

Recherche Reproductible

Module 2: Advanced Git

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@GuillePolito



An easy way to



git

1. It's a two-stage database!
2. It's a graph!



git

as a 2-stage Database

Remote
repositories



Working Copy

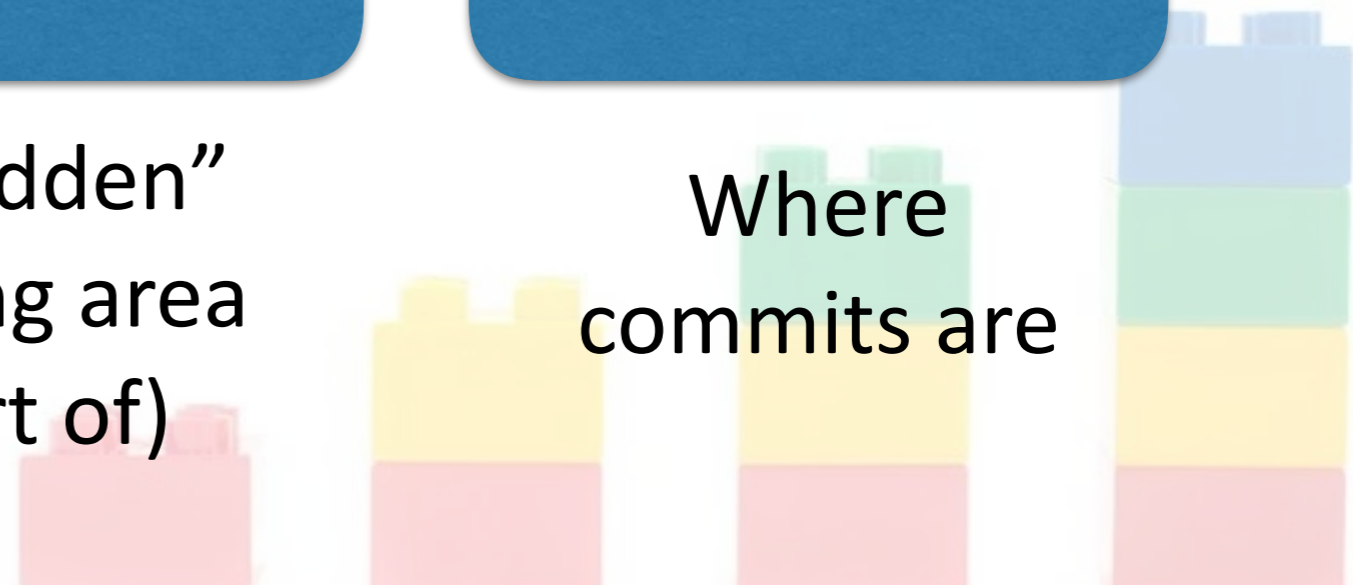
Index

Repository

What you see

A “hidden”
staging area
(sort of)

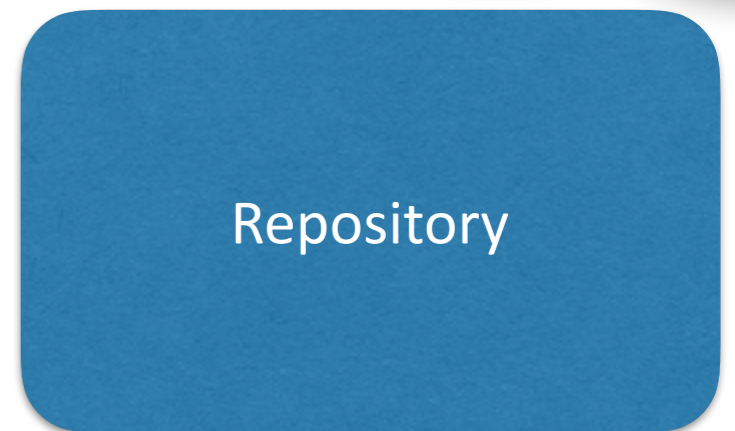
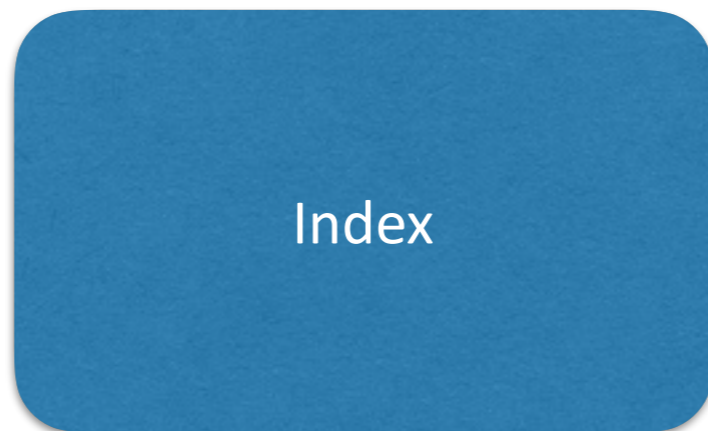
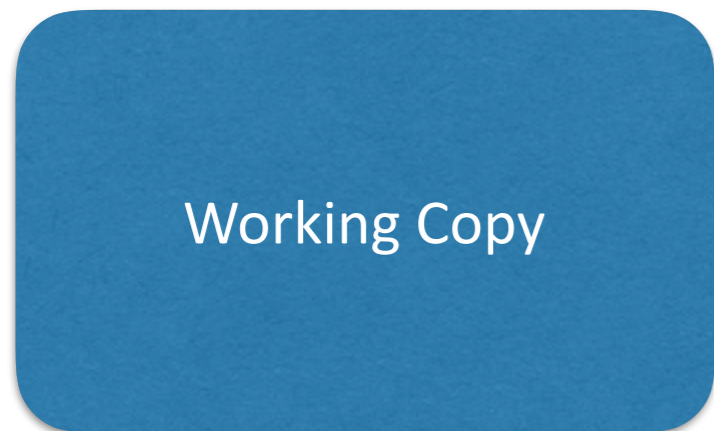
Where
commits are





git

add





git

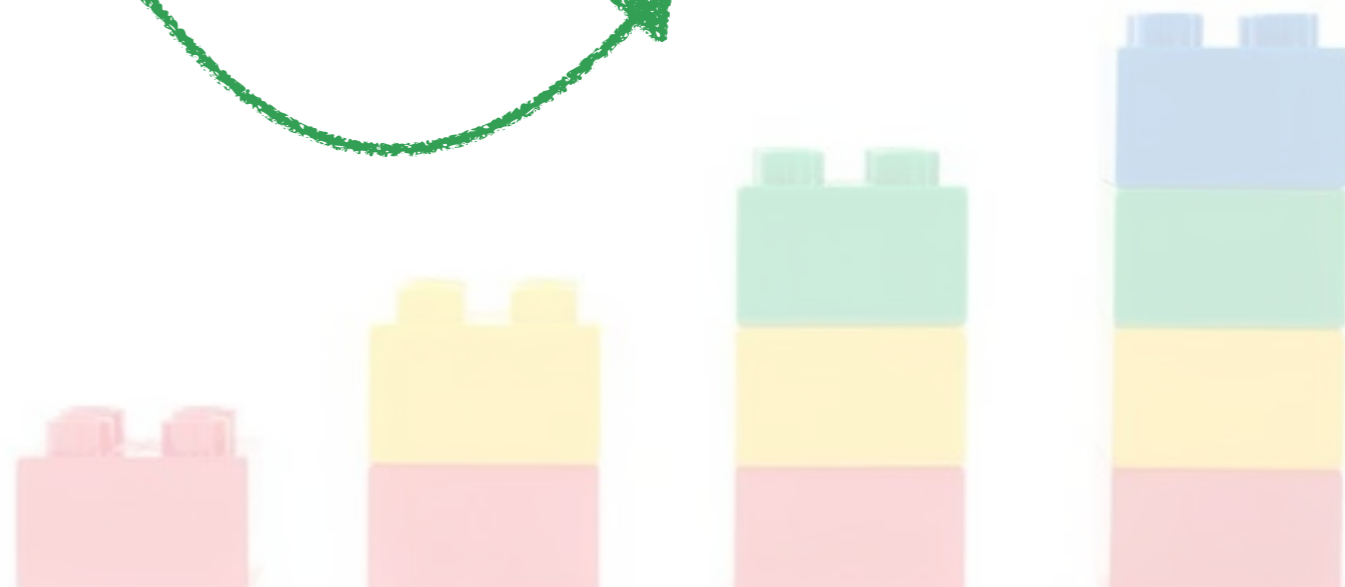
commit



Working Copy

Index

Repository





git

push



Working Copy

Index

Repository





git

fetch



Working Copy

Index

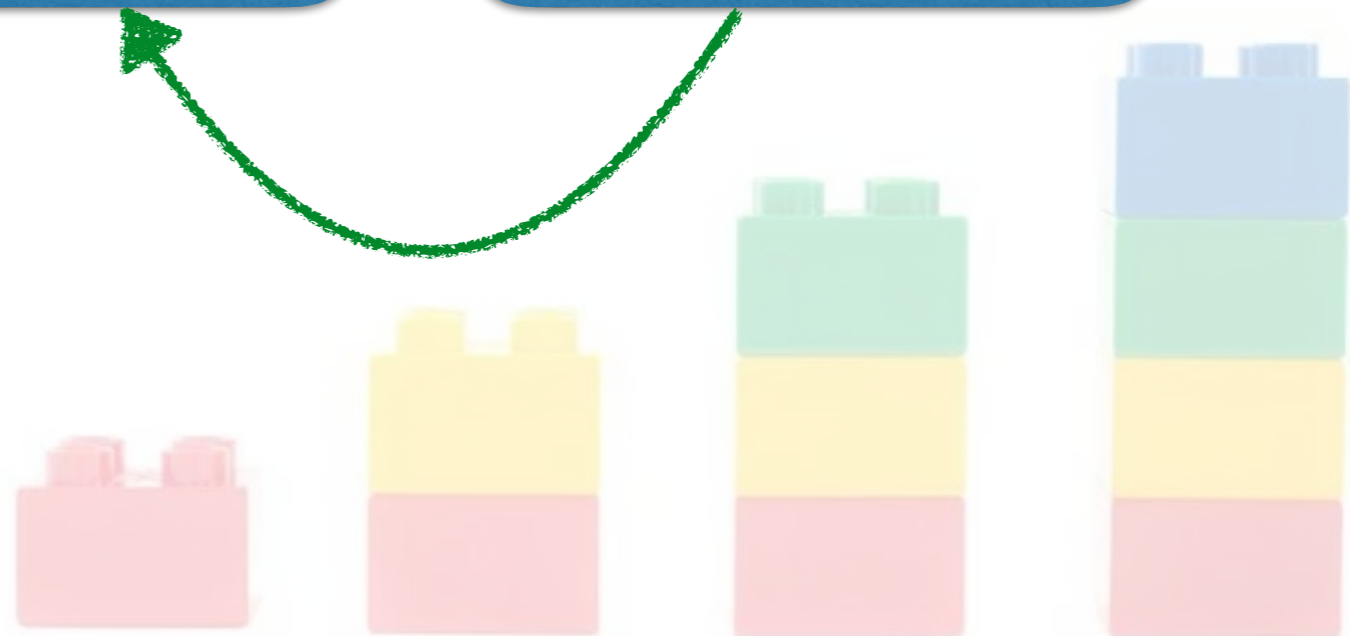
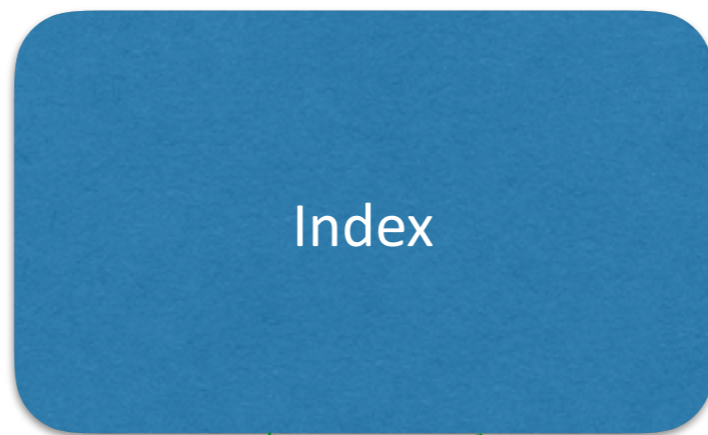
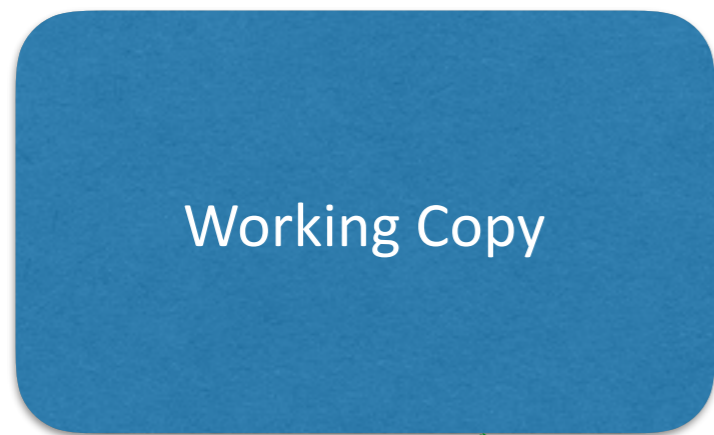
Repository





git

merge





git

pull?

```
$ git fetch  
$ git merge
```



git

as a 2-stage Database

Remote
repositories



Working Copy

What you see

Index

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(sort of)

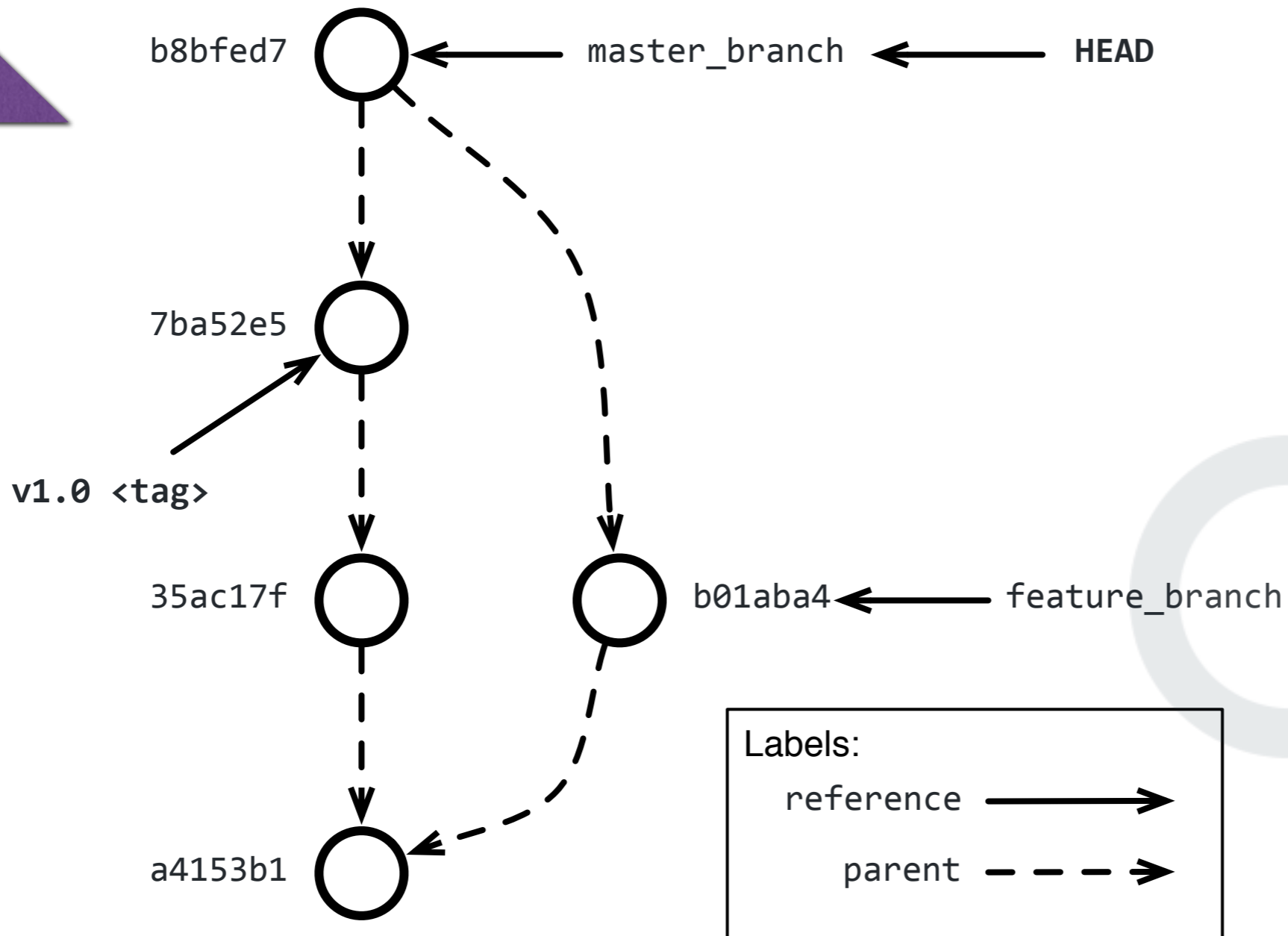
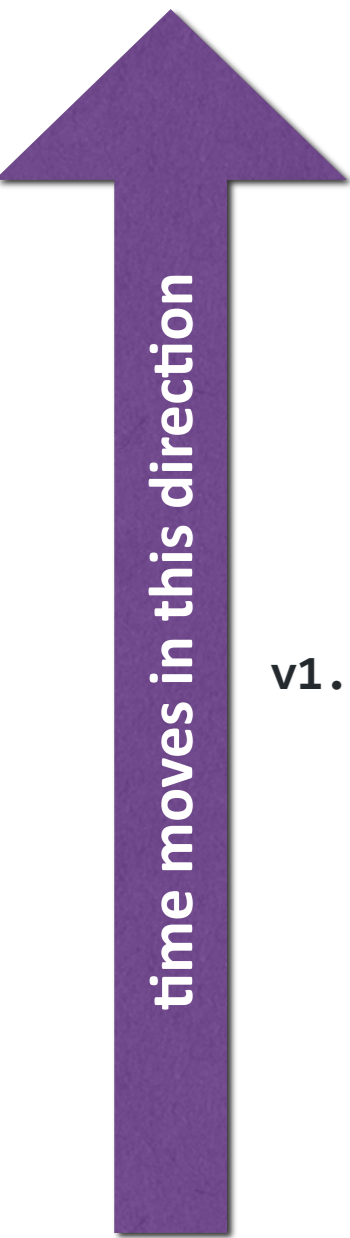
Repository

Where
commits are



git

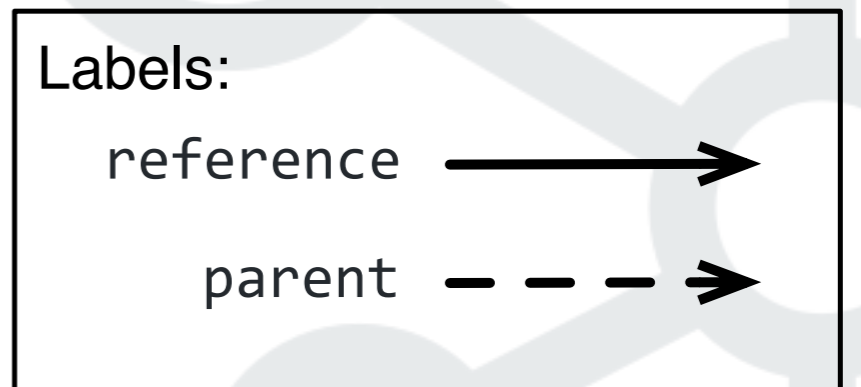
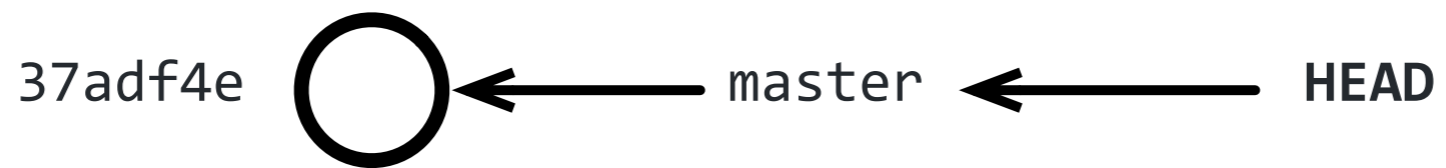
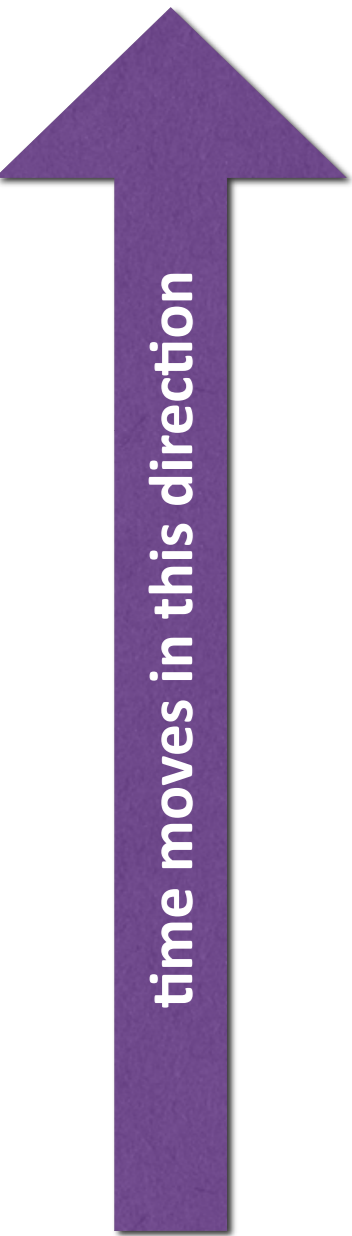
as a Graph





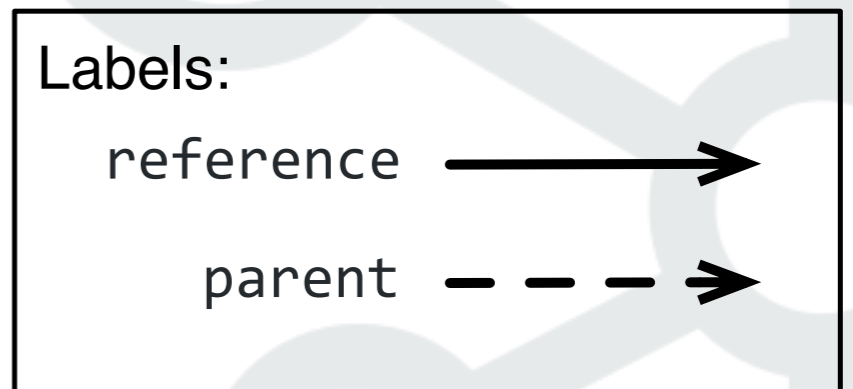
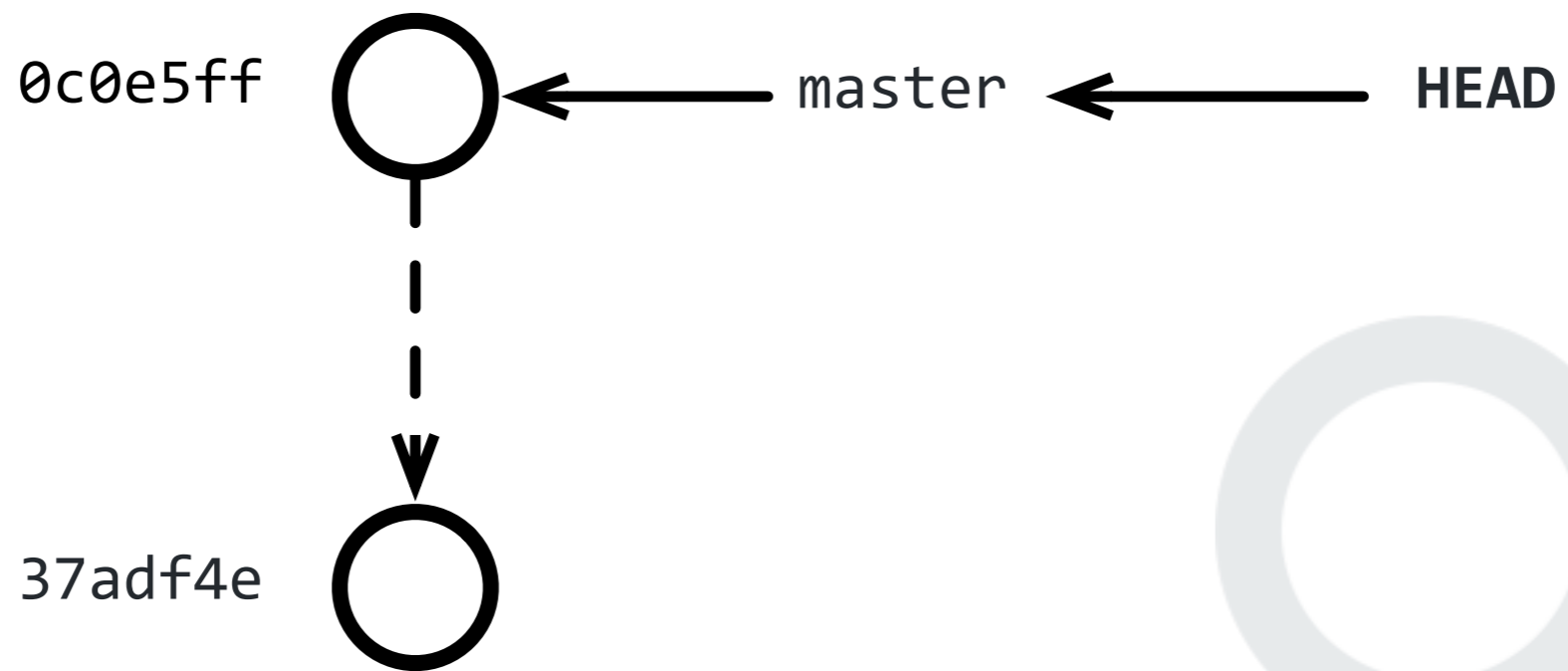
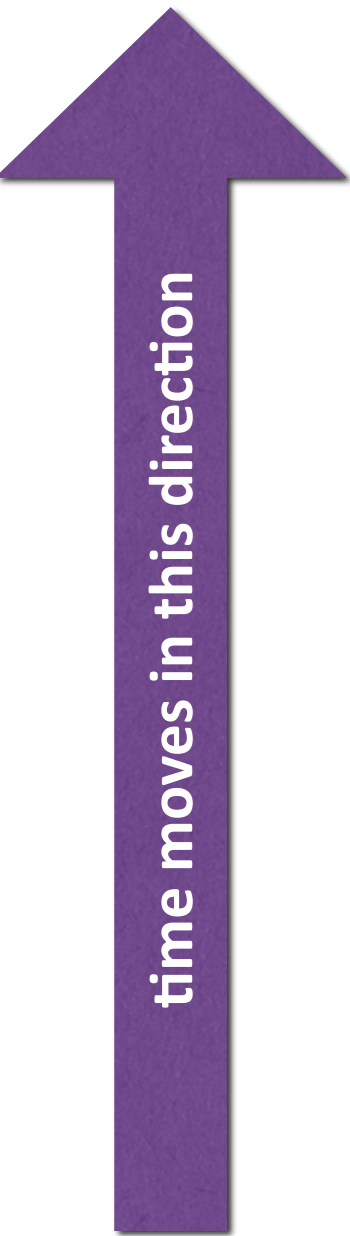
git

commit



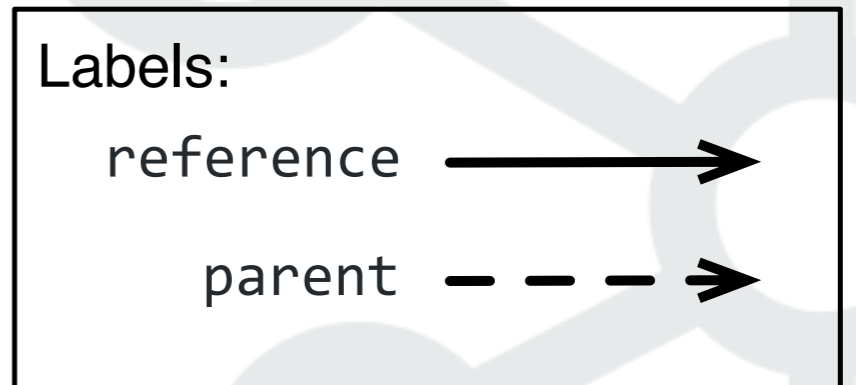
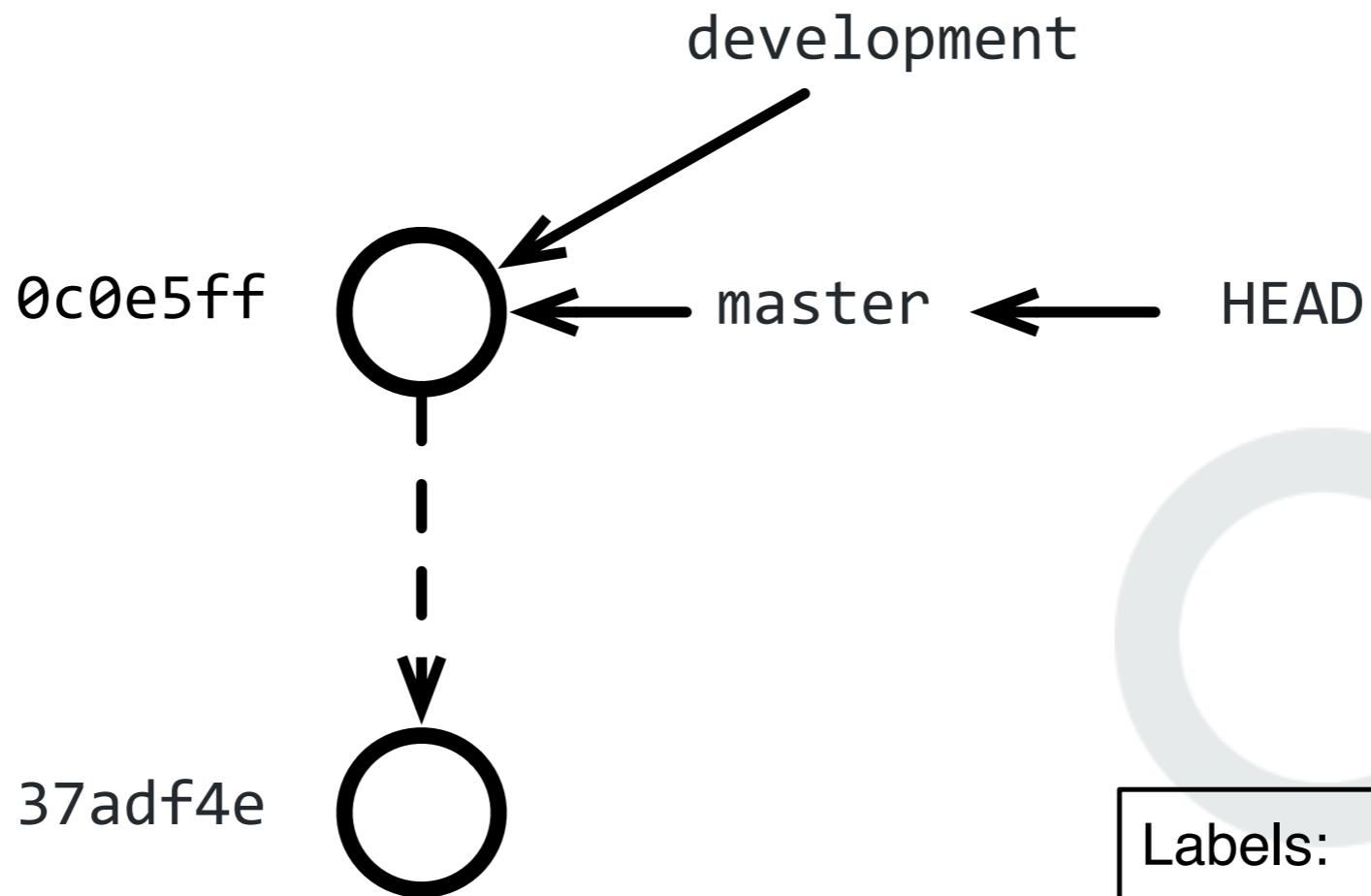
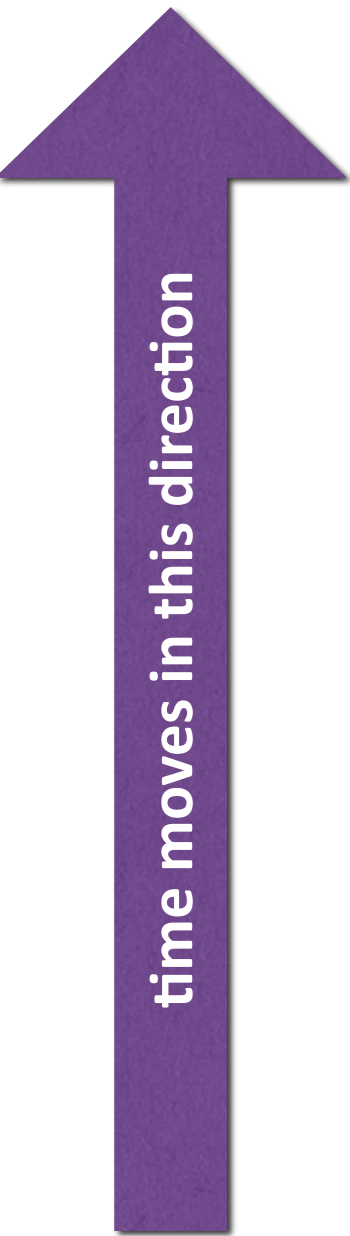


git commit





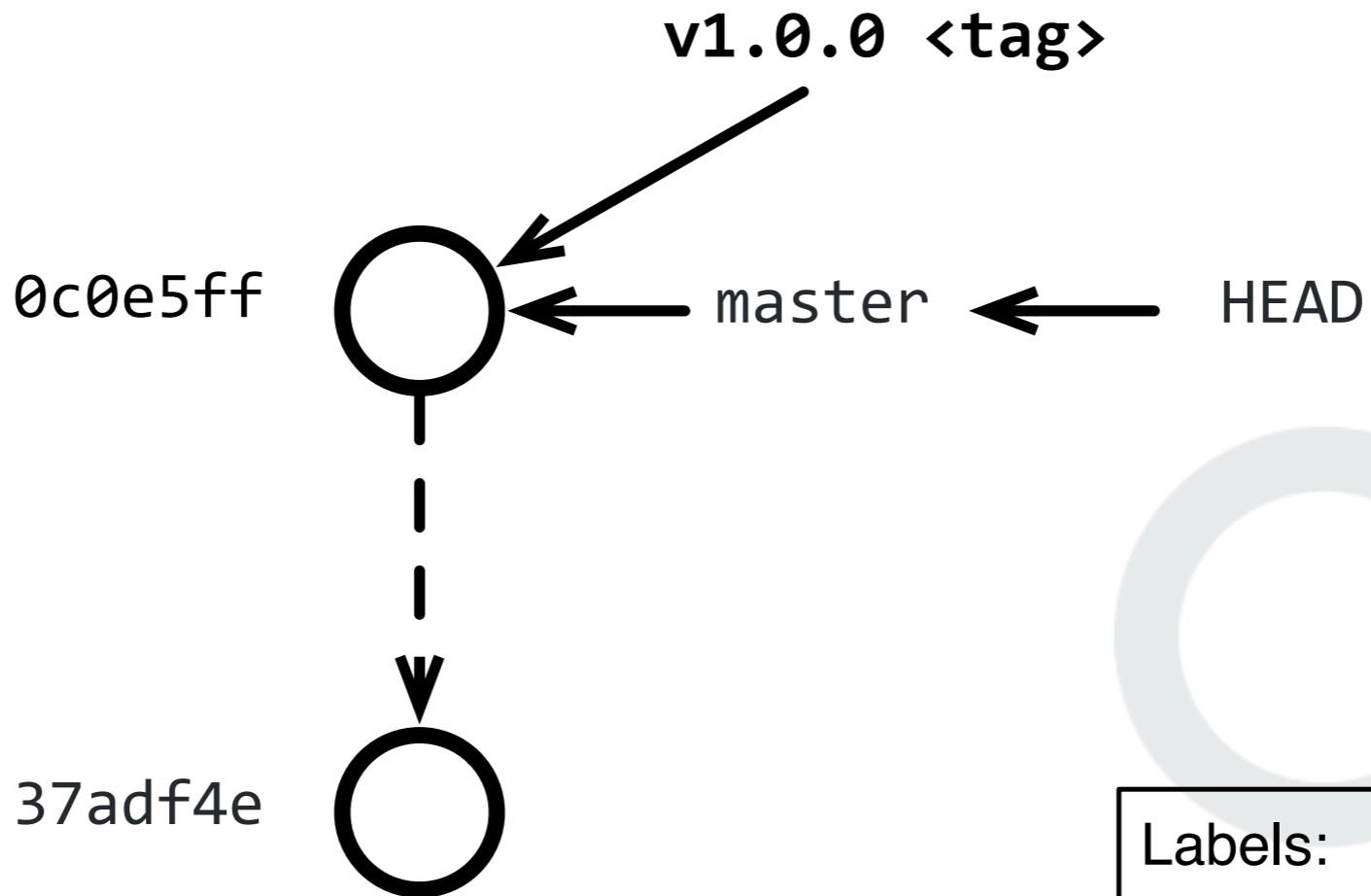
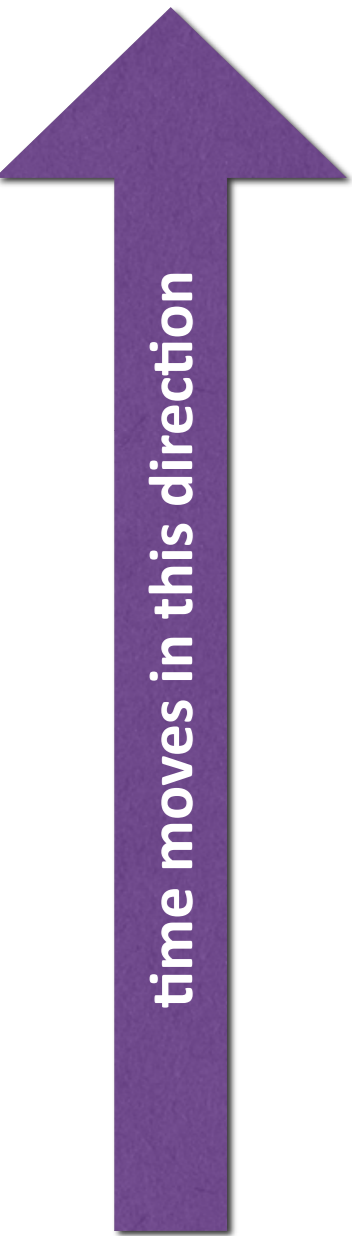
git branch





git

tag



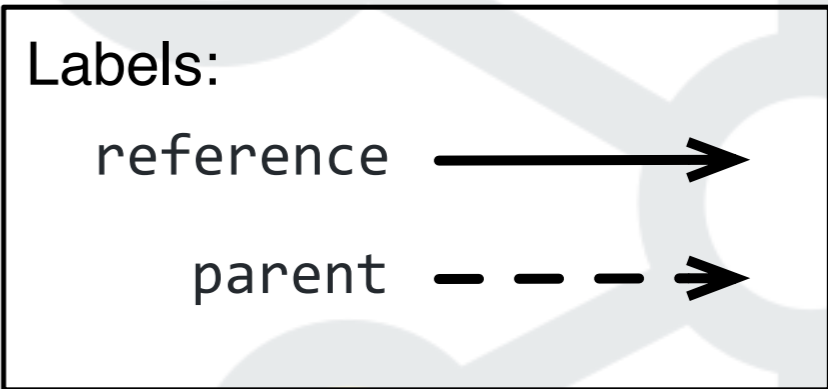
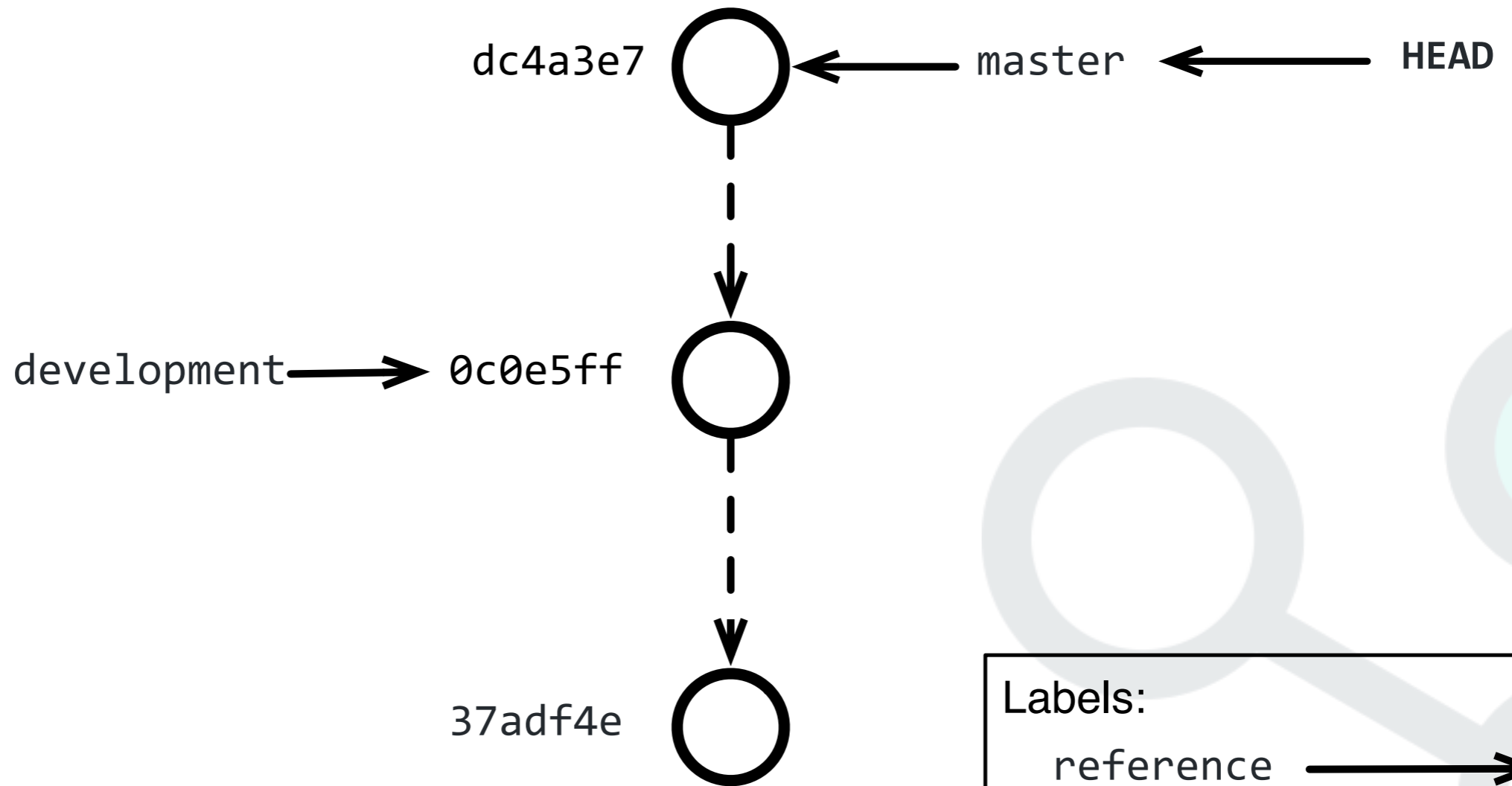
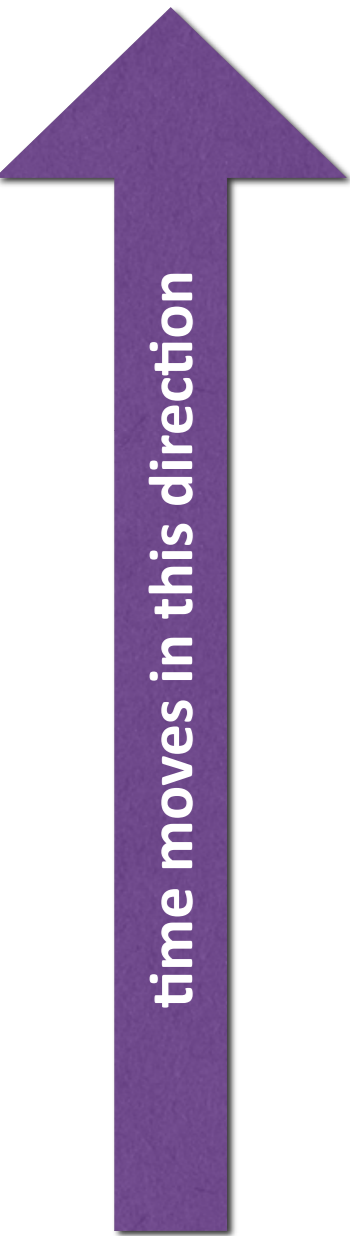
Labels:

reference →

parent - - - - ->

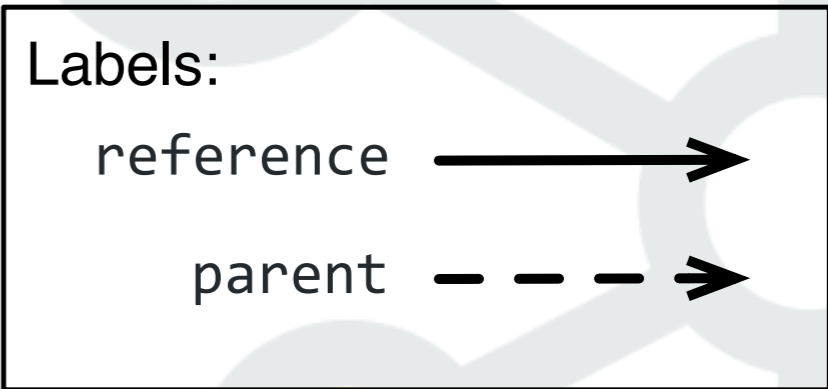
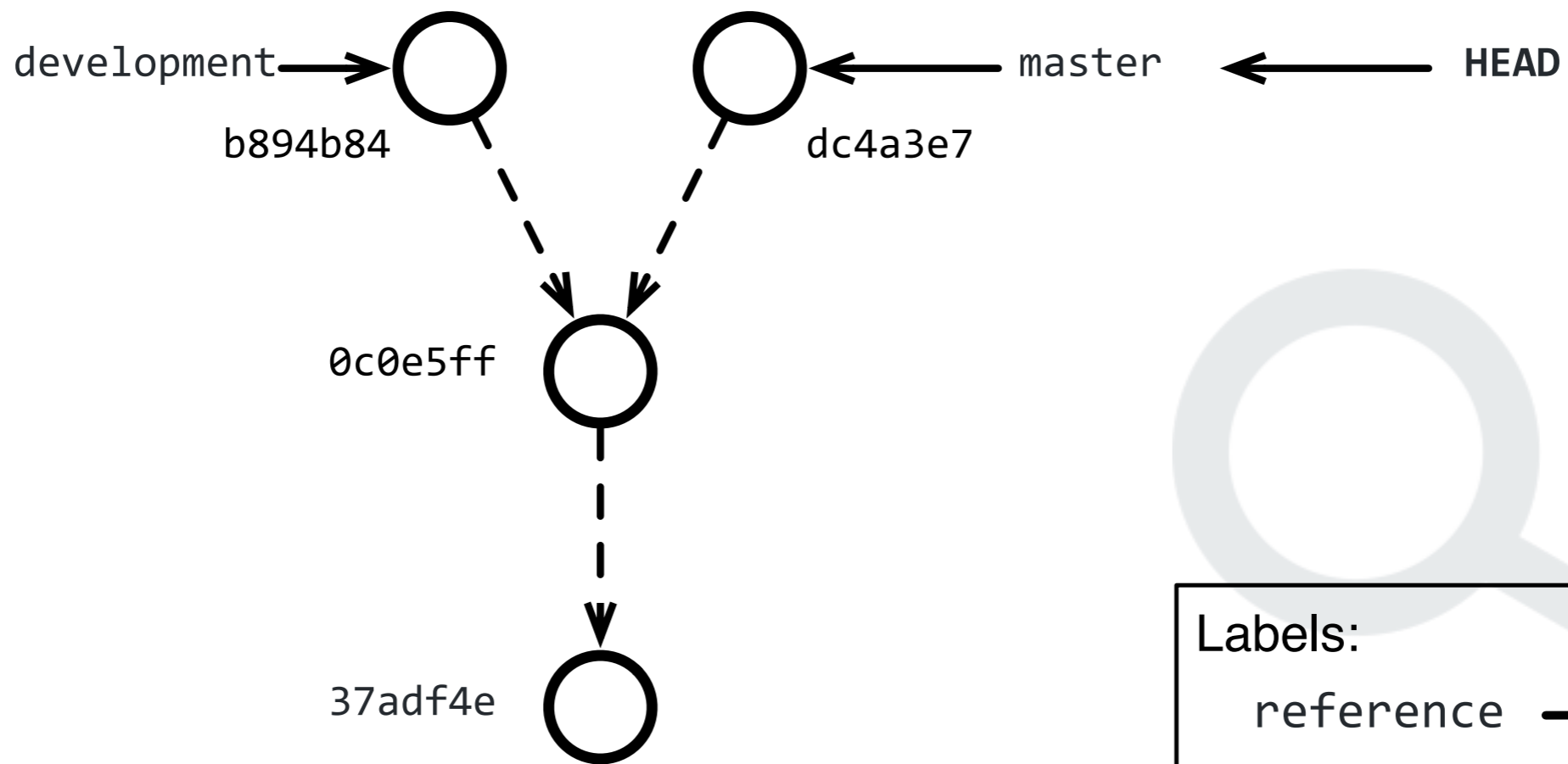
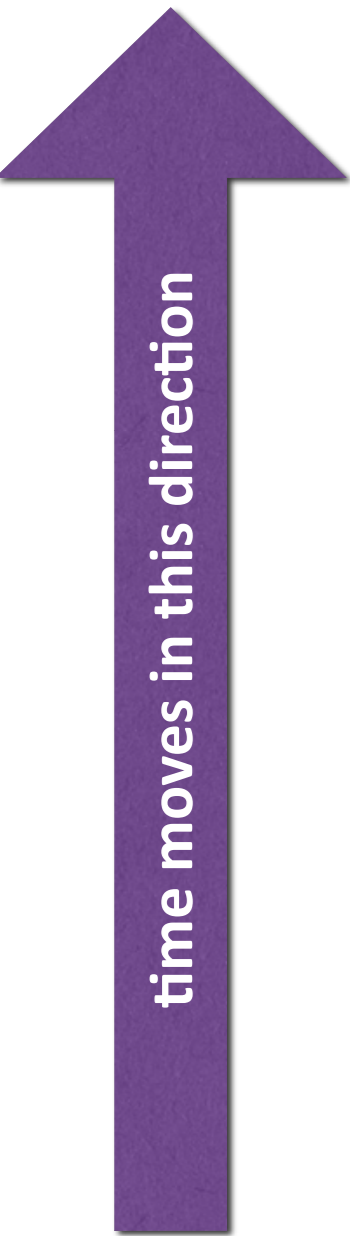


git commit (2)



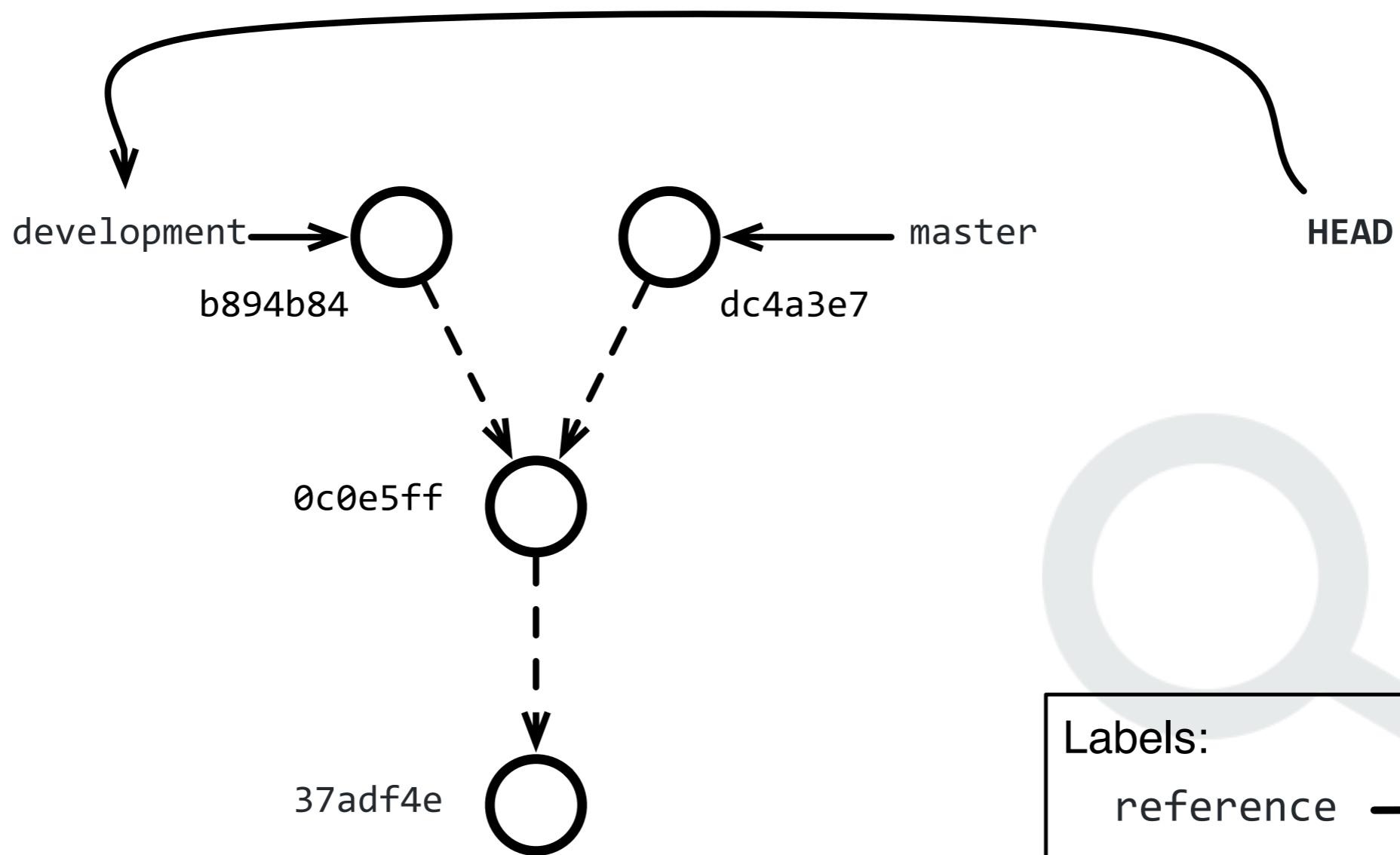
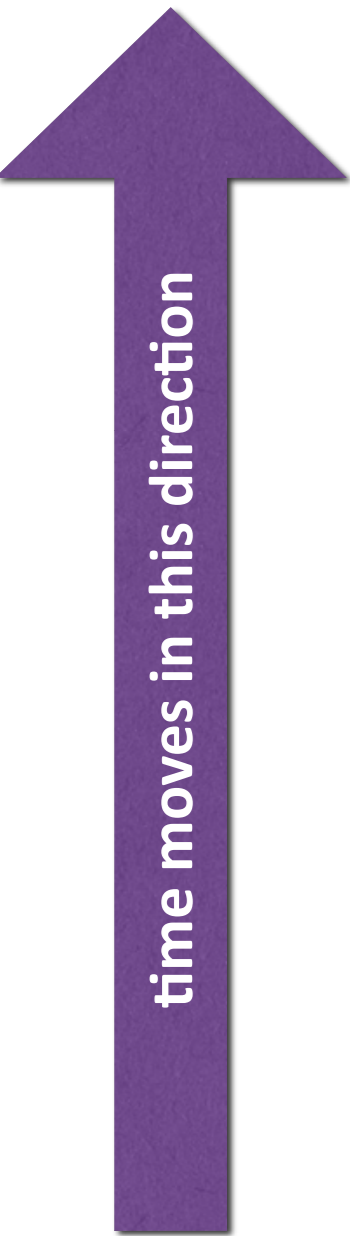


git checkout







git checkout

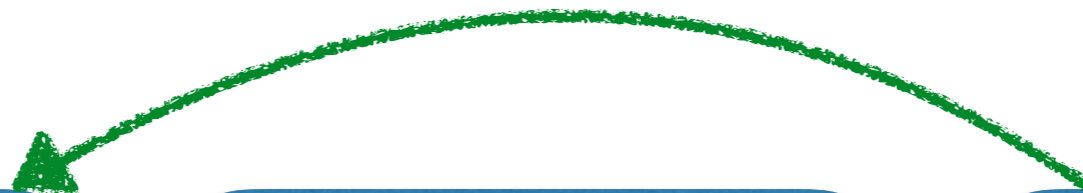
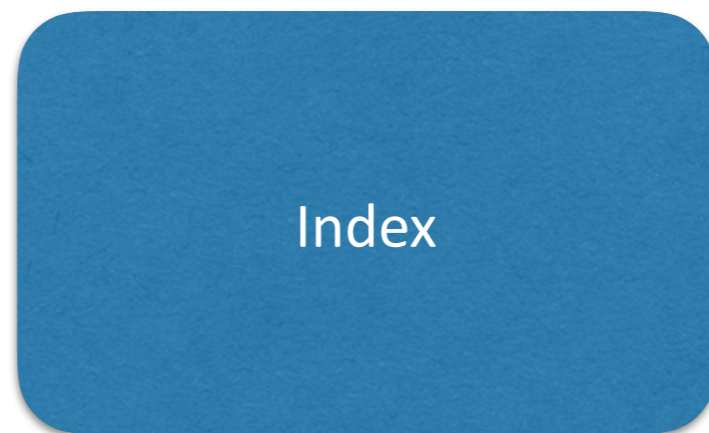
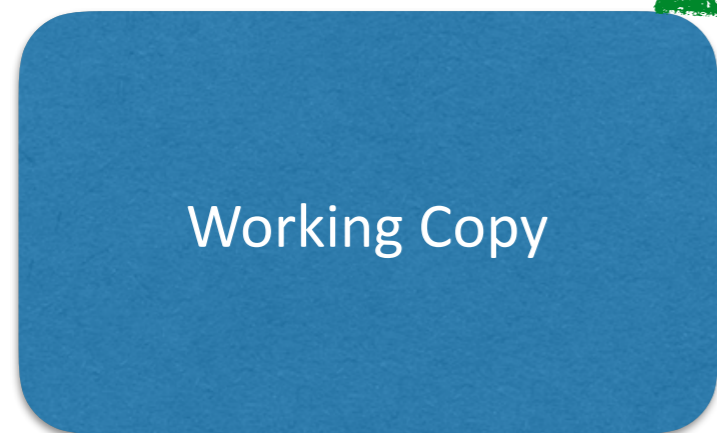
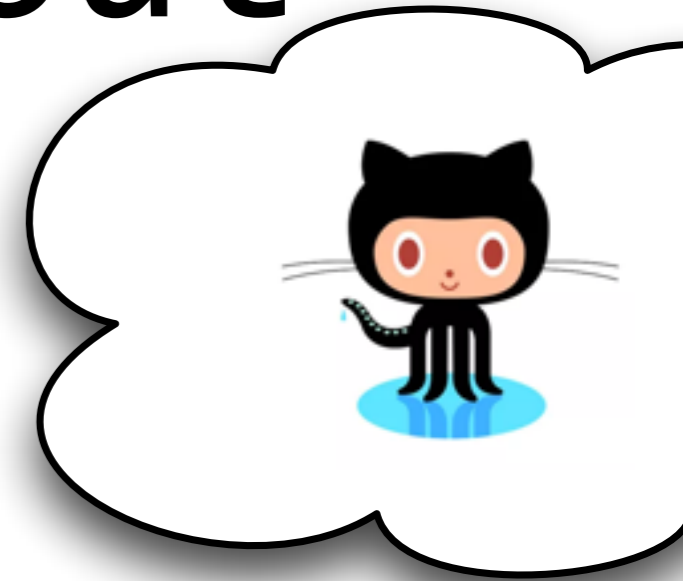


Labels:

- reference 
- parent 



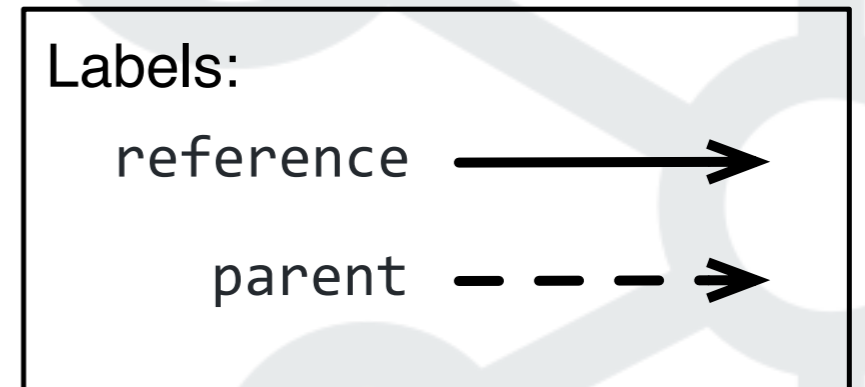
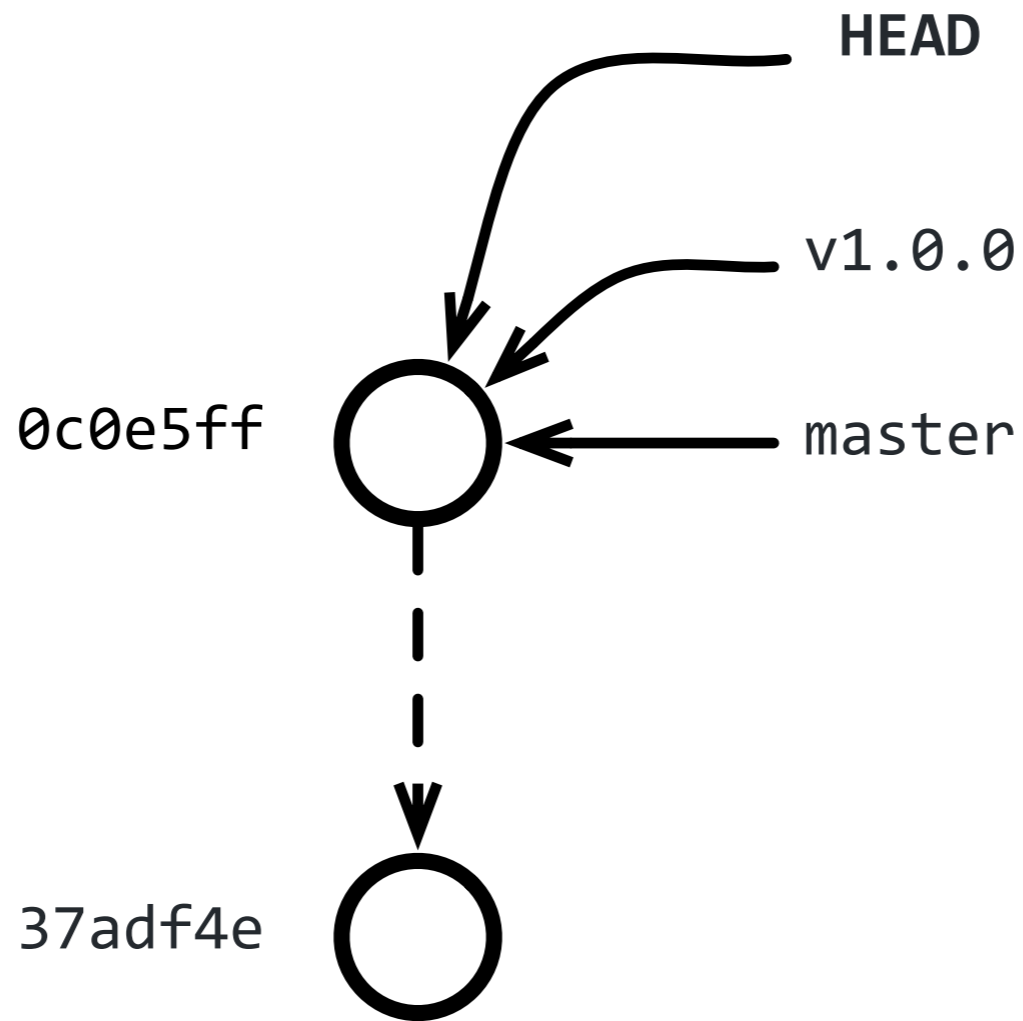
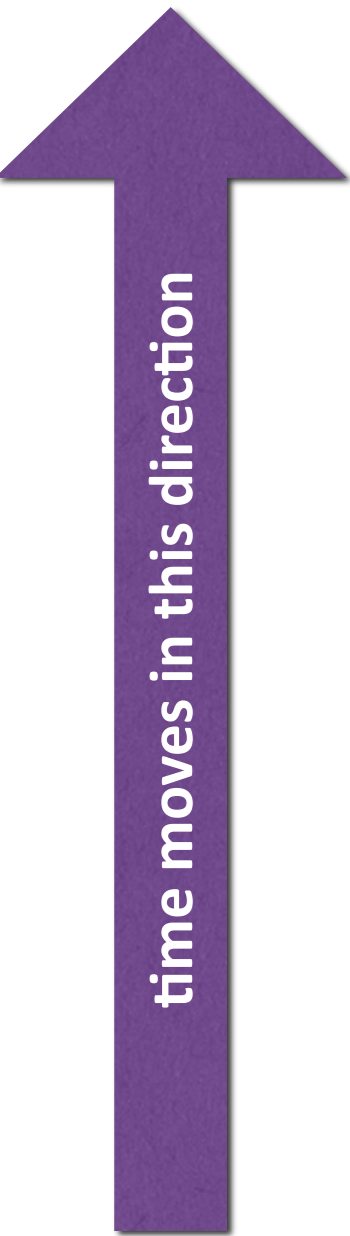
git checkout





git

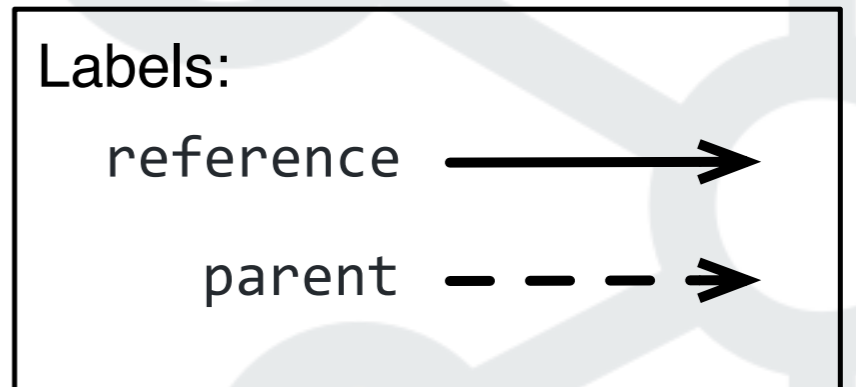
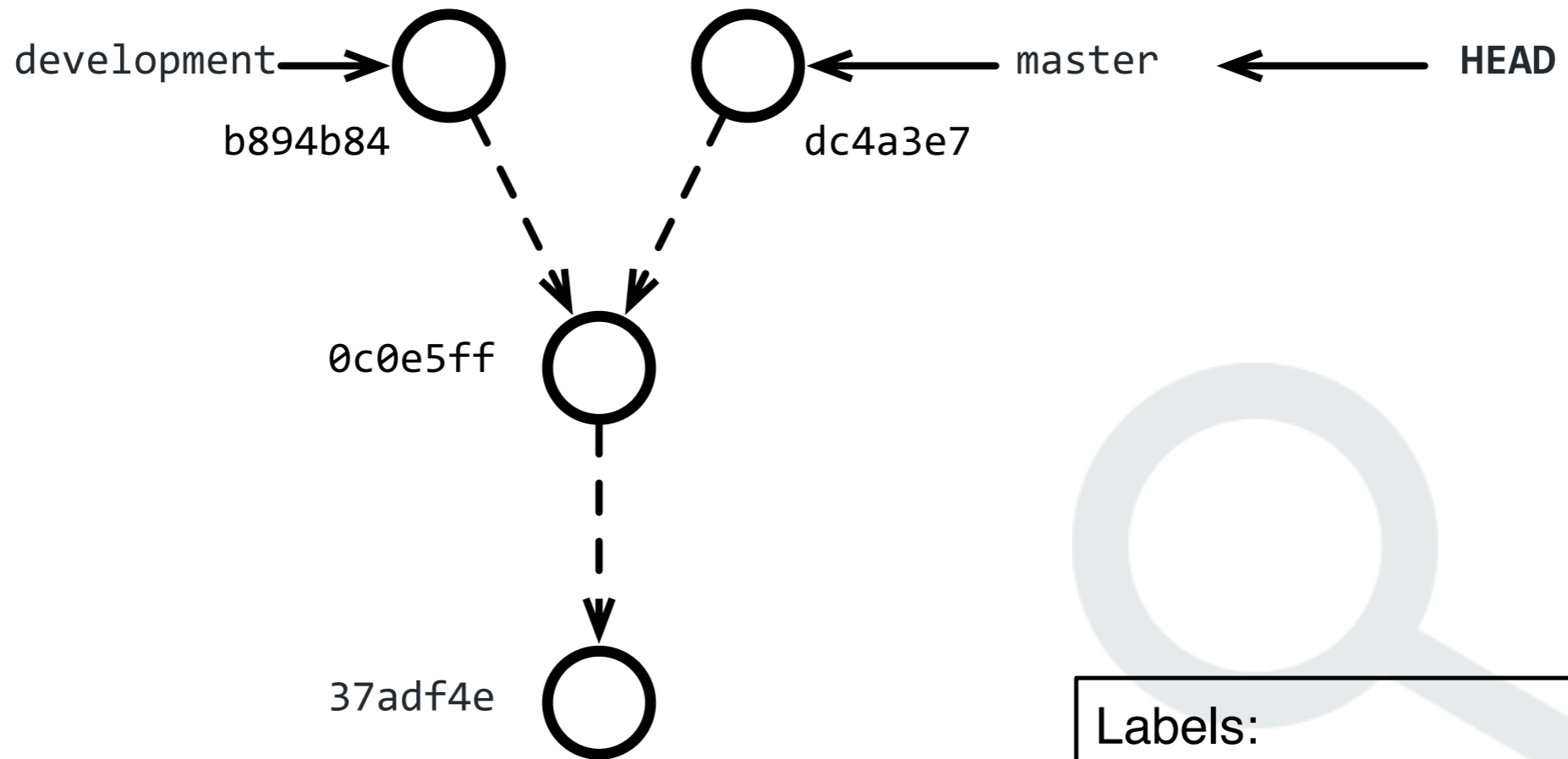
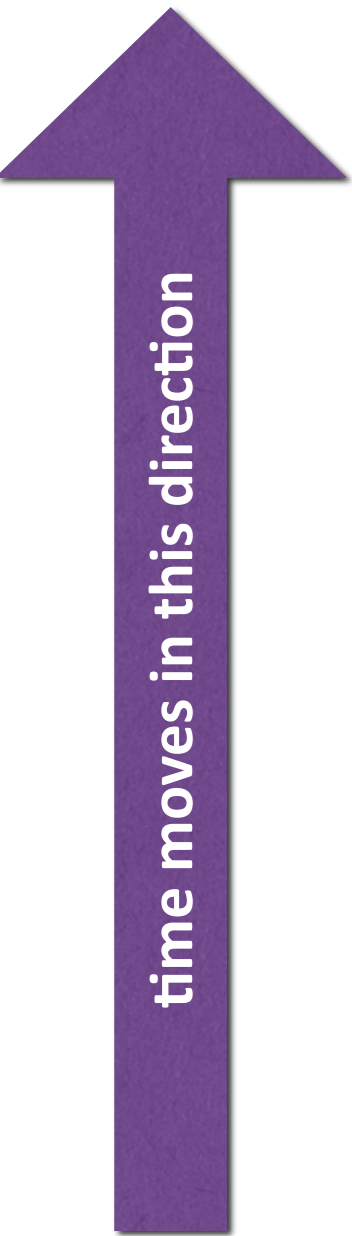
DETACHED HEAD?





git

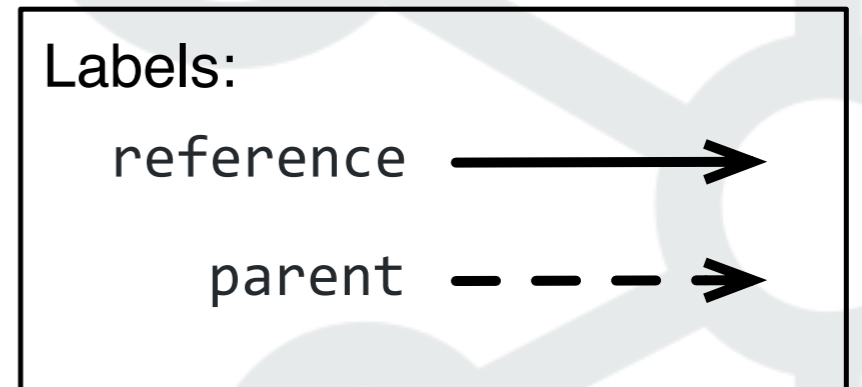
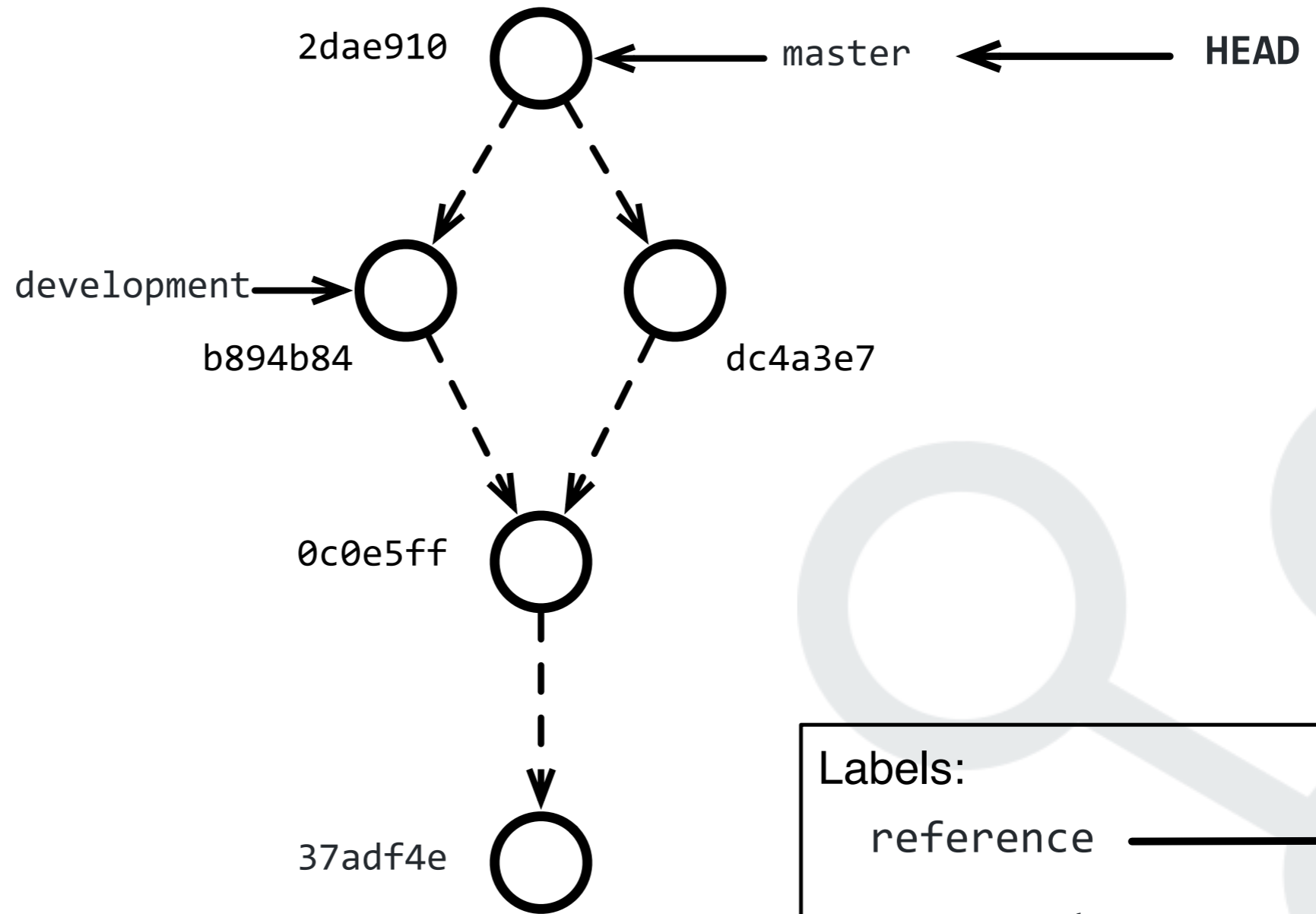
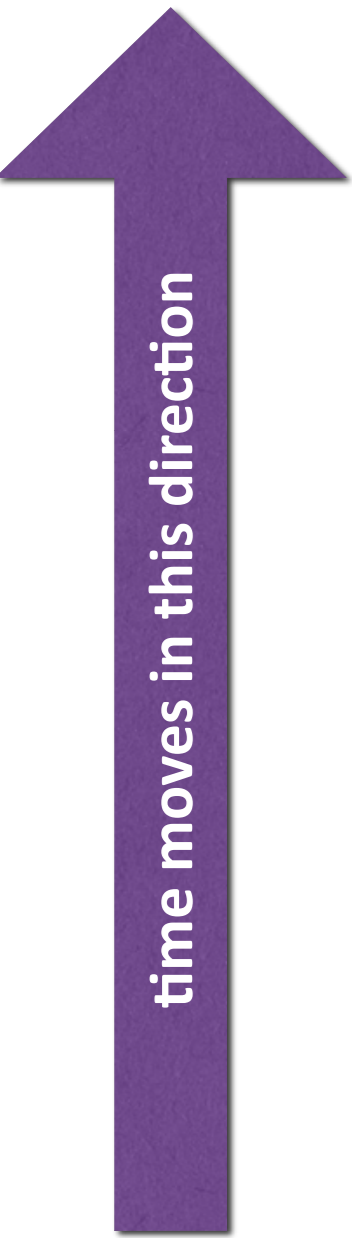
merge





git

merge

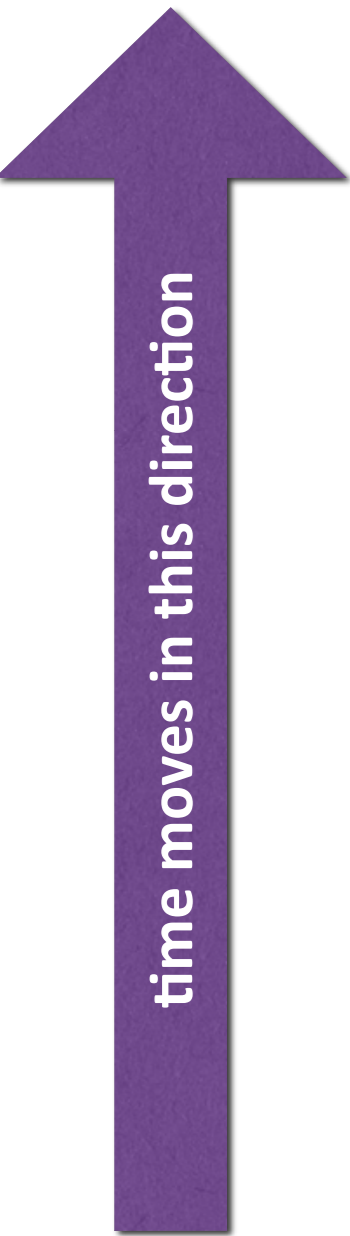




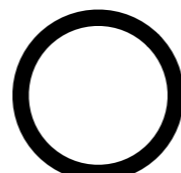
git

merge

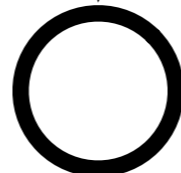
fast-forward



development → dc4a3e7



0c0e5ff



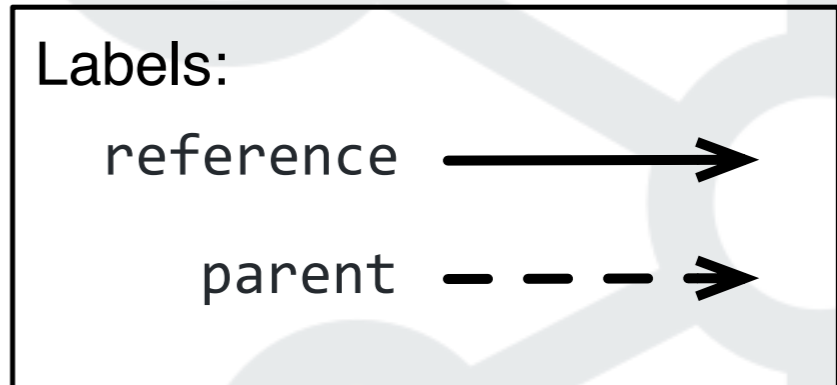
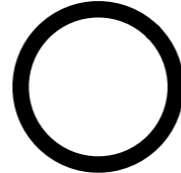
master



HEAD



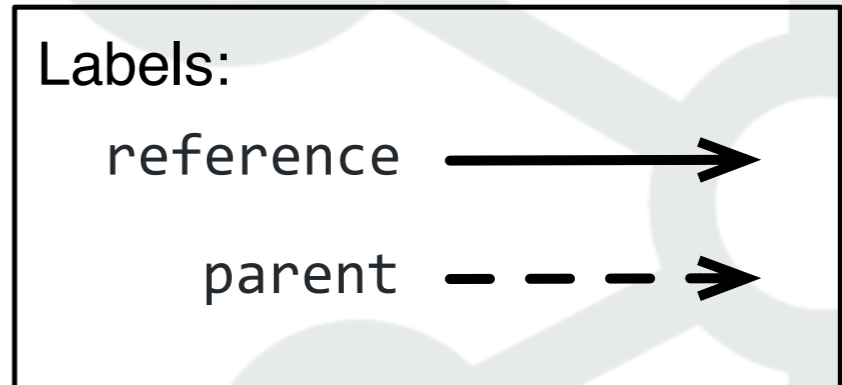
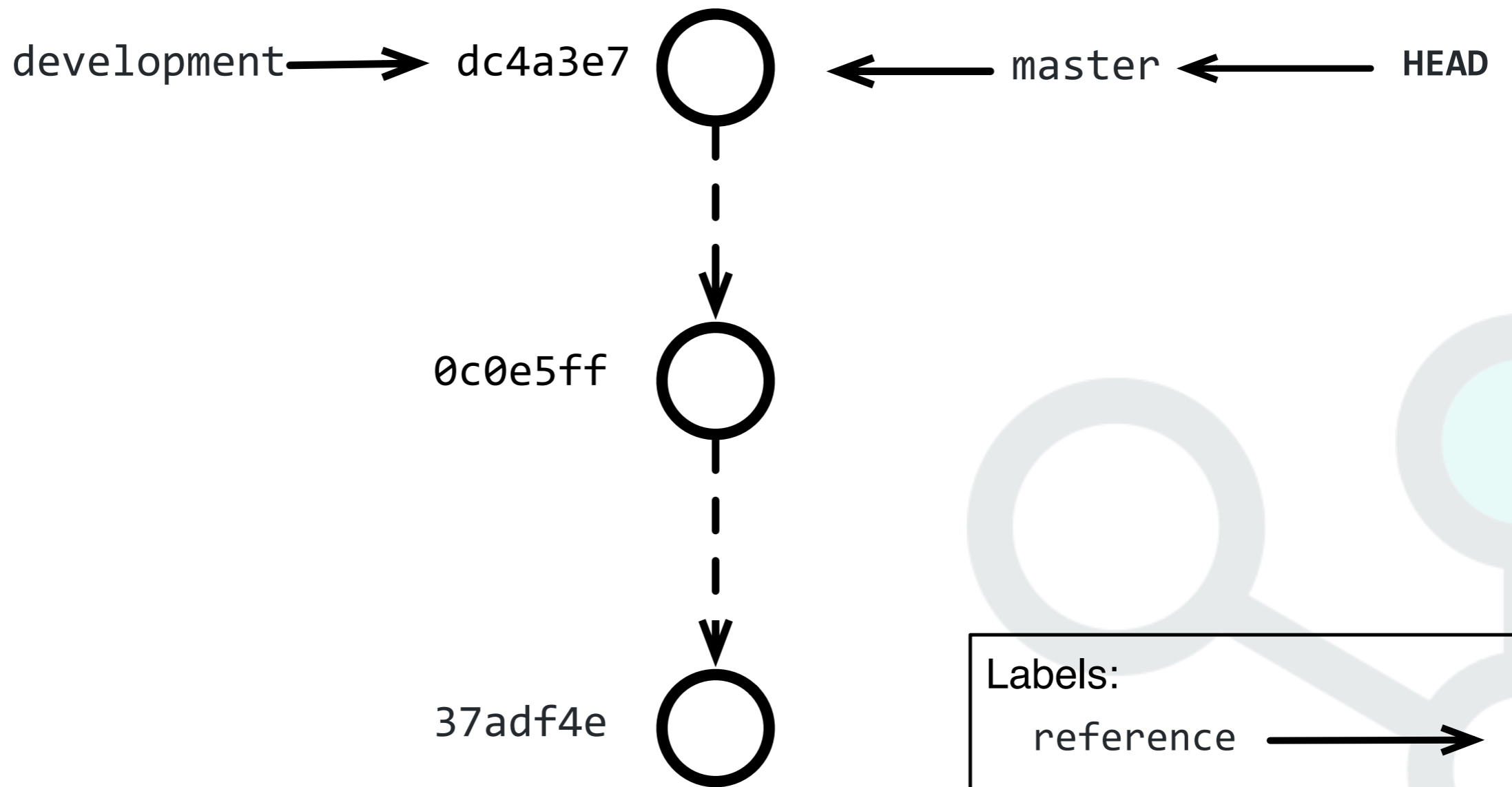
37adf4e





git

merge fast-forward



Summary

