Git para principiantes

Enrique Calderón
Estudiante de Ingeniería en Computación

Universidad Nacional Autónoma de México
Facultad de Ingeniería

Taller de Git, Semestre 2025-1

Información del Taller

Tiempo estimado

Aproximadamente 120 minutos de taller.

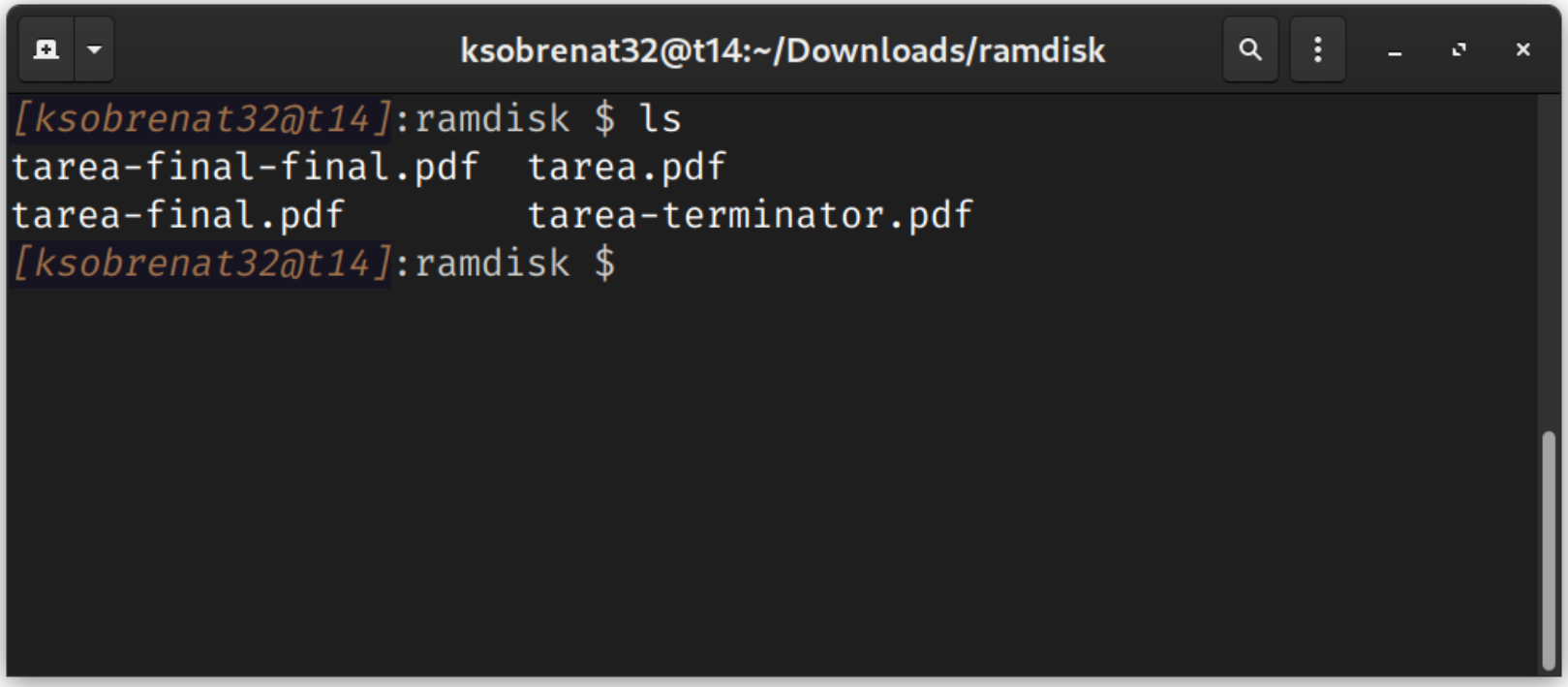
Objetivos

Que los participantes entiendan:

- Que es un sistema de control de versiones y su utilidad
- Flujo de trabajo básico con git
- Comandos básicos de git
- Uso de ramas
- Uso de repositorios remotos
- Creación de un repositorio en GitHub

Introducción al tema

Un sistema de control de versiones es una herramienta que permite llevar un registro de los cambios realizados en un proyecto a lo largo del tiempo.



Qué es Git

- Git es un sistema de control de versiones distribuido.
- Fue creado por Linus Torvalds en 2005.
- Es software libre y de código abierto.

Flujo de trabajo básico con Git

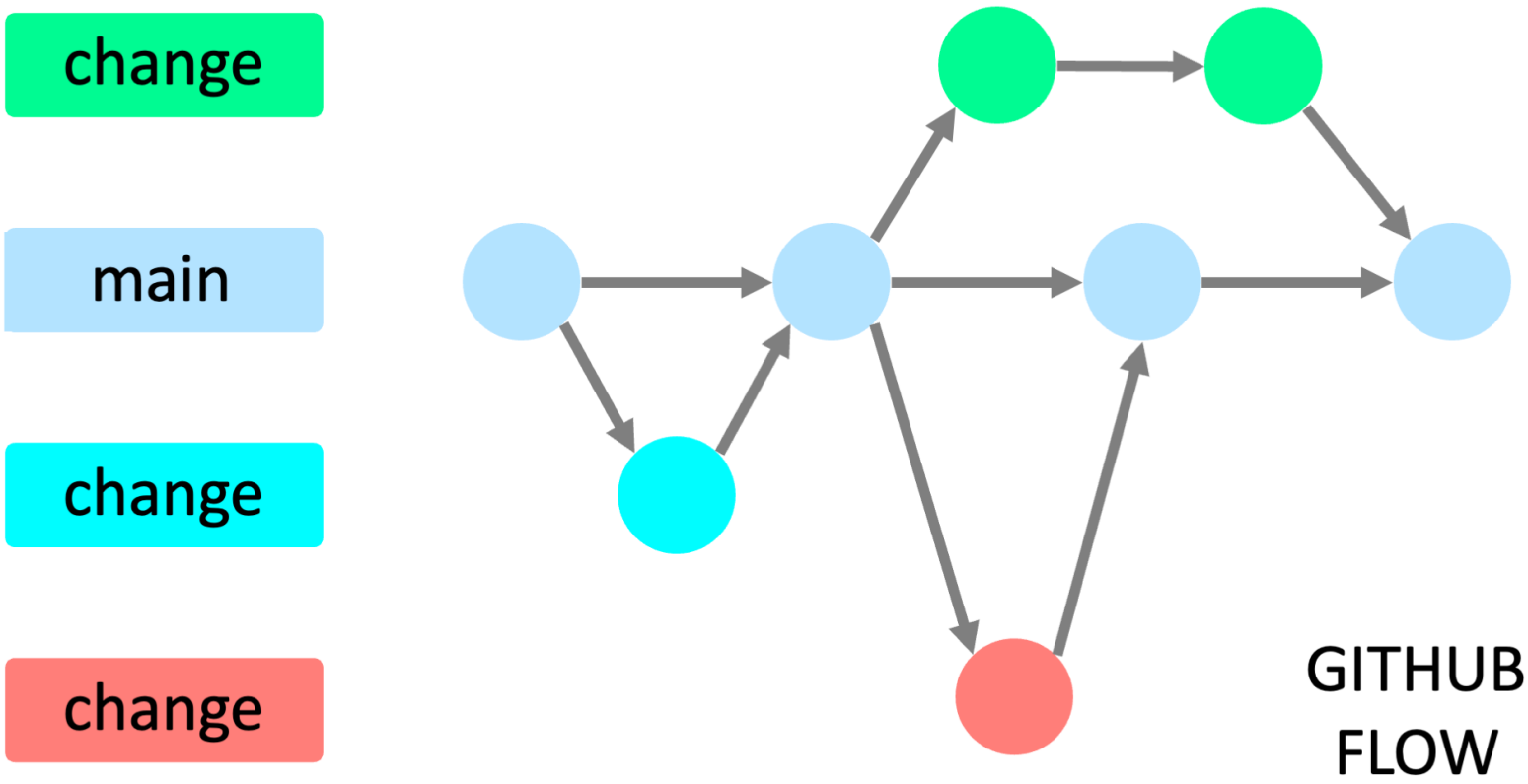


Figura 2: Github-flow

Conceptos básicos

Snapshot

Representa el estado de los archivos en un momento dado.

Commit

Es un snapshot con un mensaje descriptivo.

Branch

Es una línea de desarrollo independiente.

Repositorio

Es un conjunto de archivos y directorios que git controla.

Usando Git

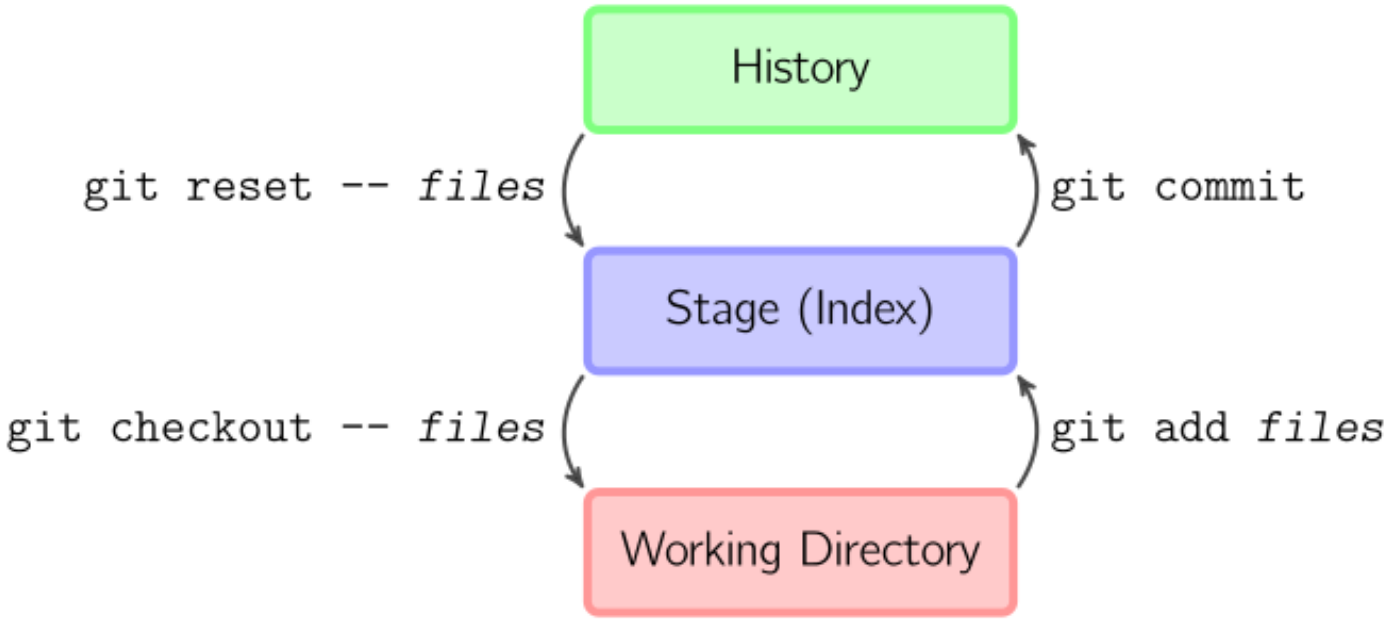


Figura 3: Zonas de trabajo

Usando Git

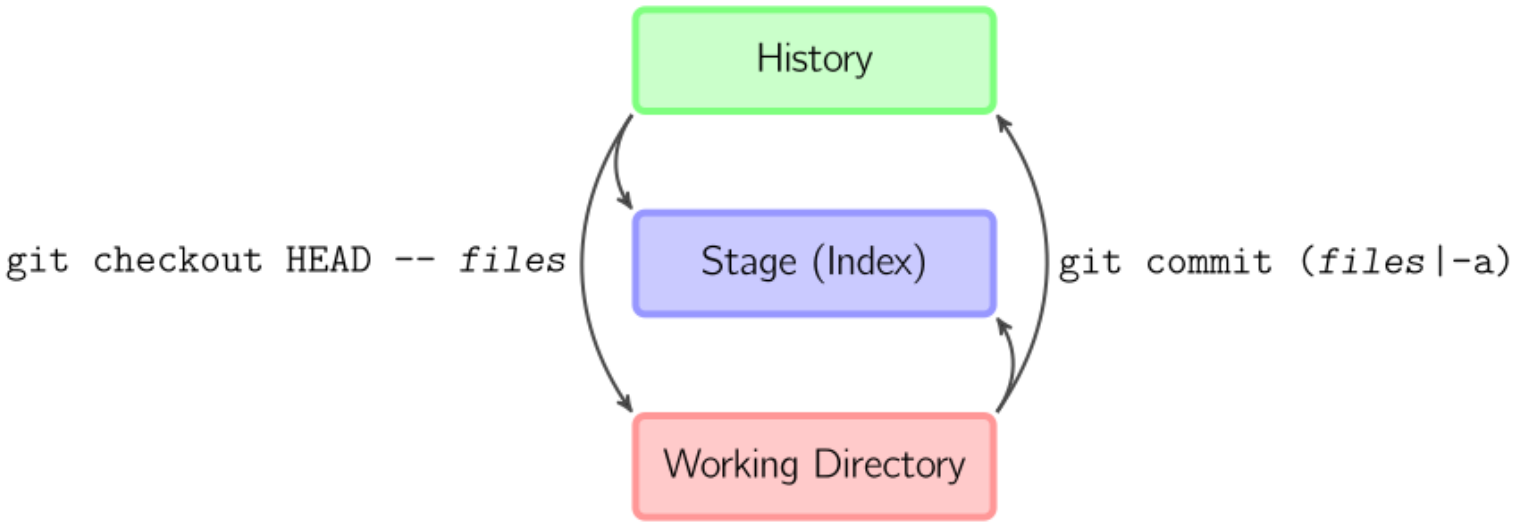


Figura 4: Zonas de trabajo

Usando Git

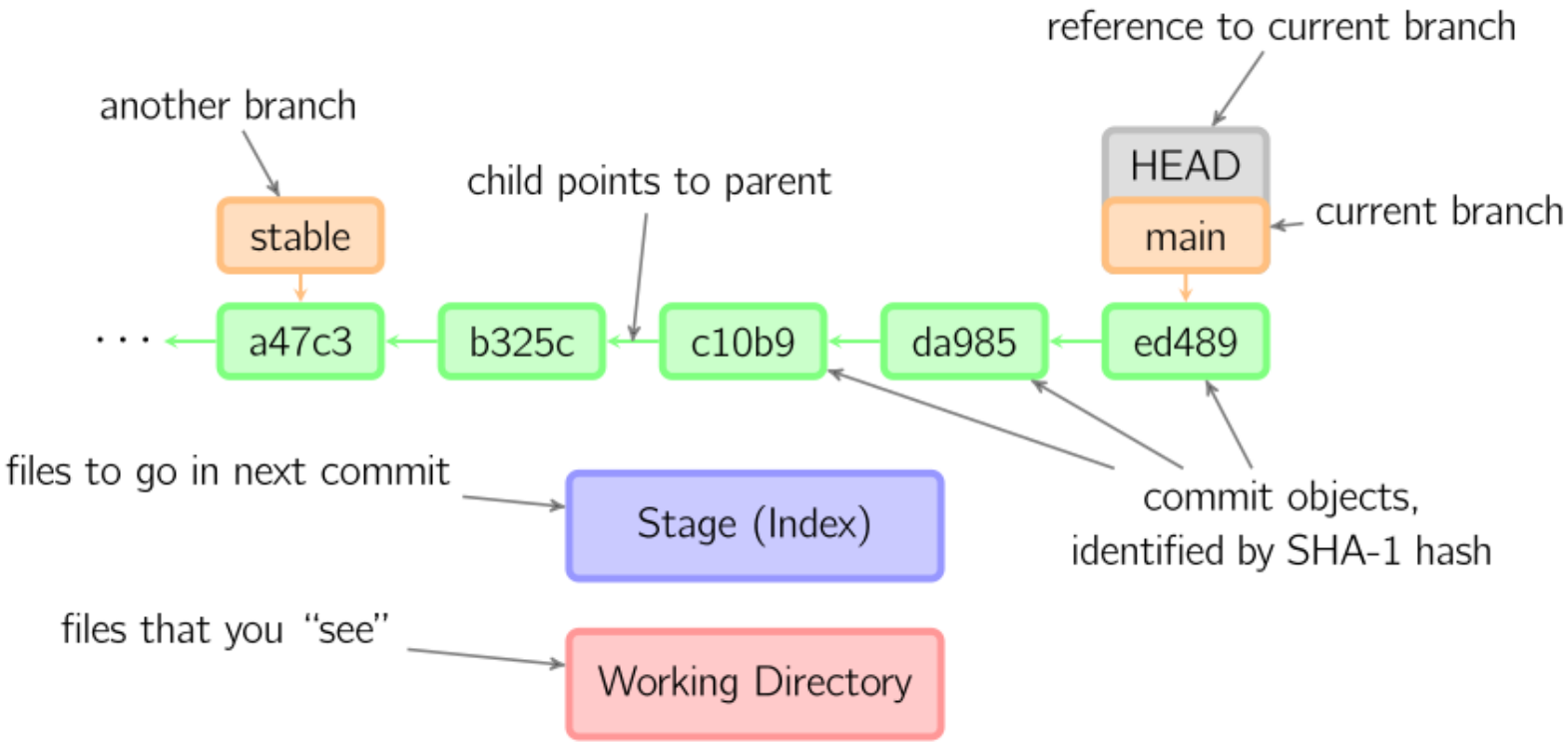


Figura 5: Convenciones

Comandos básicos

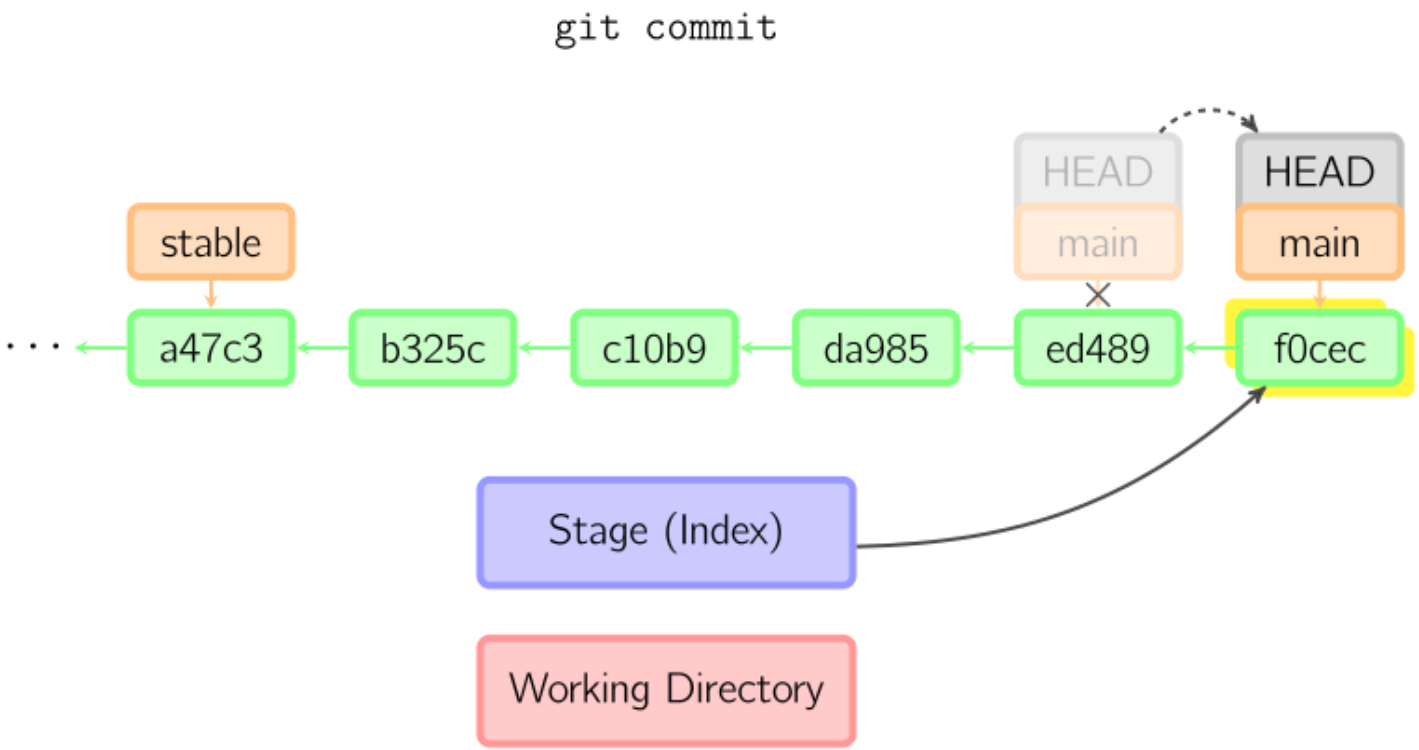


Figura 6: Commit

Comandos básicos

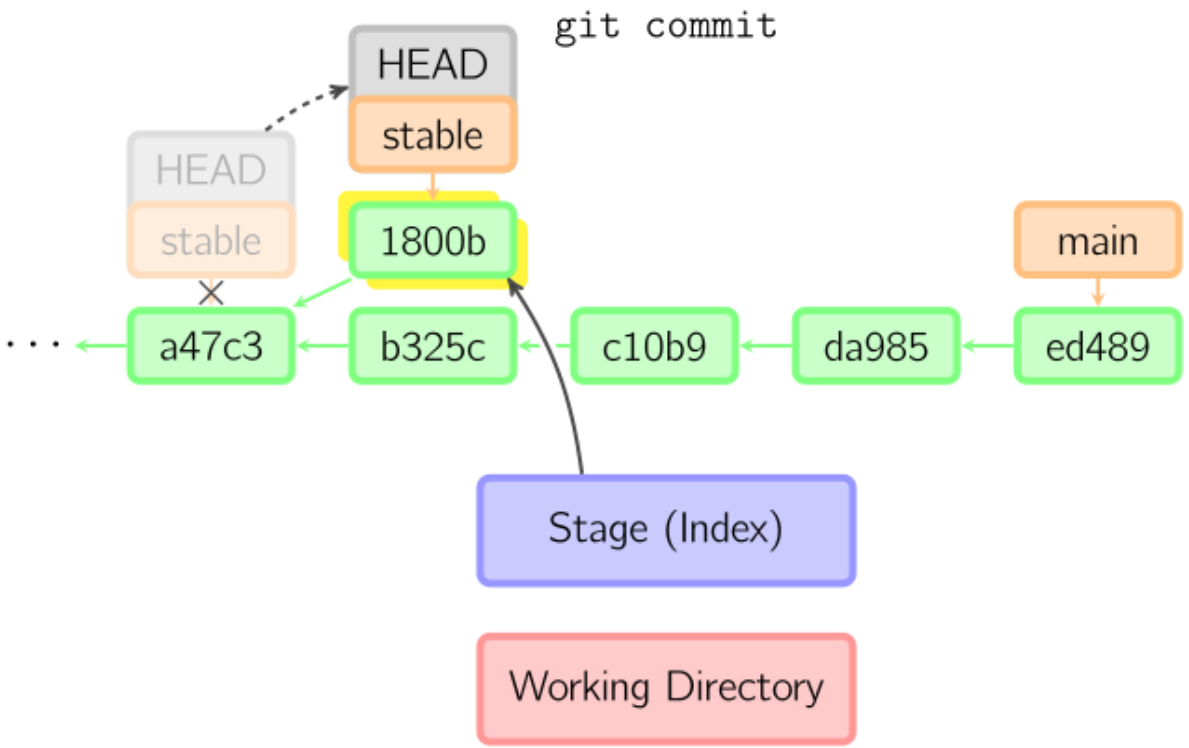


Figura 7: Commit stable

Comandos básicos

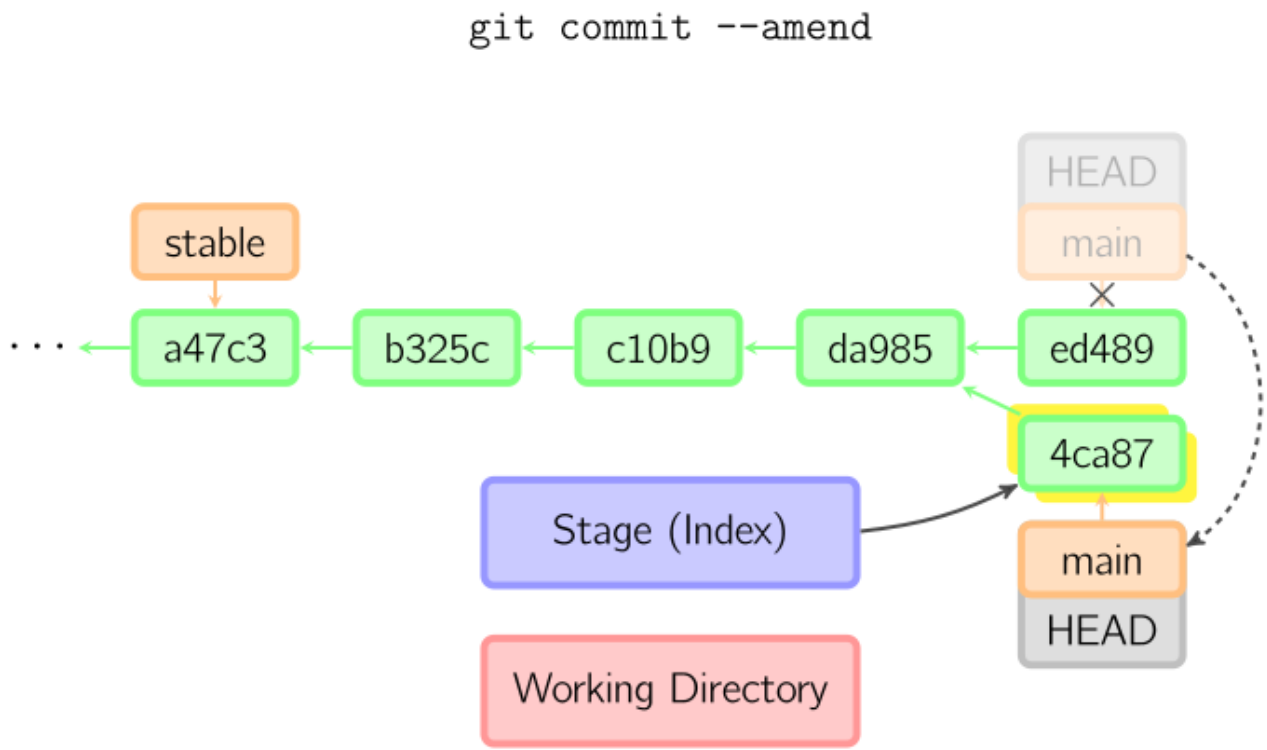


Figura 8: Commit amend

Comandos básicos

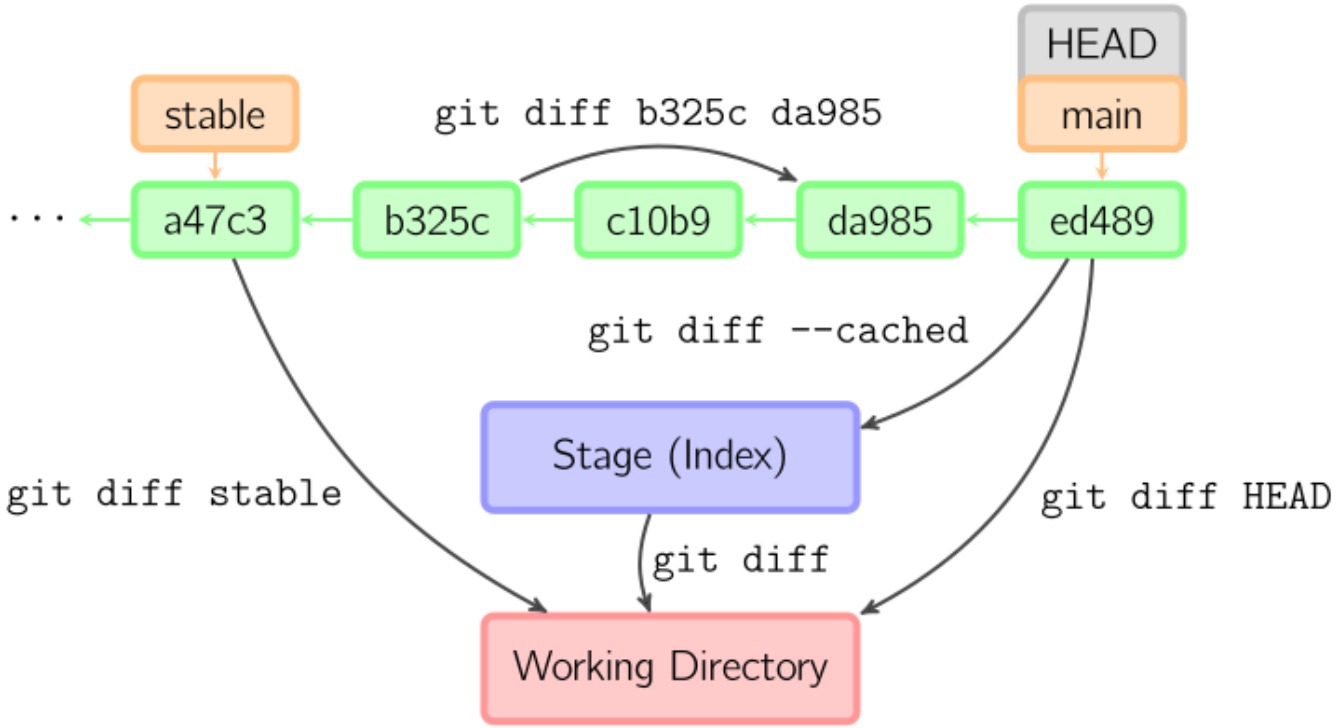


Figura 9: Diff

Comandos básicos

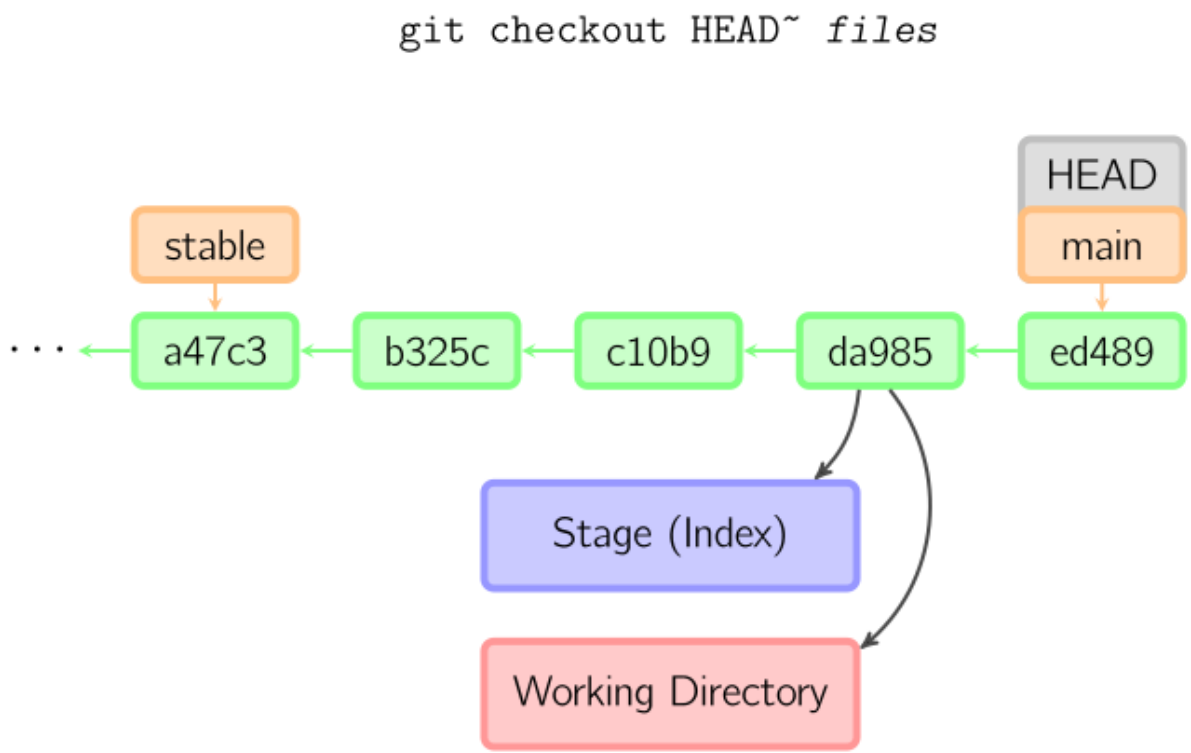


Figura 10: Checkout

Comandos básicos

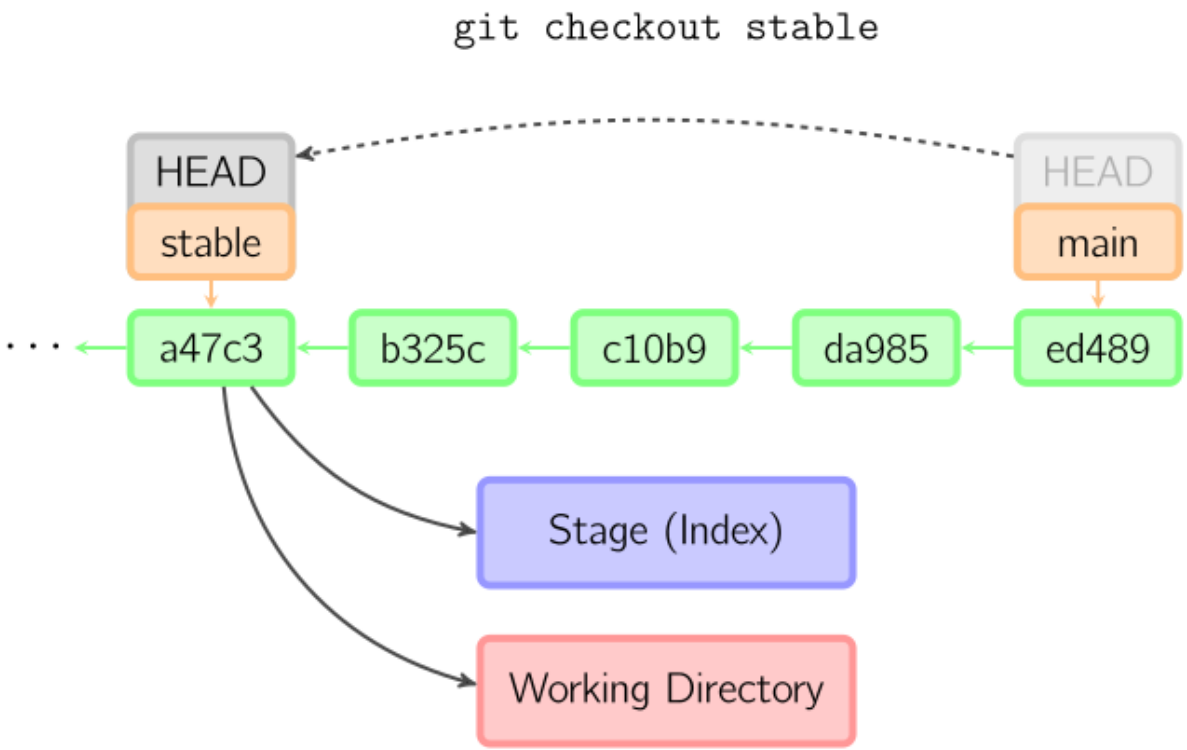


Figura 11: Checkout branch

Comandos básicos

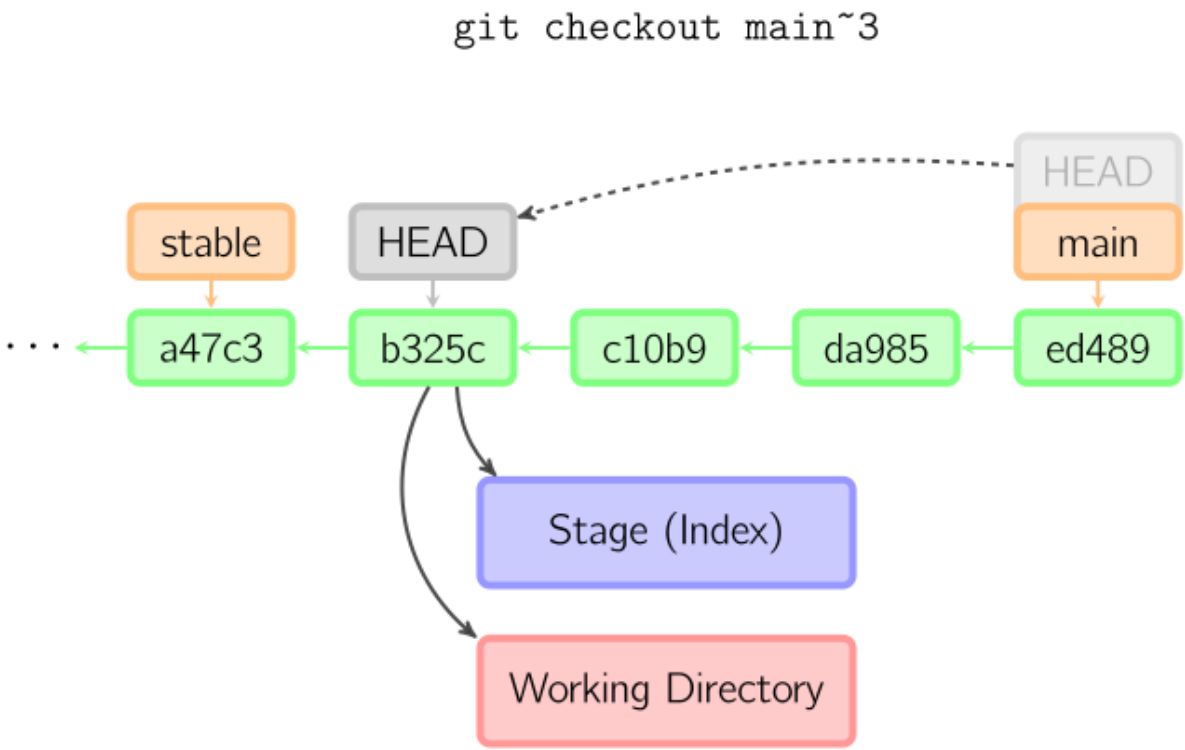


Figura 12: Checkout detached

Comandos básicos

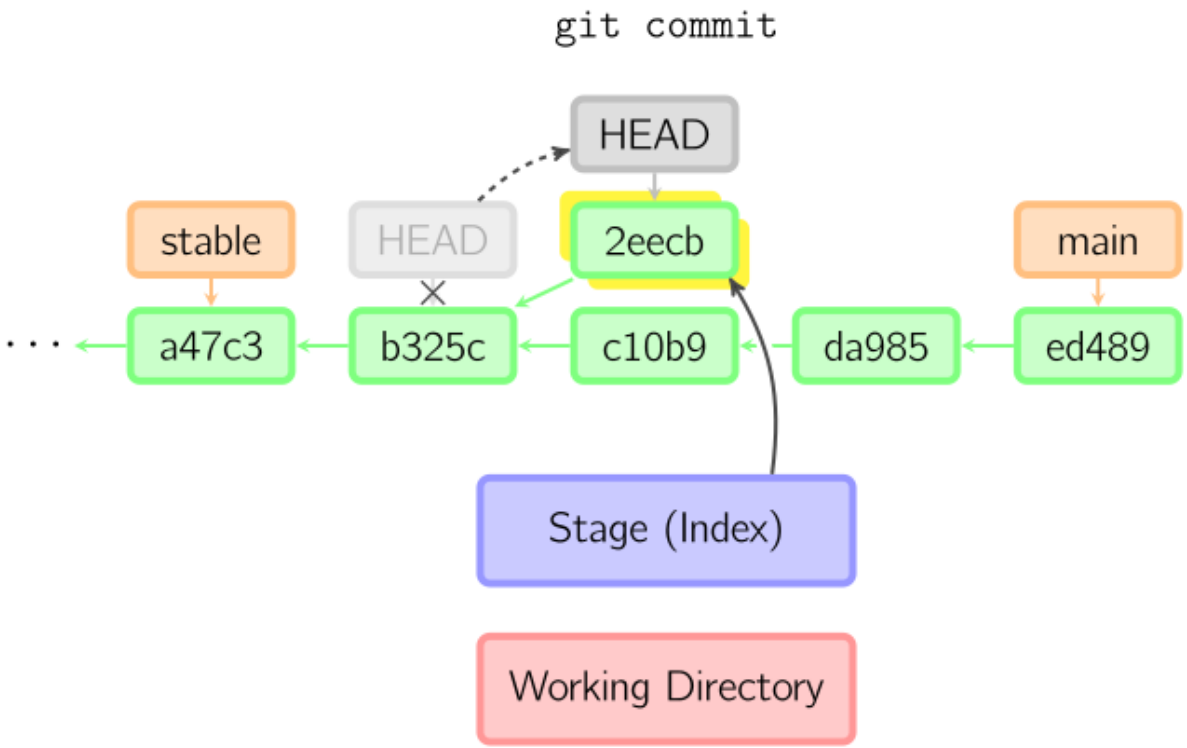


Figura 13: Commit detached

Comandos básicos

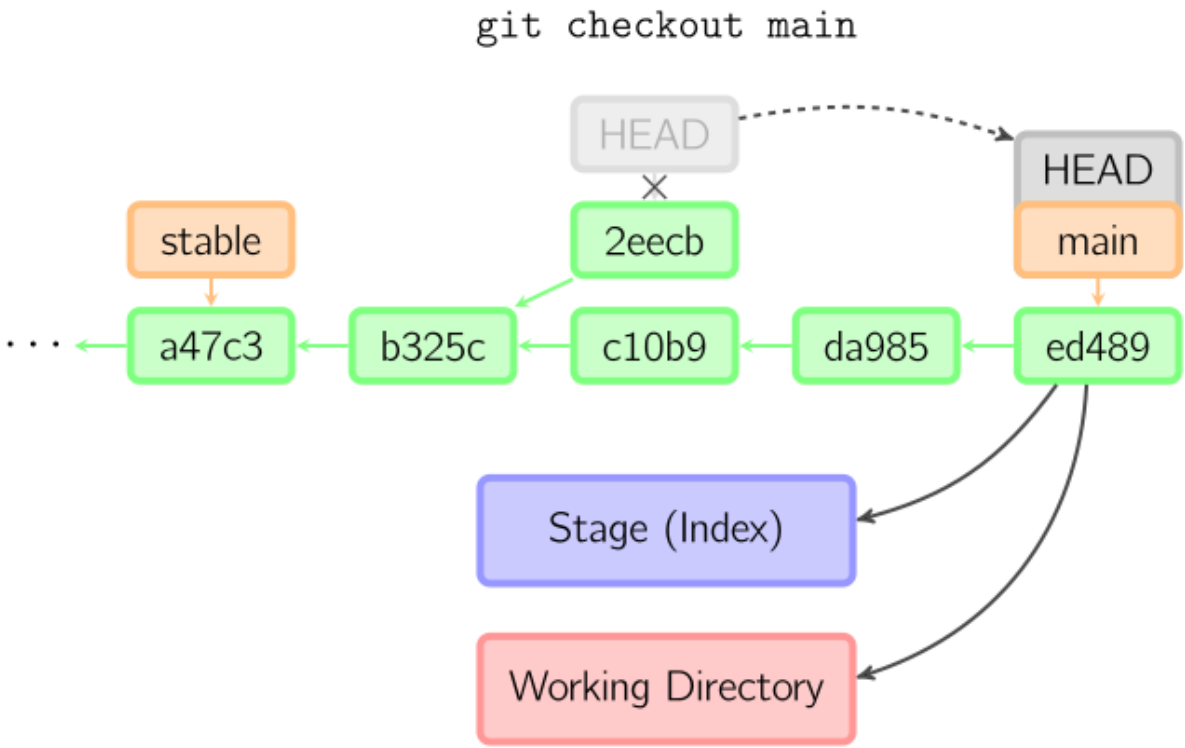


Figura 14: Checkout after detached

Comandos básicos

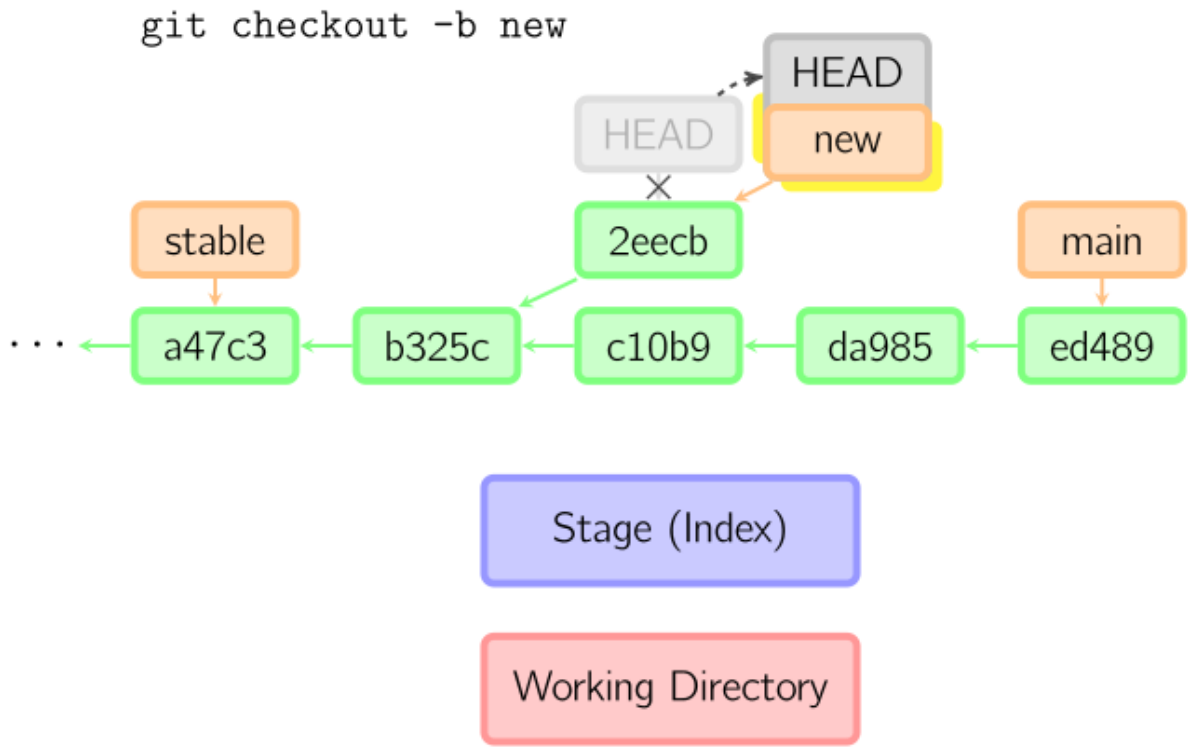


Figura 15: Checkout b detached

Comandos básicos

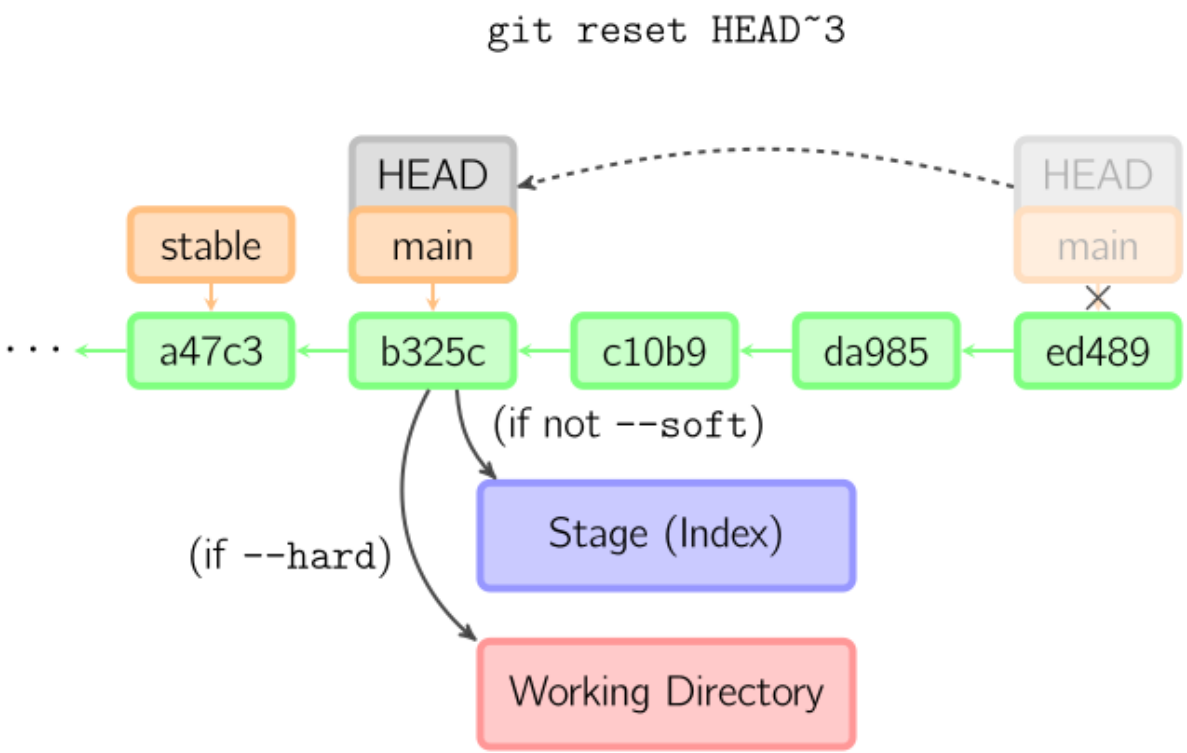


Figura 16: Reset commit

Comandos básicos

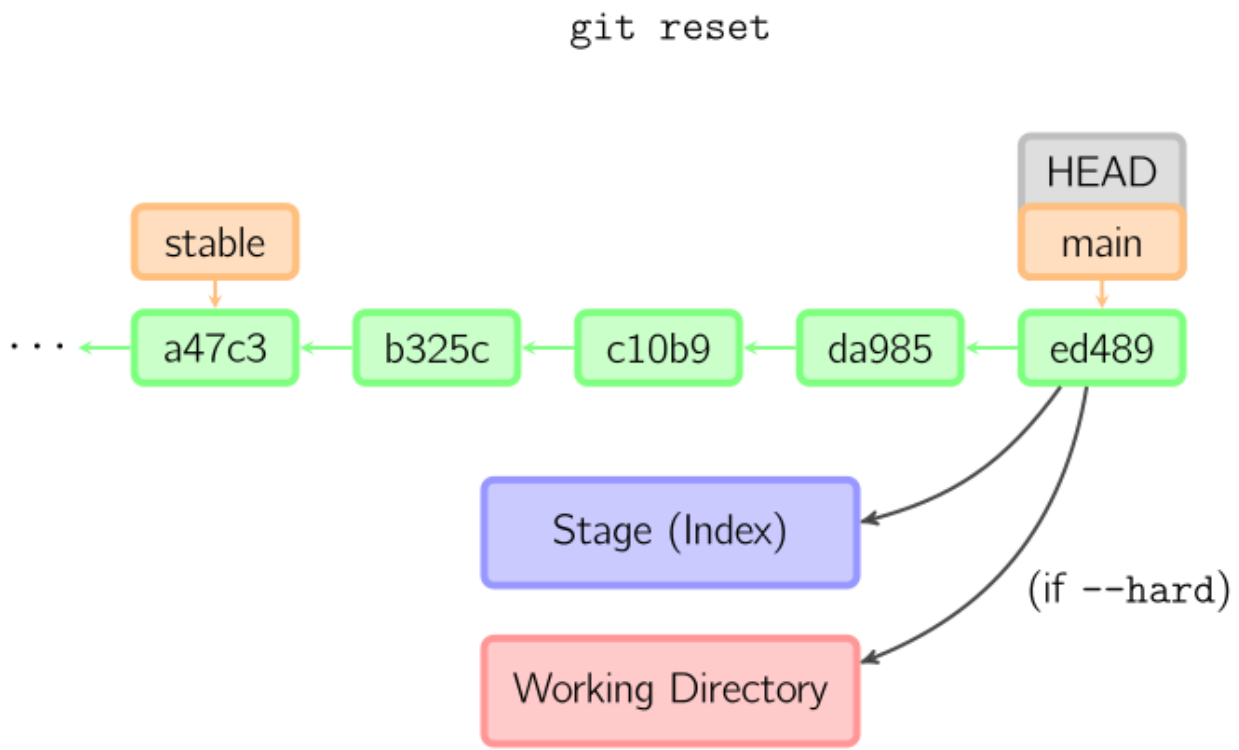


Figura 17: Reset

Comandos básicos

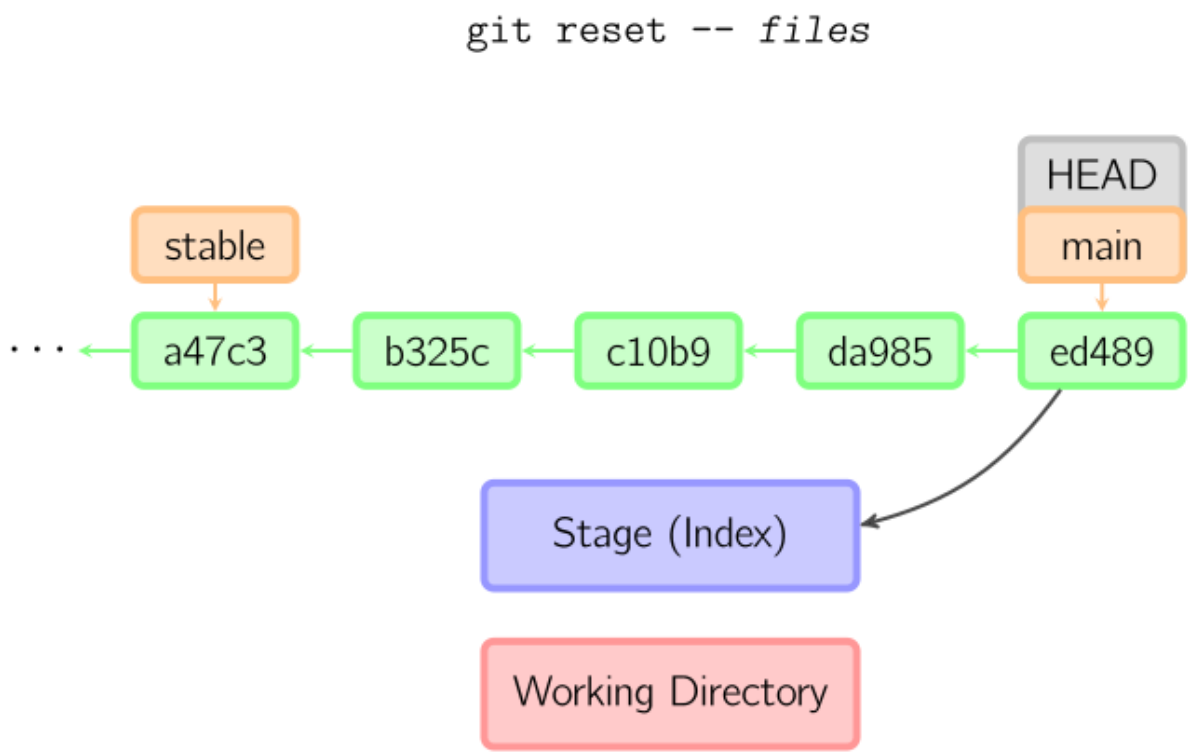


Figura 18: Reset files

Comandos básicos

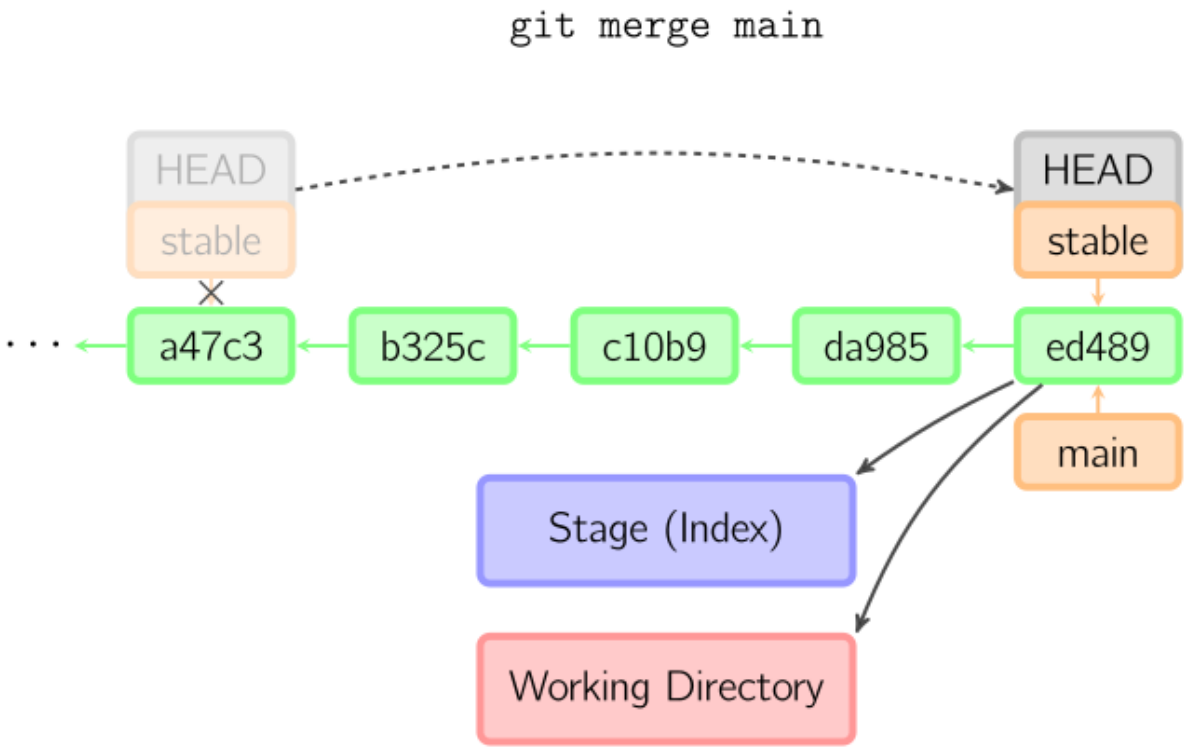


Figura 19: Merge Fast Forward

Comandos básicos

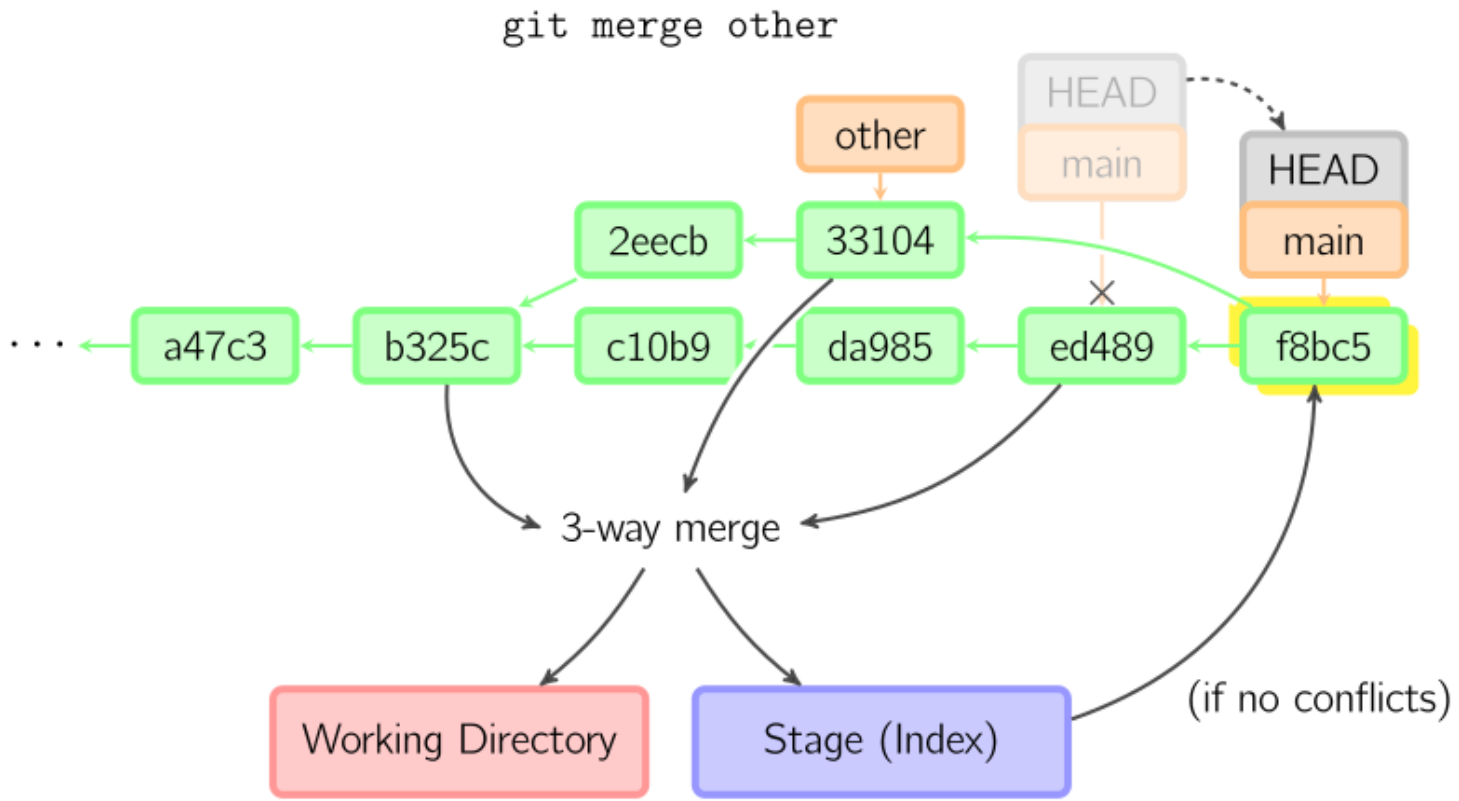


Figura 20: Merge

Comandos básicos

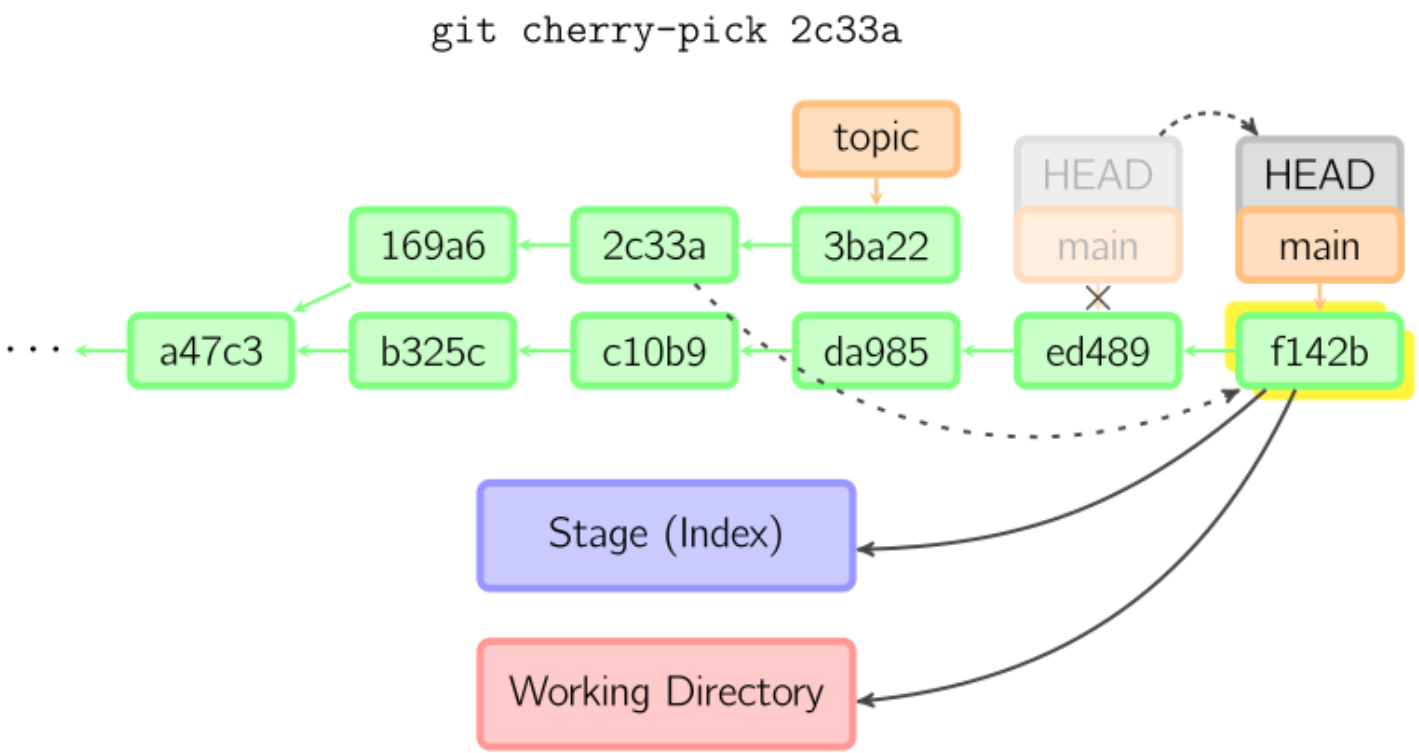


Figura 21: Cherry pick

Comandos básicos

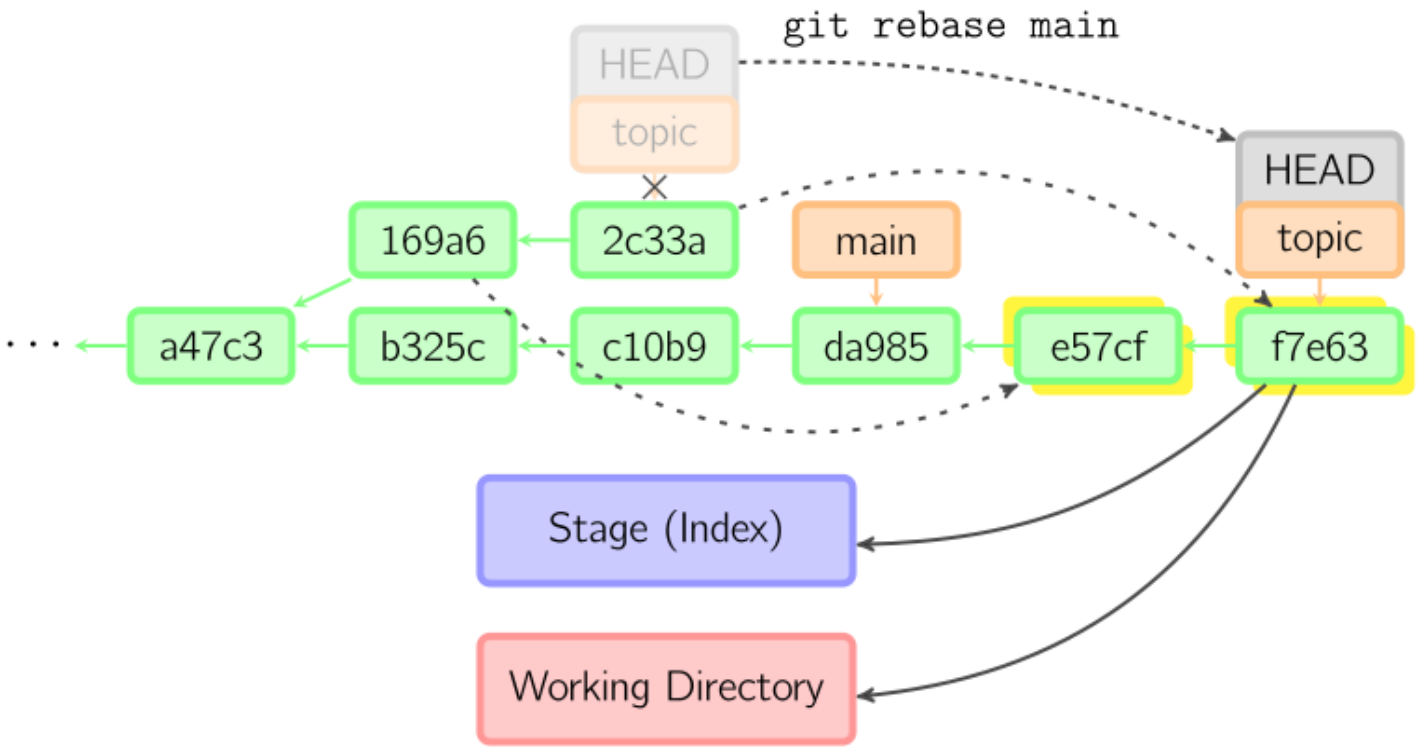


Figura 22: Rebase

Comandos básicos

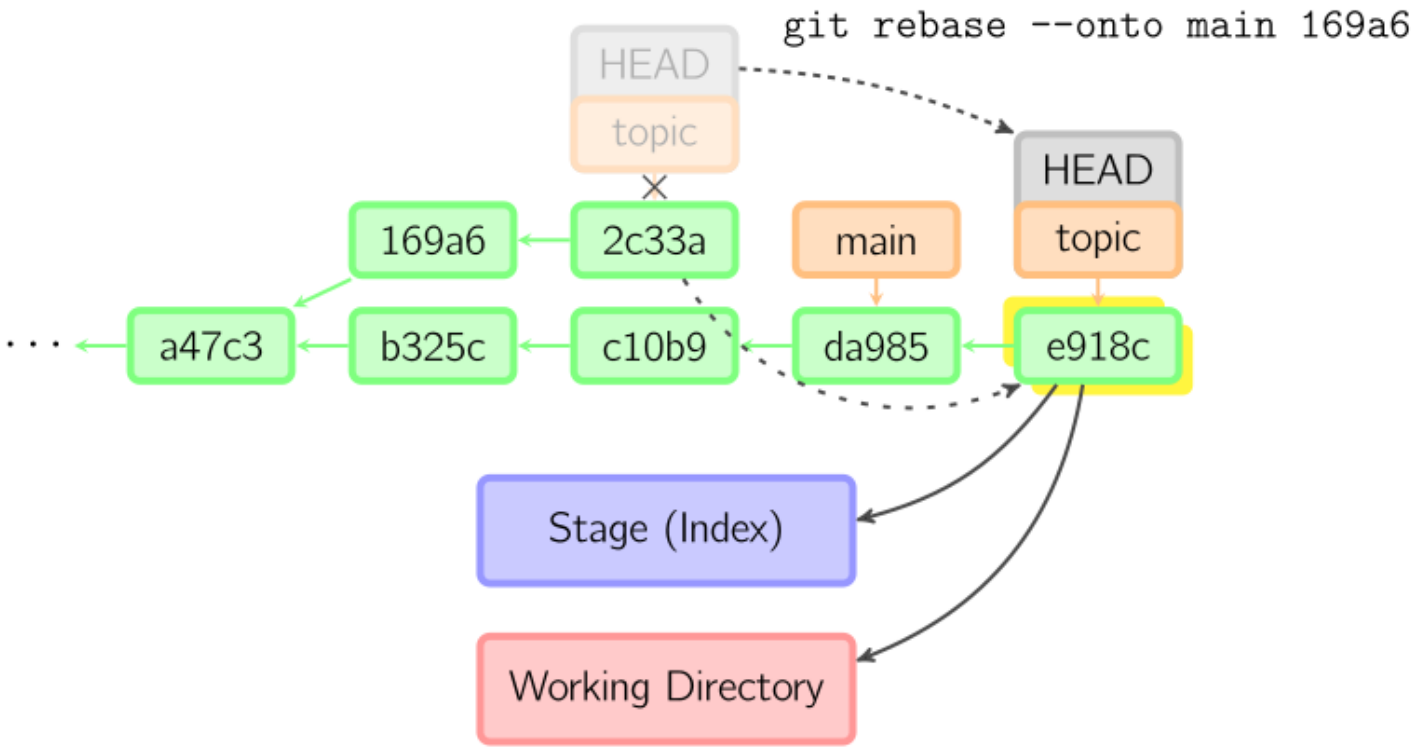
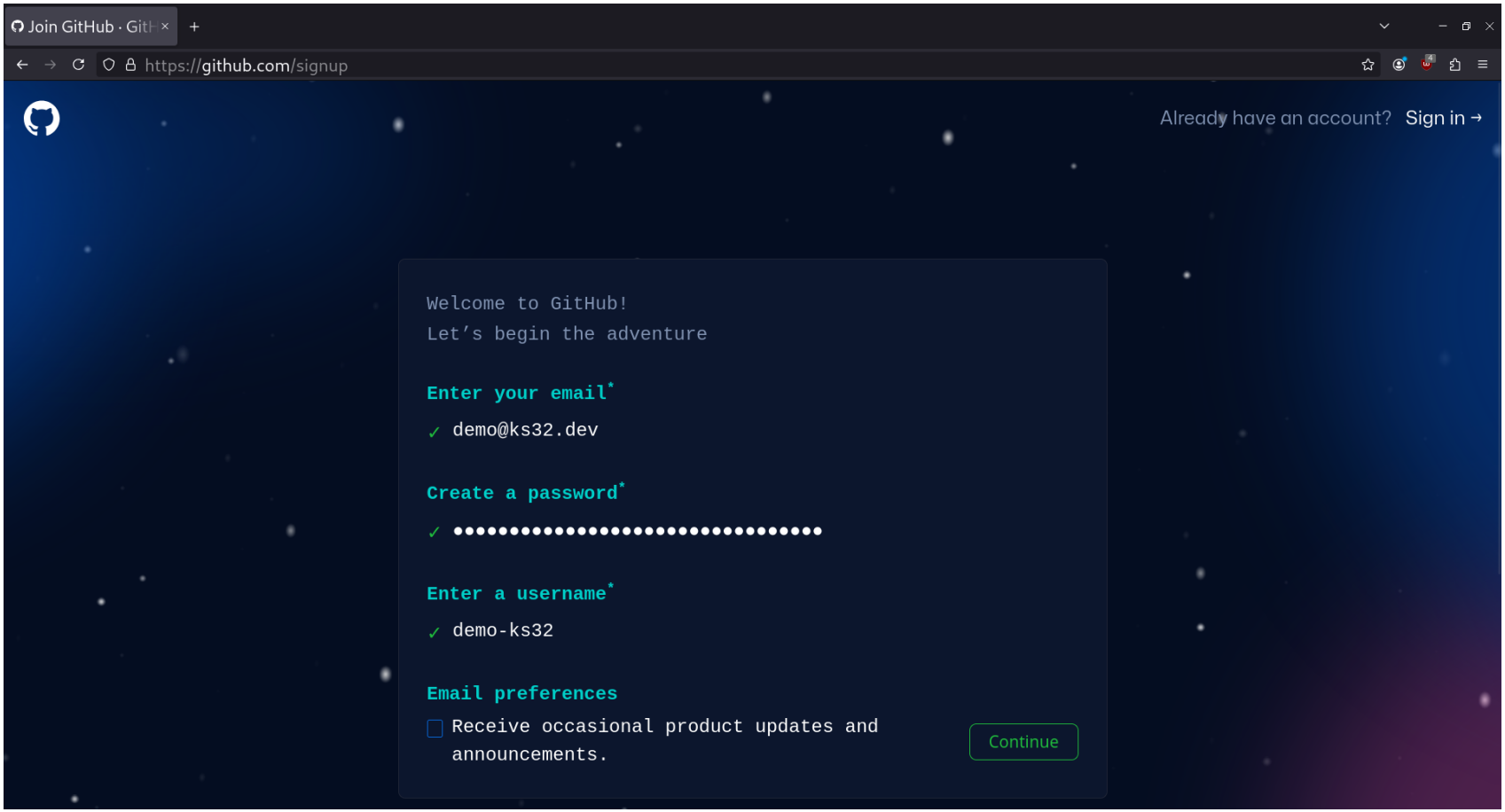
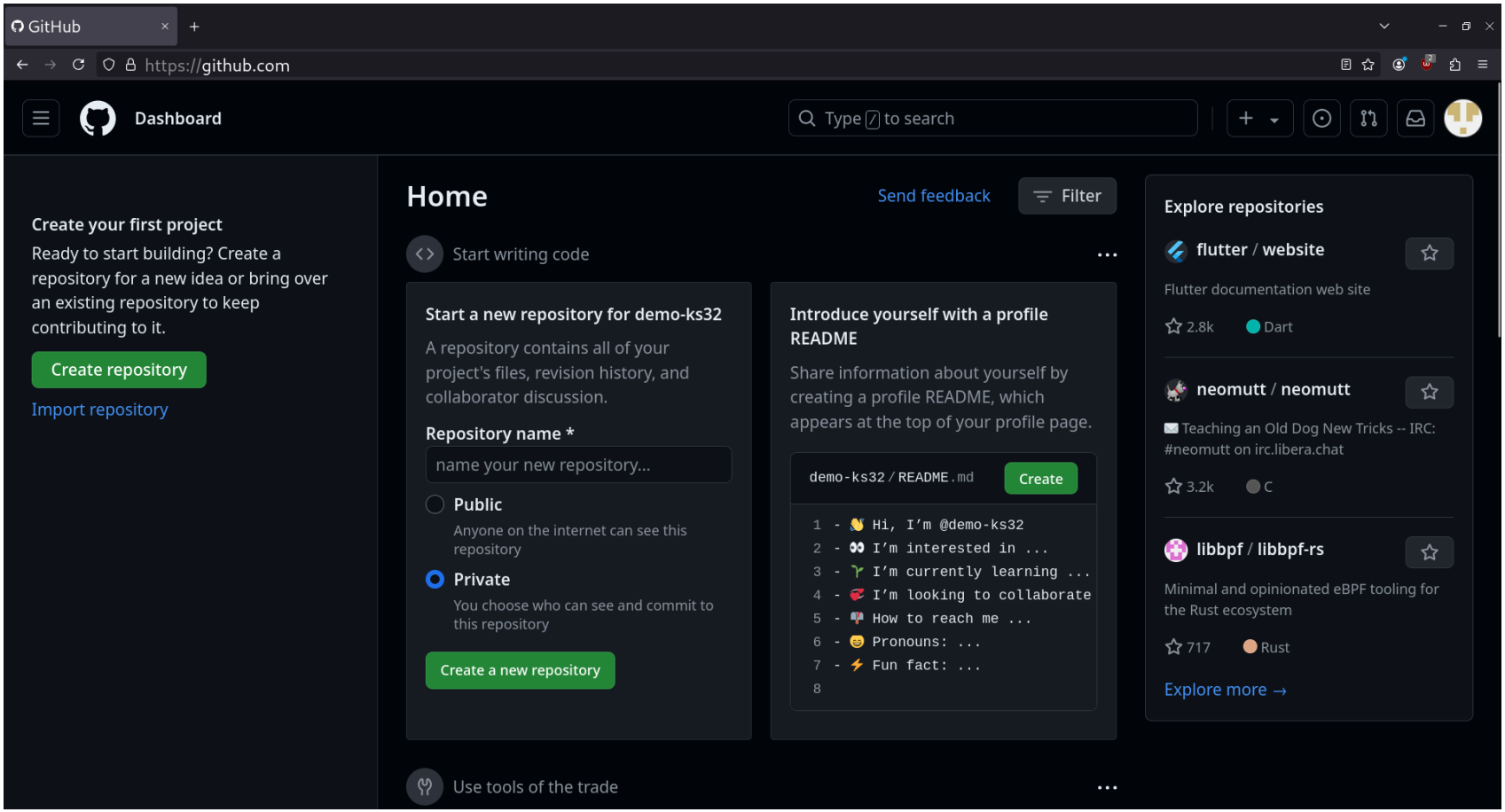


Figura 23: Rebase onto

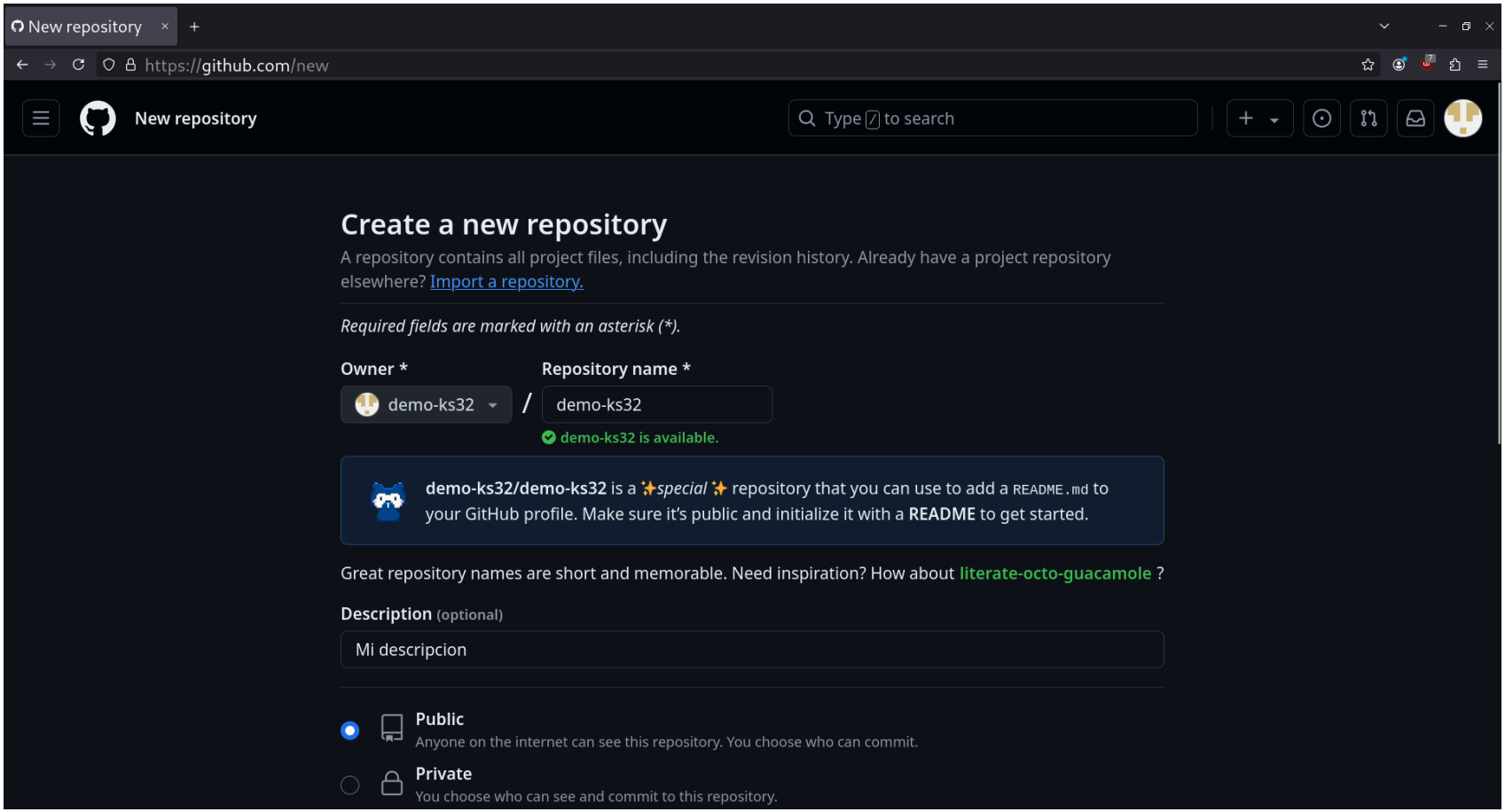
Creación de un repositorio en GitHub



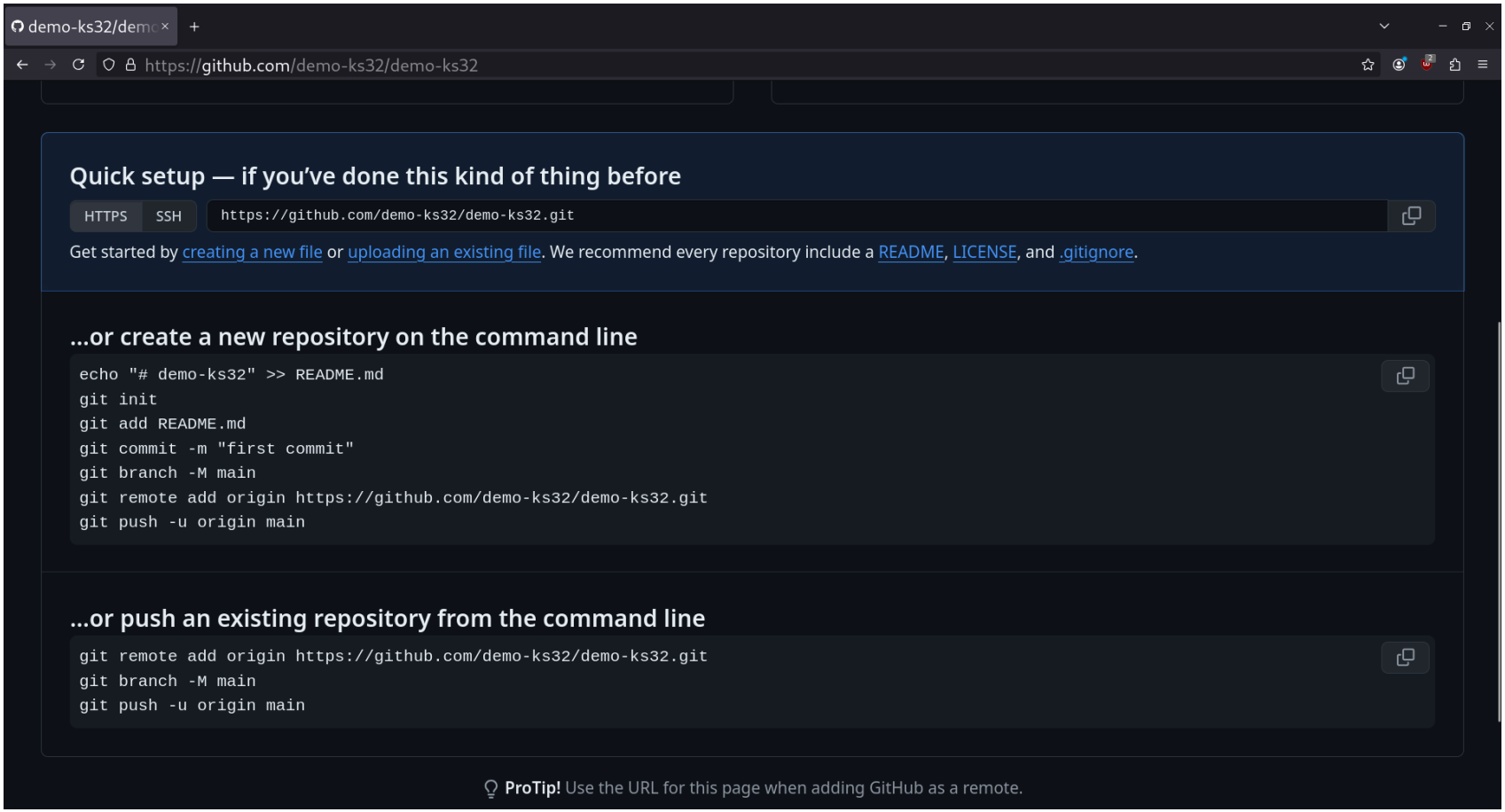
Creación de un repositorio en GitHub



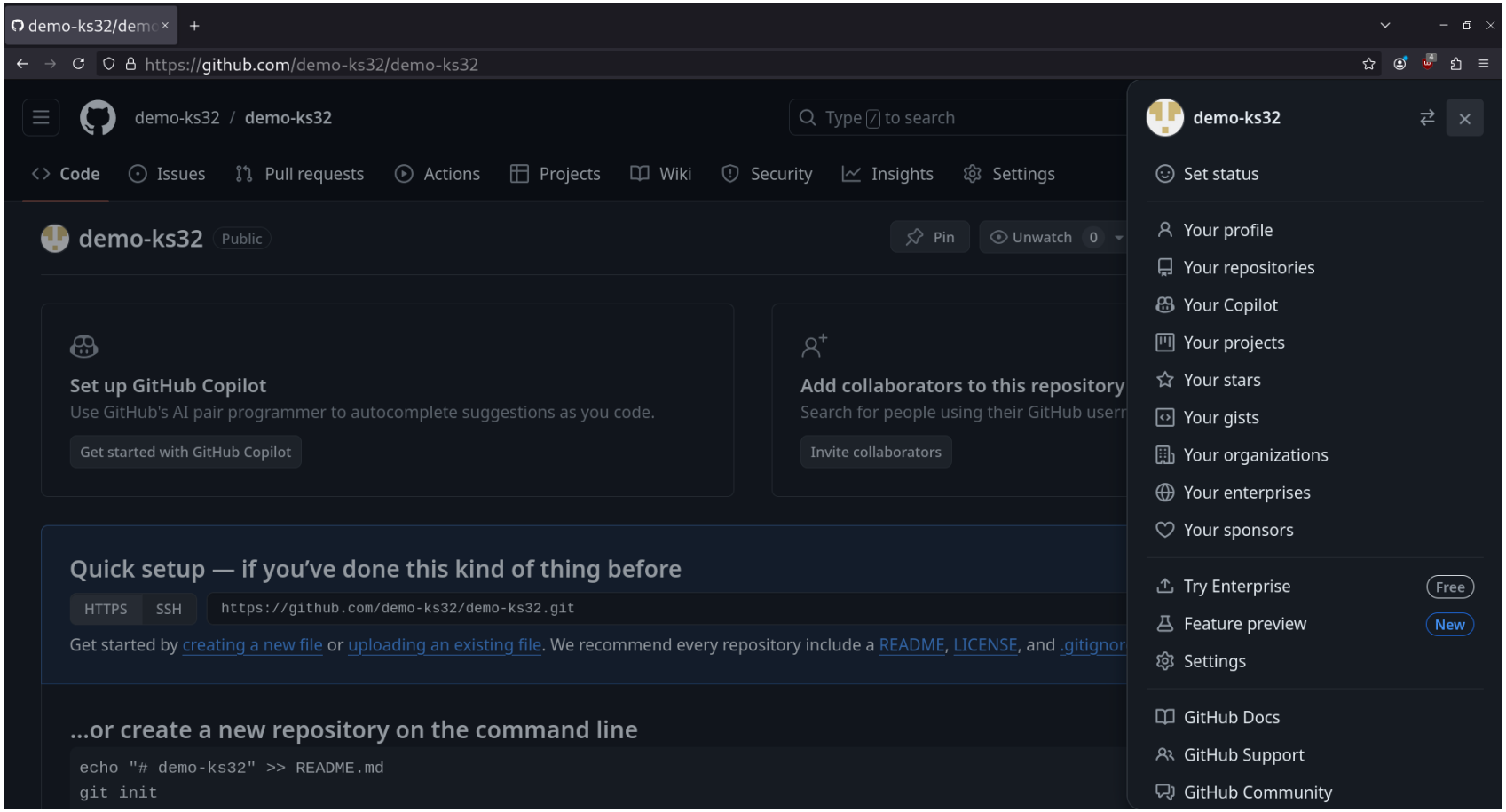
Creación de un repositorio en GitHub



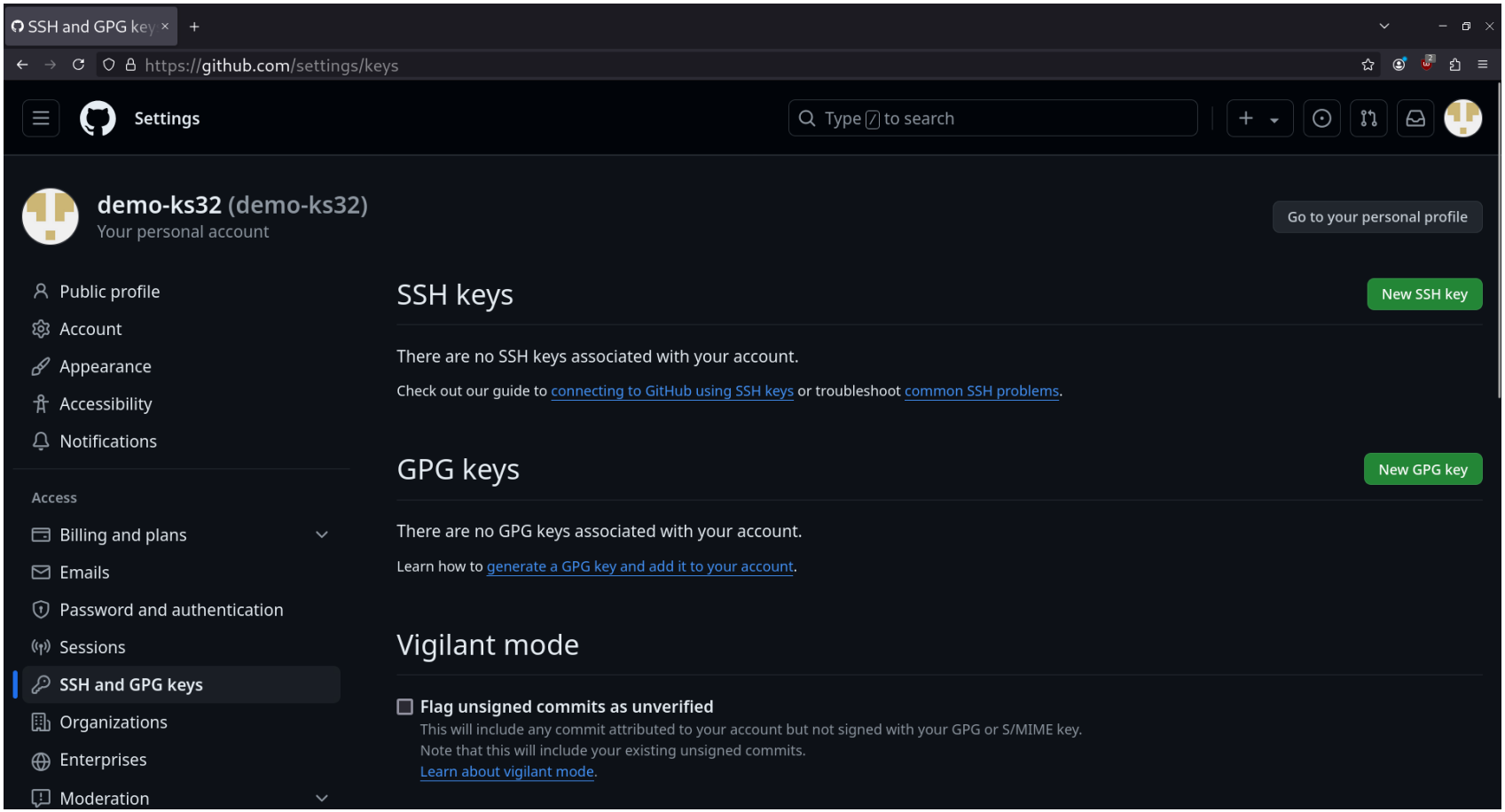
Creación de un repositorio en GitHub



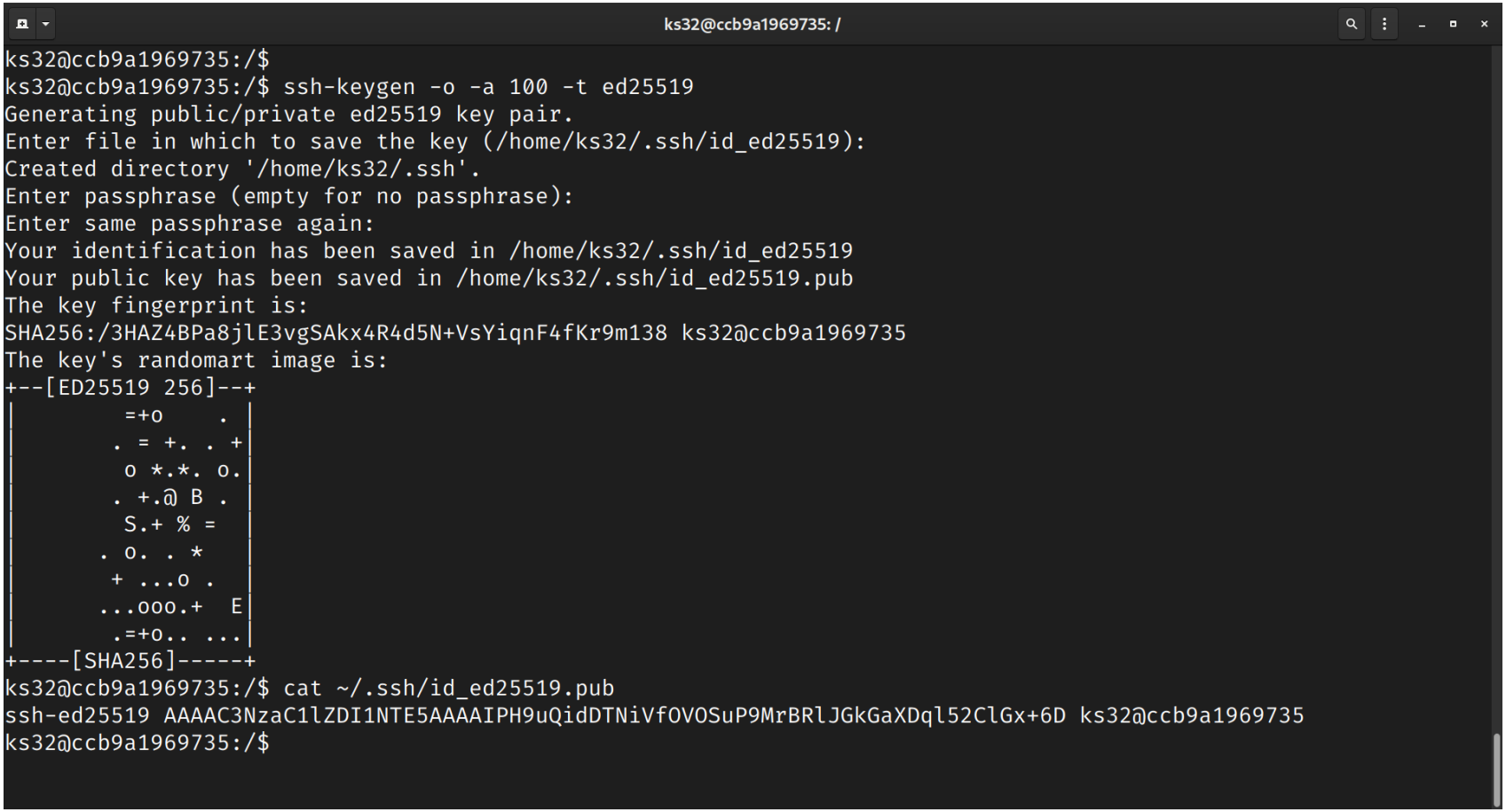
Creación de un repositorio en GitHub



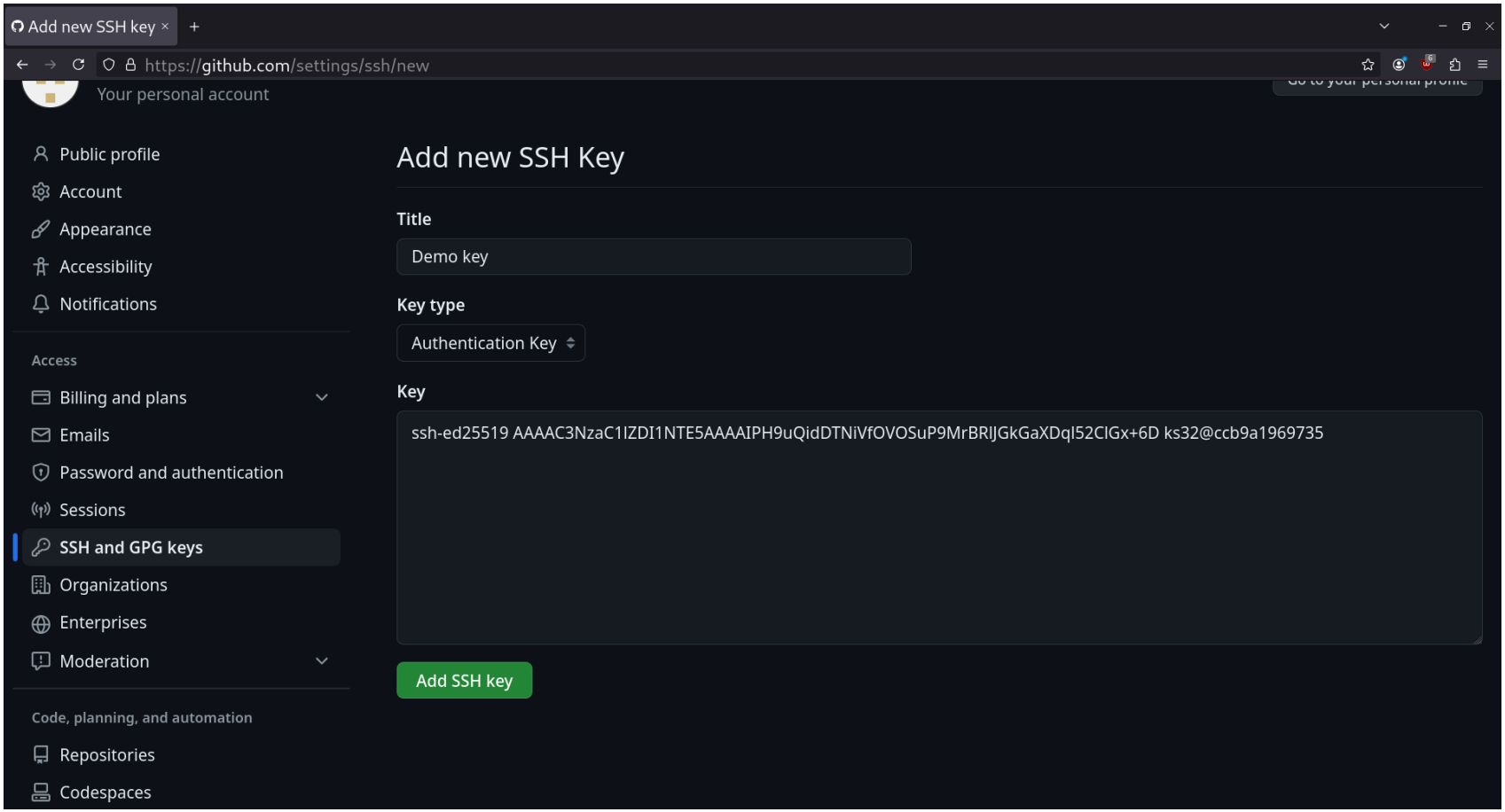
Creación de un repositorio en GitHub



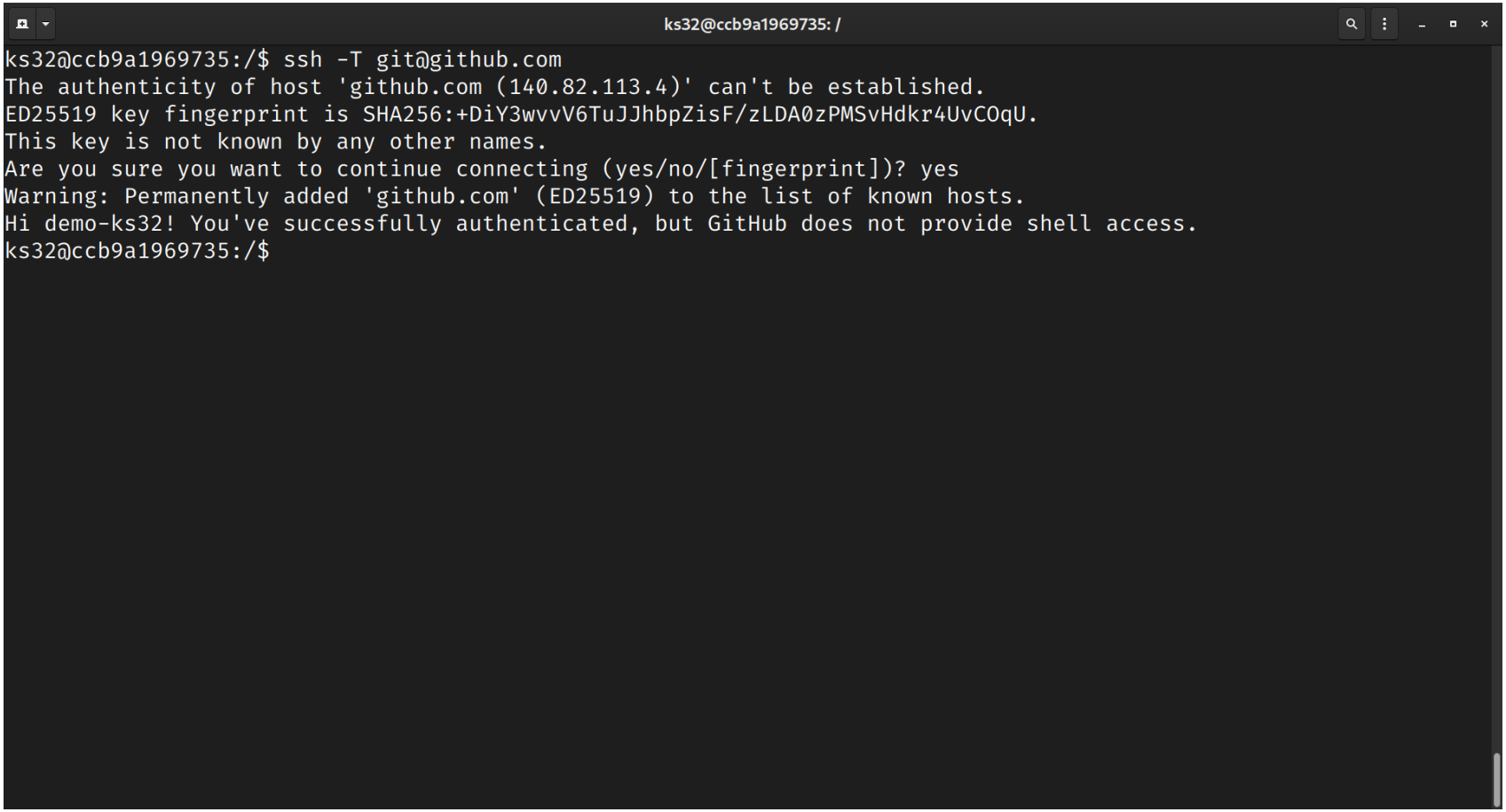
Creación de un repositorio en GitHub



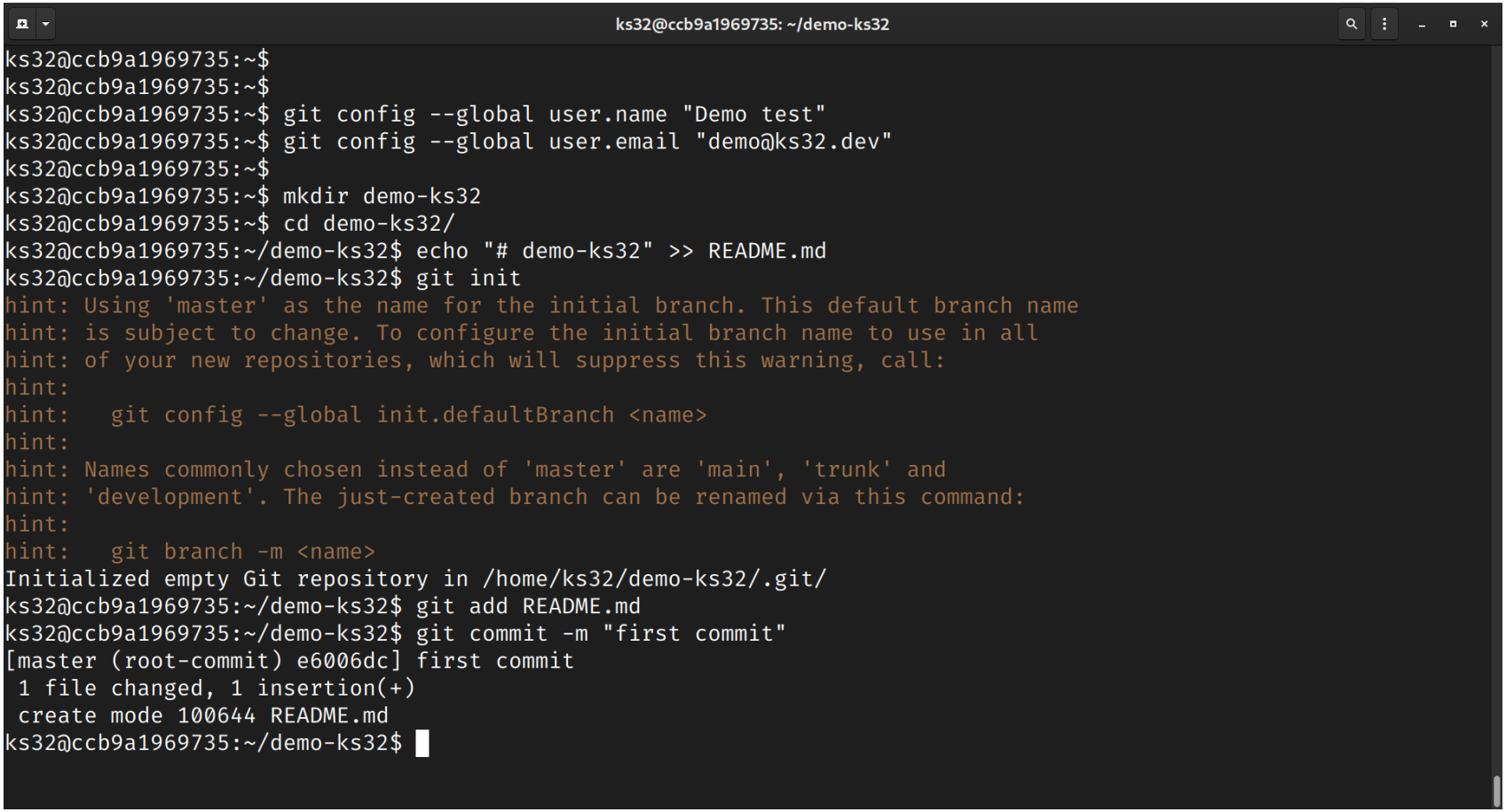
Creación de un repositorio en GitHub



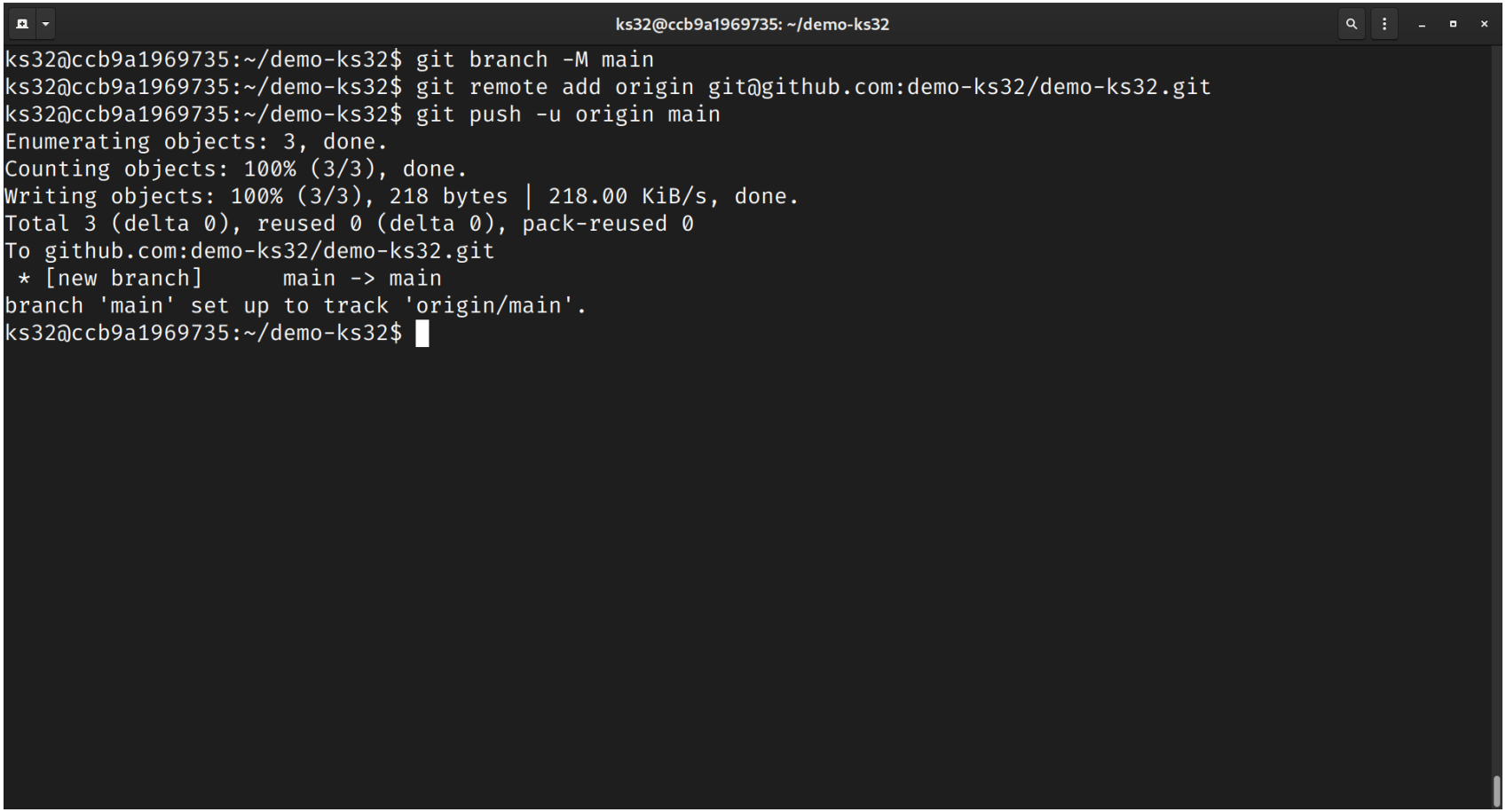
Creación de un repositorio en GitHub



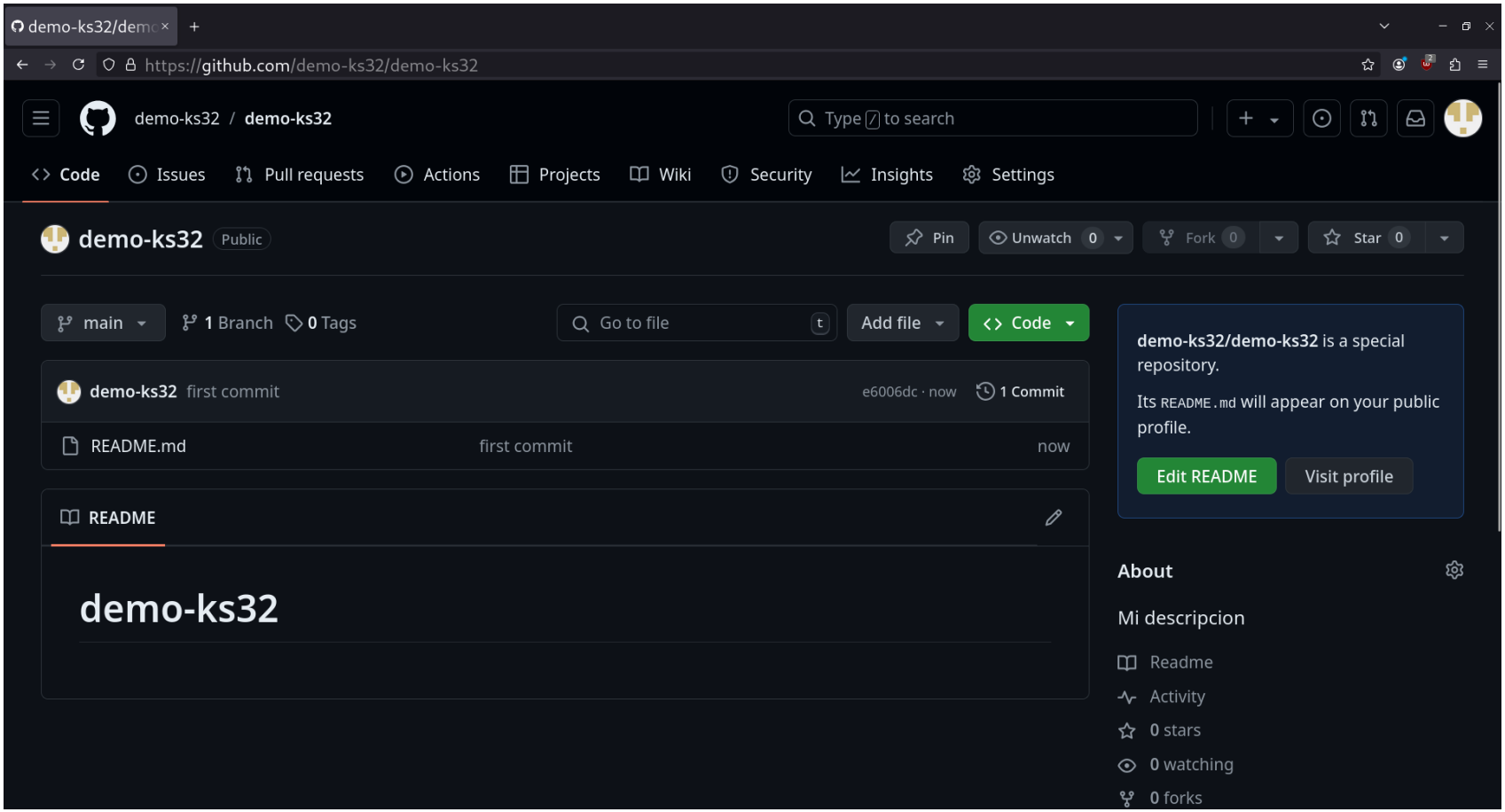
Creación de un repositorio en GitHub



Creación de un repositorio en GitHub



Creación de un repositorio en GitHub



Bibliografía

- https://git-scm.com/book/en/v2
- https://marklodato.github.io/visual-git-guide/index-es.html
- https://blog.kinto-technologies.com/posts/2023-03-07-From-Git-flow-to-GitHub-flow/