Git and GitHub

* Git
  + Configuration

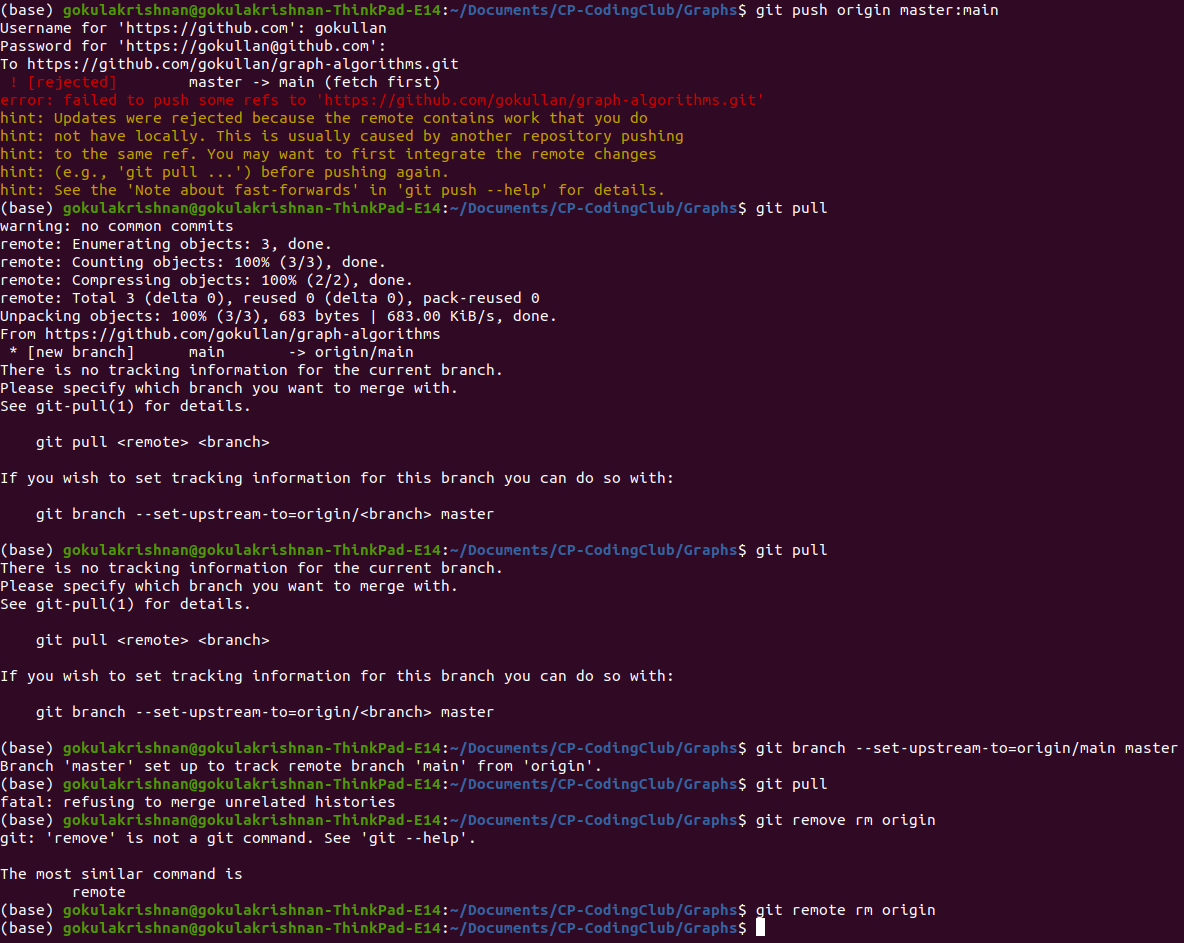
git config --local

* Repository
  + project folder in which changes are tracked by git
  + contains .git file (?)
  + can be locally stored or hosted on GitHub
  + git init
* Stages
  + Modified (green) - > Staging -> Commit(snapshot at that particular point)
  + Commit => take everything from staging area and make a “save-point”
* Creating a repository – git init
* Staging files
  + git status
  + Add to staging: git add <file> (Add everything to staging: git add . )
  + Remove from staging: git rm –cached <file>
  + Adding files to the staging area allows us to review the code before committing it (an extra blanket of security)
  + allows to have separate commits for separate changes
* Commit
  + git commit -m “<descriptive message of what the commit is about>”
  + To view commit history: git log (OR) git log --oneline
* Uploading to GitHub from a local repository
  + <https://docs.github.com/en/get-started/importing-your-projects-to-github/importing-source-code-to-github/adding-locally-hosted-code-to-github>
  + Note: git push --set-upstream origin master
  + Using personal access tokens (ghp\_iAXSoi7lqDy35wzQJbvJr96AhC9M3z3YhZGV) – <https://docs.github.com/en/authentication/keeping-your-account-and-data-secure/creating-a-personal-access-token>
* Changing remote repository
  + git remote set-url origin <NEW\_URL> && git remote -v
  + <https://docs.github.com/en/get-started/getting-started-with-git/managing-remote-repositories>
* Rename branch
  + git branch -m <old\_name> <new\_name>
  + <https://stackoverflow.com/questions/6591213/how-do-i-rename-a-local-git-branch>
* Switch branch
  + git checkout new\_branch (?)
* refusing to merge unrelated histories – <https://stackoverflow.com/questions/37937984/git-refusing-to-merge-unrelated-histories-on-rebase>
* git clone vs. git init
* git pull vs. git fetch
* --set-upstream / --set-upstream-to: <https://stackoverflow.com/questions/18031946/what-does-set-upstream-do>
* checkout
* origin vs. upstream – <https://stackoverflow.com/questions/9257533/what-is-the-difference-between-origin-and-upstream-on-github>
* Different branch names in local and remote repository – https://stackoverflow.com/questions/19154302/git-push-to-specific-branch

git push origin localBranch:remoteBranch

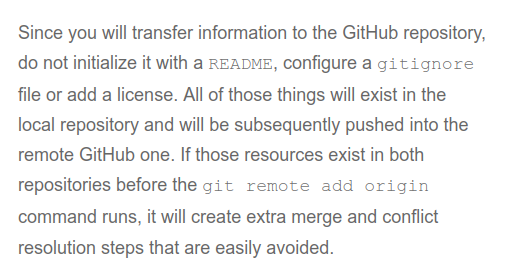
* Renaming a branch – <https://docs.github.com/en/repositories/configuring-branches-and-merges-in-your-repository/managing-branches-in-your-repository/renaming-a-branch>
* Make a new branch
  + git checkout -b branch-name
* Using git with Jupyter Notebook/ Colab
  + <https://blog.reviewnb.com/jupyter-version-control/>
  + <https://colab.research.google.com/github/googlecolab/colabtools/blob/master/notebooks/colab-github-demo.ipynb#scrollTo=8QAWNjizy_3O>
* Remove origin: git remote rm origin
* Remove version tracking: rm -rf .git
* Searching for issuses
  + https://docs.github.com/en/search-github/searching-on-github/searching-issues-and-pull-requests
* Creating pull requests
  + <https://youtu.be/8A4TsoXJOs8>
  + Linking a PR to an issue – <https://docs.github.com/en/issues/tracking-your-work-with-issues/linking-a-pull-request-to-an-issue>
* Commit messages
  + <https://www.conventionalcommits.org/en/v1.0.0/>

**Pushing from a local repository branch (master) to a (my) GitHub repository (set as remote origin) branch (main)**



Remeber when you want to **upload your local git repositiory to GitHub**

(Source: <https://www.theserverside.com/video/How-to-use-the-git-remote-add-origin-command-to-push-remotely> )



Rebasing

* “There isn’t anything to compare” – [git - Github Pull Request: There isn't anything to compare - Stack Overflow](https://stackoverflow.com/questions/53844405/github-pull-request-there-isnt-anything-to-compare)
* “You are currently editing a commit” – [git - How to get rid of "You are currently editing a commit"? - Stack Overflow](https://stackoverflow.com/questions/31252363/how-to-get-rid-of-you-are-currently-editing-a-commit)

Personal Access Tokens

* ghp\_iAXSoi7lqDy35wzQJbvJr96AhC9M3z3YhZGV
* ghp\_vC4DvYYEnxyoCuvxXcm588slvzyC9U3qkYEp
* ghp\_vrxLaZgCVud6f2t5Urg3zTqkBHBelQ2GUSNS
* ghp\_fuifp2zoTJopXZw7eA54x4Vo1uBYVd25TlZA
* ghp\_vAOlV5uzSwspGRF0A06XNCbWpHkqBw45cWd1
* ghp\_NoYMsjydZVCFmn6OXa5Pl4q3ikorTx4dsCHB
* ghp\_JLWBeOWv8NVOMRw0mlpmybXooxs6DO3wETnM

Meilisearch

--master-key BuDML6SBIbVeGPiute8gisixsBDMHGOxxCF\_uLqnl5M

Libreoffice

* New “stuff”
  + gerrit
  + logerrit
  + ssh (ed25519)
* EasyHacks – <https://wiki.documentfoundation.org/Development/EasyHacks>
  + Look at all links under `Getting Started`
* Generating SSH key – <https://www.mediawiki.org/wiki/SSH_keys#Generating_a_new_SSH_key>

(See ~/.ssh)

* Errors
  + Missing Change-ID in commit message – <https://stackoverflow.com/questions/8845658/gerrit-error-when-change-id-in-commit-messages-are-missing>