Part1.
To be familiar
Git and Github

LEE HAE JOON
ms0169747@gmail.com

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WHO AM I ?

Likes Embedded System and Comp Architecture

Likes Big Data Engineering

Likes Web Services

Now try to like Data Analysis for ?

Motivation

Open Source ?

Version Control ?

Open Source ?

Bootstrap, Hadoop, Spark, Flink, Rails, jQuery ..

Go to Open Source Repository

Your preference?

Web Server ? - Node JS, jQuery, Rails..

Distributed System or Big Data - Hadoop, Zeppelin, Spark

Image Processing - GPUImage

.. Search for everything

Open Source ?

Most popular projects

Belong to Github !

What is Version Control ?

5 minutes Talks ..

Have you ever handled version control for your project before ?!

Version Control ?

Probably, you used to share your projects files via emails or cloud system, e.g., dropbox, google drive

Version Control ?

What about these cases ?

- Your team modified a few of files while you are coding the files.
- You want to make a snapshot of changed files just in case.
- You crashed important codes without noticing.
- You want to look at the changed codes your team made.

  etc … ?

Version Control in the situations ?

- Version control systems keep **revisions straight**, and **store** the modifications in a central repository.
- This allows developers to easily **collaborate**, as **downloading** a new version of the software, make **changes**, and **upload** the newest revision.

Now,
Understand Version Control ?

Saying ...

If you want to make successful projects with your team, you must handle **Github and Git**

Saying ...

If you already use **Subversion** ?

read this article -

vs

Git ? Github ?

Git ?

History

- Git is an open-source version control system that was started by Linus Trovalds – the same person who created " ? ".
- Changed files can be stored in **local** file system.

Github ?

Git is a command-line tool.

GitHub is a web-based **Git repository** hosting service, where you can store projects and network with likeminded people.

Github ?

Github isn't just for developers !

- GitHub can be used for any types of files

  if you have a team that is constantly making changes to a **word document**.

  E.g., project proposal

Hack Git

BTW

Install & Play zshell within 10 minutes

>> curl -L https://raw.github.com/robbyrussell/oh-my-zsh/master/tools/install.sh | sh

>> zsh

>> vim ~/.zshrc

ZSH_THEME="pygmalion" | You can choose your theme up to your favor

https://github.com/robbyrussell/oh-my-zsh/wiki/themes

Reference : https://github.com/robbyrussell/oh-my-zsh

Hack Git

3 STEPS
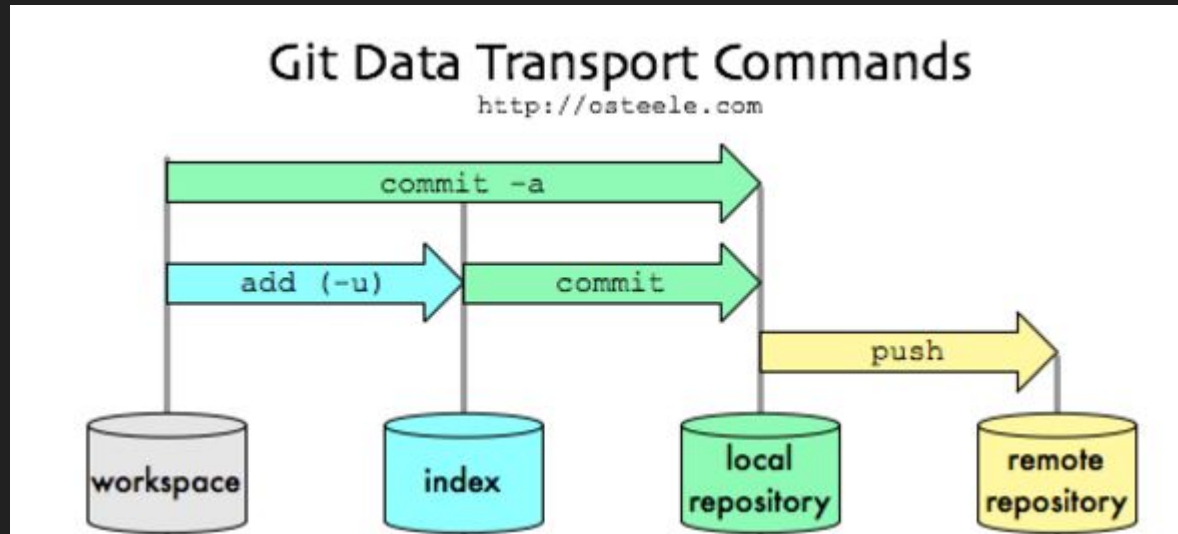
Hack Git

Tracked Files

Staged - modified file has been marked to go into next commit

Committed - file's safely stored in your local database

Modified - file's been changed, but not committed
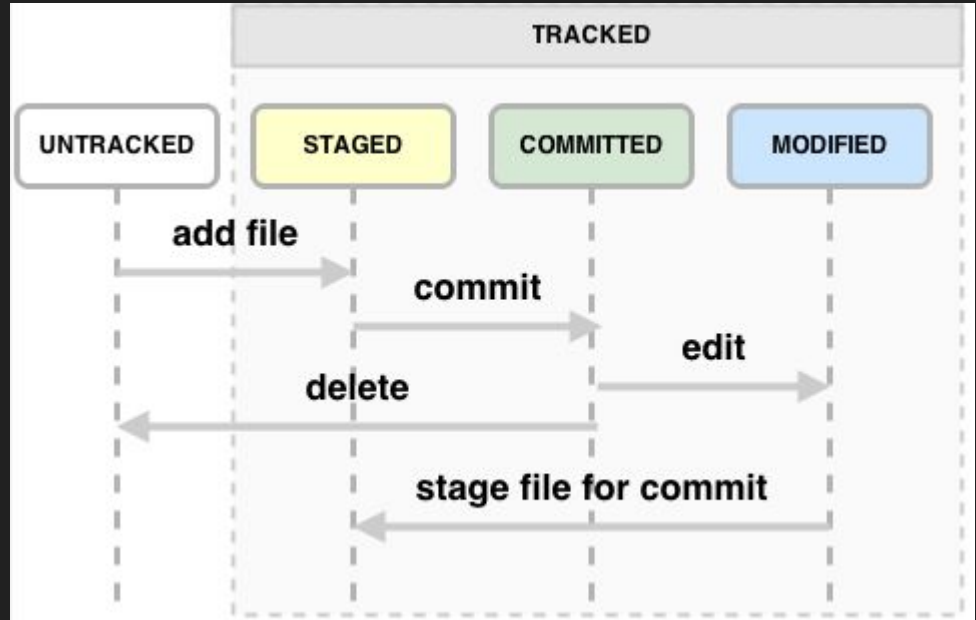
Hack Git

Sudo apt-get update

Sudo apt-get install build-essential git

Hack Git

>> git init

Initializes a new Git repository. You run this command inside a repository or directory. Only after you input this does it accept further Git commands

Hack Git

>> git clone https://github.com/philjjoon/**KyungHeeHadoopLecture**

Cloning some repository to your local system

Hack Git

>> git pull

If you're working on your local computer and want the most up-to-date version of your repository to work with, you "pull" the changes down from GitHub with this command.

Hack Git

>> git add

This does not add new files to your repository. Instead, it brings new files to Git's attention. After you add files, they're included in Git's "snapshots" of the repository.

Hack Git

>> git commit

Git's most important command. After you make any sort of change, you input this in order to take a "snapshot" of the repository.

Hack Git

>> git push

If you're working on your local computer, and want your commits to be visible online on GitHub as well, you "push" the changes up to GitHub with this command.

Hack Git

>> git checkout

This is a navigational command that lets you move to the repository you want to check. You can use this command as 'git checkout master' to look at the master branch.

Hack Git

>> git branch

This command will let you build a new branch, or timeline of commits, of changes and file additions that are completely your own. Your title goes after the command.

Hack Git

>> git merge

When you're done working on a branch, you can merge your changes back to the master branch, which is visible to all collaborators.

Hack Git

>> git log

Browse your commit files which are snapshots stored in your local repository

Hack Github

Goto > www.github.com

Sign up !!

Hack Github

Try Forking !

is when you create a new project based off of another project that already exists. This is an amazing feature that vastly encourages the further development of programs and other projects.

https://github.com/philjjoon/KyungHeeHadoopLecture

Hack Github

Pull Request !

After **forking** a repository, make a **great revision** to the project, and want it to be **recognized** by the original developers, included in the official repository.

By creating a pull request, the original authors can see your work, and then can accept it into the official project.

https://github.com/philjjoon/KyungHeeHadoopLecture

Hack Github

Make Issue !

https://github.com/philjjoon/KyungHeeHadoopLecture

Hack Github

Make Label !

https://github.com/philjjoon/KyungHeeHadoopLecture

Done

Find the interesting open source project in github

Leave the repository URL and your github name

https://goo.gl/lRc4ae

References

- http://www.slideshare.net/ianychoi/git-github-46020592
- http://www.howtogeek.com/180167/htg-explains-what-is-github-and-what-do-geeks-use-it-for/
- http://readwrite.com/2013/09/30/understanding-github-a-journey-for-beginners-part-1/
- http://mycup.tistory.com/196
- http://www.slideshare.net/einsub/svn-git-17386752
- http://rogerdudler.github.io/git-guide/index.ko.html
- http://blog.tzolov.net/2014/07/file-lifecycle-under-git-control.html