Git & github notes

- -git means distributed Version control system
- -Git is a free and open source
- -github is source for project and sources
- -github simplify using git
- -you can use git without github
- -git has GUI

Why learn git?

- -developers contribute to the same project
- -you can revert the changes
- -you can collaborate to fix bugs
- you can collaborate to create new features
- -solve conflict
- -oraganize features

Words you will hear

- -repository(repo)
- -branch
- -local repo
- -remote repo
- -commit(checkpoint in your local repo)
- -clone(from local or remote)
- push(upload local changes to remote)
- -pull(pull changes from remote to local)
- -pull request

Git commands

- -git clone +(repo link) >> Git clone is a command for downloading existing source code from a remote repository
- -git status >> gives us all the necessary information about the current branch
- -git add +(file name)/or gitt add * \rightarrow -means add all-
- -git reset head
- -git commit -m "message" >> Takes the staged snapshot and commits it to the project history
- -git branch
- -git remote -v
- -git push +remote name +branch name
- -git pull +remote name >> is used to get updates from the remote repo

- -git config -l >> A convenient way to set configuration options for your Git installation
- -git help config
- -git config --global user.email
- -git config --global user.name
- -git config -l --show-origin
- -git config --global --unset user.email
- git config --global --edit
- -ssh-keygen -t rsa -b 4096 -C "email"
- cat /.ssh/id_rsa.pub
- -git init >> Initializes a new Git repository
- git push -u <remote> <branch-name>
- git config --global alias.st status
- git checkout \(\text{branchname} \rightarrow \rightarrow \text{Switching branches} \)
- git branch -d localBranchName >> delete branch
- git branch -m <new name> >> rename branch
- -git merge >> combine multiple sequences of commits into one unified history
- -git stash>> is a built-in command with the distributed Version control tool in Git that locally stores all the most recent changes in a workspace and resets the state of the workspace to the prior commit state.
- git stash pop >> Takes the files in a stash, places them back into the development workspace and deletes the stash from history
- git stash list >> Displays the stash history in chronological order
- git stash apply >> Takes the files in a stash and places them back into the development workspace, but does not delete the stash from history
- -git stash drop
- -git stash show
- -git stash clear>> Removes all entries in the git stash history.
- git restore --staged <file> >> to undo changes in the staging area
- git clean $-n \gg$ just show what would be done
- git tag <tag name>
- git tag -a <tag name> -m "< Tag message>
- git tag -l
- git tag -d <tagname>