 <meta name="description" content="">
8 <link rel="stylesheet" href="https://fonts.googleapis.com/css?family=Montserrat|Open+Sans">
9 <link rel="stylesheet" href="css/normalize.min.css">
10 <link rel="stylesheet" href="css/app.css">
11 </head>
12 <body>
13
14 <header class="page-header">
15   <h1>Aventures</h1>
16 </header>
17
18 <div class="container">
19   <main>
20     <h2 class="visuallyhidden">Articles</h2>
21
22     <article>
23       <header>
24         <h3>Chasing the Snow</h3>
25         <time datetime="2016-05-12T08:00">May 12</time>
26
```

A red circle with the number **1** highlights the conflict marker in the output code at line 15, where the text "Aventures" is highlighted in purple. A red circle with the number **2** highlights the "Open in external merge" button in the top right corner.

MERGE CONFLICTS

The screenshot shows the GitKraken interface with the repository `course-git-blog-project` and the `master` branch selected. A merge conflict is visible between the `conflicto` branch (blue) and the `master` branch (green). The `conflicto` branch has 2 changes, and the `master` branch has 8 changes. The commit message for the merge is "Merge branch 'conflicto'".

Unstaged Files (0)

Staged Files (1)

Commit Message

1 file change on master

Name Path Tree

▼ Unstaged Files (0)

▼ Staged Files (1)

Unstage all changes

index.html

Commit and Merge Abort Merge

1

1 file change on master

Name Path Tree

▼ Unstaged Files (0)

▼ Staged Files (1)

Unstage all changes

index.html

Commit Message

Merge branch 'conflicto'

Description

Commit and Merge Abort Merge

1

100% Feedback FREE

RESUMEN

- Áreas de trabajo
 - Working directory
 - Stage
 - Repositorio
- Crear/clonar repositorio
- Agregar cambios al área stage
- Enviar cambios al repositorio (commit)
- Branching
 - Head pointer
- Merging
 - Regular
 - Fast-forward



RECURSOS ADICIONALES

- **Git-it:** Aplicación desktop para aprender Git y Github
<https://github.com/jlord/git-it-electron>
- **Try git:** Tutorial interactivo para aprender Git <https://try.github.io/levels/1/challenges/>
- **How to use version control Git y Github:** MOOC sobre git y Github <https://www.udacity.com/course/how-to-use-git-and-github--ud775>