



git developed by **Linus Torvalds**

https://en.wikipedia.org/wiki/Linus_Torvalds



WHAT IS GIT?

Version Control System (VCS) for tracking changes in computer files



git

- ✓ Distributed version control
- ✓ Coordinates work between multiple developers
- ✓ Who made what changes and when
- ✓ Revert back at any time
- ✓ Local & remote repos

CONCEPTS OF GIT

- ✓ **Keeps track of code history**
- ✓ **Takes “snapshots” of your files**
- ✓ **You decide when to take a snapshot by making a “commit”**
- ✓ **You can visit any snapshot at any time**
- ✓ **You can stage files before committing**

BASIC COMMANDS

- **\$ git init** // Initialize Local Git Repository
- **\$ git add <file>** // Add File(s) To Index
- **\$ git status** // Check Status Of Working Tree
- **\$ git commit** // Commit Changes In Index
- **\$ git push** // Push To Remote Repository
- **\$ git pull** // Pull Latest From Remote Repository
- **\$ git clone** // Clone Repository Into A New Directory

INSTALLING GIT

- ✓ **Linux (Debian)**

`$ sudo apt-get install git`

- ✓ **Linux (Fedora)**

`$ sudo yum install git`

- ✓ **Mac**

<http://git-scm.com/download/mac>

- ✓ **Windows**

<http://git-scm.com/download/win>

Some other commands

- `git config --global user.name ''`
- `git config --global user.email ''`
- `git branch login`
- `git checkout login`
- `git checkout master`
- `git merge`
- `git clone`
- Avoid entering password – you can use **ssh keys**

Terminal – Unix based systems

Terminal – Unix based systems like Linux or MAC

Basic Commands:

cd – change directory

cd .. Move to previous directory

mkdir – make a directory

ls – to list all files in a directory

ls -all – to list details

touch – to create a file

rm – to remove files or folders

Many more

Command line (CMD) - Windows

- dir – to list files or folders in a folder
- cd – change folder
- Many more

Text Editors

- Notepad
- Notepad++
- Atom
- Sublime Text
- vi (I for insert and to write and quit :wq)

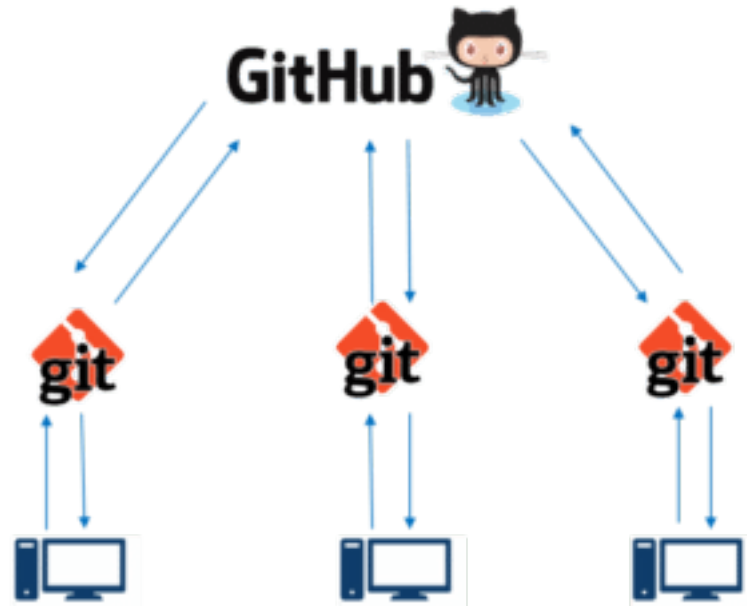
.gitignore - file

- To avoid uploading system, logs and other related files.

Remote Repository

- GitHub – recently purchased by Microsoft
- BitBucket
- Many more.....

How git and GitHub work?



Branching

