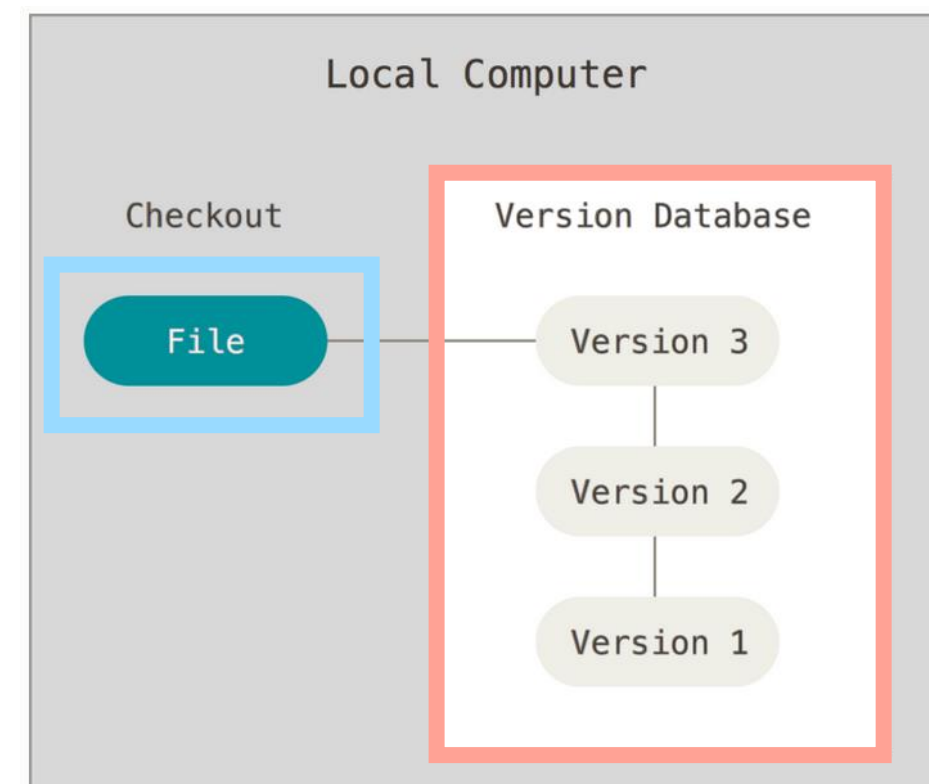


Local Version Control



**Working
copy/ tree**



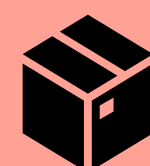
- these are the files you are working with
- corresponds to one (usually the last) version of the project

**Index/
Staging area**



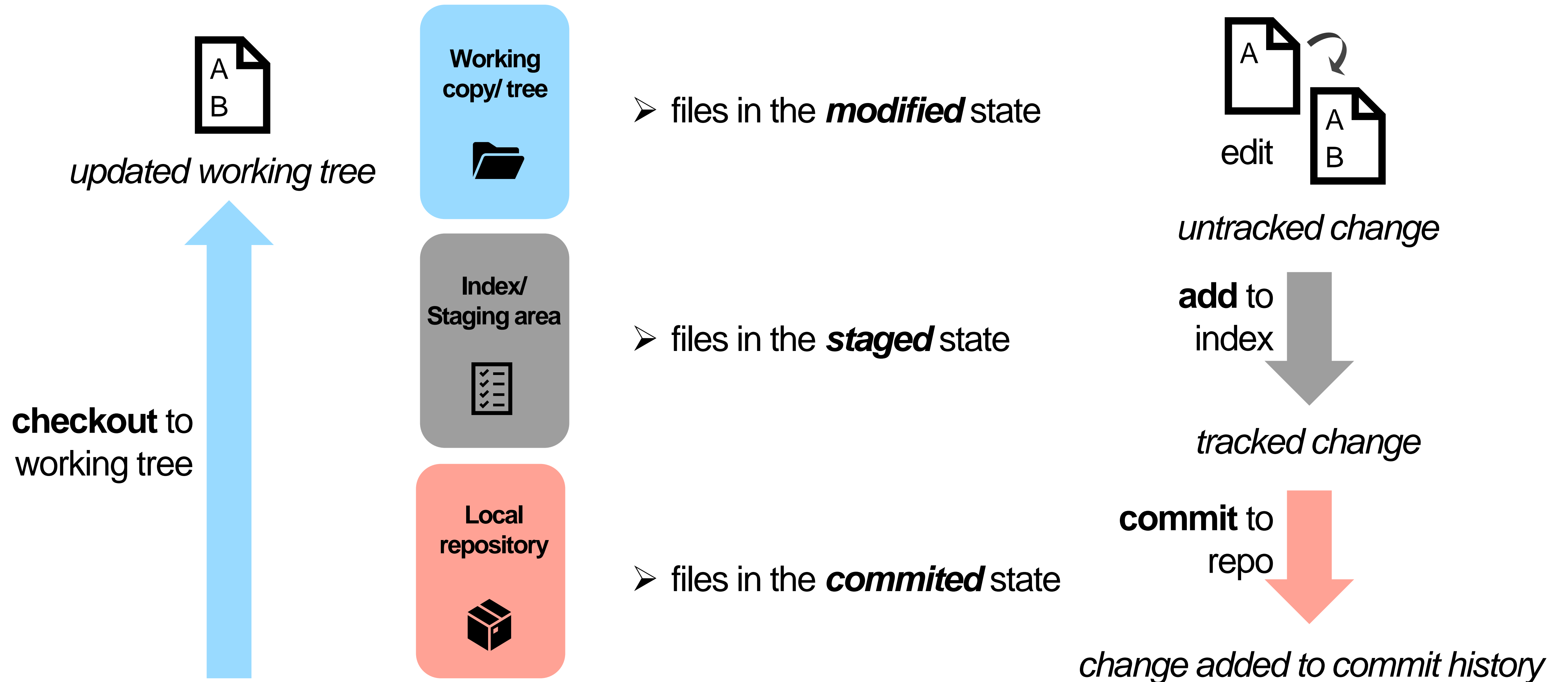
- stores info about which files are part of the next commit
- contained in a file in the *.git* folder

**Local
repository**



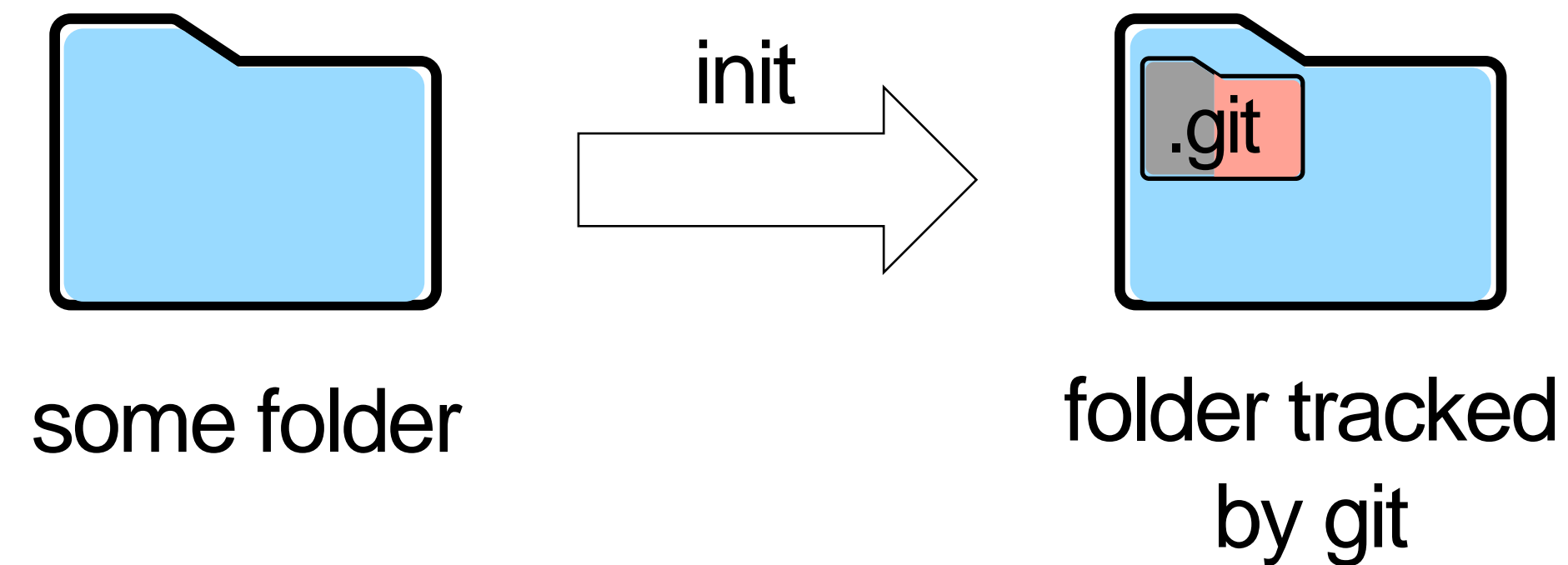
- compressed database with full commit history in *.git* folder
- this is copied when you clone a repository

Local Version Control



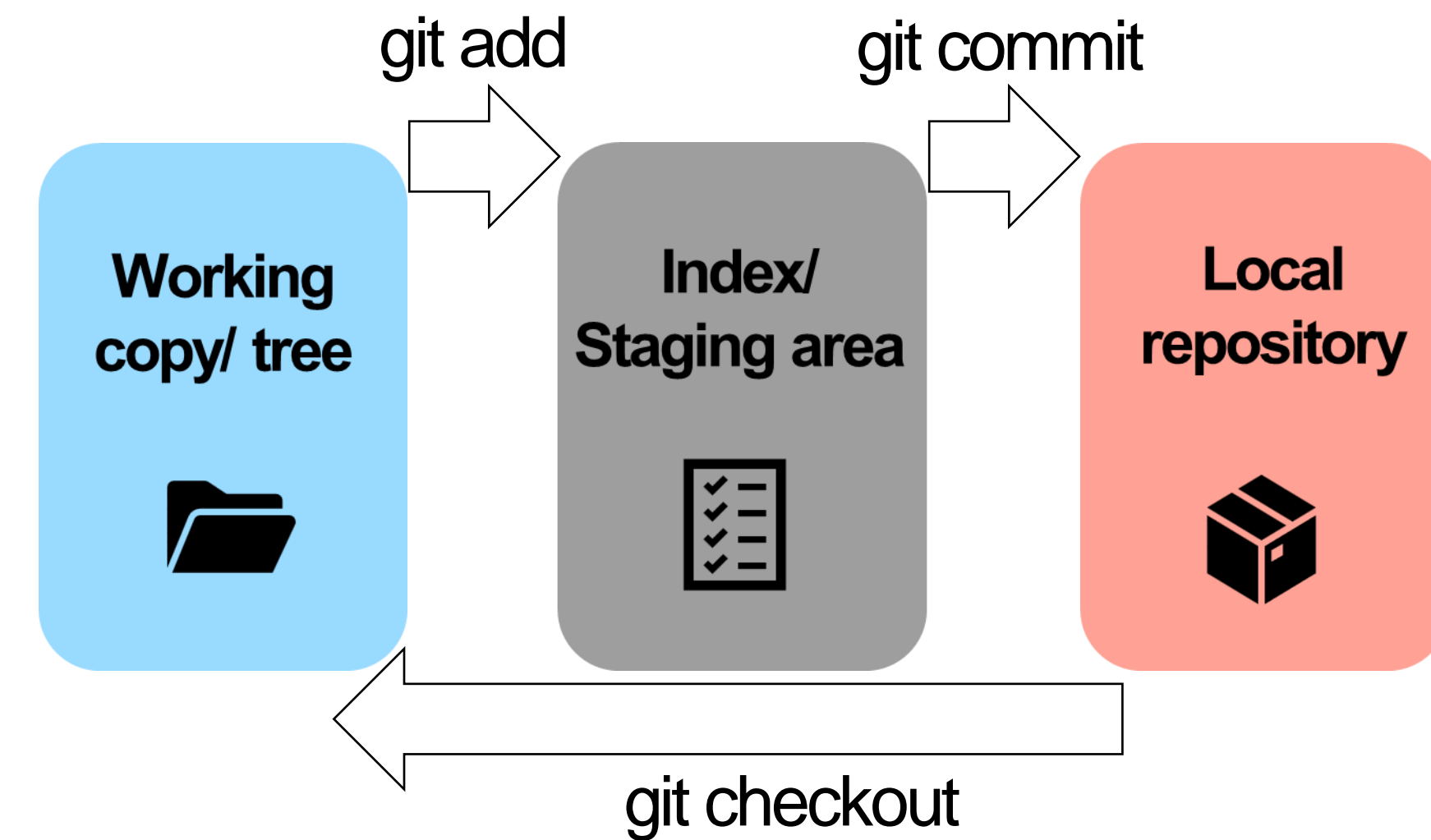
Local Version Control

What happens when you **initialize** a **new repository**?



Let's go

Follow the instructions in module_2.txt!



Commit messages

What do you think makes a good commit message?

- a „**log of work done**“
- **what** has been done (& **why**); maybe also what needs to be done
- **direct** and **concise** (no filler words)
- consistent syntax and wording as far as possible
- subject: about 50 characters, capitalize only first word, don't end in punctuation, imperative mood
- (optionally) body: should be separated by blank line from subject

Commit messages

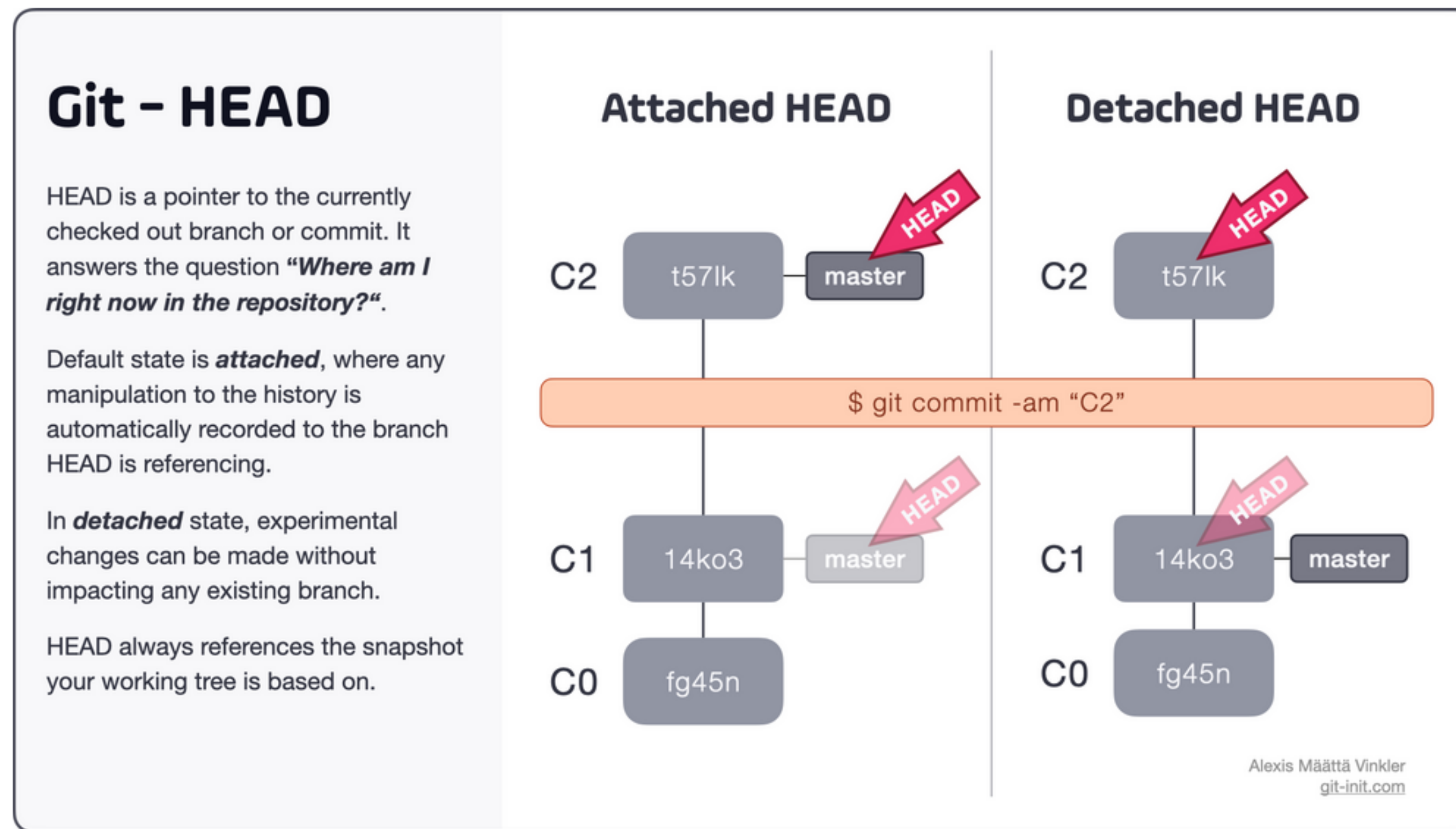
What do you think makes a good commit message?

```
* 39b54d7 - new stuff (3 months ago) <Juha Kiili>
* 16ec3bf - New stuffy (3 months ago) <Juha Kiili>
* 07ab2e4 - Boy 2! (4 months ago) <Juha Kiili>
* c8ef0db - new stuffs again (4 months ago) <Juha Kiili>
* b04b15c - ML! (4 months ago) <Juha Kiili>
* 2bdec65 - First ML stuff (4 months ago) <Juha Kiili>
* 337849d - New stuff (4 months ago) <Juha Kiili>
* 319d616 - Fixes (4 months ago) <Juha Kiili>
```

```
* ce32c69c0 - Use `config_dict_or_path` for deepspeed.zero.Init (#13614) (2 months ago) <Alex Hedges>
* 0eb02871d - Removed console spam from misfiring warnings (#13625) (2 months ago) <Matt>
* da8beaaf7 - Fix special tokens not correctly tokenized (#13489) (2 months ago) <Li-Huai (Allan) Lin>
* 1f9dcfc1e - [Trainer] Add nan/inf logging filter (#13619) (2 months ago) <Patrick von Platen>
* eae7a96b7 - Optimize Token Classification models for TPU (#13096) (2 months ago) <Ibraheem Moosa>
* e02ed0ee7 - XLMR tokenizer is fully picklable (#13577) (3 months ago) <Benjamin Davidson>
* af5c6ae5e - Properly use test_fetcher for examples (#13604) (3 months ago) <Sylvain Gugger>
```


git HEAD

Where am I in the repository (which commit is checked out)?



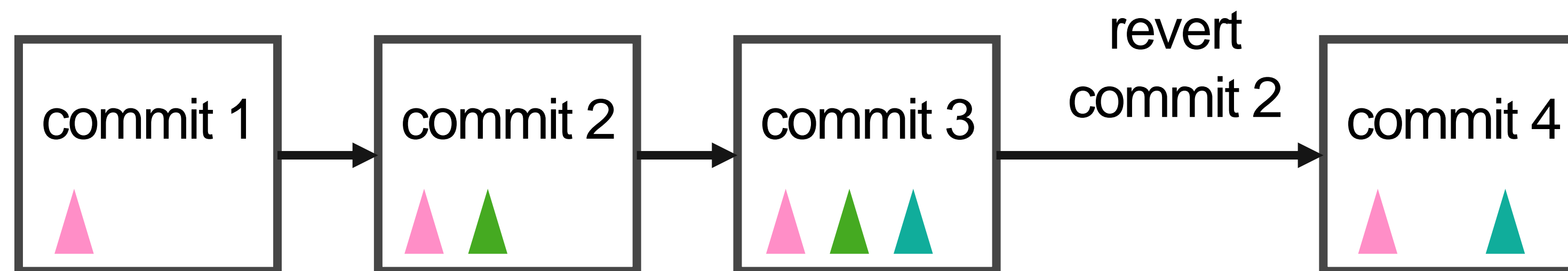
The HEAD
usually contains a reference to a branch
(branch = a series of commits)

git revert, reset, restore

git revert „undo“ type command

→ inverts changes leading to specified commit

→ adds a new commit with inverted changes



git revert, reset, restore

git reset moves the HEAD and main branch reference to specified commit
→ it changes the commit history!

git restore alternative (newer) command to git reset

Note: To only add something to the last commit or change its commit message, you can use:

git commit --amend -m „message“