Thursday, September 24, 2020

How to Use GitHub

Introduction to Git (Crash Course)

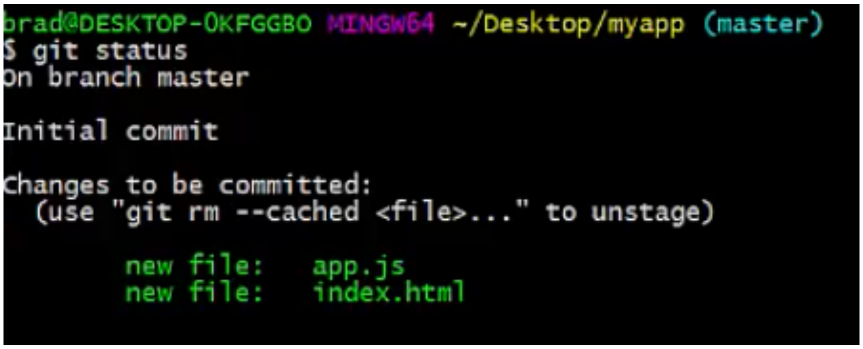
Git is a (decentralized) version control system

Concepts

- Record of code history
- “Snapshots” of your files — commits
- Revisit snapshots any time

Basic Commands (local)

- $git init //initialize local git repository } turns a folder into a local respository
- $git add <file> //add file to index } temporary location before files are committed
- $git status //displays difference between working tree and index



```
brad@DESKTOP-0KFGGBO MINGW64 ~/Desktop/myapp (master)
$ git status
On branch master

Initial commit

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)

        new file:   app.js
        new file:   index.html
```

- $git commit //commits changes to local repository

Remote Repository

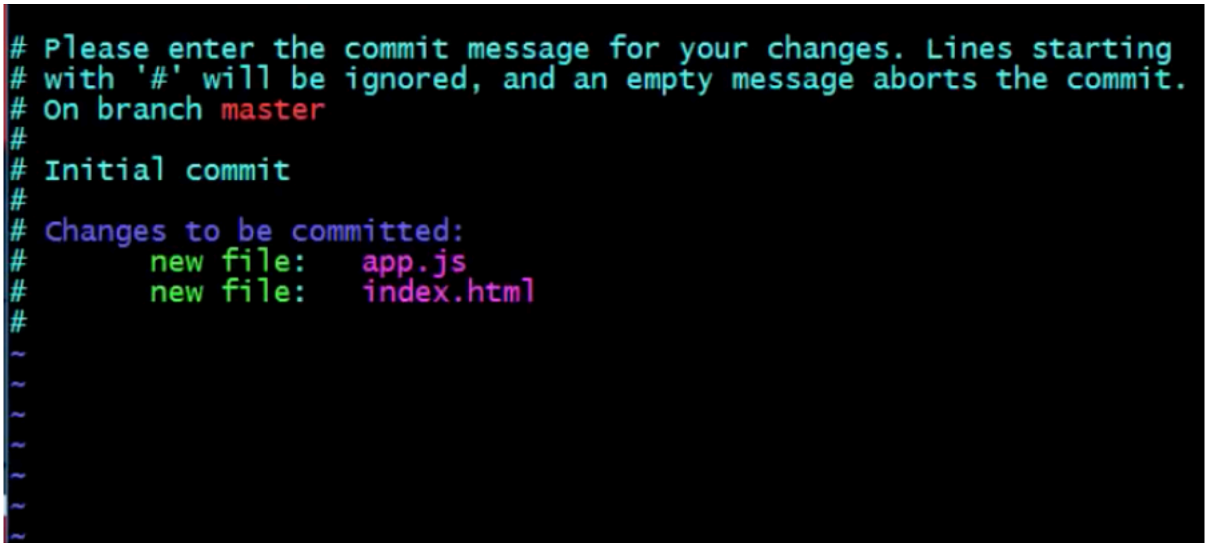
- $git push //push to remote repository } push your changes onto remote version control
- $git pull //pull latest changes from remote repo
- $git clone //clone repo into new directory

$git config —global user.name ‘Name’

$git config —global user.email ‘name@service.com'

When you commit a file, an editor will pop up but it will only be in read mode until you press “I”.

Press [esc] to get out of insertion (write) mode and the press “:wq” and [enter] to commit.



```
# Please enter the commit message for your changes. Lines starting
# with '#' will be ignored, and an empty message aborts the commit.
# On branch master
#
# Initial commit
#
# Changes to be committed:
#       new file:   app.js
#       new file:   index.html
#
~
~
~
~
~
~
~
```

To skip the edit stage: $git commit -m “This is where your message goes”

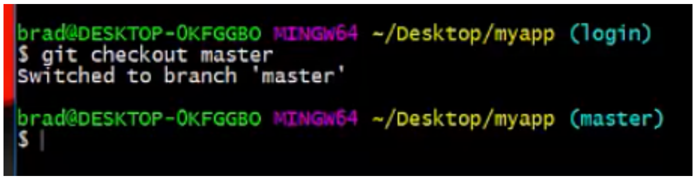
.gitignore //files to not include in your repo, basically a file of files not to include in commits, you can add files/folders/expressions (*.txt)

Branches

$git branch <name> //creates branch

You have to commit the changes before you switch to the branch

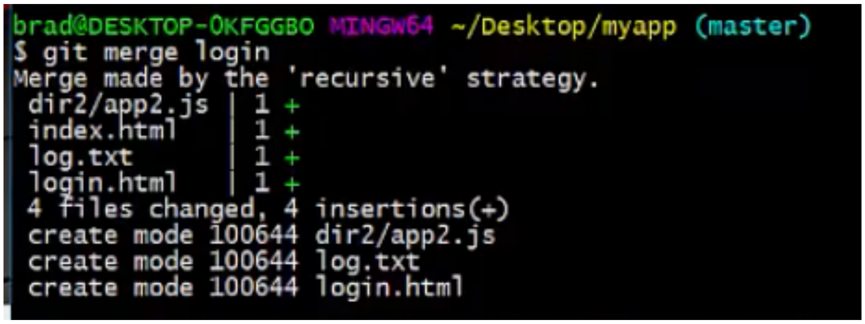
$git checkout <branch name> //switch to branch



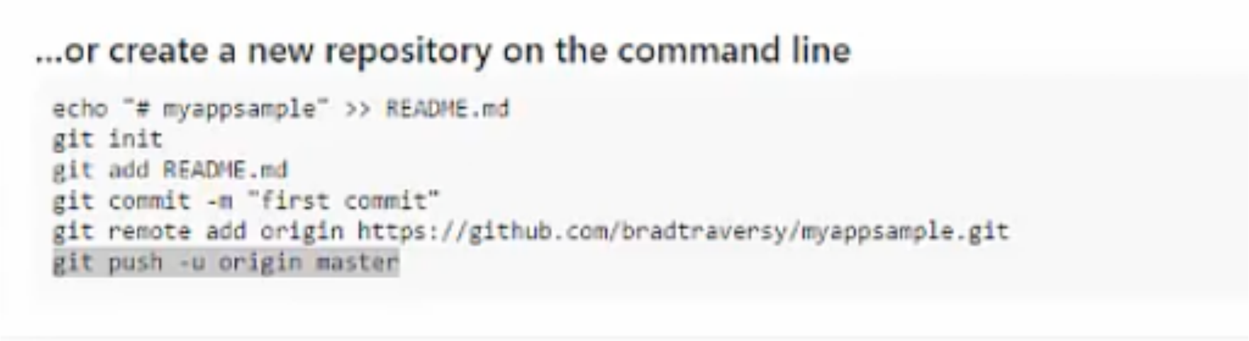
```
brad@DESKTOP-OKFGGBO MINGW64 ~/Desktop/myapp (login)
$ git checkout master
Switched to branch 'master'

brad@DESKTOP-OKFGGBO MINGW64 ~/Desktop/myapp (master)
$ |
```

$git merge //merge two branches, by default I think it merges the child with the parent



```
brad@DESKTOP-0KFGGBO MINGW64 ~/Desktop/myapp (master)
$ git merge login
Merge made by the 'recursive' strategy.
 dir2/app2.js | 1 +
 index.html   | 1 +
 log.txt      | 1 +
 login.html   | 1 +
 4 files changed, 4 insertions(+)
 create mode 100644 dir2/app2.js
 create mode 100644 log.txt
 create mode 100644 login.html
```



...or create a new repository on the command line

```
echo "# myappsample" >> README.md
git init
git add README.md
git commit -m "first commit"
git remote add origin https://github.com/bradtraversy/myappsample.git
git push -u origin master
```

The last two lines are needed to add a remote repo to your local computer, and it will require that you sign in to your account.

$git clone <link to remote repo> //clones entire repo to local computer