20170111\_Notes

Git is a VCS

VCS- Version Control System

* Records changes to files over time, allows multiple people to edit files
* Can be used to store tons of different files, but mostly works for plain text files

How does git work:

1. Initialize a repository🡪 hidden folder (ie .hiddenfiles). Add files.
2. Edit file
3. After several edits, commit your changes, then VCF have updated file
4. Continue to make edits and commit updates
5. Can restore past files using checkout of previous commit

Git Commands:

* Clone: copy existing repository to local
* Init: initialize repository in current folder
* Add: add new file to existing repository- “staging”
* Commit: update files in repository
* Pull: retrieve all files
* Checkout: pull single file from repository

Supports concurrent users- how does it avoid merge conflicts

* Makes people resolve conflict- window opens with 3 versions of file- one you want to keep in center file.

Branching

* Branch is complete copy of code- primary branch is master branch
* Allows you to work on entire code on side branch- try dangerous things. Don’t hurt stable code.
* Can later merge with master branch

**GITHUB is NOT Git**

Can set up private git server- no need to use GitHub.

**LOCAL vs. REMOTE Git**

* All commands are local except push and clone
* Adds and commits are your own