Git folder within Git Folder–Git Subtree Project and Draft

Go back to fan's Miscellaneous Repository.

Git subtree

Search

- git submodule
- Git subtree
- import subtree to existing repository
- import repo to existing repository as subtree

Issue

- There is a main folder, which is a git folder (code etc folder), shared in dropbox
- There is a remote repository (paper draft).
- Pull remote paper draft into git folder for whole project so remote repo for draft folder looks like a regular folder in dropbox in the shared master git repo folder with co-authors.

Solution

How to sync both folders properly? Traditional option is submodule, do not use that, use **subtree**, which is a standard feature for git since *v1.7.11*.

Create subtree in existing repository

1. There is some git repository: *"C:/Users/fan/Documents/Dropbox (UH-ECON)/Project Emily Minority Survey/"*
   - make sure the repository does has been synced, no uncommited changes
2. Add remote git url for draft folder
   - *git remote add github_draft git@github.com:FanWangEcon/ChinaSchoolClosure.git*
3. Suppose folder *Drafts_RR* is not in the repository yet, create subtree under that
   - *git subtree add –prefix=Drafts_RR/ github_draft master*: pull from master branch of remote repo github_draft defined in step 2, add remote repo files to Drafts_RR folder
4. now updates in github_draft repo are synced inside the github repo. but github_draft remains independently syncable with overleaf. So overleaf does not have to be synced to much larger non-tex folder.

Sync Subtree Changes with Folder and Sub folder.

1. make some changes in subfolder
2. sync with the github repo first, commit changes in the master folder first.
3. sync with subtre subfolder
   - *cd "C:/Users/fan/Documents/Dropbox (UH-ECON)/Project Emily Minority Survey/"*
   - *git subtree push –prefix=Drafts_RR github_draft master*

Commands Together

```
# Project git folder in dropbox
cd "C:/Users/fan/Documents/Dropbox (UH-ECON)/Project Emily Minority Survey/Drafts_RR"

# Add new paper draft remote url to project git remote urls
# github main is project repo url, github_draft is overleaf synced folder
git remote -v
git remote add github_draft git@github.com:FanWangEcon/ChinaSchoolClosure.git
git remote -v

# Add subtree, Drafts_RR should not exist yet
git subtree add --prefix=Drafts_RR github_draft


git subtree add --prefix "C:/Users/fan/Documents/Dropbox (UH-ECON)/Project Emily Minority Survey/Drafts_

git subtree split --prefix=Drafts_RR/ -b ChinaSchoolClosure
Do not use submodule
```

Console outputs

```
$ git subtree add --prefix=Drafts_RR/ github_draft master
git fetch github_draft master
Enter passphrase for key '/c/Users/fan/.ssh/id_rsa':
warning: no common commits
remote: Enumerating objects: 235, done.
remote: Counting objects: 100% (235/235), done.
remote: Compressing objects: 100% (177/177), done.
remote: Total 235 (delta 110), reused 133 (delta 50), pack-reused 0
Receiving objects: 100% (235/235), 3.02 MiB | 3.58 MiB/s, done.
Resolving deltas: 100% (110/110), done.
From github.com:FanWangEcon/ChinaSchoolClosure
 * branch            master      -> FETCH_HEAD
 * [new branch]      master      -> github_draft/master
Added dir 'Drafts_RR'
fan@LAPTOP-55QHS6DU MINGW64 ~/Documents/Dropbox (UH-ECON)/Project Emily Minority Survey (master)
$ ls
 Code/          Drafts/               Images/                        notes.md        'Possible Que
 CodeEdccRR/    Drafts_RR/            Log/                           onenote1.pdf    presentation
 comments/     'eth disparities irb'/  'Model Variables Graph Factory'/  onenote2.pdf   'R&R comments
 Data/          Feedback/            'Notes and drafts, language'/   Planning.xmind  README.md
 desktop.ini  'Government Documents'/ 'Notes and Papers'/             policies/      'Reference pa

fan@LAPTOP-55QHS6DU MINGW64 ~/Documents/Dropbox (UH-ECON)/Project Emily Minority Survey (master)
$ ls Drafts_RR
 _bib/  _fig/  _tab/  draft_main.pdf  draft_main.tex  fragments/  preamble_main.tex  sections/
```

Links

- Git Tools - Submodules

- Working with submodules
- 4 Git Submodules Alternatives You Should Know
- Git subtree: the alternative to Git submodule
  - instructions came from here
- What is Git subtree?
- git subtrees: a tutorial