(Git) IV

DAYONE(Basic Git Workflow):

Git is a software ~~that~~ allows you to keep track of changes made to a project over time. It works by recording the changes.

① when we do " git init ", we're starting tracking it. the word init means initialize.

② A Git project can be thought of as having three parts:
1. A working Directory ; 2. A staging ; 3. A Repository.

Git workflow: editing files in 1, adding files to 2, saving to 3.

③ You can check the status of those changes with "git status"

④ We can add file to the staging area with "git add+~~N~~ name" where "name" represents the filename.

⑤ We can check the differentes between the working directory . and the staging area with "git diff+name".

NOTICE!: Press q on the keyboard to exit diff mode.

⑥ "git commit" is a command we'll do next. Option "-m" is used followed by a message in quotation marks.

⑦ commits are sorted chronologically in the repository and can be ~~veiw~~ viewed with "git log"

DAYTWO(How to Backtrack)

① the commit you're currently on is known as HEAD commit. To see it, enter "git show HEAD"

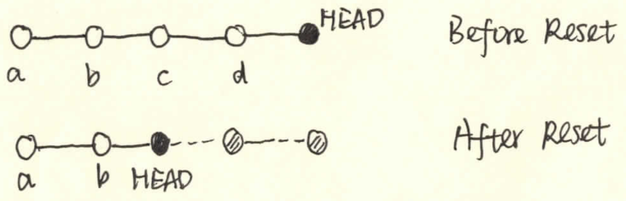
② The command "git checkout HEAD+name" will restore the file in your working directory to look exactly as it did when you last made a commit. F

③ Command "git add" can be used to add to file at one time.

④ Command "git reset HEAD+name" resets the file in the staging area to be the same as the HEAD commit. (The file you have removed from staging area will be ignored if you make a commit this time.)

⑤ Git enables you to retreat to anywhere you have been to before. By using command "git reset SHA" (where SHA represents the first 7 characters of a previous commit)

There is a diagram to understand this command

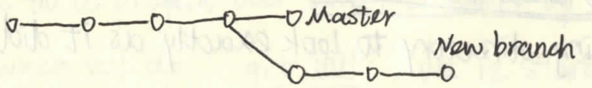


※ Each circle respresents a commit. Shadow one is no longer part of your project. while white one is.

DAYTHREE(Git Branching)

① Command "git branch" is used to show the branch you've on.

There is a diagram illustrating branches:



② To create a new branch, you can use "git branch + name",
where name will be the branch name and can't contain space.

③ You can switch the new branch with "git checkout + name"

④ Command "git merge + name" can merge the branch into master.

Merge Conflict happen if you change the master and new branch together and you want to merge them.

⑤ Command "git branch -d+name" will delete the branch from you git project.

DAYFOUR (Git Teamwork)

① Command "git clone remote_location clone_name" is used to clone file from remote_location.

remote_location can be a web address or a filepath.

clone_name is the name you give to the directory in which Git will clone the respository.

② Origin: the remote address which you cloned from.

You can list the Git's project's remotes with the command:

git remote -v.

③ To keep up with the origin file, you can use command:
git fetch. It brings changes onto what's called a ~~remote~~ branch.
origin/master branch.

④ When you have done your work, Command "git push origin + your_branch" is used to share your work with the remote.