Git:

- I can save my files at different save points as different versions on local repository.
- If I screw up my latest version, I can rollback to any previous versions using Git.
- This is called version control.
- Git init -> To initialize git repository in a folder
- git status -> To check the status of the files in a folder

  red -> Not commited(Added)/Changes
- git add filename.extension -> To add in staging area(A place where files can be commited)

  green -> Ready to be commited
- git commit -m "Initial commit" -> To commit
- git log -> To see all the commits
- git add . -> To add everything in a folder to staging area
- git diff -> To check the difference between current version of a file and last save point
- git checkout filename.extension -> To revert a file to its previous version

GitHub:

- Using github I can create remote repository on internet.

- We can create brand new repository or we can push existing repository as well.
- git remote add origin /(path of remote repository.git)

  Above command to create remote repository.
- Origin is that remote repository somewhere on internet.
- git push -u origin master

  Above command -> -u : To link up our local repository to remote repository

  origin : Push towards origin (remote repository)

  master : Push to the master branch
- Master branch is the main branch of your commits and savepoints
- git ignore - To ignore some things to be commited on remote repository on internet
- To make a git ignore file in mac (touch .gitignore)
- To remove everything from staging area :- git rm --cached -r .
- To ignore files to be commited, just put names of those files in new lines in git ignore file.
- git clone (path of remote repository.git) - to clone it in your working directory
- Branching: it means to create a different branch aside from the master.
- You can create branch for different topics or when multiple people working on same project.

- We can commit on the branch we choose.
- After that we can merge those branches into master branch.
- To create a branch: git branch \(branch name)
- To see all the branches: git branch
- To switch to a branch: git checkout \(branch name)
- To merge a branch: First checkout to master branch

  then git merge \(branch name which you wanna merge to master branch)

- The difference between push and pull:

  If you change something in your project locally, you can push it to the remote(GitHub).

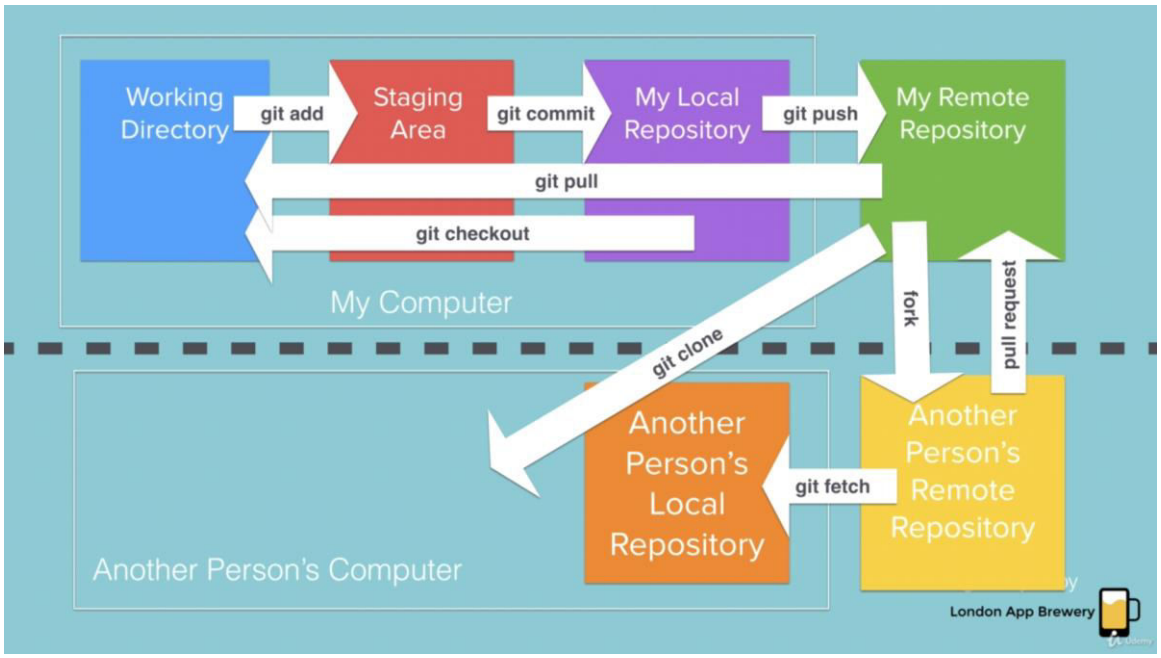
  If you change or create something from remote, You will not be able to push from local to remote.

- First you have to pull from remote and update your local so your local is up to date.
- And from that point youll be able to push to the remote from local.
- The difference between cloning and forking:

  Cloning means clone a repository from github to your local environment

  Forking means grab a copy of a github repository and keep it under your own GITHUB account.

  So if someone fork my remote repository in their own remote repository and work locally and commit to their forked remote repository, they can give a pull request. And only if I want, I can pull those changes into my remote repository.


Working Directory
git add
Staging Area
git commit
My Local Repository
git push
My Remote Repository
git pull
git checkout
My Computer
fork
pull request
git clone
Another Person's Local Repository
git fetch
Another Person's Remote Repository
Another Person's Computer
London App Brewery