



FEBRUARY 25, 2023

DevOps Classroomnotes 25/Feb/2023

Git Authentication Methods

- Git has two popular authentication methods
 - username and password/token
 - ssh key pair
- Creating a PAT for GitHub [Refer Here](#)
- Use ssh-keygen to generate id_rsa and id_rsa.pub files in <HOME-DIR>/.ssh
- copy the id_rsa.pub in GitHub => Settings => SSH and GPG keys => New SSH Key

Git Remote and Branches

- The command to push git push <remote-name> <branch-name>

Upstream branches

- In Git while pushing the code if we observe the following errors

```
$ git push
fatal: The current branch main has no upstream branch.
To push the current branch and set the remote as upstream, use

    git push --set-upstream origin main

See git-pull(1) for details.

    git pull <remote> <branch>

If you wish to set tracking information for this branch you can do so with
:

    git branch --set-upstream-to=origin/<branch> master
```

- By setting the upstream branch we are setting the default remote

Making changes in Local commits

- We have the latest commit in which there is typo in commit message which we want to correct

```
Dell@DESKTOP-TM7SH71 MINGW64 /c/temp/gitpractice/commitrework (master)
$ git log
commit 8775d46f1b8ad146a8ddeafd9e4ddc3f0ddb2e3d (HEAD -> master)
Author: shaikkhajaibrahim <qtikhajacloud@gmail.com>
Date: Sat Feb 25 08:07:14 2023 +0530

    aded main.py
```

```
Dell@DESKTOP-TM7SH71 MINGW64 /c/temp/gitpractice/commitrework (master)
$ git log --oneline
8775d46 (HEAD -> master) aded main.py

Dell@DESKTOP-TM7SH71 MINGW64 /c/temp/gitpractice/commitrework (master)
$ git commit --fixup=reword:8775d46
[master 5b03752] amend! aded main.py

Dell@DESKTOP-TM7SH71 MINGW64 /c/temp/gitpractice/commitrework (master)
$ git log --oneline
5b03752 (HEAD -> master) amend! aded main.py
8775d46 aded main.py

Dell@DESKTOP-TM7SH71 MINGW64 /c/temp/gitpractice/commitrework (master)
$
```

- Now i want to delete this extra commit and then fix typo

- Clone the code from [Refer Here](#)
- `git commit --amend` can be used to reword the latest commit not previous
- Look at classroom video to
- edit: make the changes in commit
- reword: change the commit message
- squash: combine commits
- Exercise: [Refer Here](#). Try to solve atleast 10 exercises.

Git Repository Types

- Bare Repository: This repository will have only .git folder no working tree. This is used generally on server sides on git remotes
- mirror Repository: This repository also will have only .git folder and used to cater to other users
- Normal Repository: Here we get working tree as well as .git and is used for development.

Other topics

- Force push `git push --force` this command pushes the changes to git remote and overrides the remote repo history.
- Git maintains two logs in your local repo
 - log
 - ref log: maintains the history of all changes done into local

```
Dell@DESKTOP-TW7SH71 MINGW64 /c/temp/gitpractice/RRR (main)
$ git reflog
deeeb97 (HEAD -> main, origin/main, origin/HEAD) HEAD@{0}: rebase (finish): returning to refs/heads/main
deeeb97 (HEAD -> main, origin/main, origin/HEAD) HEAD@{1}: rebase (start): checkout HEAD~2
bf86257 HEAD@{2}: clone: from https://github.com/GitPracticeRepo/RRR.git
```

- Try `git log` examples and `git diff` examples

Leave a Reply

Enter your comment here...

This site uses Akismet to reduce spam. [Learn how your comment data is processed.](#)



About continuous learner

devops & cloud enthusiastic learner

[VIEW ALL POSTS](#)

[◀ PREVIOUS POST](#)

[AWS Classroomnotes 24/Feb/2023](#)

[NEXT POST](#)

DevOps Classroomnotes 25/Feb/2023

