

`git checkout -- fileName`作用：丢弃掉相对于暂存区中最后一次添加的文件内容所做的变更

```
Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
$ git status
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)

        modified:   test.txt

no changes added to commit (use "git add" and/or "git commit -a")

Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
$ cat test.txt
hello
world
hello world
hello Java
hello python

Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
$ git checkout -- test.txt

Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
$ git status
On branch master
nothing to commit, working tree clean

Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
$ cat test.txt
hello
world
hello world
hello Java

Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
```

修改之后如果将修改的内容提交到暂存区，则不能使用`git checkout -- fileName`丢弃变更

```
Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
$ cat test.txt
hello
world
hello world
hello Java
hello python

Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
$ git status
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)

        modified:   test.txt

no changes added to commit (use "git add" and/or "git commit -a")

Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
$ git add .

Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
$ git status
On branch master
Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)

        modified:   test.txt

Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
$ git checkout -- test.txt

Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
$ git status
On branch master
Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)

        modified:   test.txt

Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
$ cat test.txt
hello
world
hello world
hello Java
hello python

Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
```

```
Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
$ cat test.txt
hello
world
hello world
hello Java
hello python

Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
$ git status
On branch master
Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)

        modified:   test.txt

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)

        modified:   test.txt

Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
$ cat test.txt
hello
world
hello world
hello Java
hello python
hello scala

Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
$ git checkout -- test.txt

Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
$ git status
On branch master
Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)

        modified:   test.txt

Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
$ cat test.txt
hello
world
hello world
hello Java
hello python

Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
```

`git reset HEAD fileNmae`作用：将之前添加到暂存区（stage, index）的内容从暂存区移除到工作区 `git reset HEAD fileName`将提交到暂存区的变更从暂存区中移出，此时可以使用`git checkout -- fileName`

丢弃变更

```
Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
$ git status
On branch master
Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)

        modified:   test.txt

Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
$ cat test.txt
hello
world
hello world
hello Java
hello python

Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
$ git reset HEAD test.txt
Unstaged changes after reset:
M       test.txt

Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
$ git status
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)

        modified:   test.txt

no changes added to commit (use "git add" and/or "git commit -a")

Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
$ git checkout -- test.txt

Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
$ git status
On branch master
nothing to commit, working tree clean

Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
$ cat test.txt
hello
world
hello world
hello Java

Administrator@MS-20170722ZJNZ MINGW64 /f/mygit (master)
```

`git stash`将当前在分支上一切的修改状态临时保存起来，在未来的某一时刻就可以恢复出来，`git stash list`将当前所有的保存状态列出来，`git stash pop`将最新的一次保存状态恢复出来，同时将保存的临时状态给删除掉，`git stash apply`将之前保存的状态恢复过来，但是不删除stash保存的临时状态

保存现场工作

- 保存现场
 - `git stash`
 - `git stash list`
- 恢复现场
 - `git stash apply`（stash内容并不删除，需要通过`git stash drop stash@{0}`手动删除）
 - `git stash pop`（恢复的同时也将stash内容删除）
 - `git stash apply stash@{0}`