

# Using git without alternate branches

- `git add .` (or `git add filename`)
- `git commit -m "One line description of what was changed"`
- `git push`
- `git fetch`
- `git pull`
- `git status`
- `git log`

# GitHub Repository

MAIN (branch)

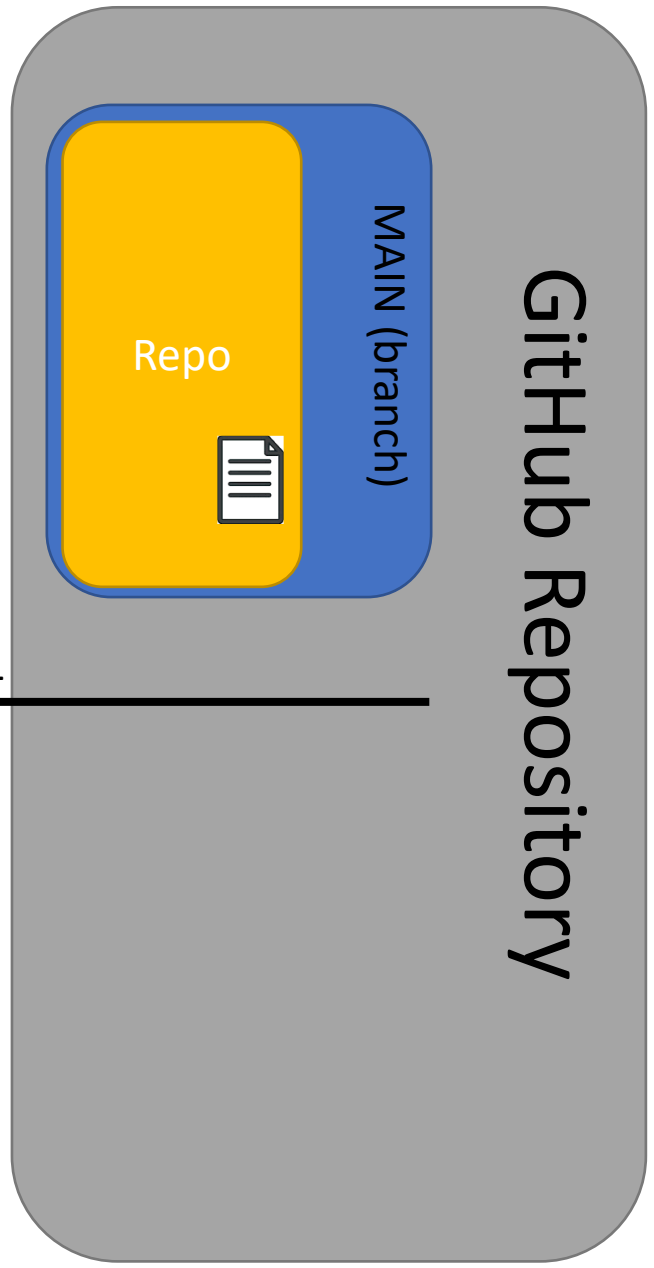
Repo



Local Computer



git clone URL



GitHub Repository

# Local Repository



# GitHub Repository



# Local Repository

MAIN (branch)

Working

Staging

Repo

Git clone

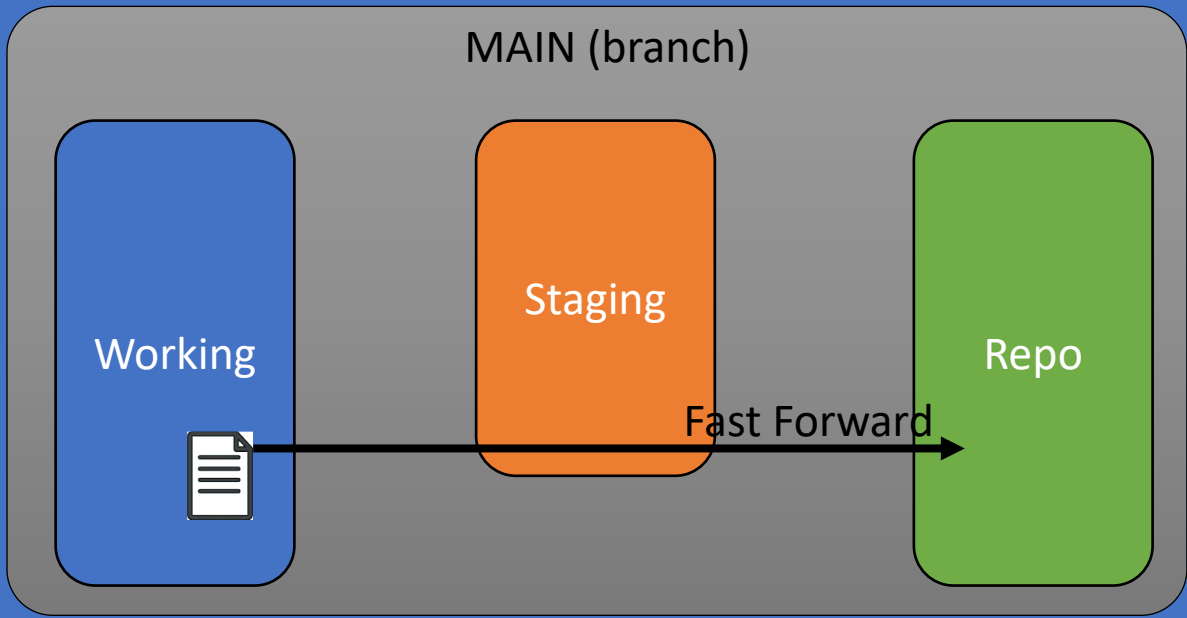
Repo

MAIN (branch)

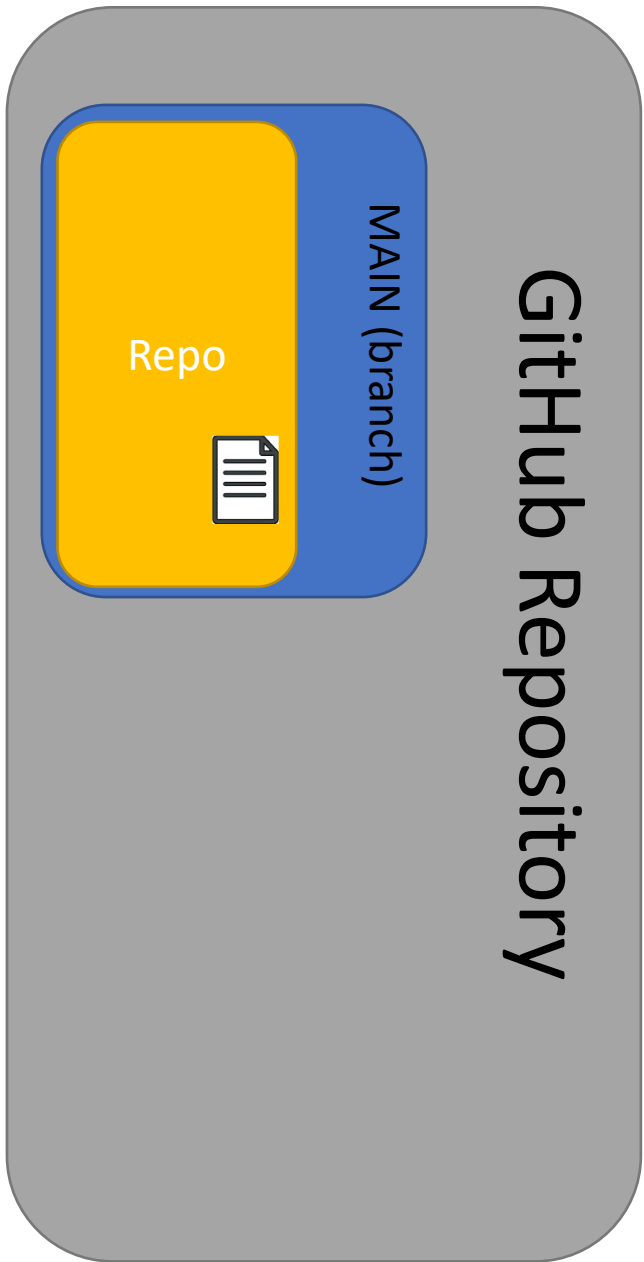
# GitHub Repository



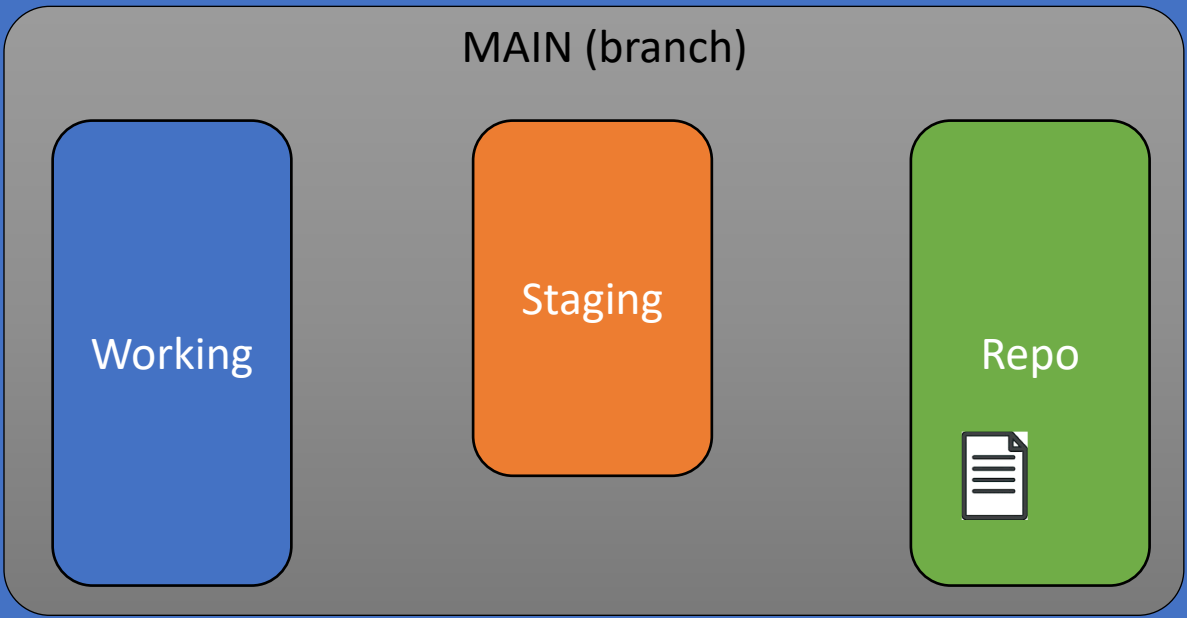
# Local Repository



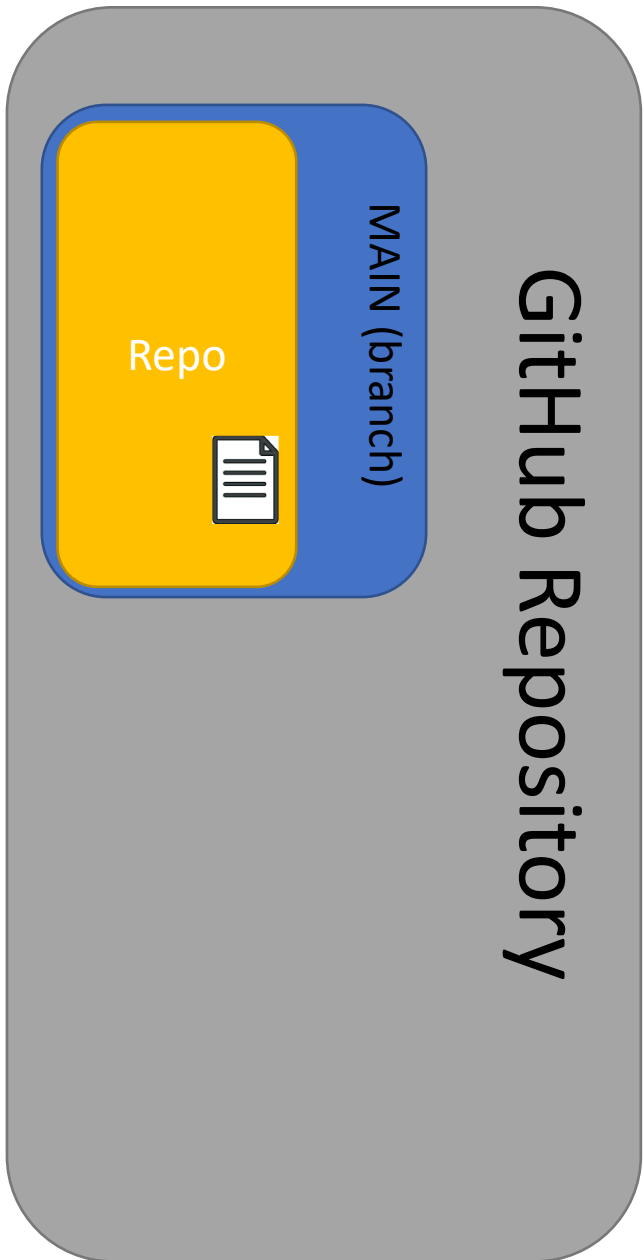
# GitHub Repository



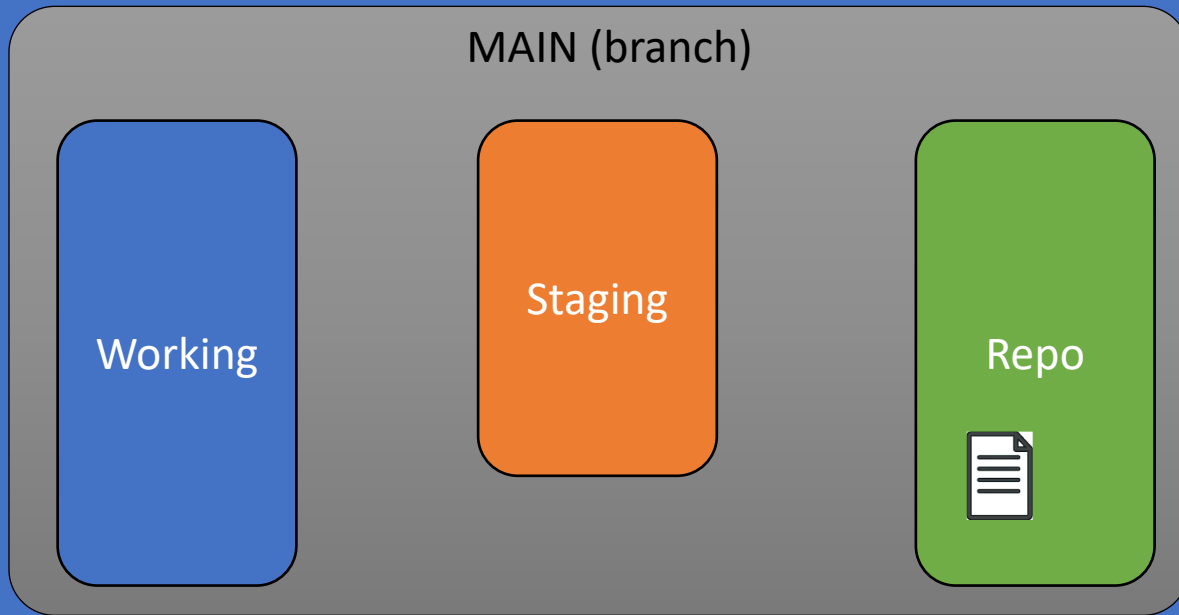
# Local Repository



# GitHub Repository

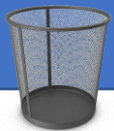


# Local Repository



git status:  
On branch main  
Your branch is up to date with 'origin/main'.


nothing to commit, working tree clean





# Local Repository

MAIN (branch)

  
Working

Staging

Repo



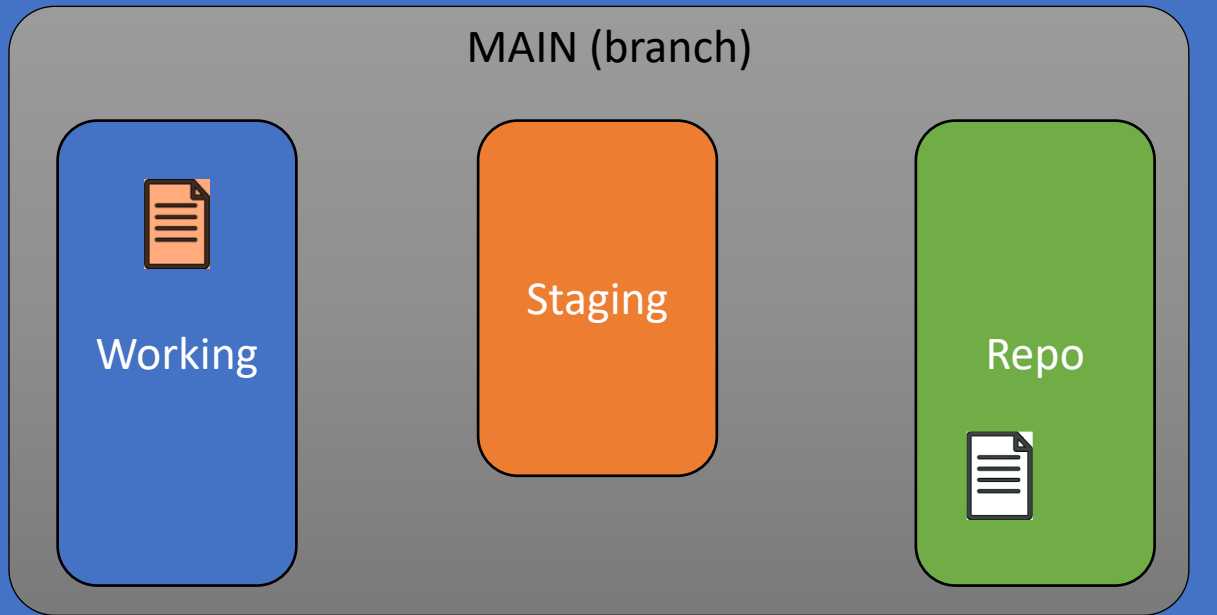
# GitHub Repository

MAIN (branch)

Repo



# Local Repository



git status:

On branch main

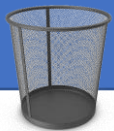
Your branch is up to date with 'origin/main'.

Untracked files:

(use "git add <file>..." to include in what will be committed)

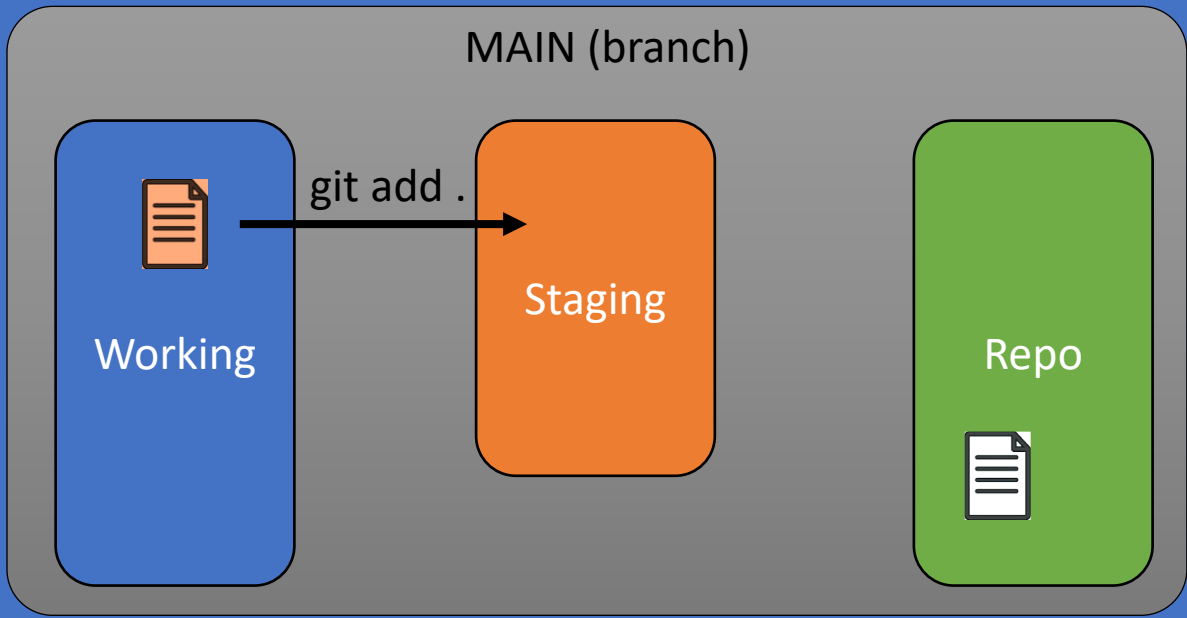
NewFile.txt

nothing added to commit but untracked files present (use "git add" to track)

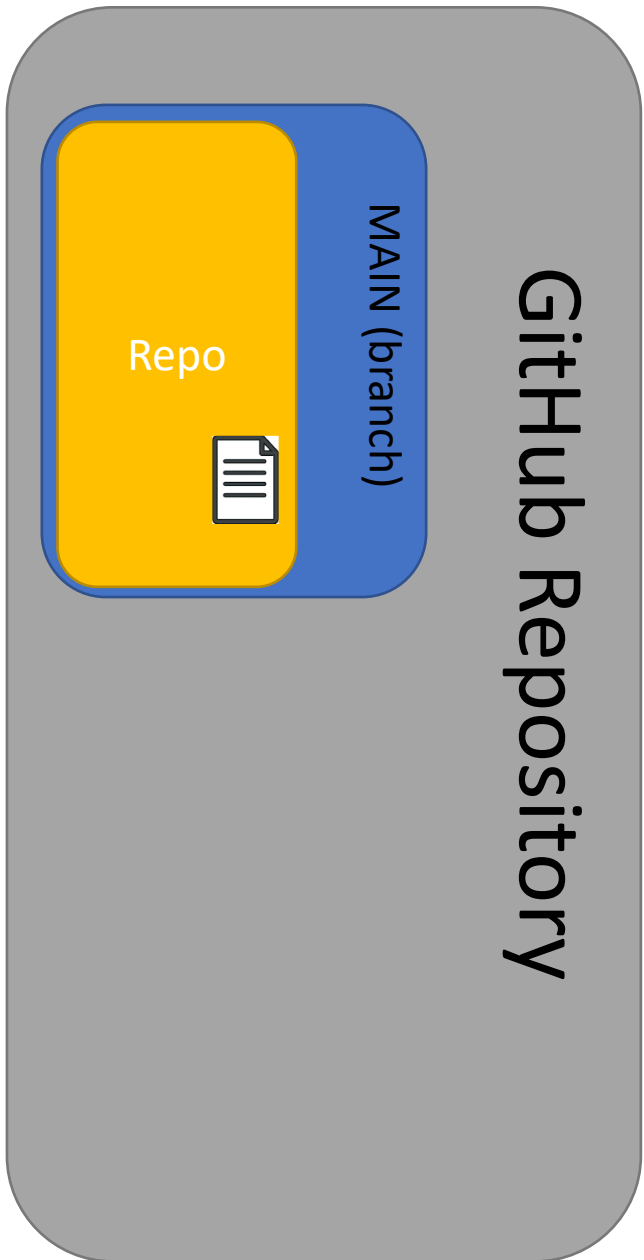


# GitHub Repository

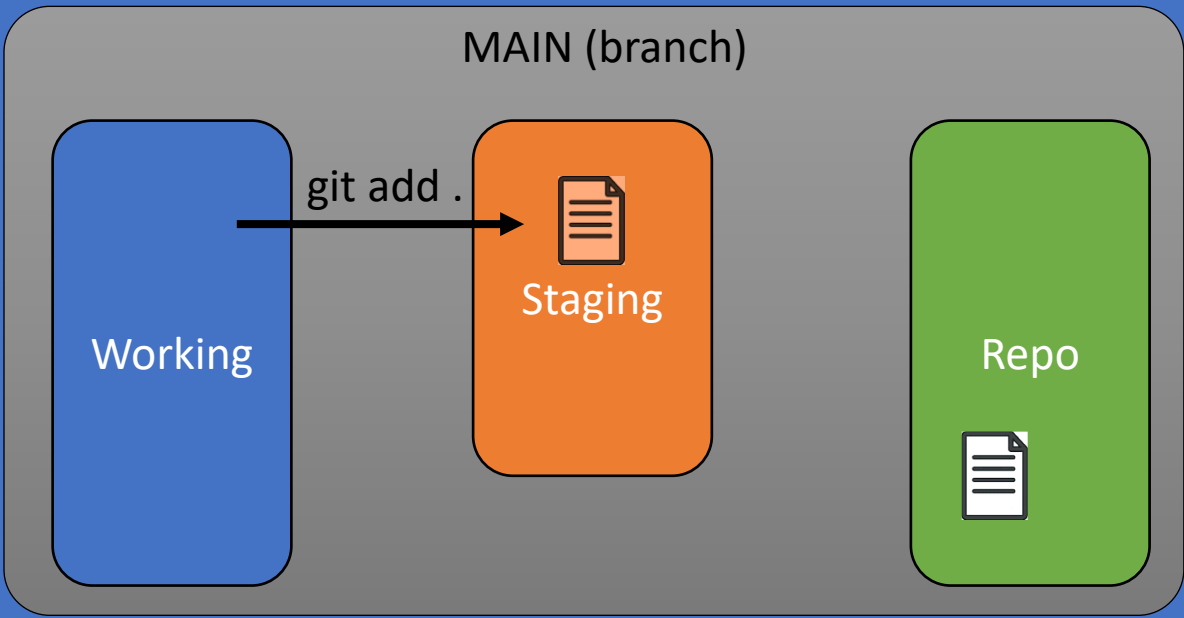
# Local Repository



# GitHub Repository



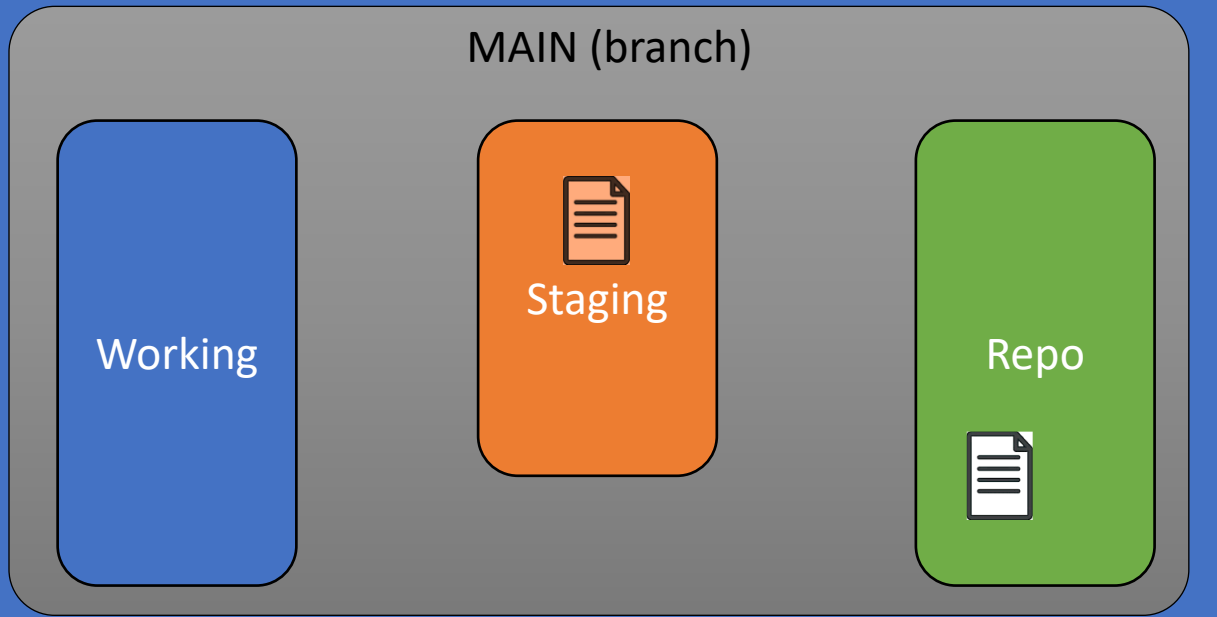
# Local Repository



# GitHub Repository

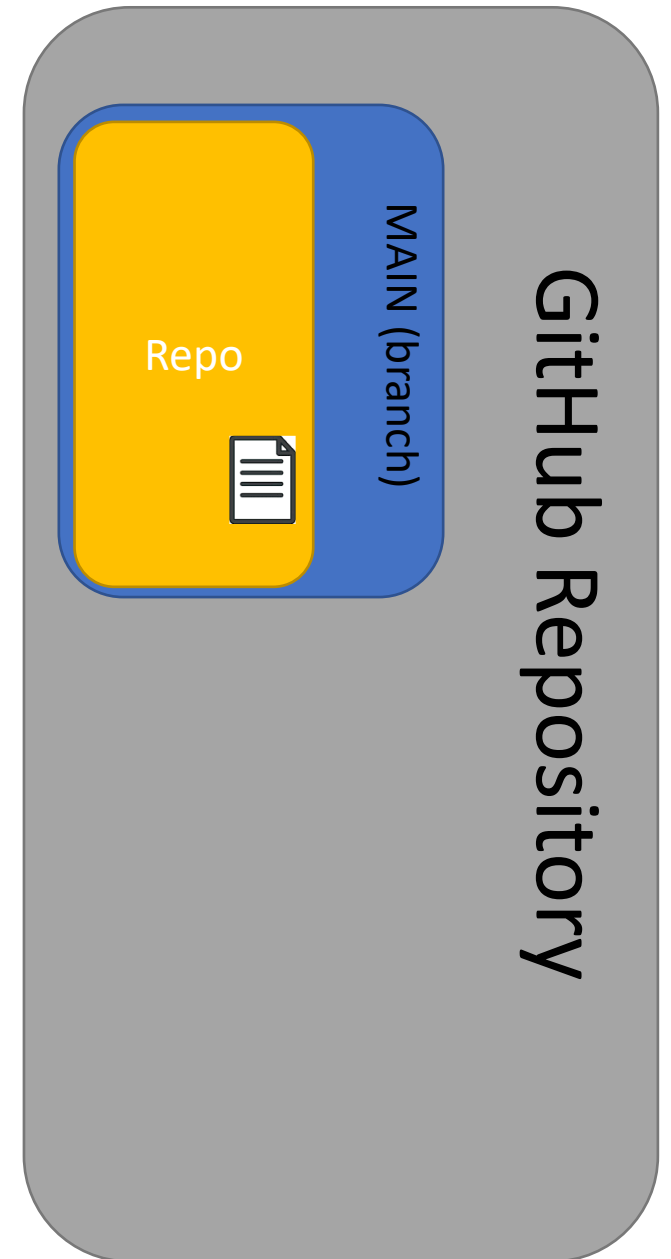


# Local Repository



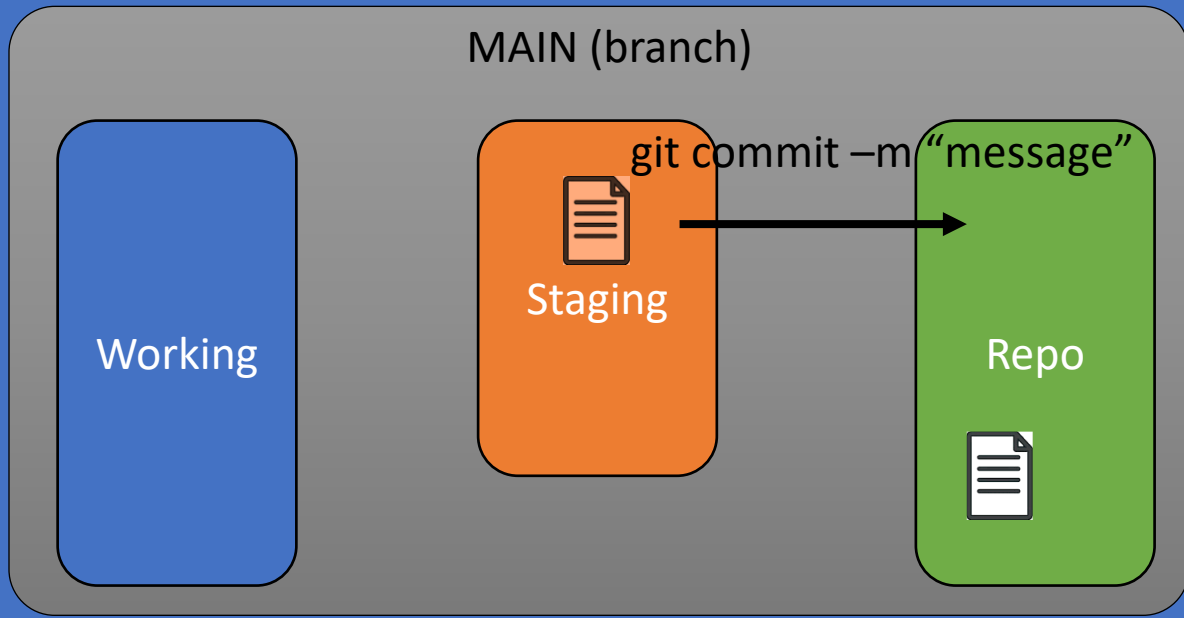
git status:  
On branch main  
Your branch is up to date with 'origin/main'.

Changes to be committed:  
(use "git restore --staged <file>..." to unstage)  
new file: NewFile.txt



# GitHub Repository

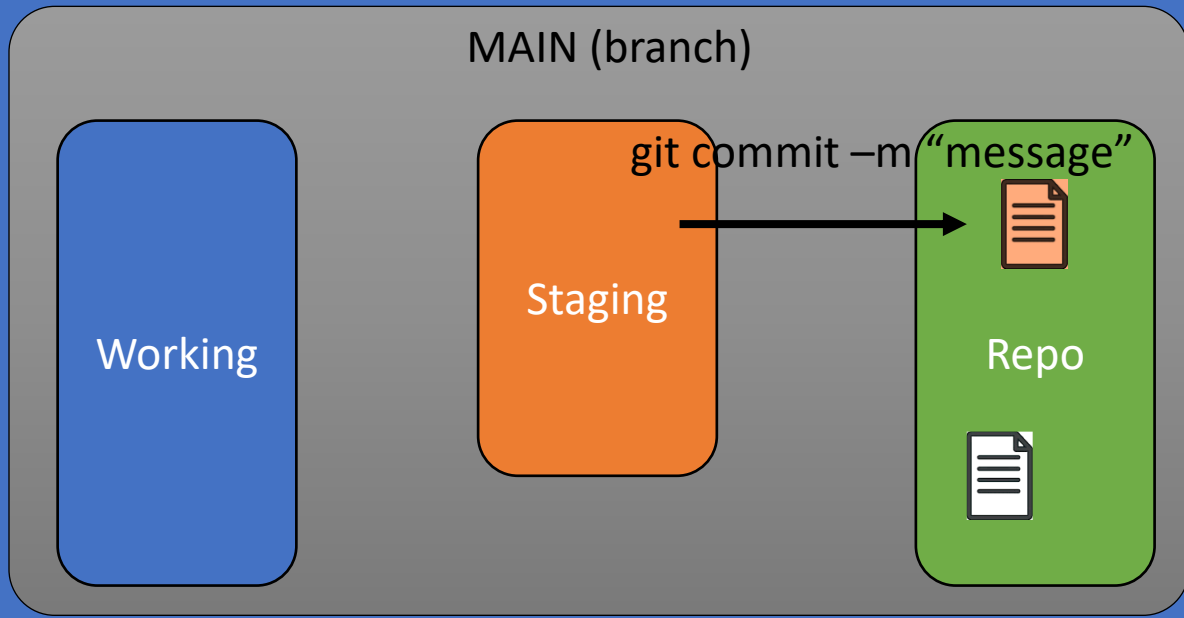
# Local Repository



# GitHub Repository



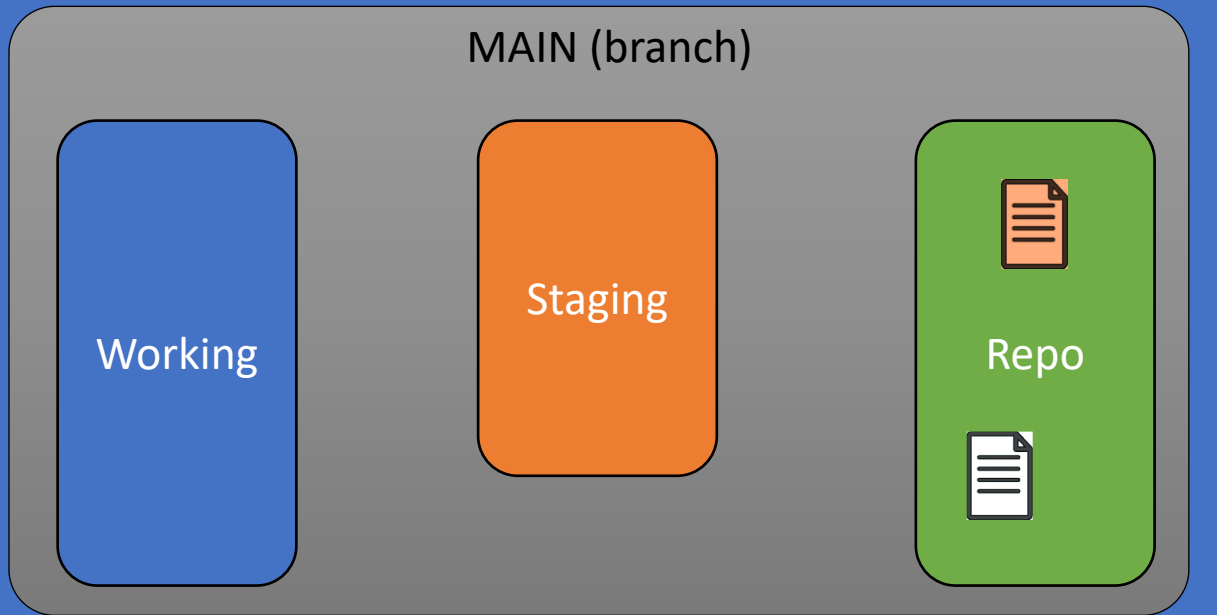
# Local Repository



# GitHub Repository



# Local Repository



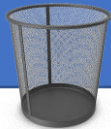
git status:

On branch main

Your branch is ahead of 'origin/main' by 1 commit.

(use "git push" to publish your local commits)

nothing to commit, working tree clean

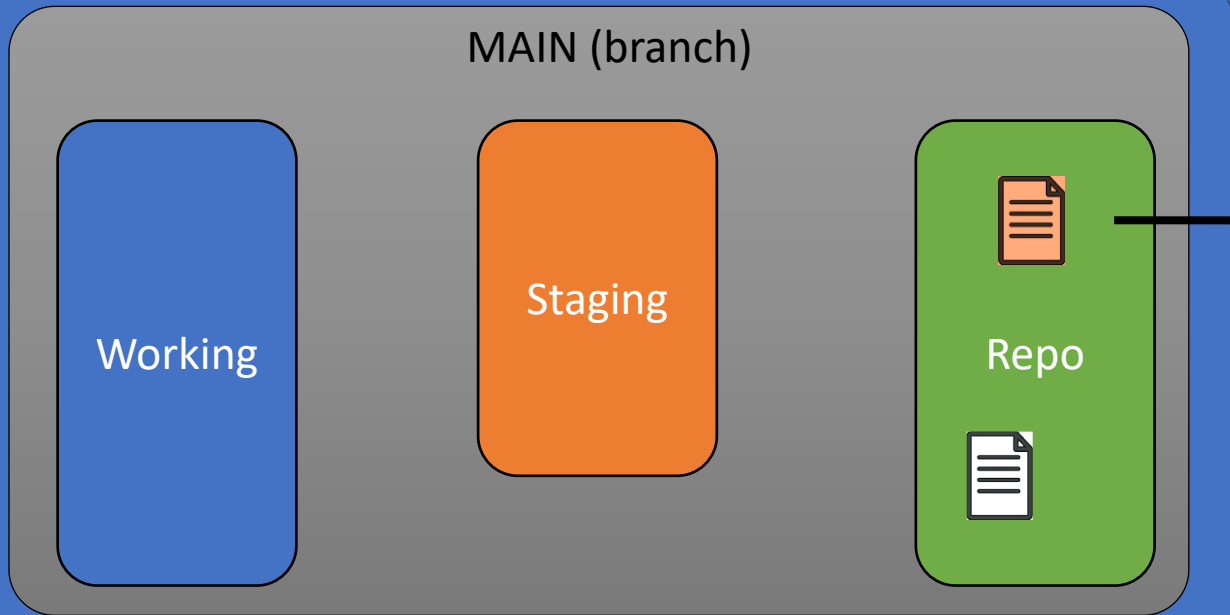


# GitHub Repository

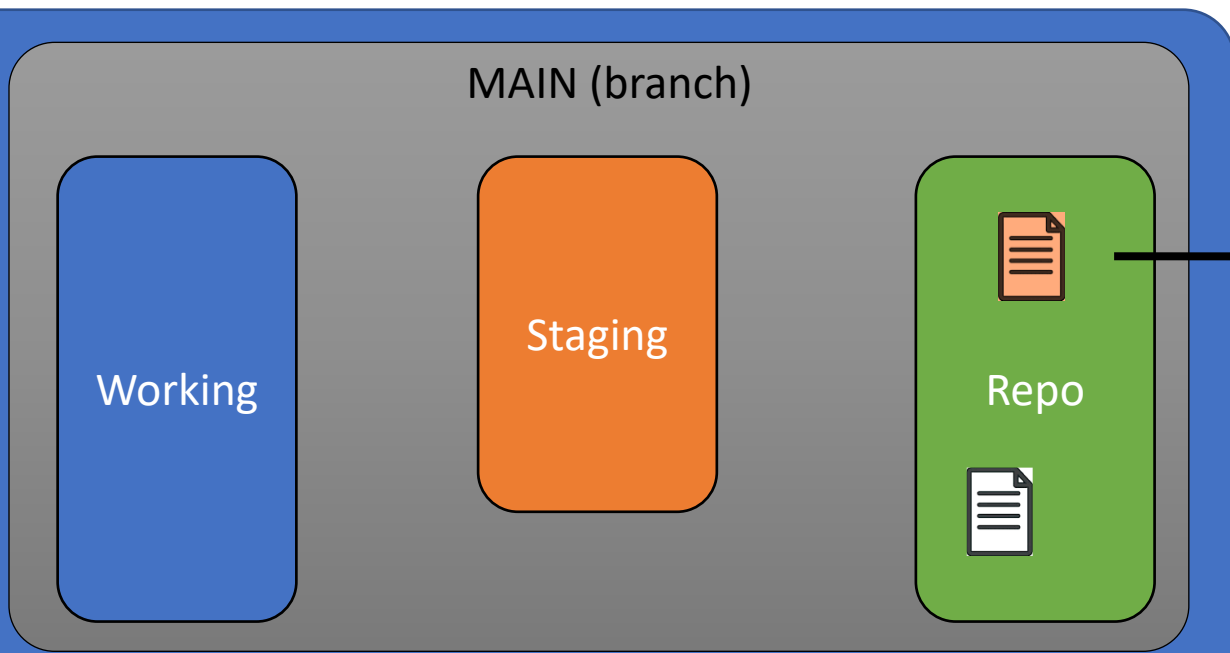




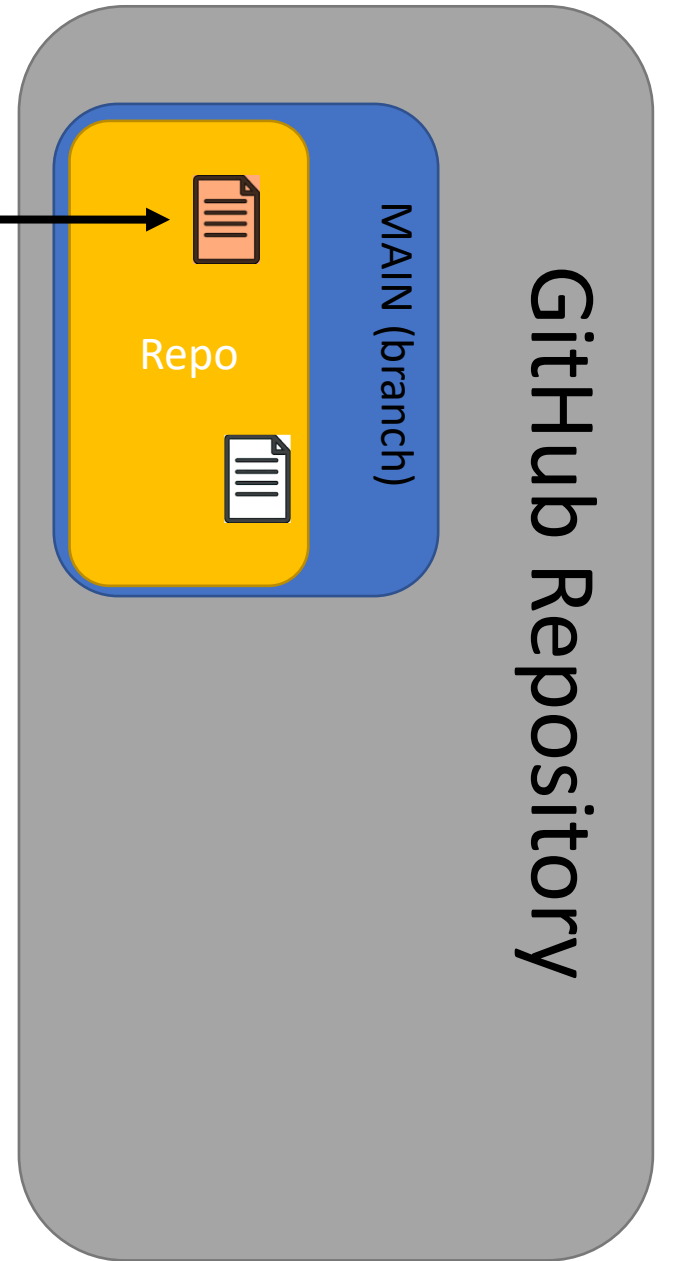
# Local Repository



# Local Repository



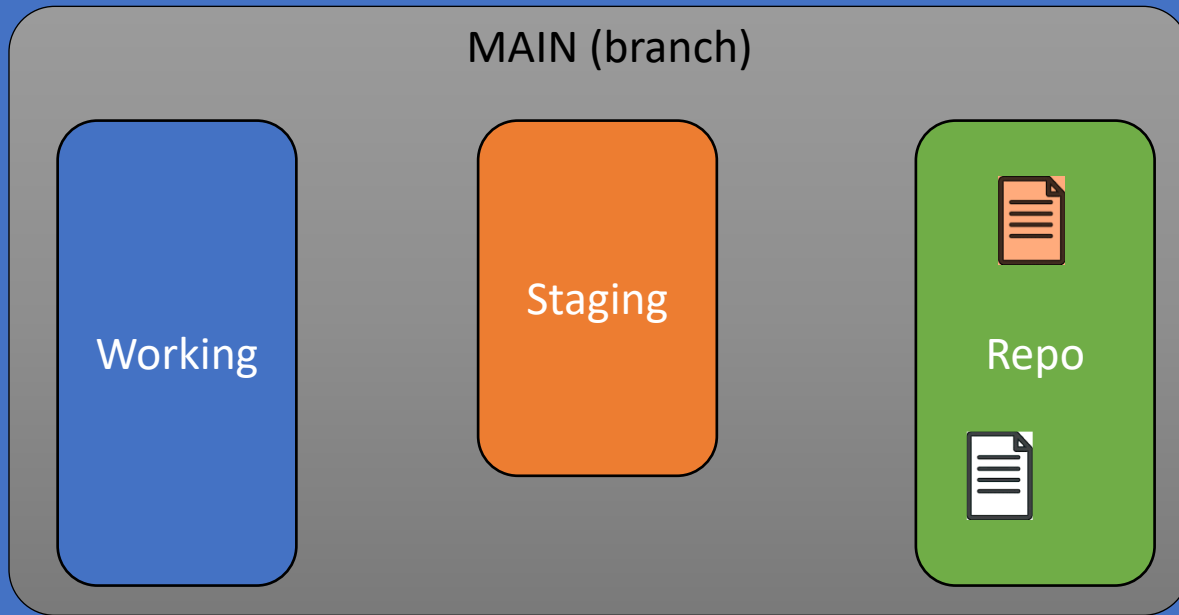
git push



# GitHub Repository

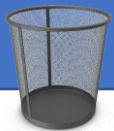


# Local Repository



git status:  
On branch main  
Your branch is up to date with 'origin/main'.

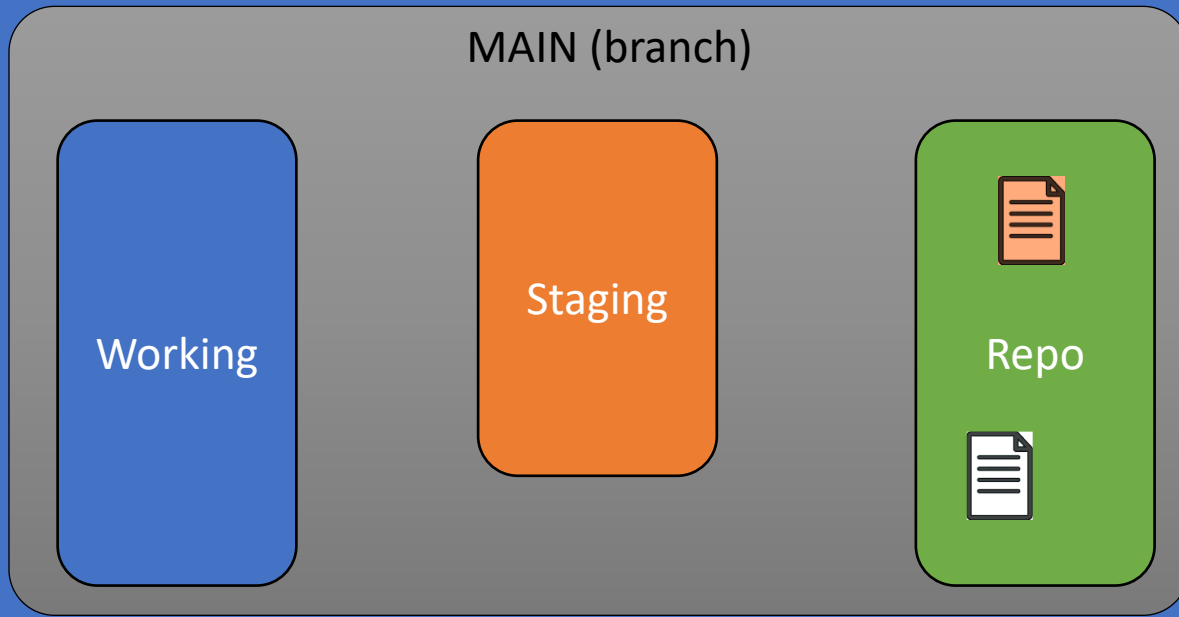
nothing to commit, working tree clean



# GitHub Repository



# Local Repository



## git log

commit 8252d2894a99cd7128be02c5d807f75026e18e64  
Author: Brent Denny <brent.denny@ddls.com.au>  
Date: Fri Nov 26 10:52:33 2021 +1000

new file

commit 54e36e93531323b245c6ce494521f8c678ec761a  
Author: BrentD09 <brent.denny@ddls.com.au>  
Date: Fri Nov 26 10:48:10 2021 +1000

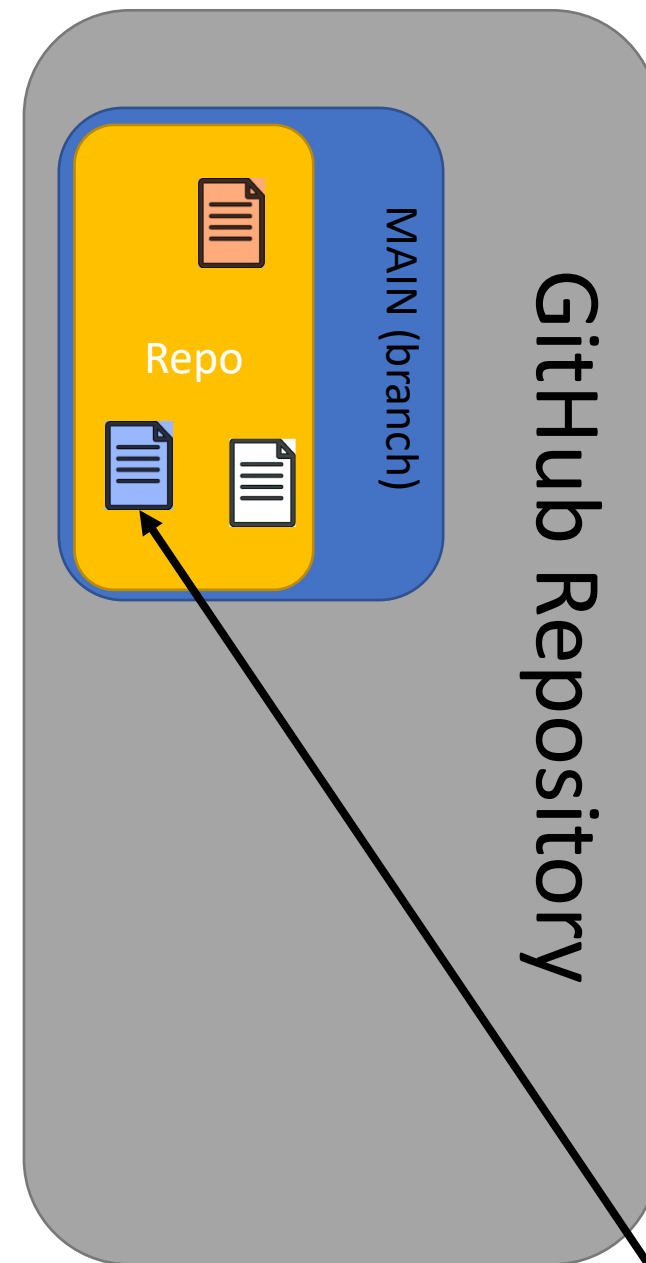
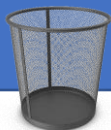
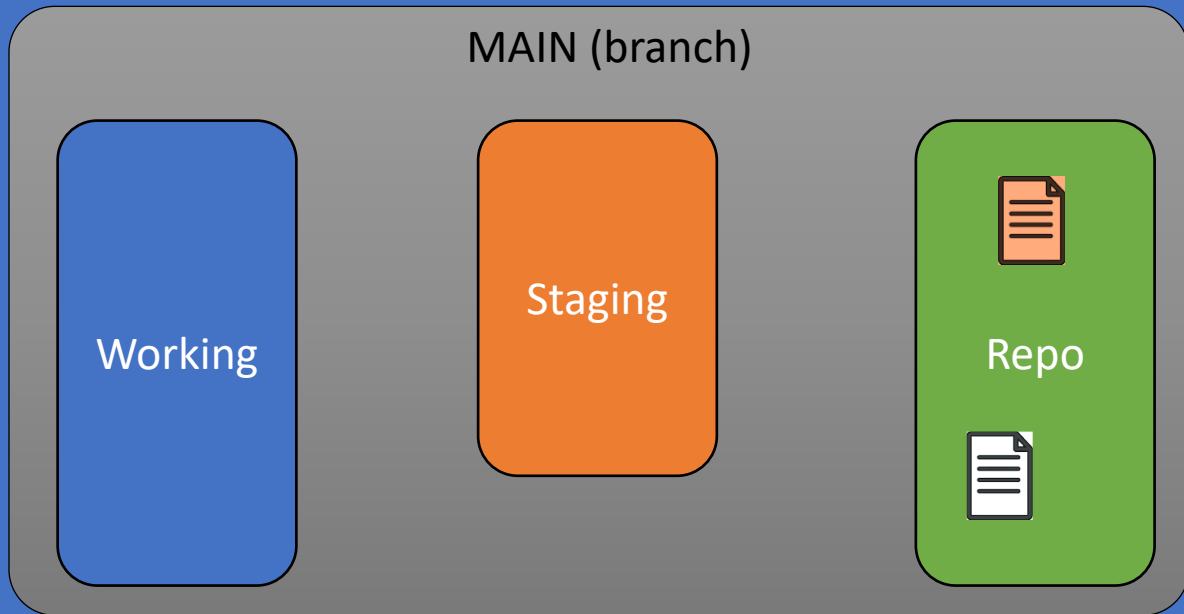
Create NewFile2.txt

commit 77bc09560d0b899c0c6356976625c6b919258d11  
Author: Brent Denny <brent.denny@ddls.com.au>  
Date: Fri Nov 26 10:44:04 2021 +1000

Added NewFile.txt



# Local Repository



File added by someone else

# Local Repository

MAIN (branch)

Working

Staging

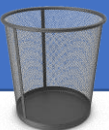
Repo

git fetch

Repo

MAIN (branch)

# GitHub Repository



# Local Repository

MAIN (branch)

Working

Staging

Repo

git fetch

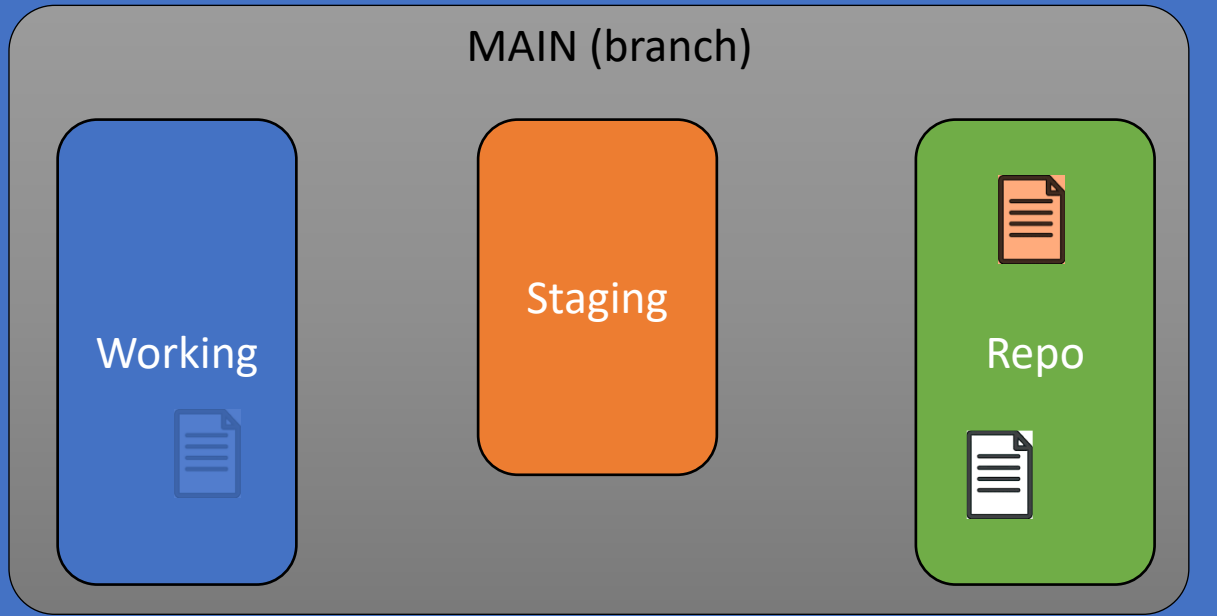
Repo

MAIN (branch)

# GitHub Repository



# Local Repository



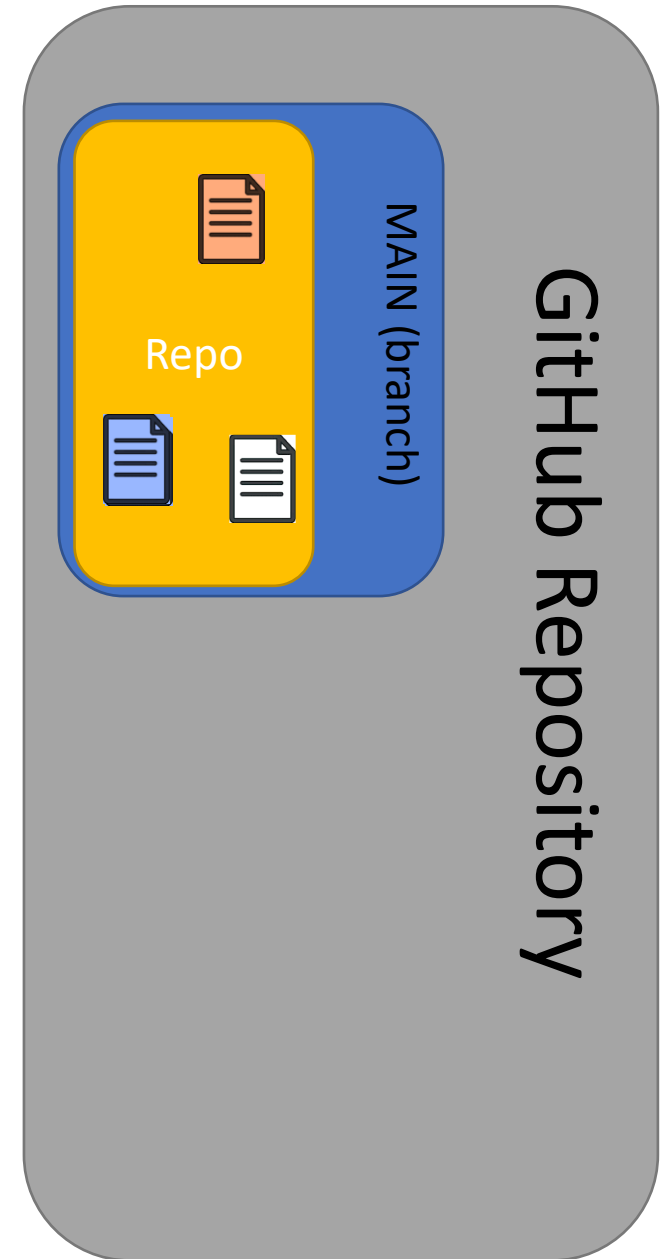
git status:

On branch main

Your branch is behind 'origin/main' by 1 commit, and  
can be fast-forwarded.

(use "git pull" to update your local branch)

nothing to commit, working tree clean



# GitHub Repository





# Local Repository

MAIN (branch)

Working

Staging

Repo

git pull

Repo

MAIN (branch)

# GitHub Repository



# Local Repository

MAIN (branch)

Working

Staging

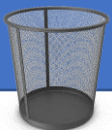
Repo

git pull

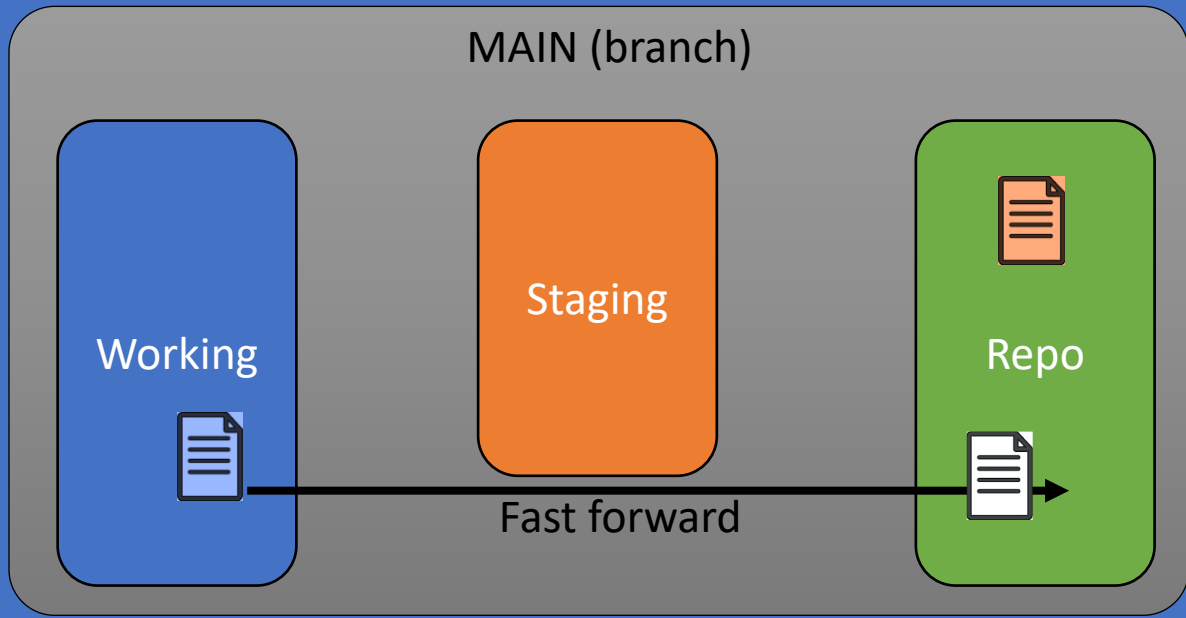
Repo

MAIN (branch)

# GitHub Repository



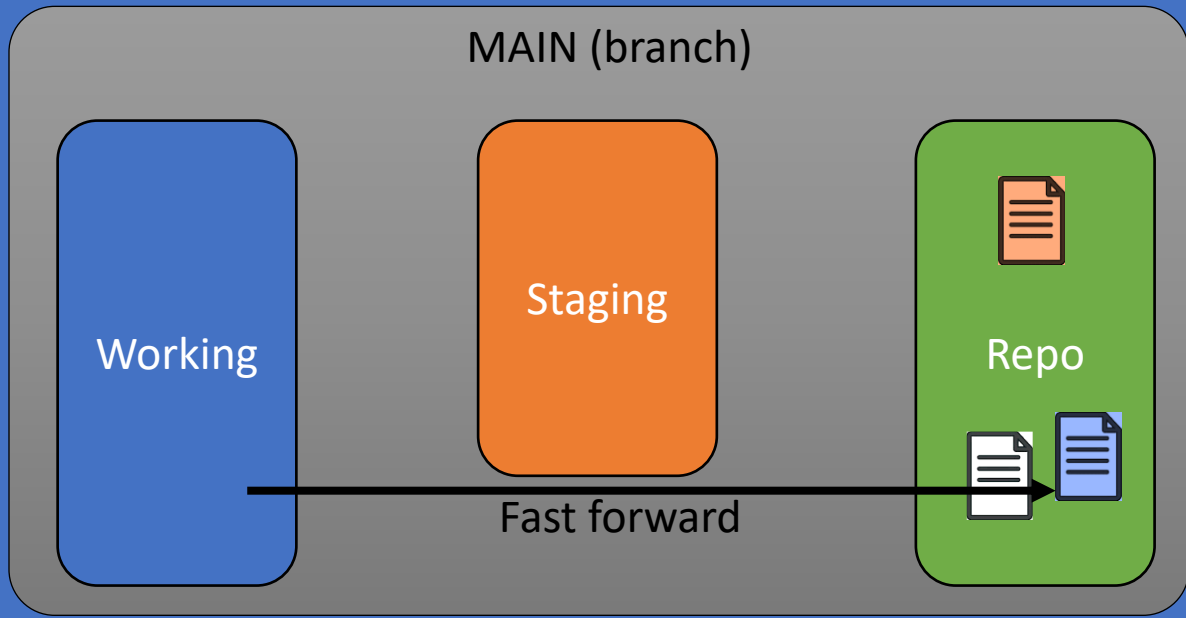
# Local Repository



# GitHub Repository



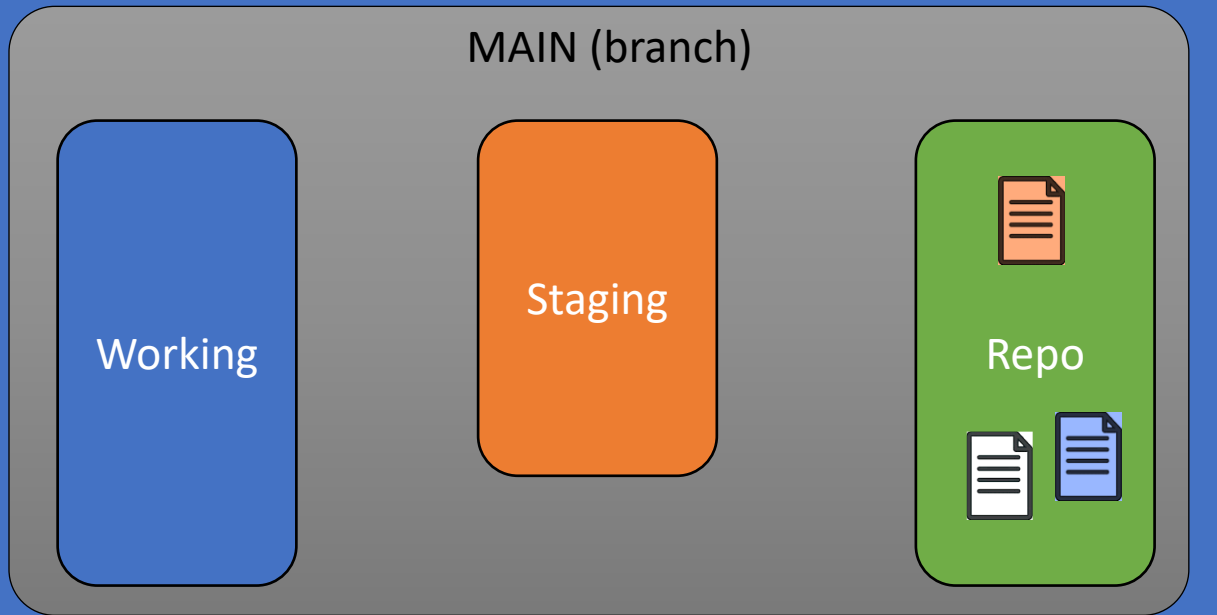
# Local Repository



# GitHub Repository

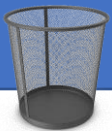


# Local Repository



git status:  
On branch main  
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

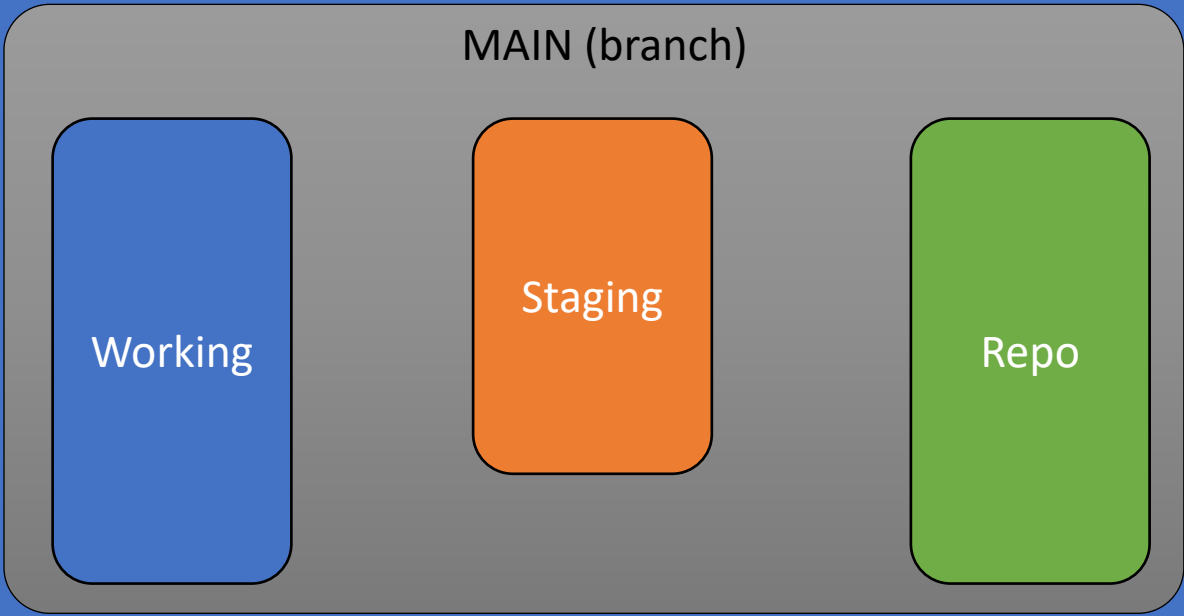


# GitHub Repository

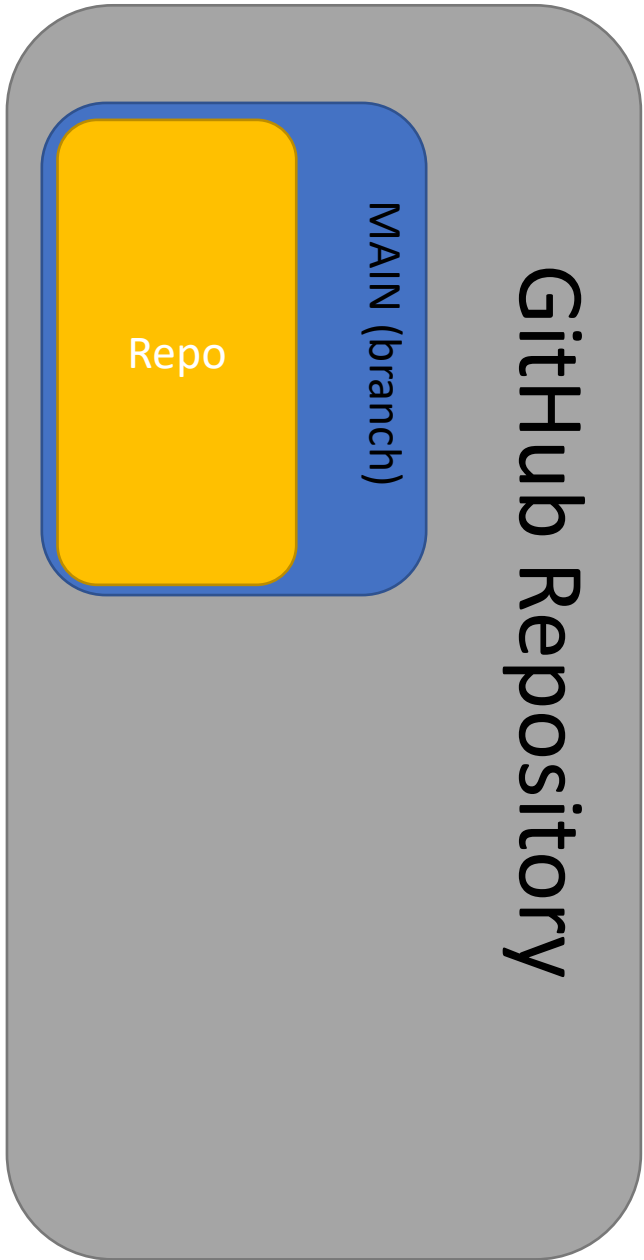
# Using git with multiple branches

- git branch *newbranchname*
- git checkout *newbranchname*
- git add . (or git add filename)
- git commit -m "One line description of what was changed"
- git push
- Pull request (*from the GitHub side*)
- Merge (*from the GitHub side*)
- git fetch
- git pull

# Local Repository



# GitHub Repository



# Local Repository

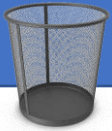
git branch "changes"

Working

MAIN (branch)

Staging

Repo



# GitHub Repository

MAIN (branch)

Repo



# Local Repository

git branch "changes"

Working

MAIN (branch)

Staging

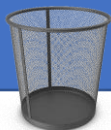
Repo

Working

Staging

Repo

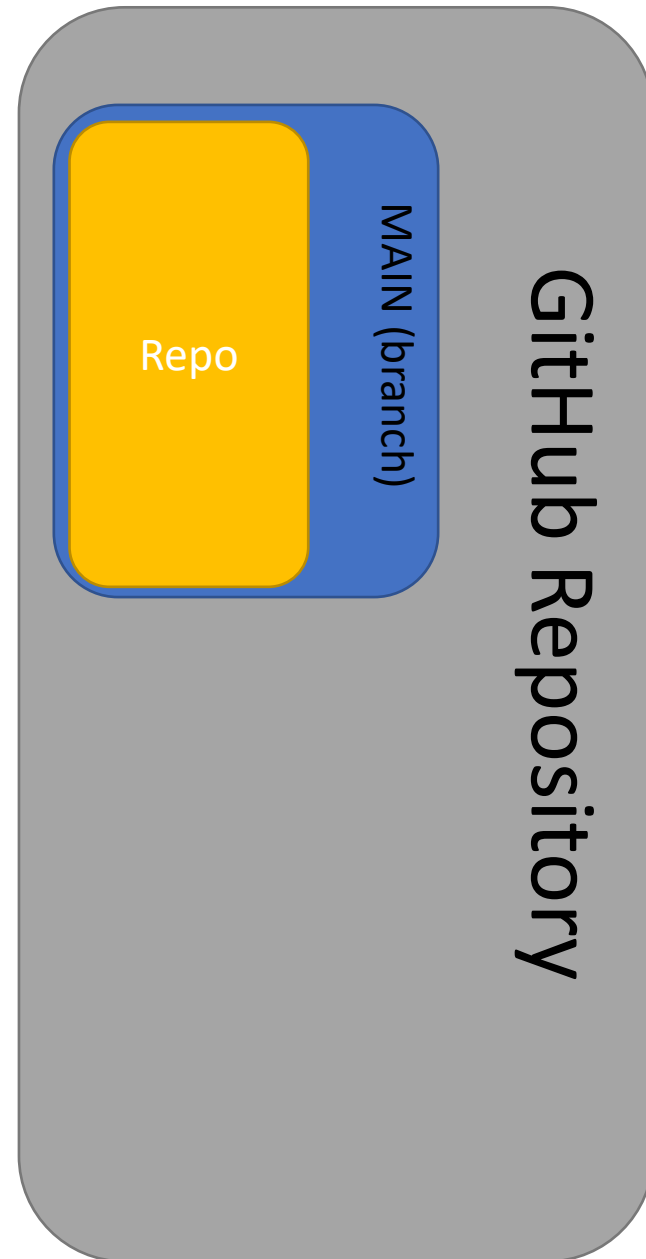
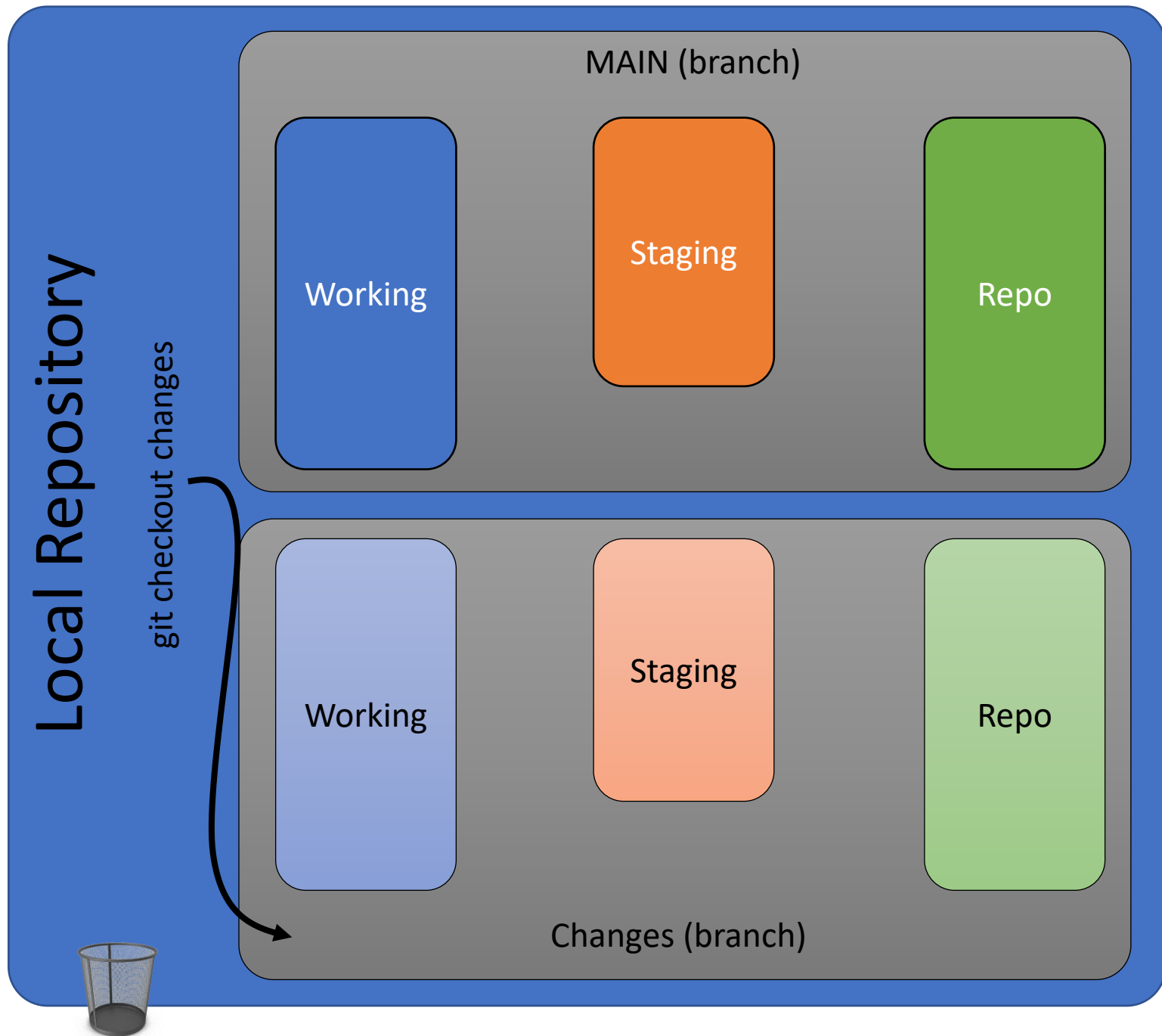
Changes (branch)

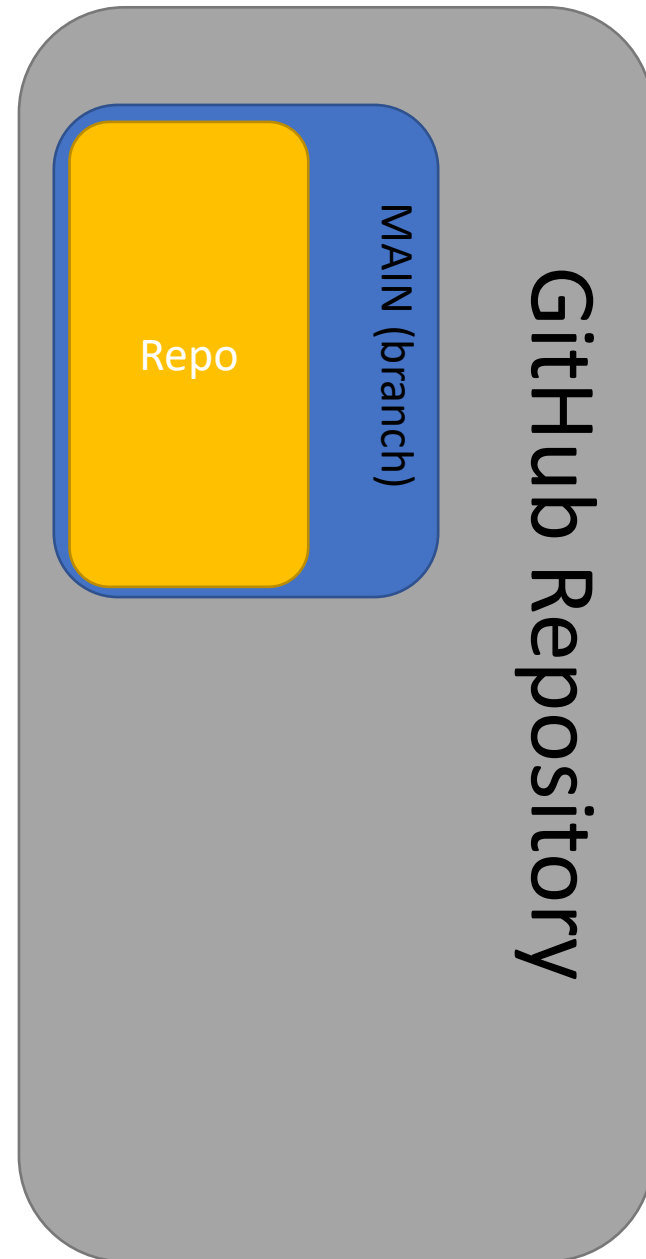
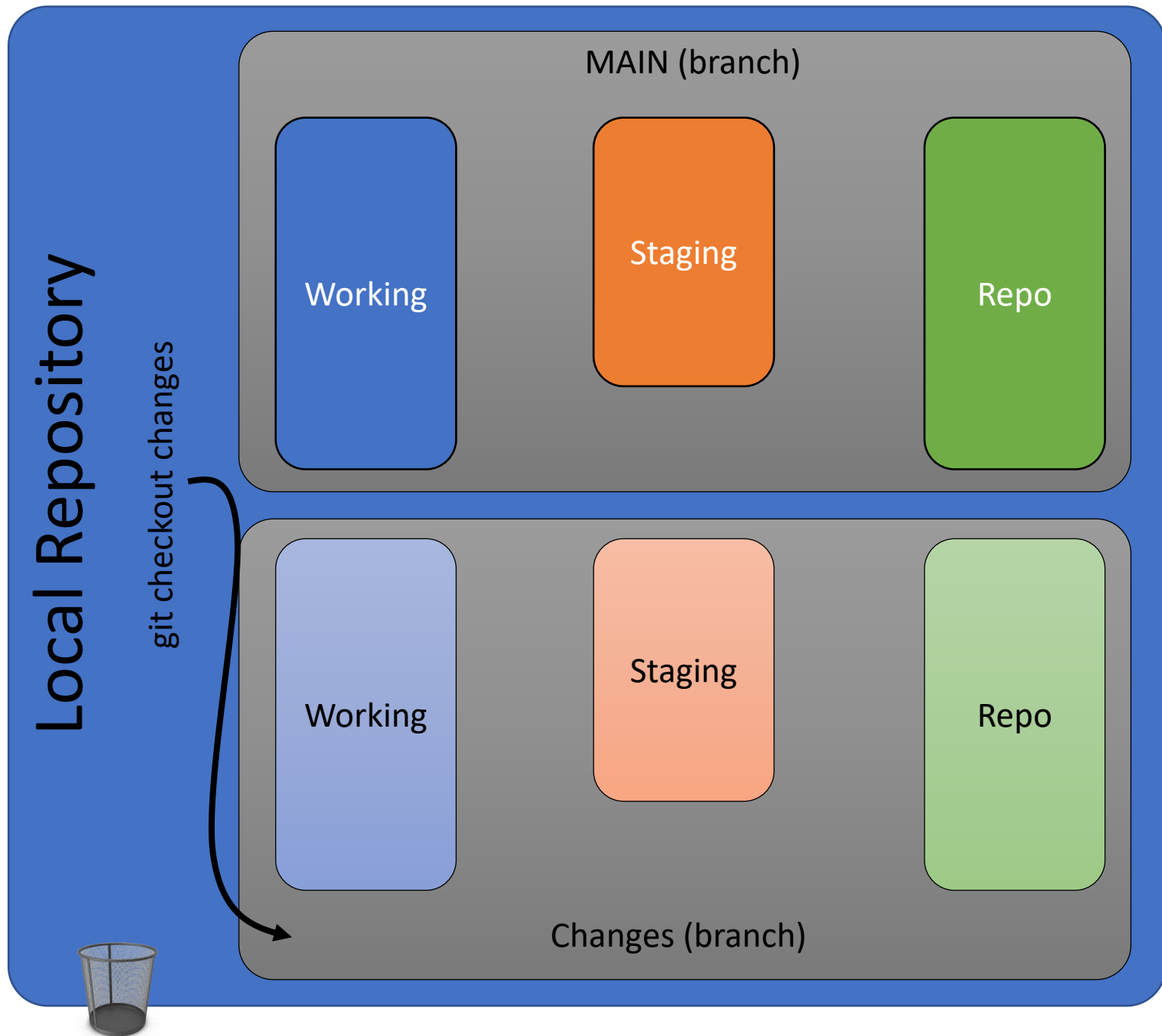


Repo

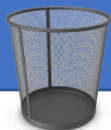
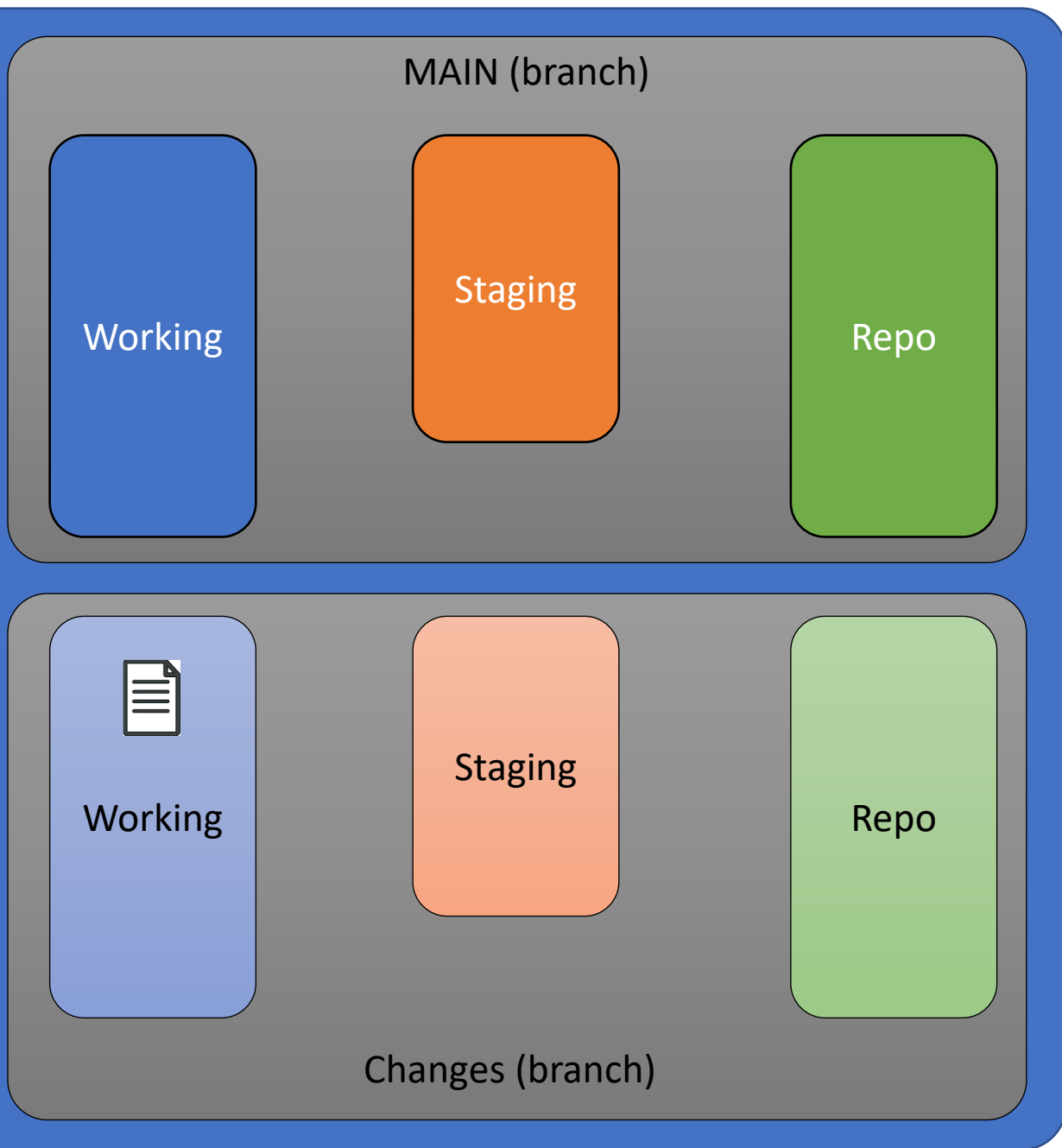
MAIN (branch)

# GitHub Repository

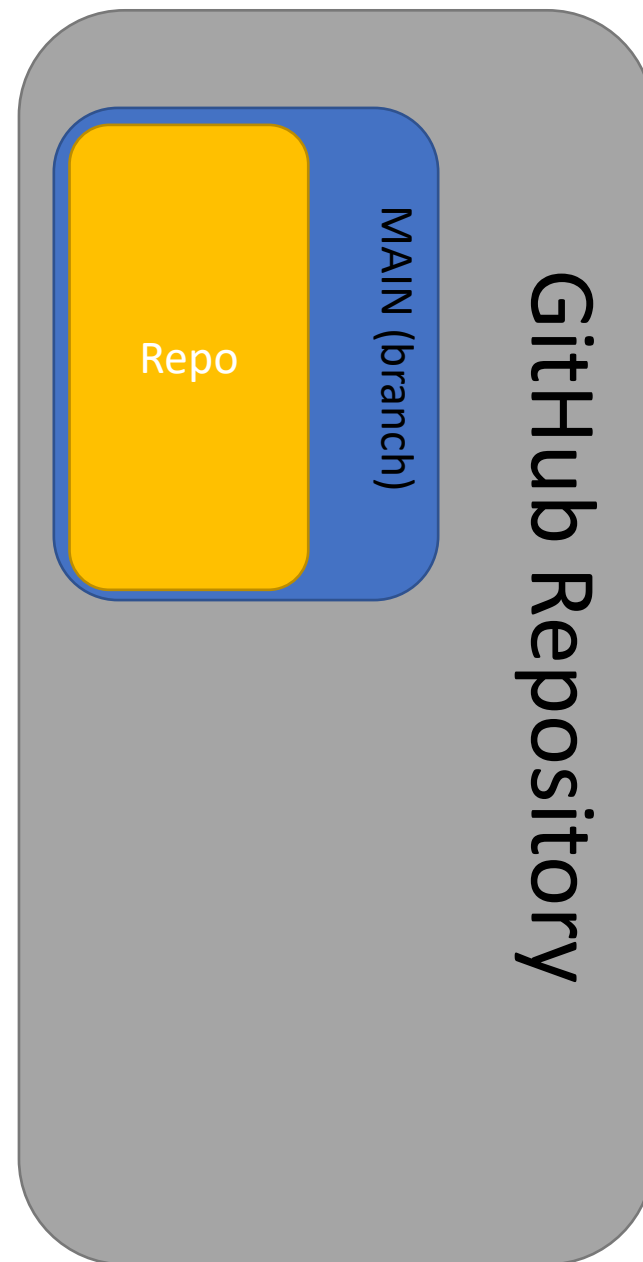




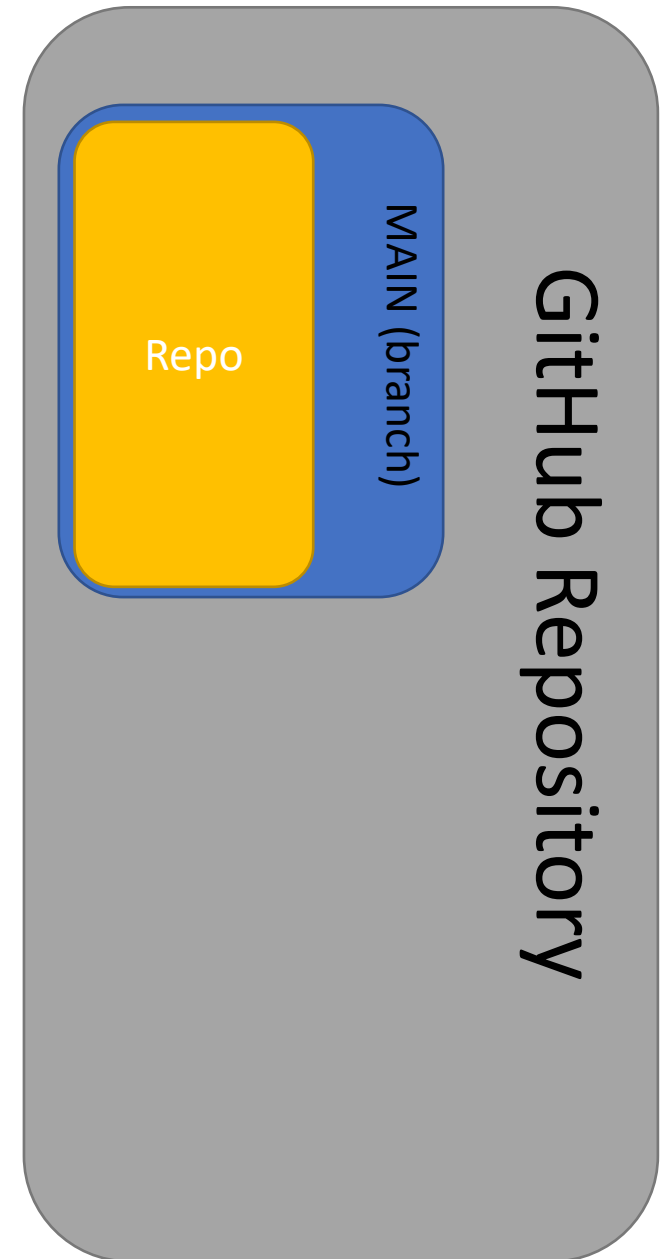
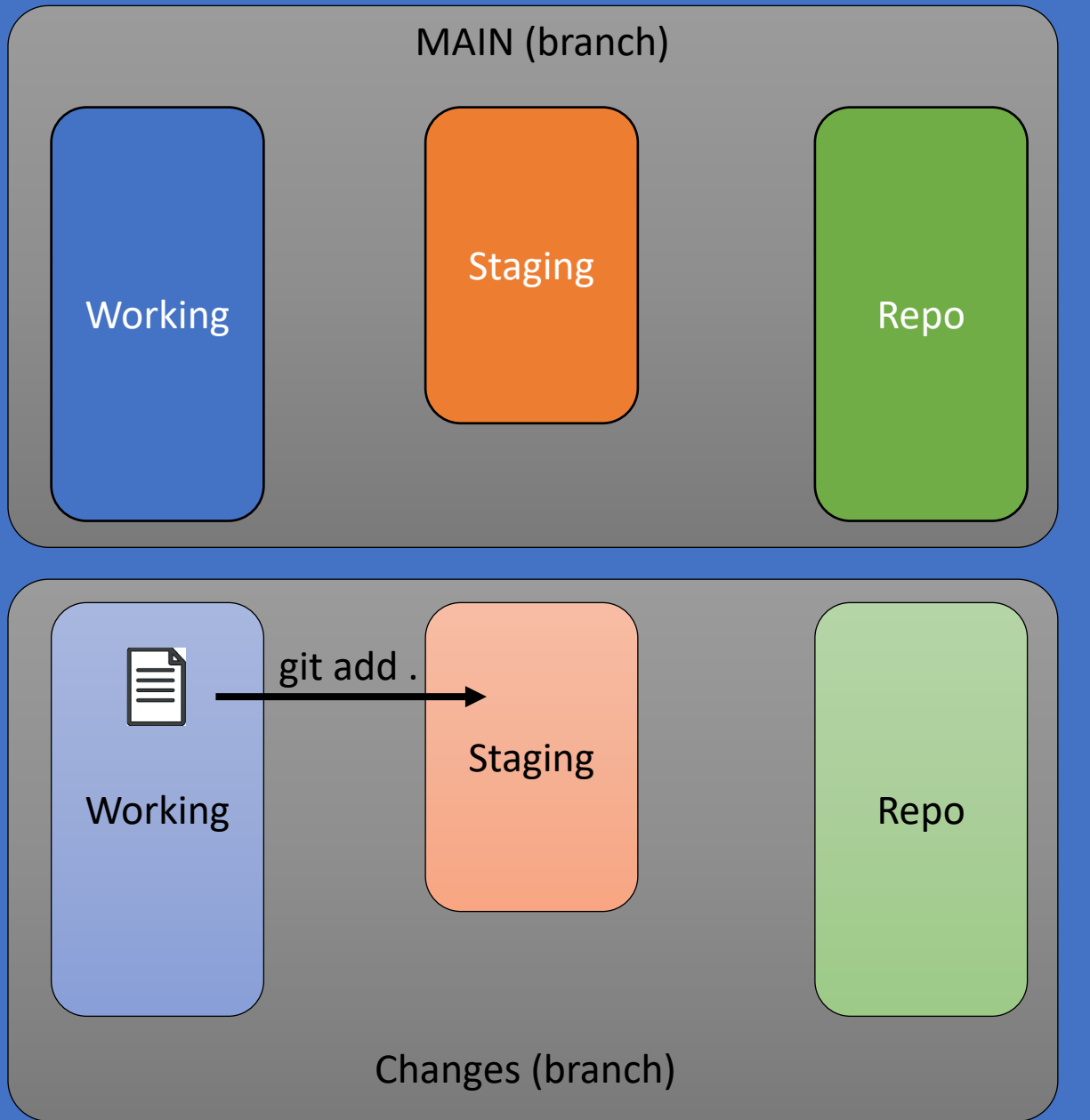
# Local Repository



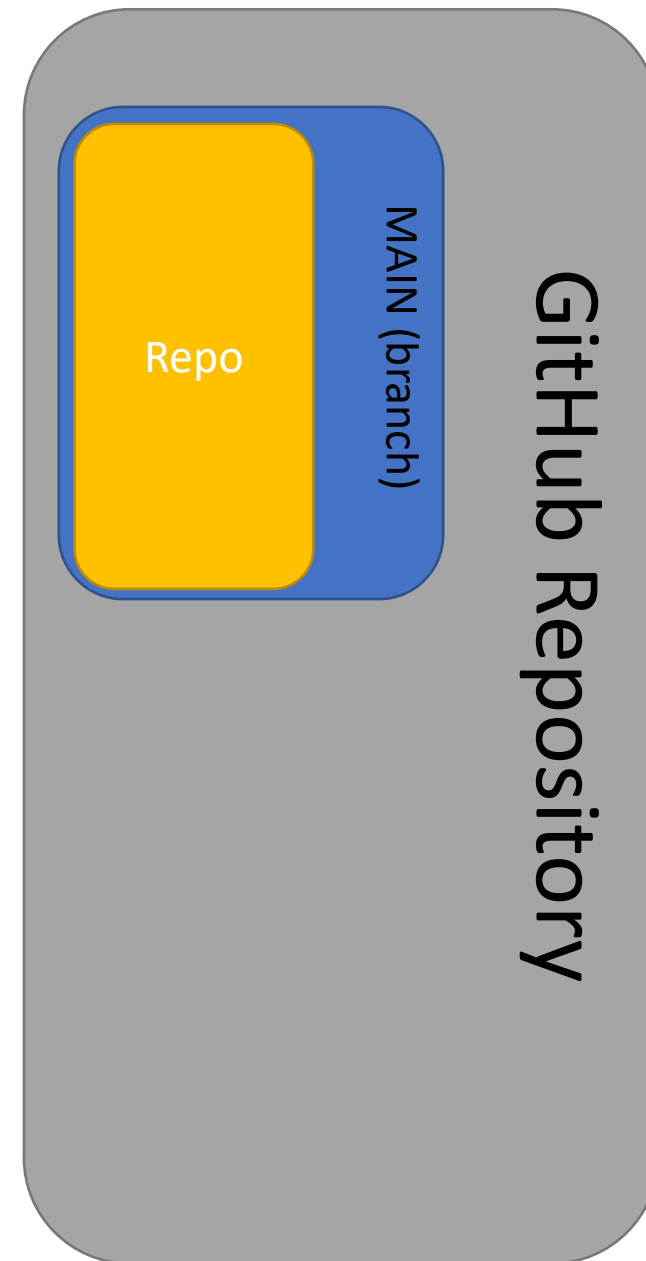
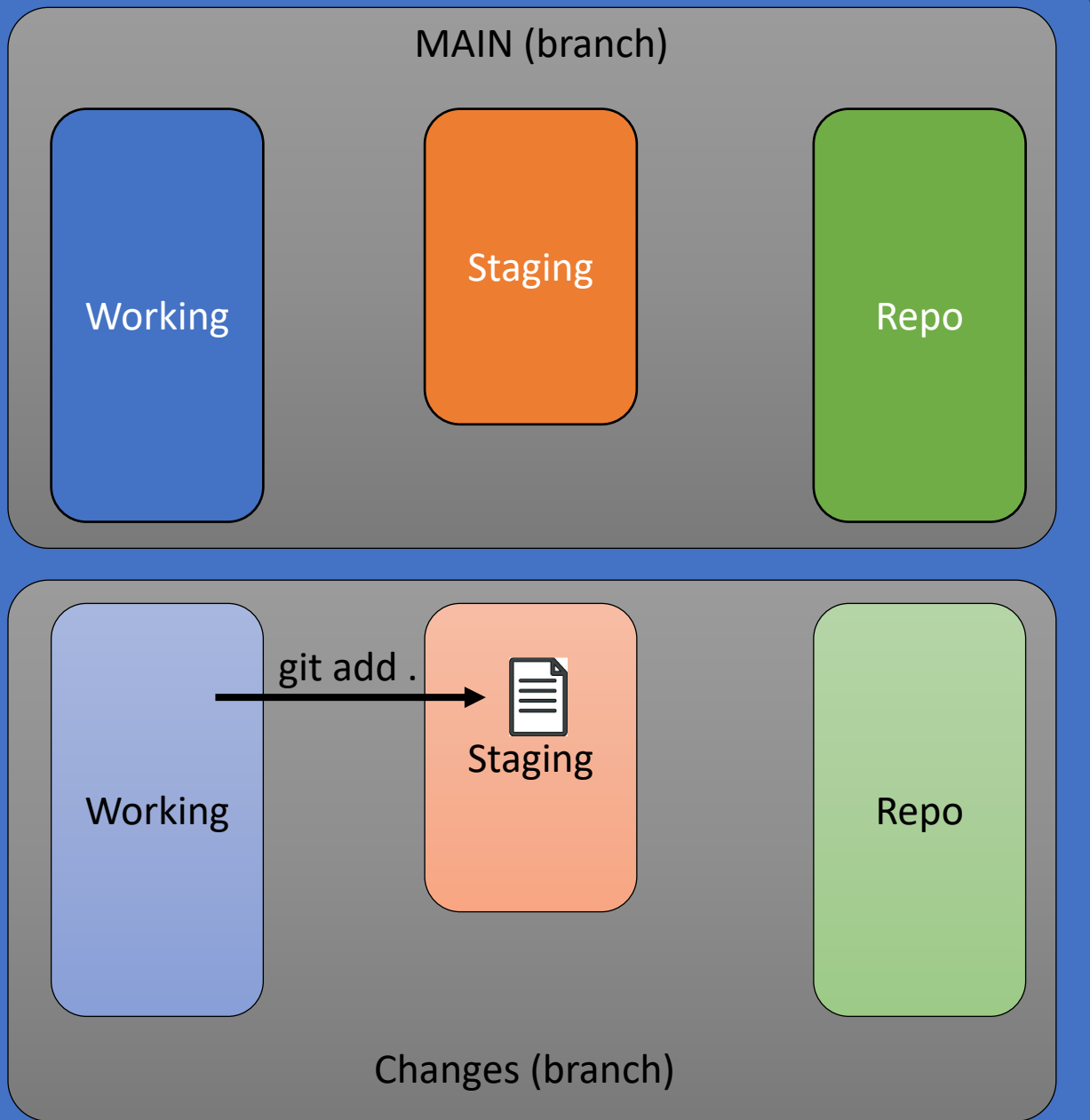
# GitHub Repository



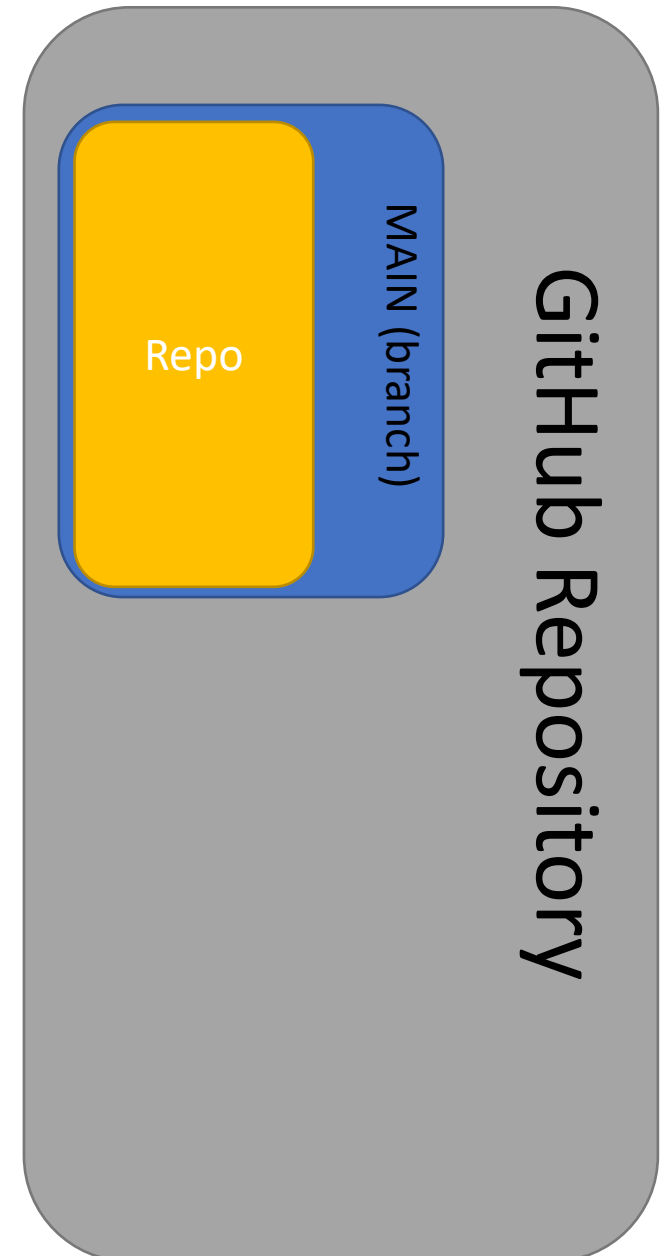
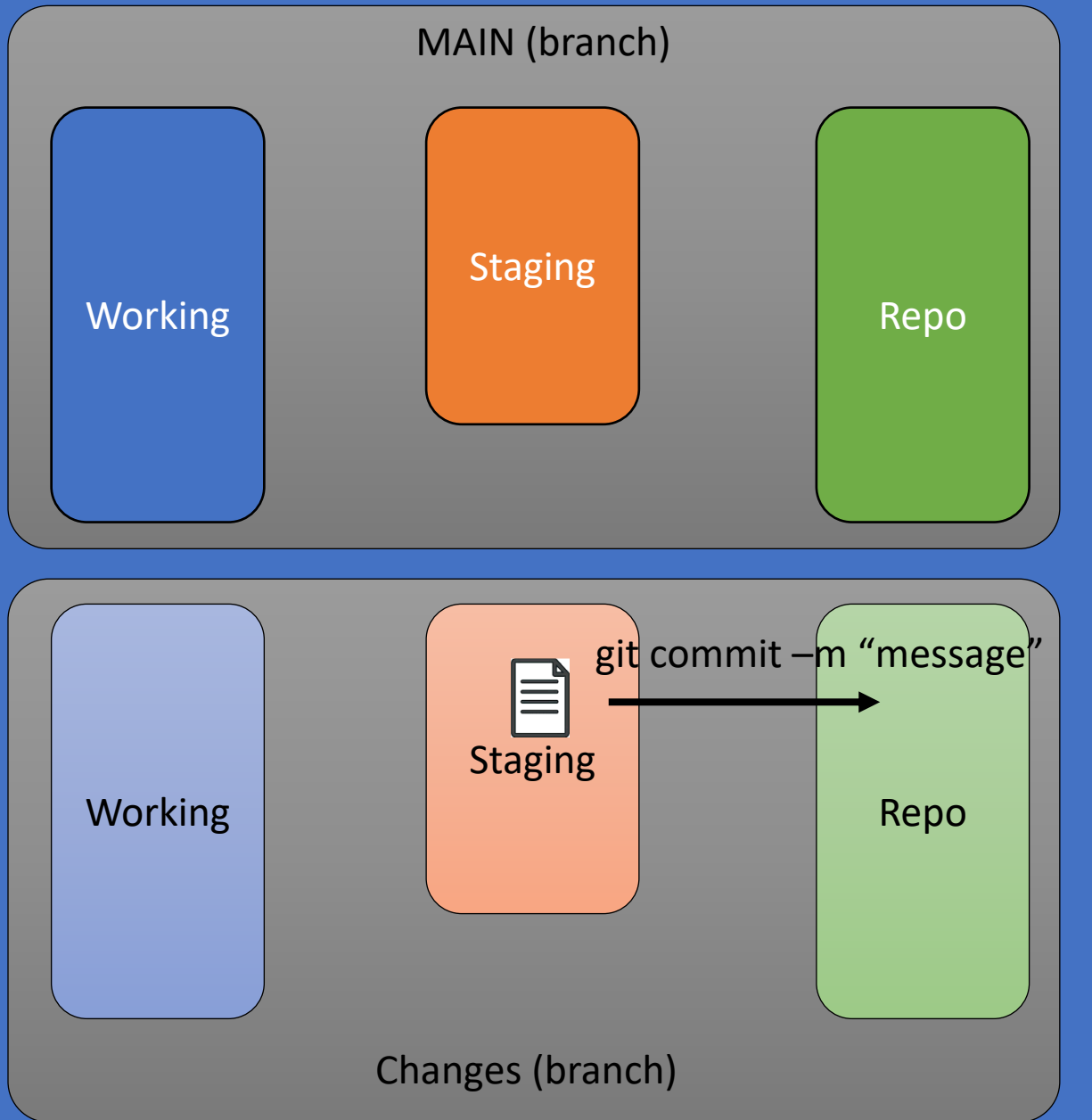
# Local Repository



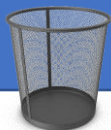
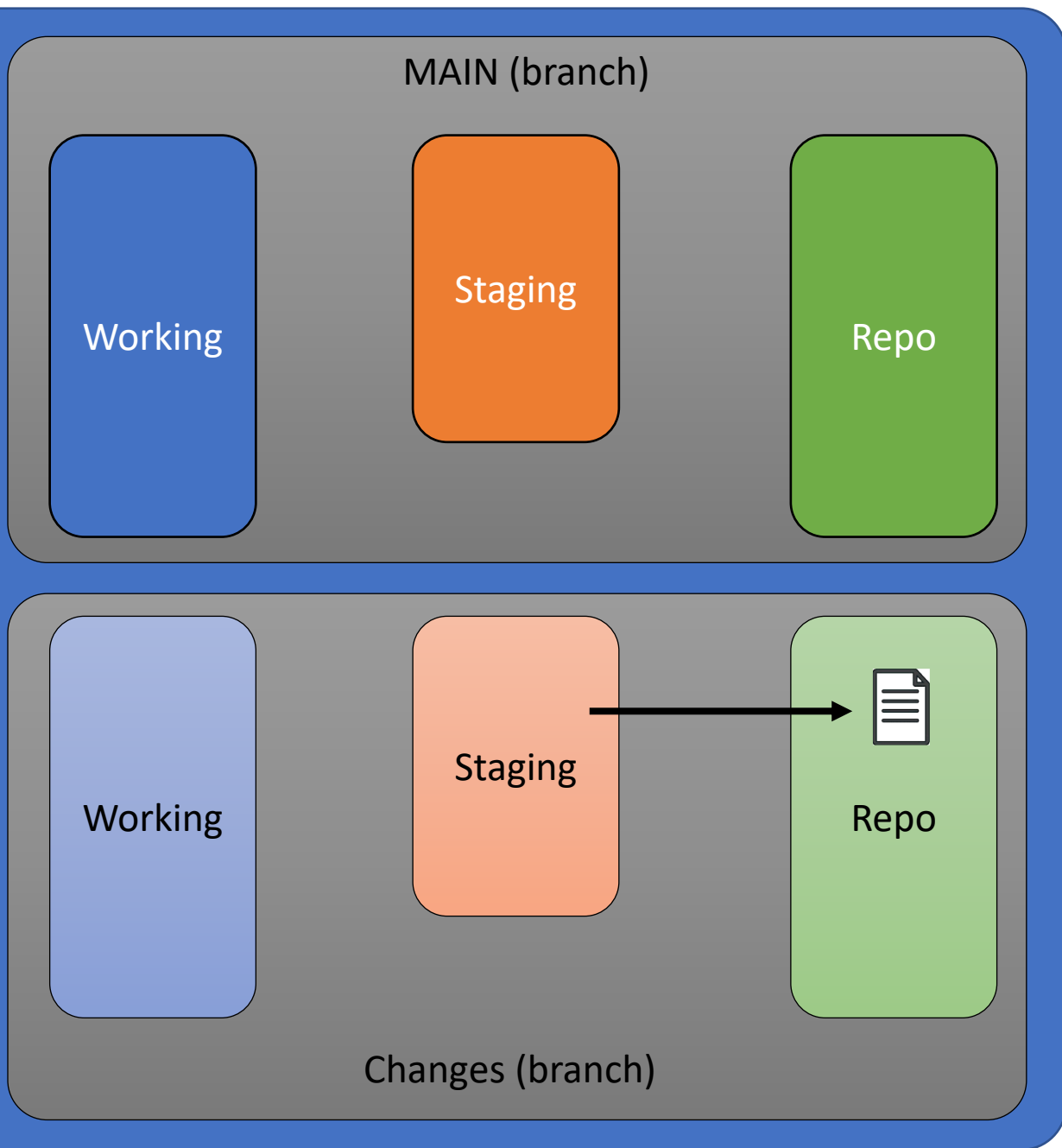
# Local Repository



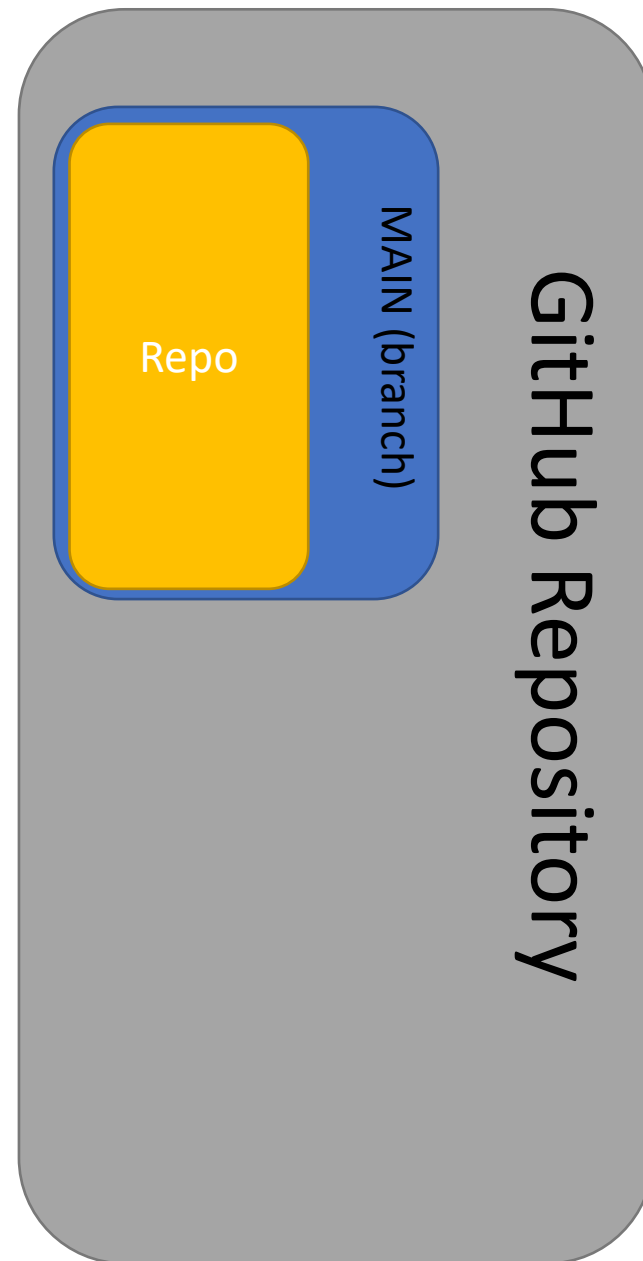
# Local Repository



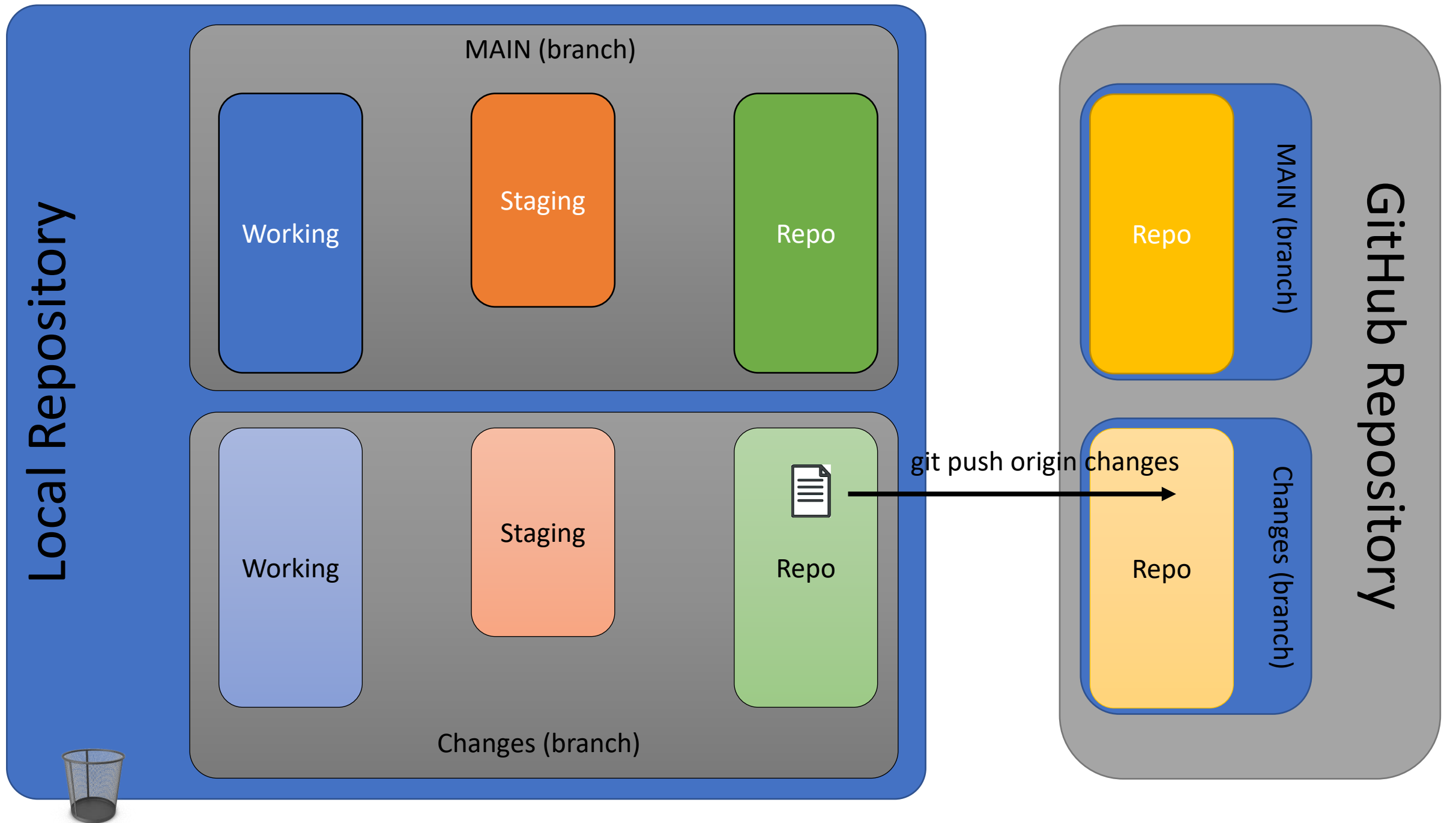
# Local Repository

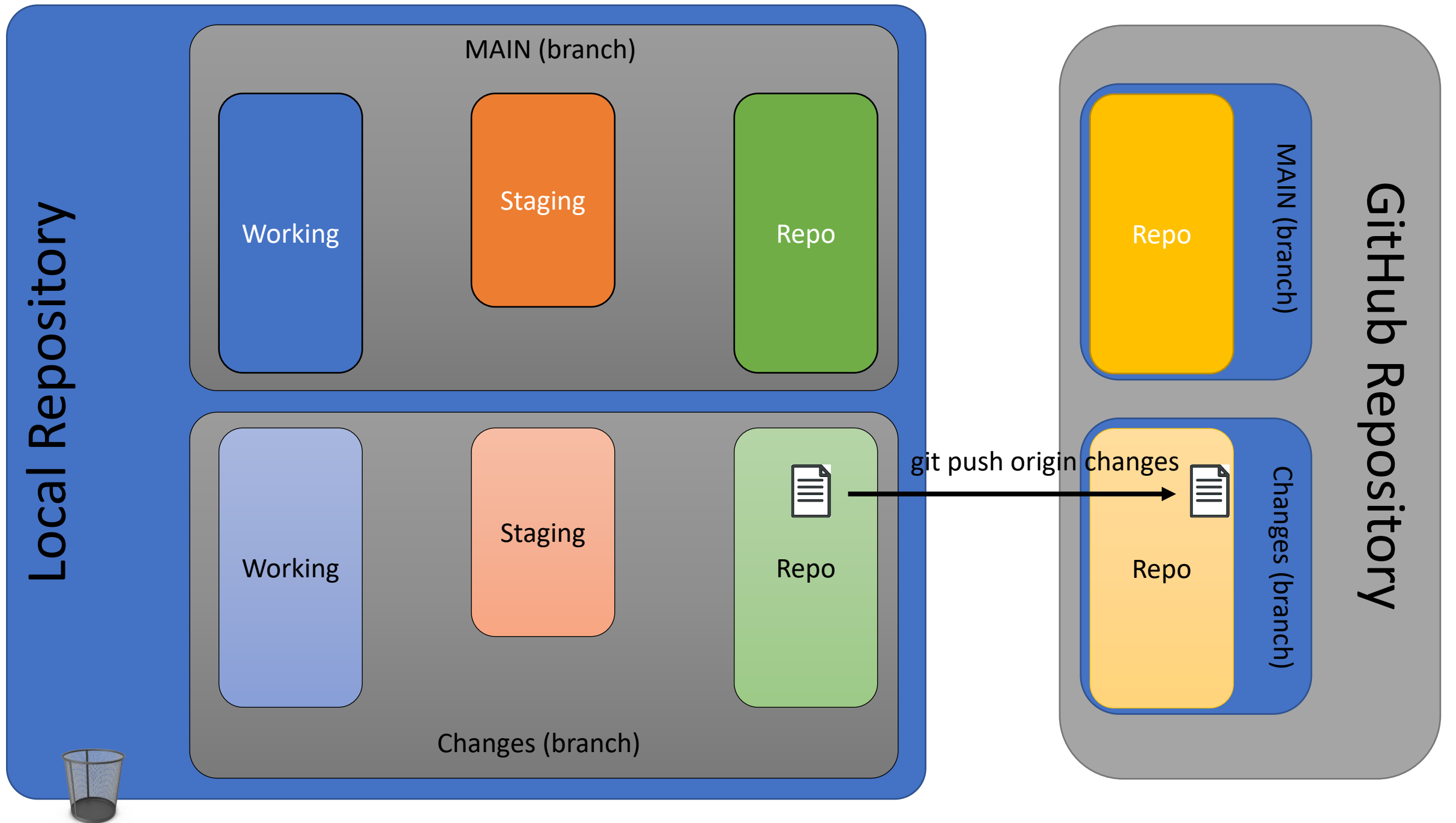


# GitHub Repository









# Local Repository

MAIN (branch)

Working

Staging

Repo

Working

Staging

Repo

Changes (branch)



# GitHub Repository

MAIN (branch)

Repo

Changes (branch)

Make  
Pull  
Request  
Repo



# Local Repository

MAIN (branch)

Working

Staging

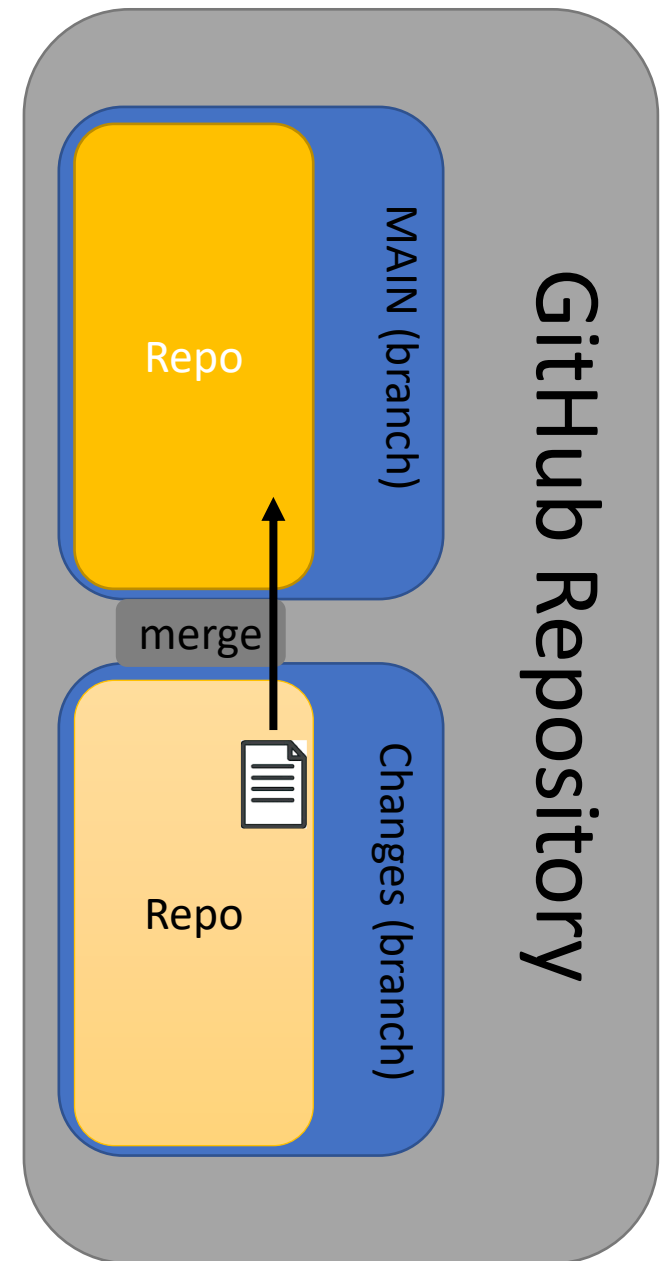
Repo

Working

Staging

Repo

Changes (branch)



# Local Repository

MAIN (branch)

Working

Staging

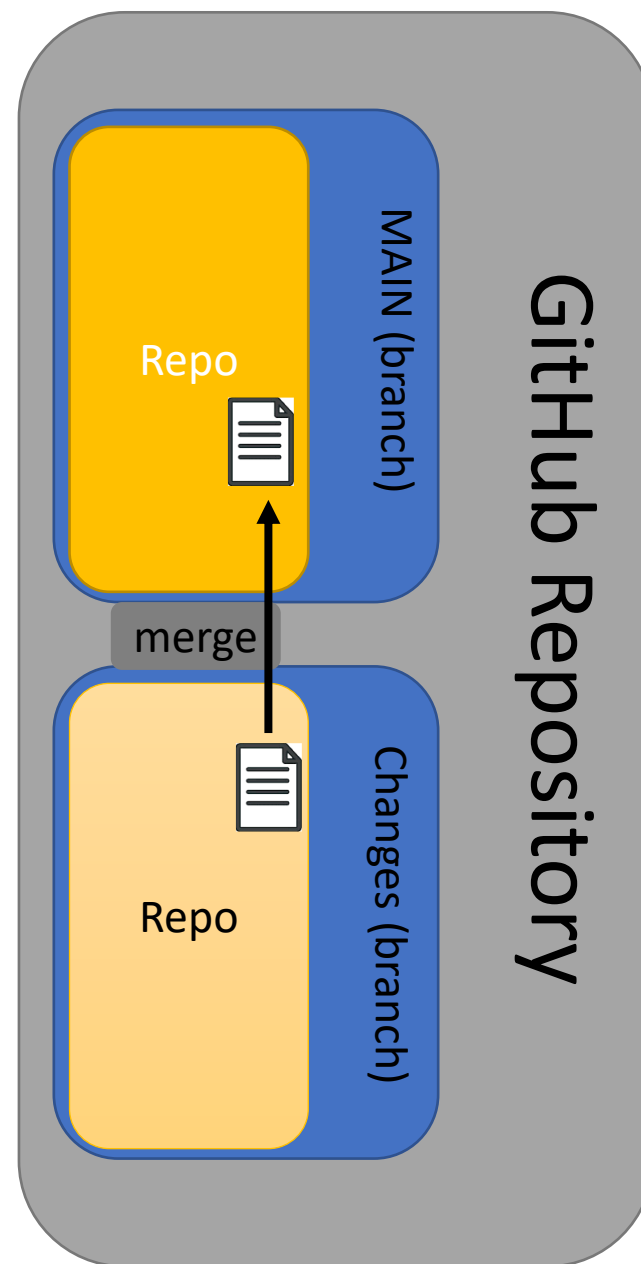
Repo

Working

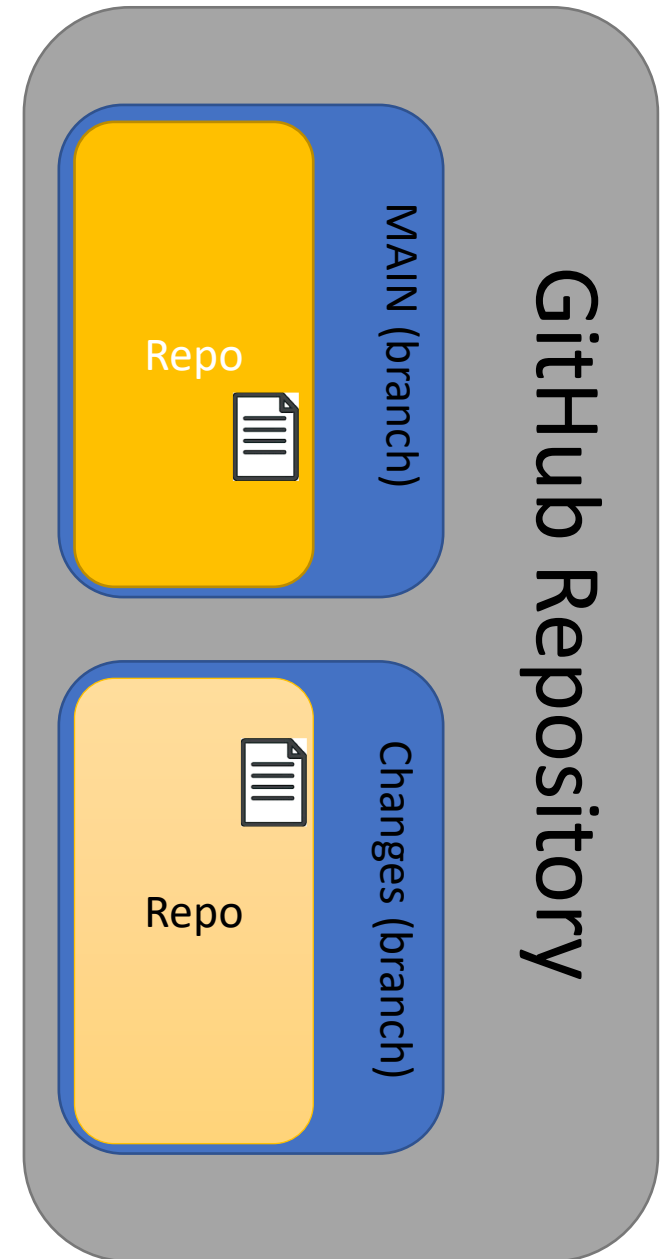
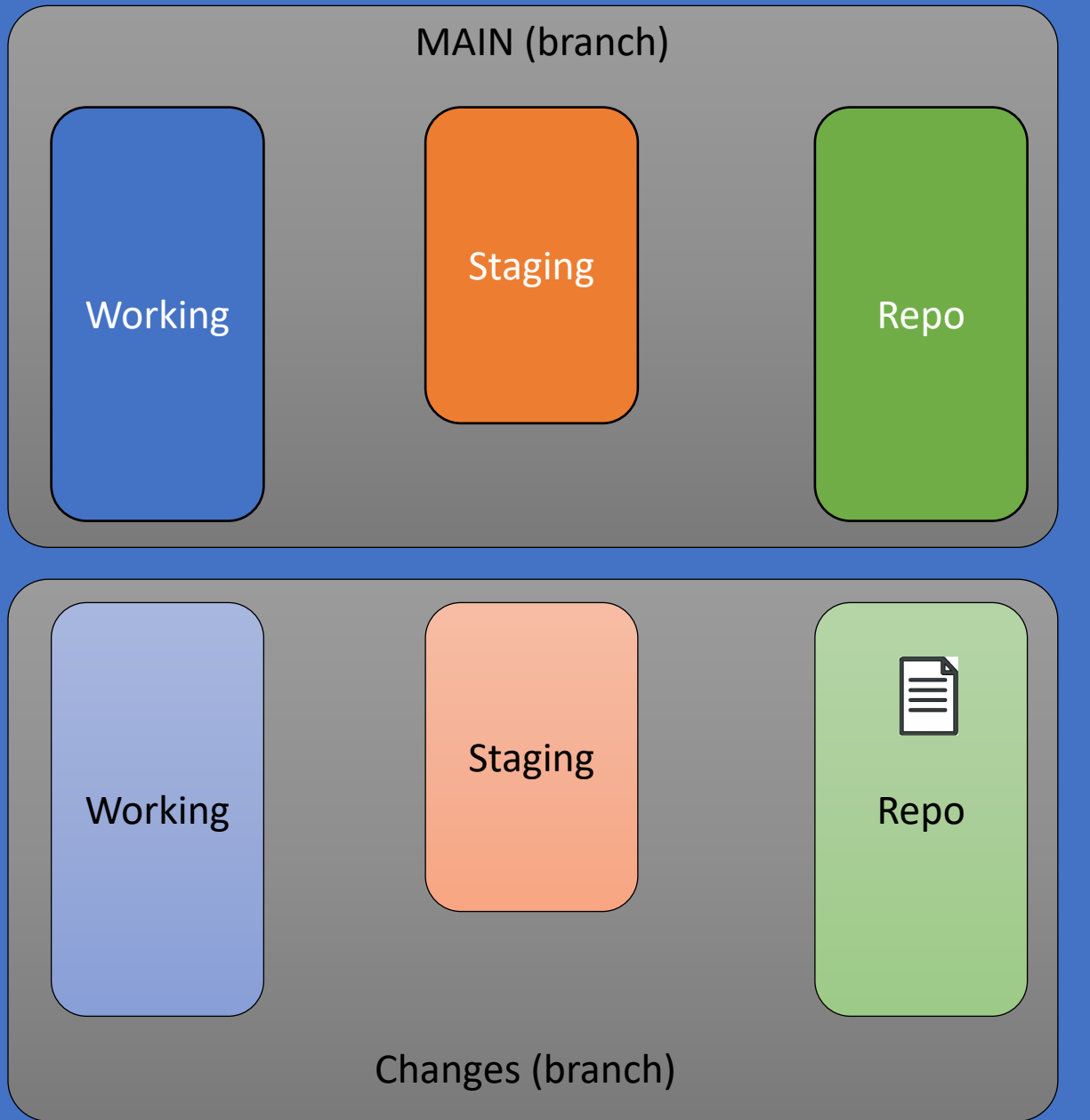
Staging

Repo

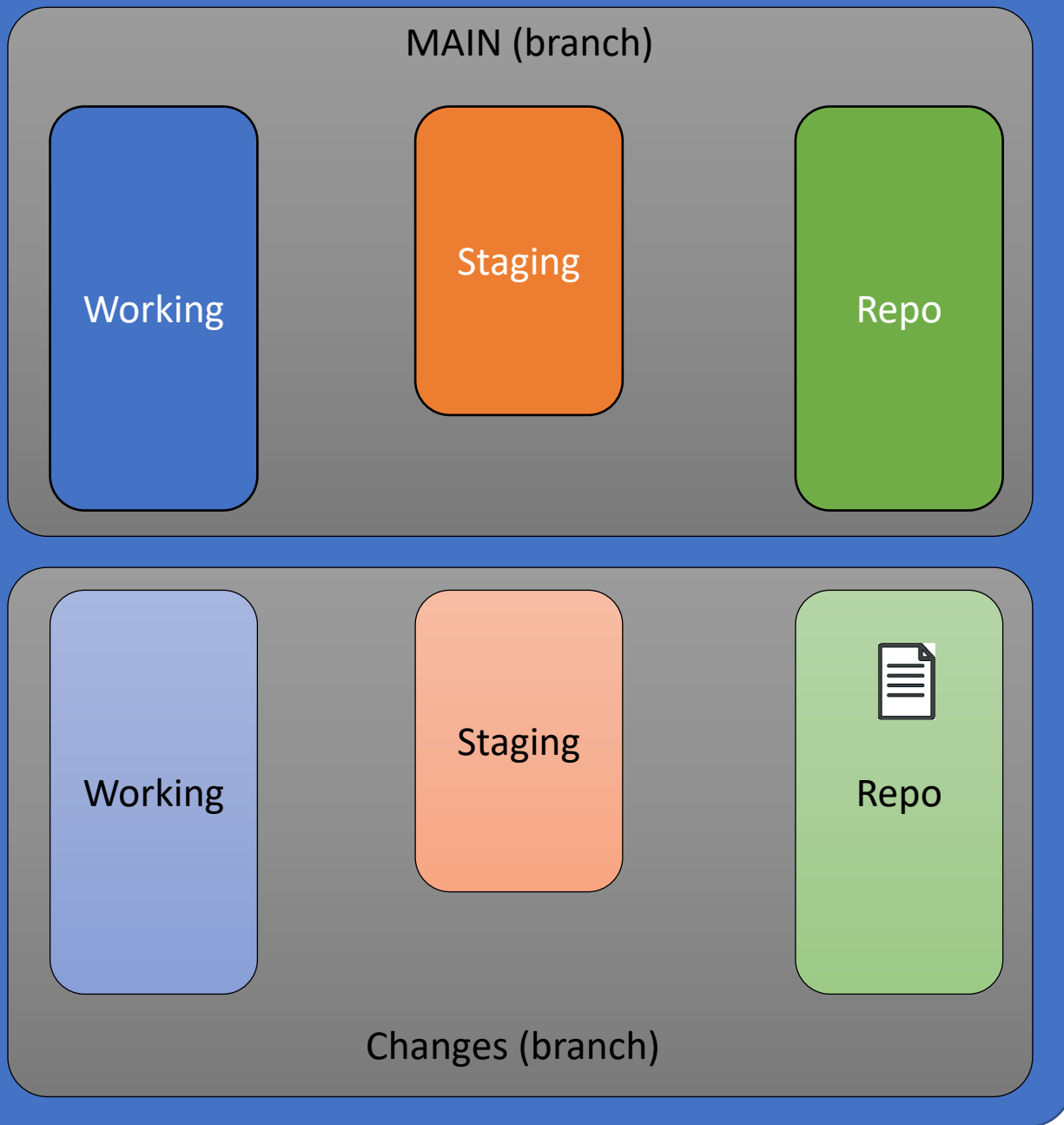
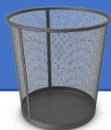
Changes (branch)



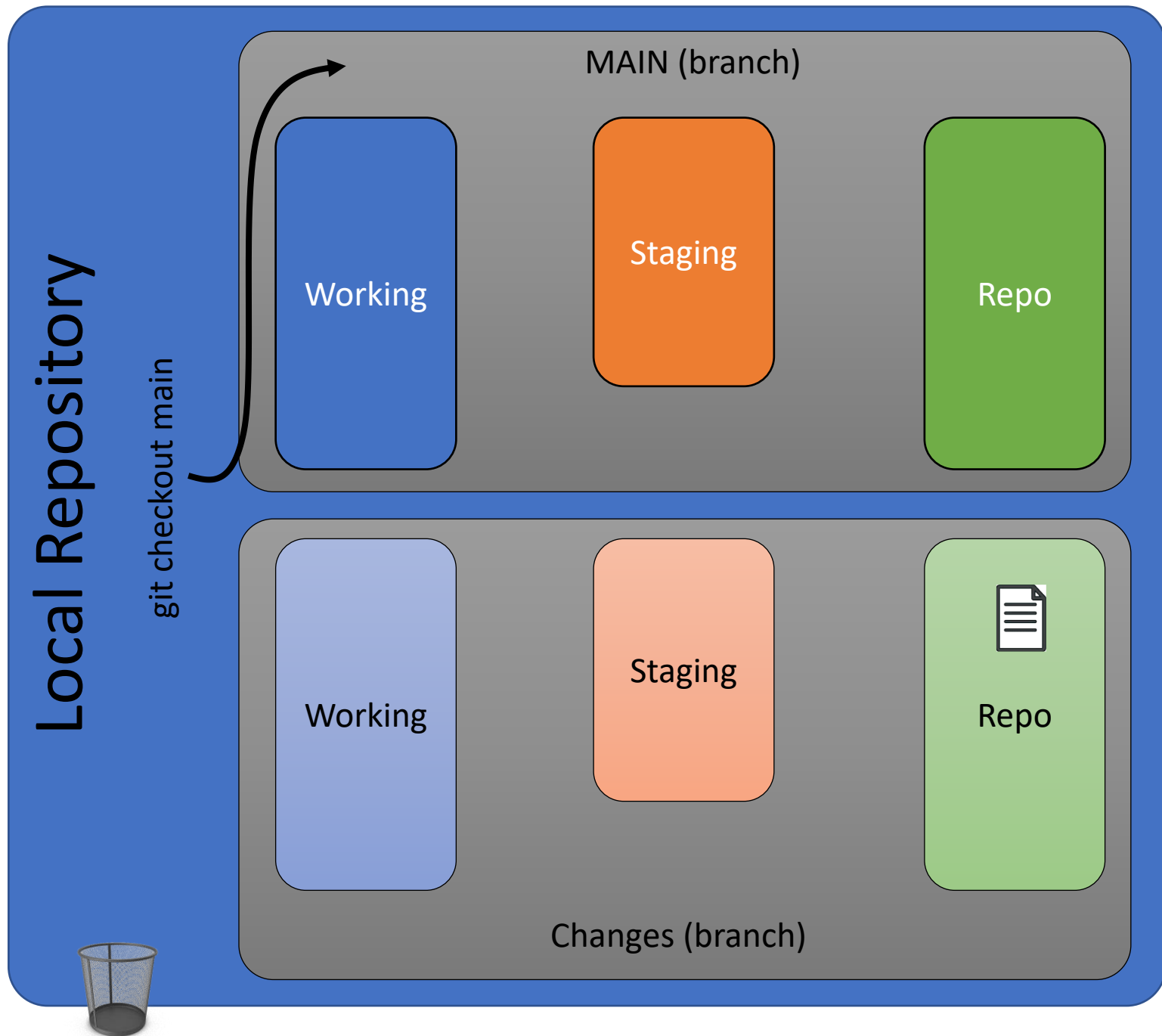
# Local Repository



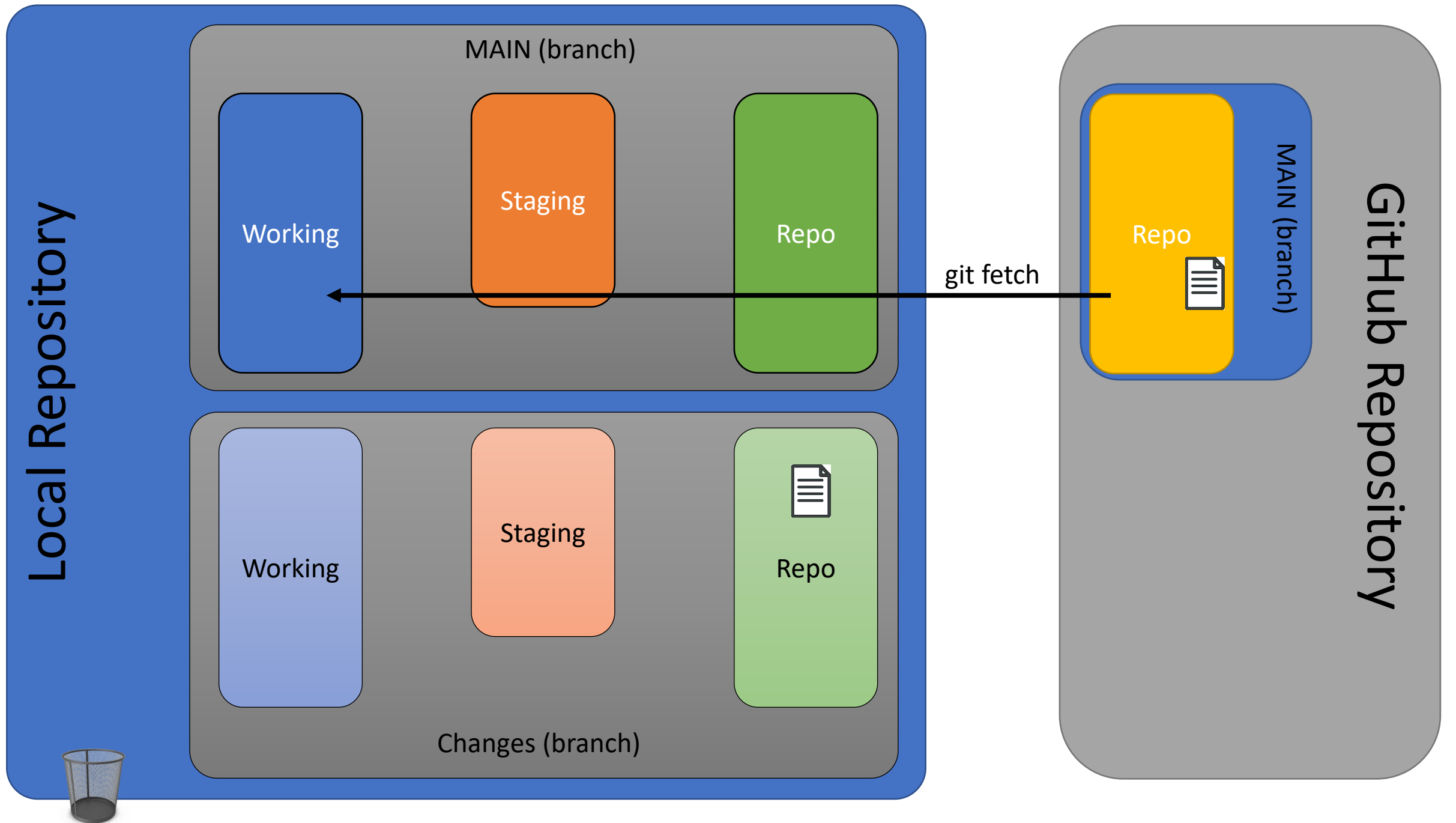
# Local Repository

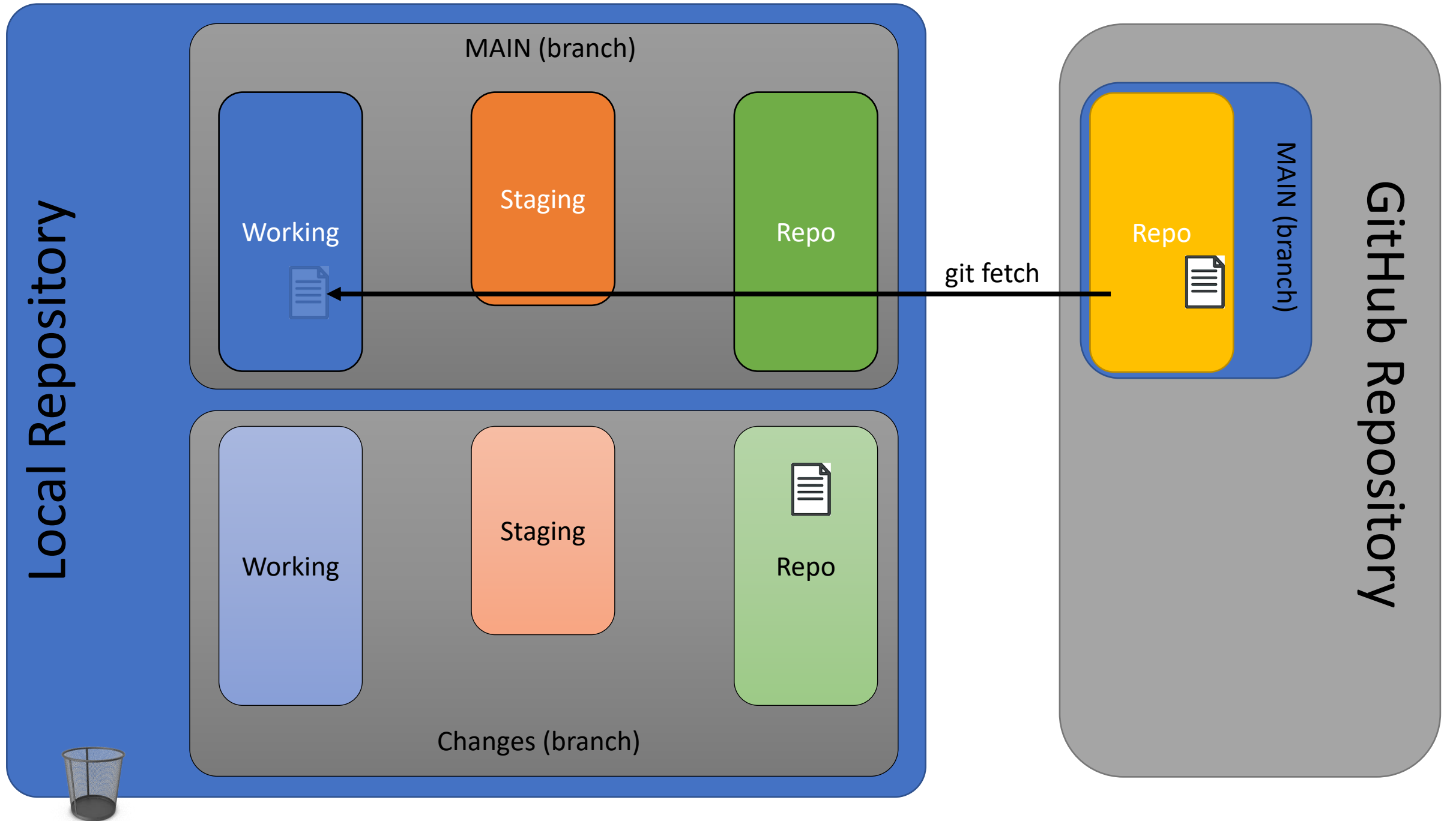


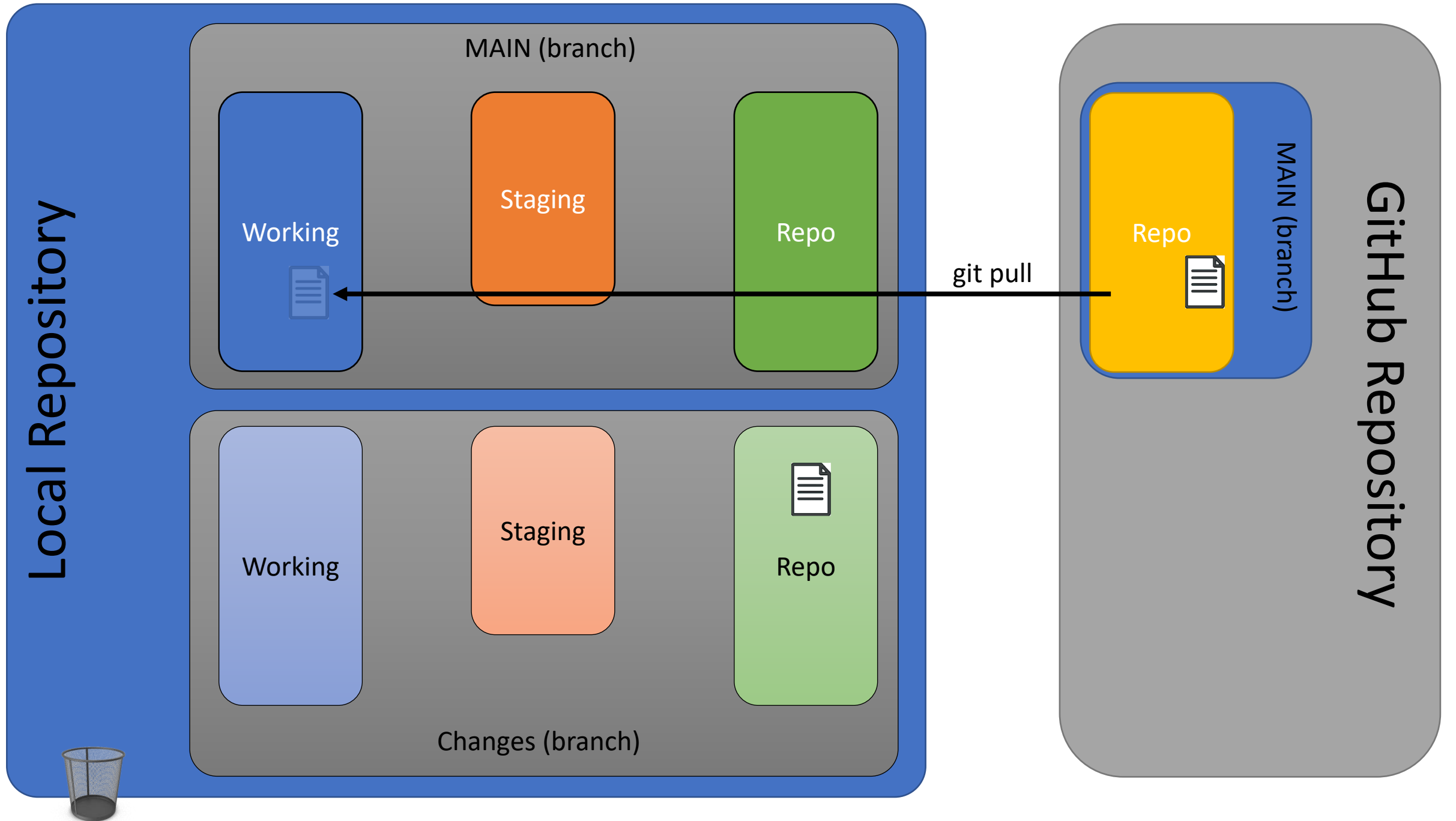
# GitHub Repository











# Local Repository

MAIN (branch)

Working

Staging

Repo

git pull

Repo

MAIN (branch)

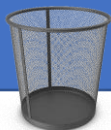
# GitHub Repository

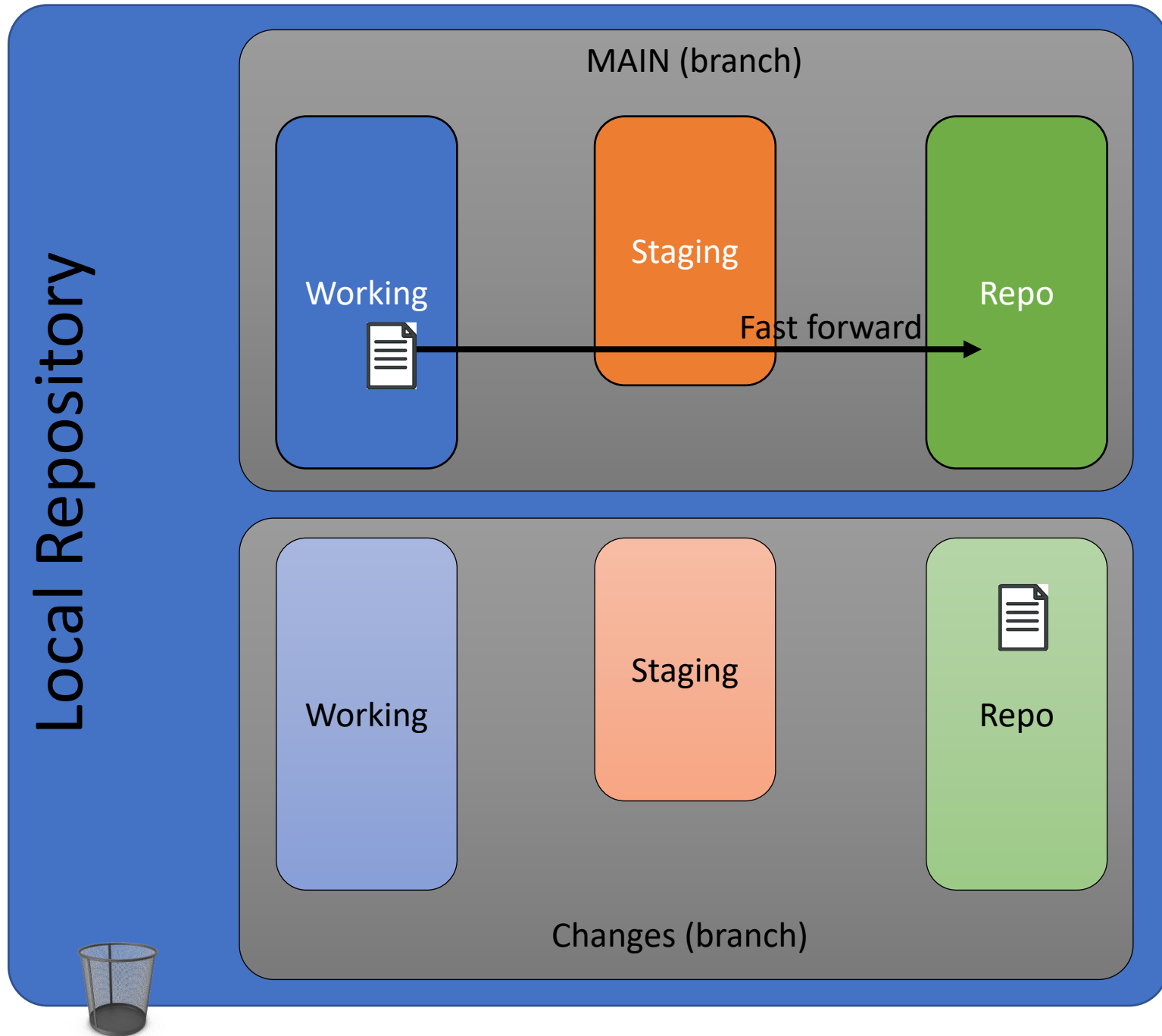
Working

Staging

Repo

Changes (branch)

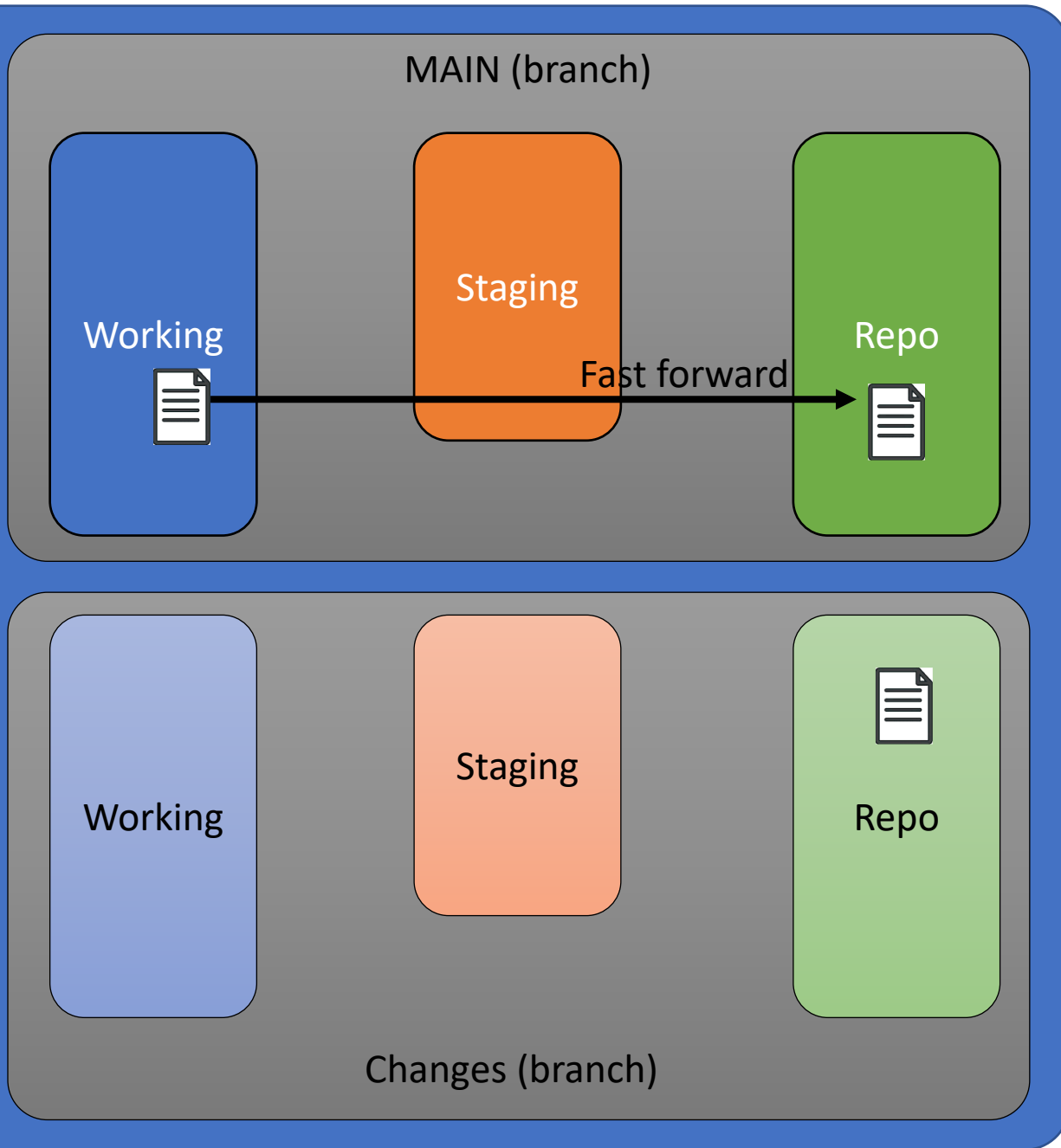
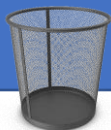




git pull



# Local Repository

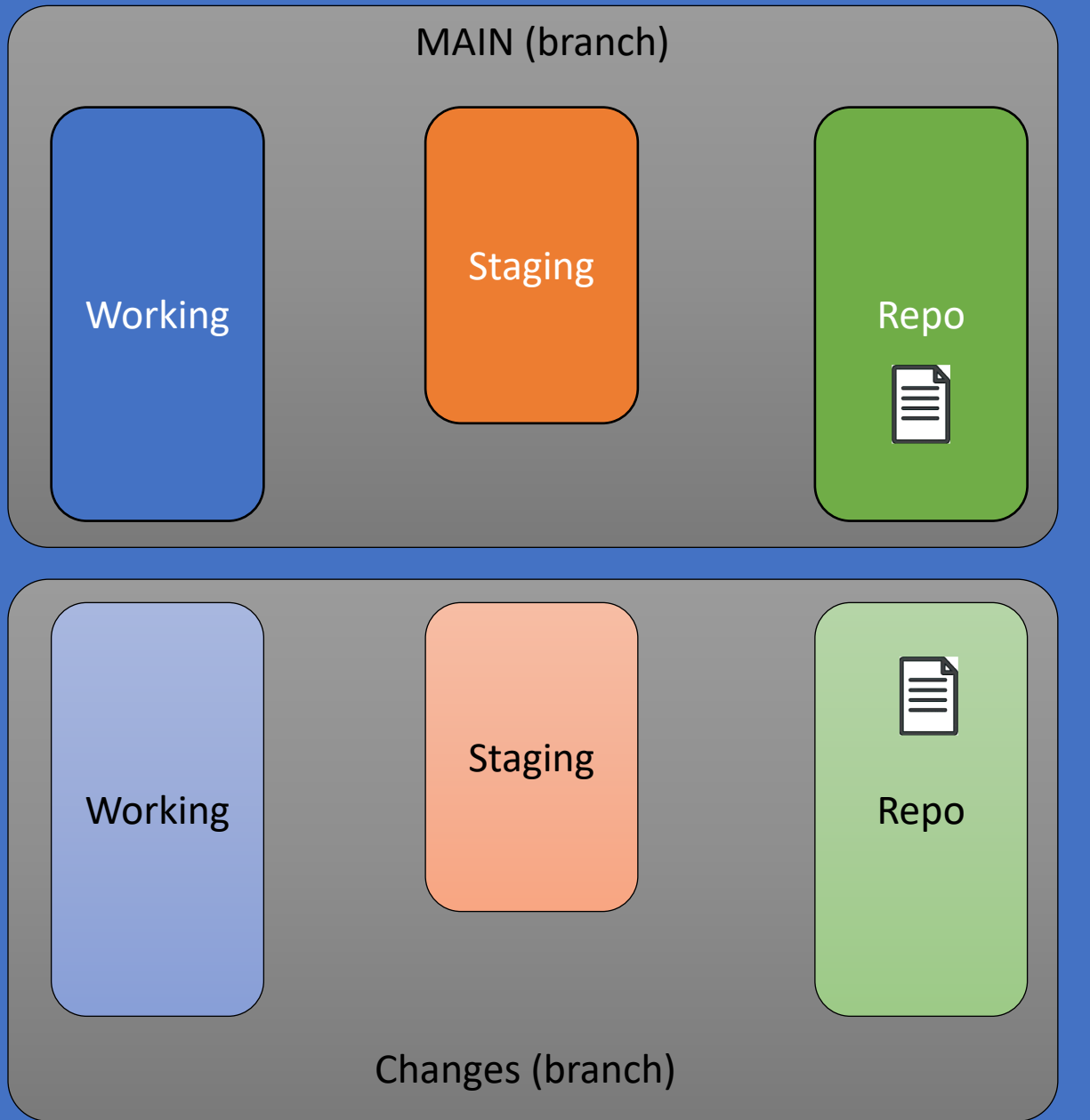


git pull



# GitHub Repository

# Local Repository



# GitHub Repository

# Local Repository

git branch -d changes

Working

MAIN (branch)

Staging

Repo

Working

Staging

Repo

Changes (branch)



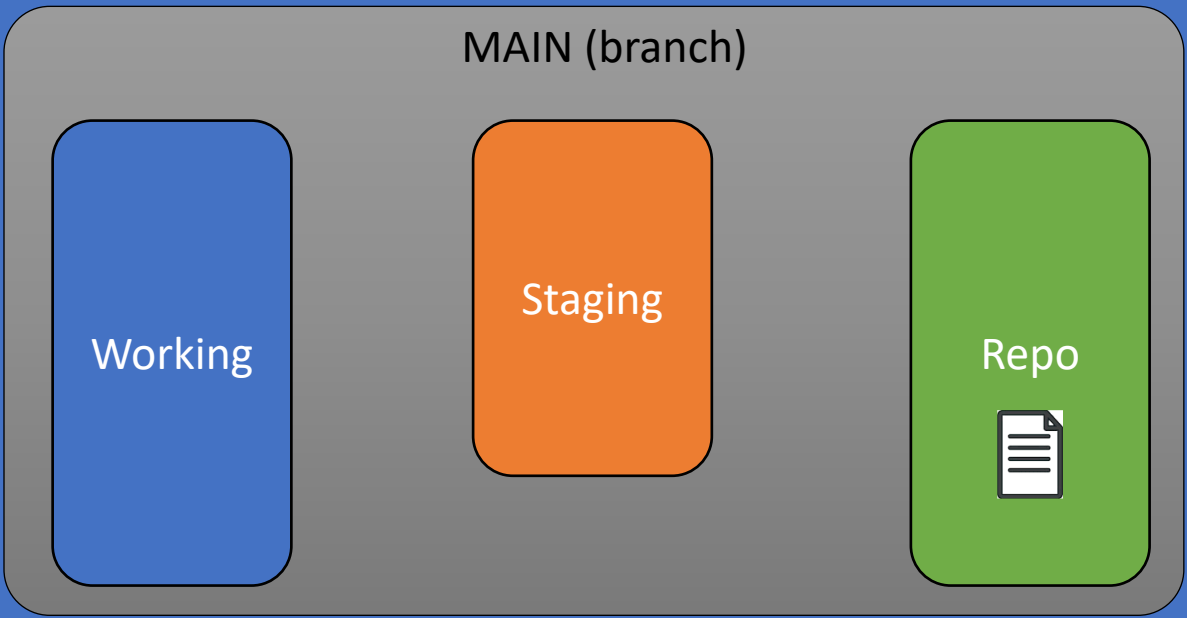
Repo

MAIN (branch)

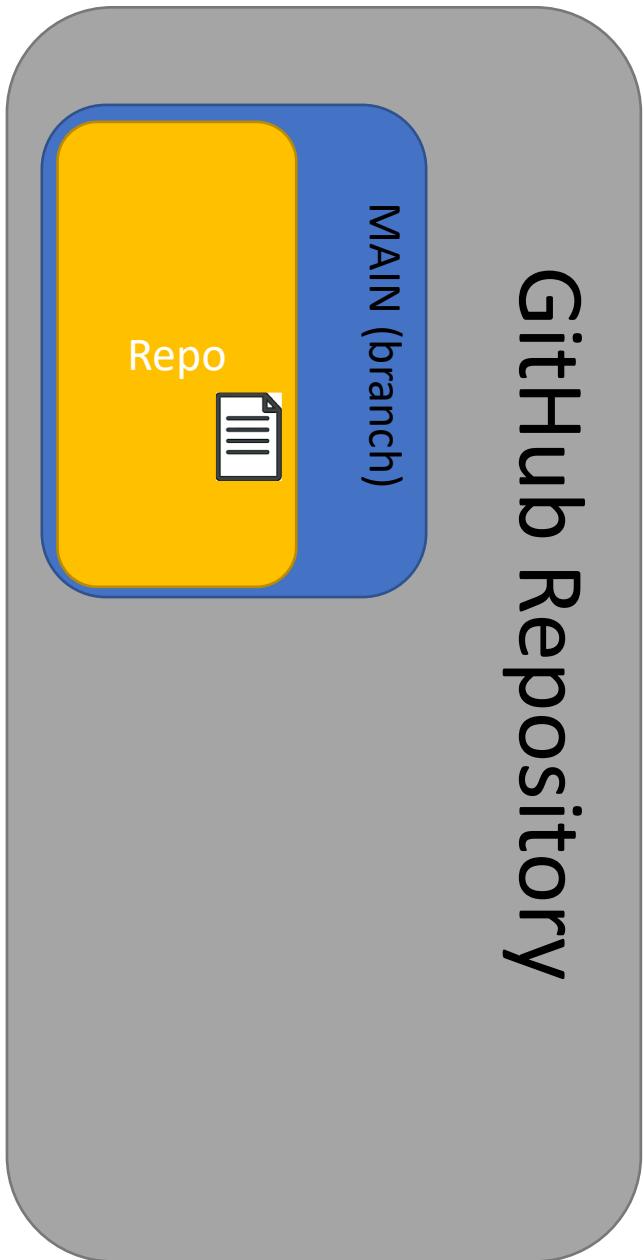
# GitHub Repository



# Local Repository



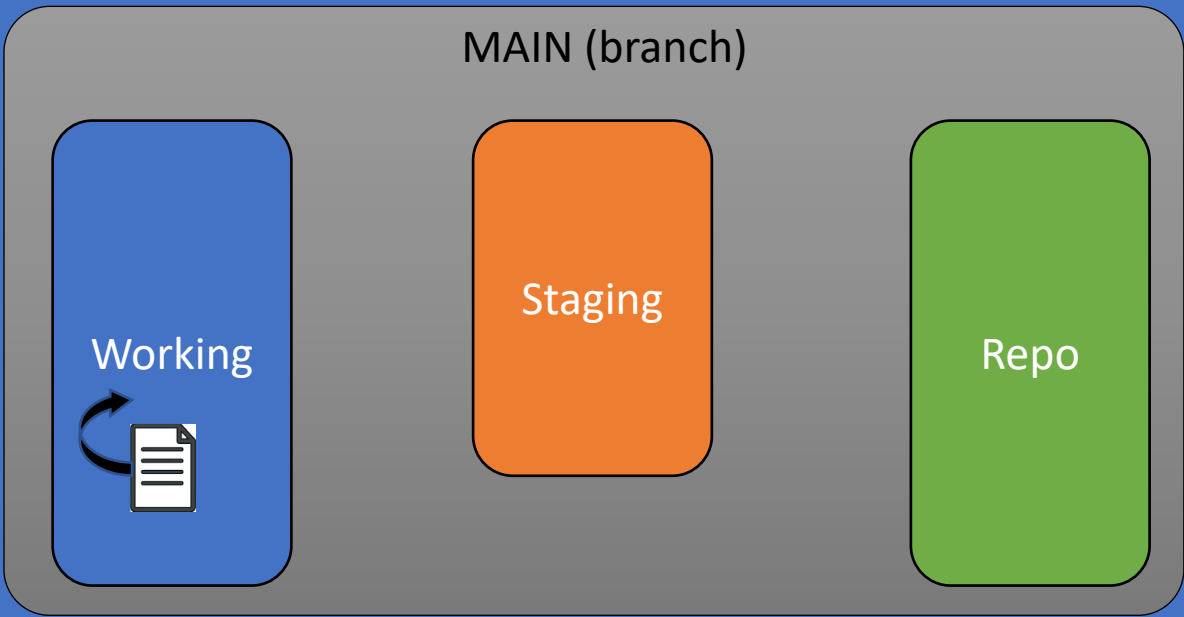
# GitHub Repository



# Reverse git commands

- git restore
- git reset

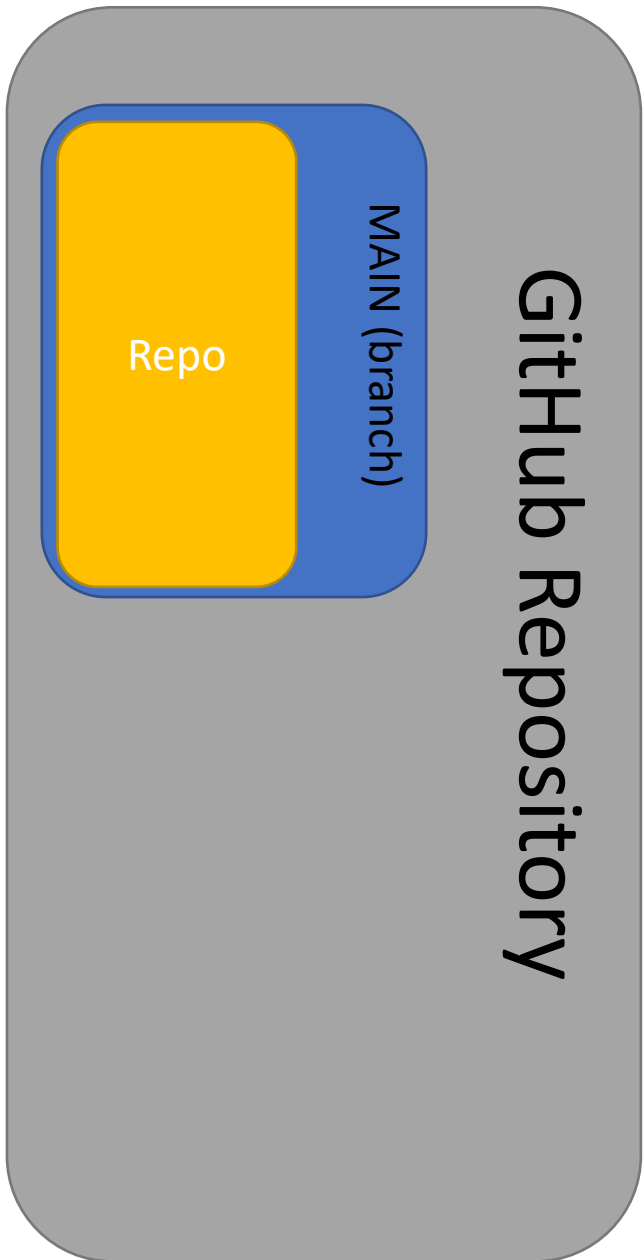
# Local Repository



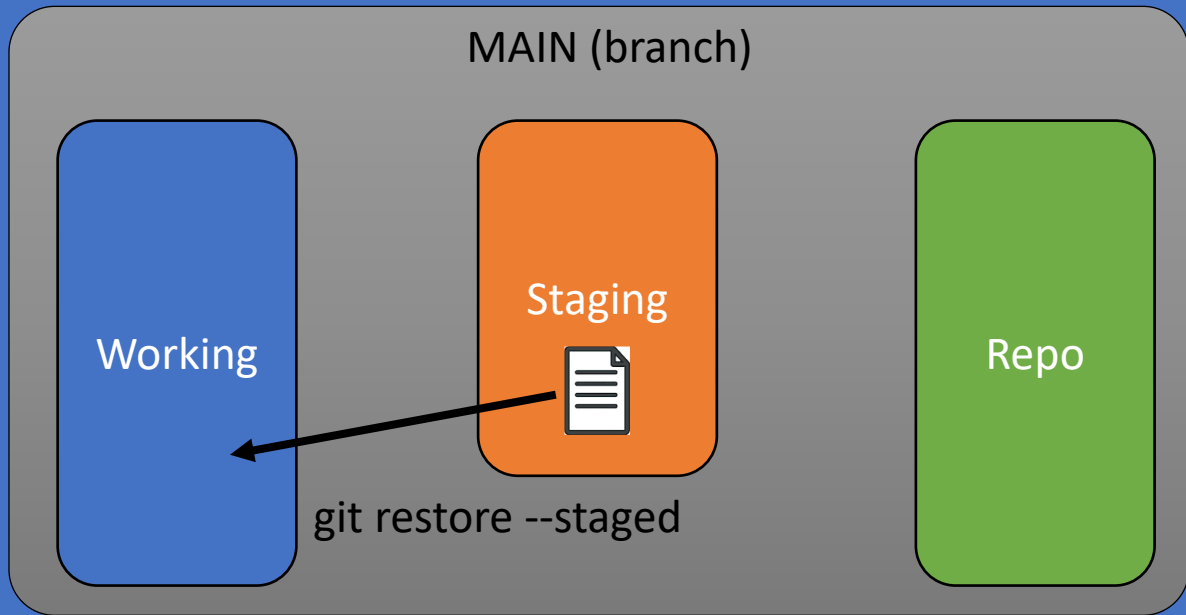
git reset --hard



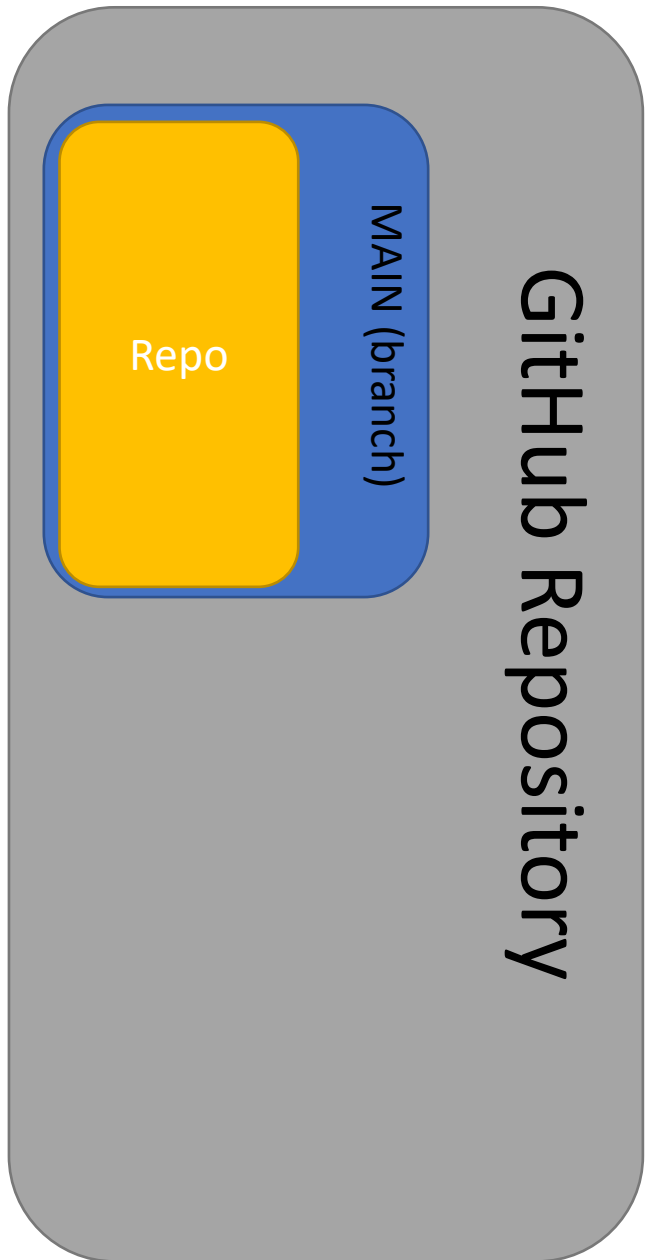
# GitHub Repository



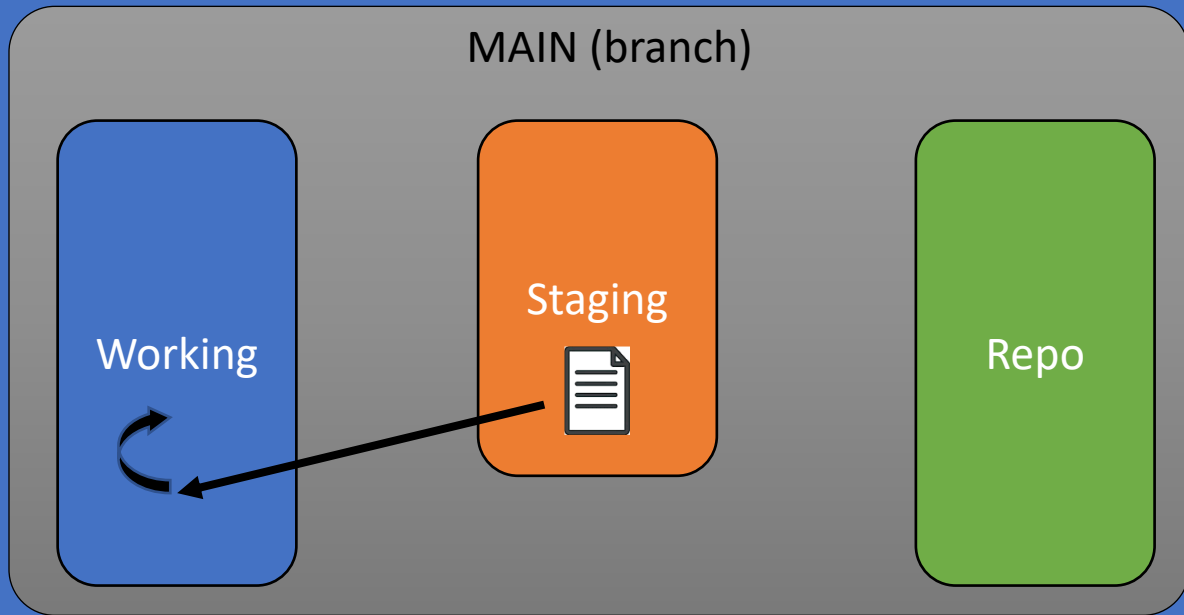
# Local Repository



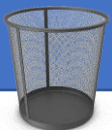
# GitHub Repository



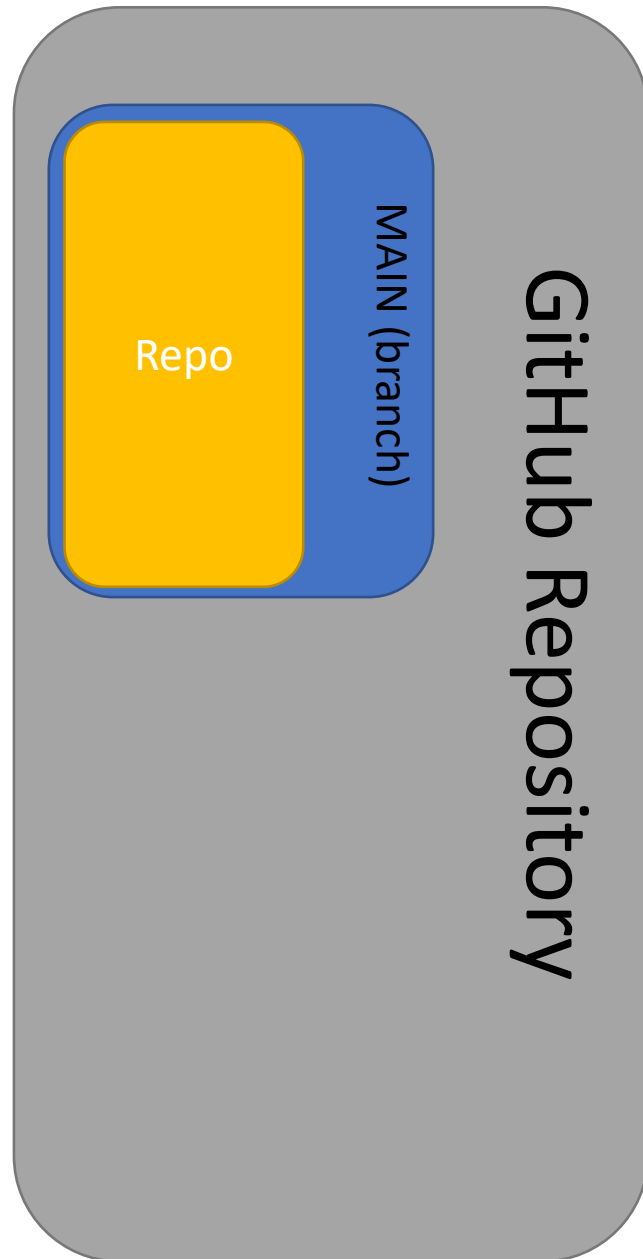
# Local Repository



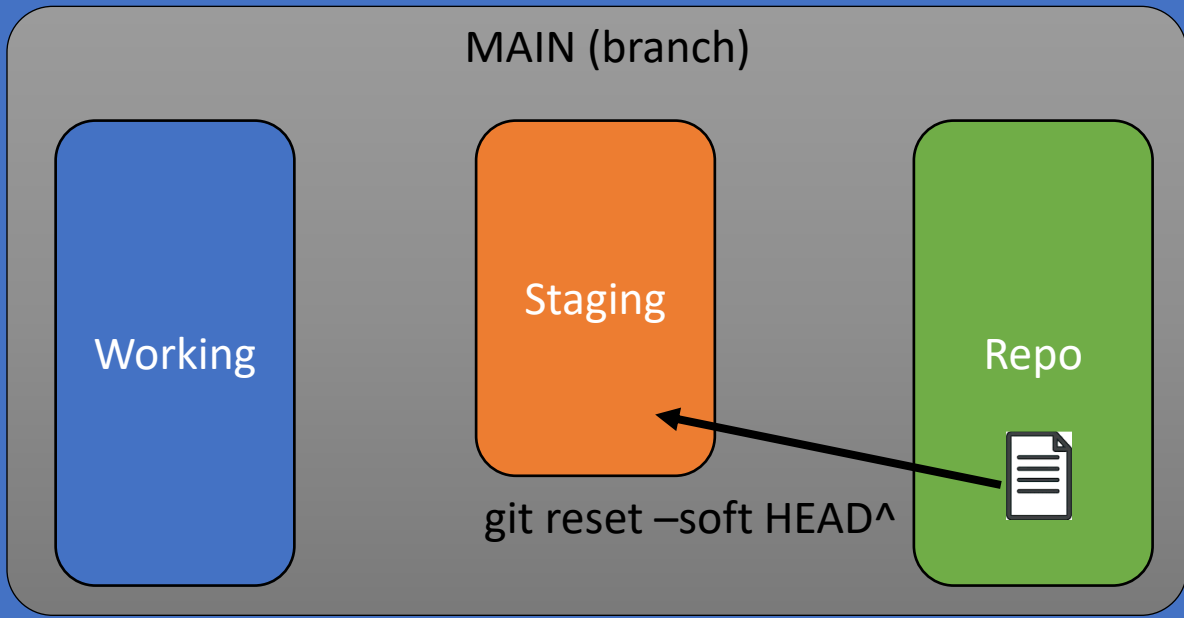
git reset --hard



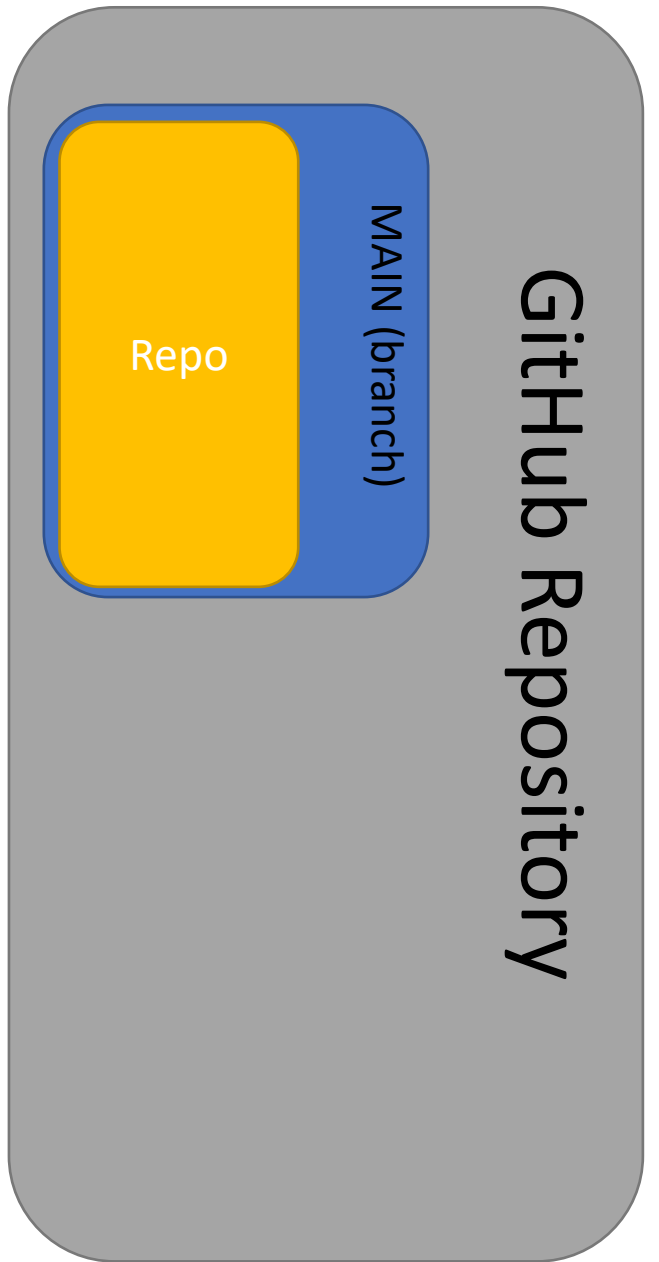
# GitHub Repository



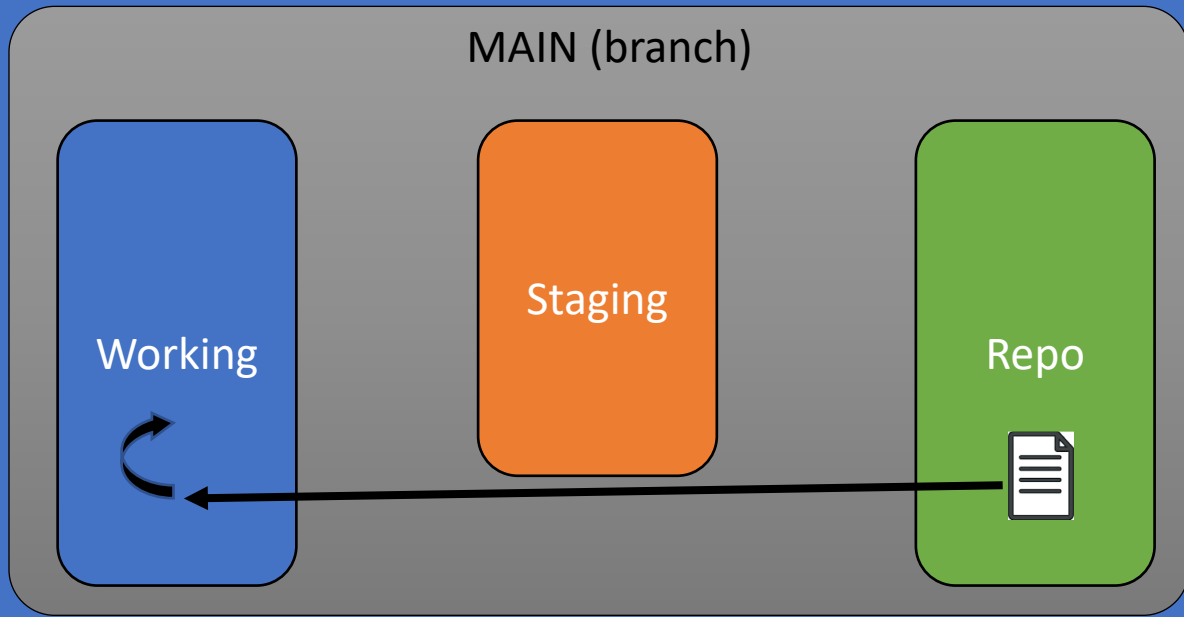
# Local Repository



# GitHub Repository



# Local Repository



git reset --hard HEAD^



# GitHub Repository

