Introduction To Programming

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What Is The Command Line?

The command line is the ability to interface with a device (computer, server, smart phone, main frame, etc) via text messages.

You can use these text messages to control your computer such as creating files, running programs, and more!

GUI vs Command

A Graphical User Interface (GUI) is a visual interface for communicating with a computer, server, phone, etc. It often will make command line calls.

Common Command Line Commands

- mv
- mkdir
- cp
- rm
- touch
- nano
- ls
- cd
- pwd

LS - List

List all the files in a directory. A directory is a folder, and a folder contains files.

Examples:

$ ls

$ ls -la

$ ls /some/directory

CD - Change Directory

Move to another directory.

Examples

$ cd /path/to/directory

$ cd ..

Mdkir - Make directory

Makes a new directory or folder. Remember the -p command.

Examples:

$ mkdir afoldername

$ mkdir -p /path/to/a/folder

Touch - Create File

Touch will create an empty file.

Examples:

$ touch filename.text

$ touch /path/to/new/file.txt

Nano

Nano is an editor for going into files and updating its content.

Example:

nano filename.text

MV - Move

Moves a file or folder to another directory. Remember the -R.

Examples:

$ mv file1.txt file2.txt

$ mv file2.txt /path/to/different/folder/file2.txt

$ mv -R folder1 folder2

CP - Copy

Copies a file or directory. Remember the -R.

Examples:

$ cp file1.txt file2.txt

$ cp file1.txt /different/directory/file2.txt

$ cp -R folder1 folder2

RM - Delete

Deletes either a file or directory.

Examples

$ rm file1.txt

$ rm -rf folder1

Pwd - Current Working Directory

Get thes current working directory
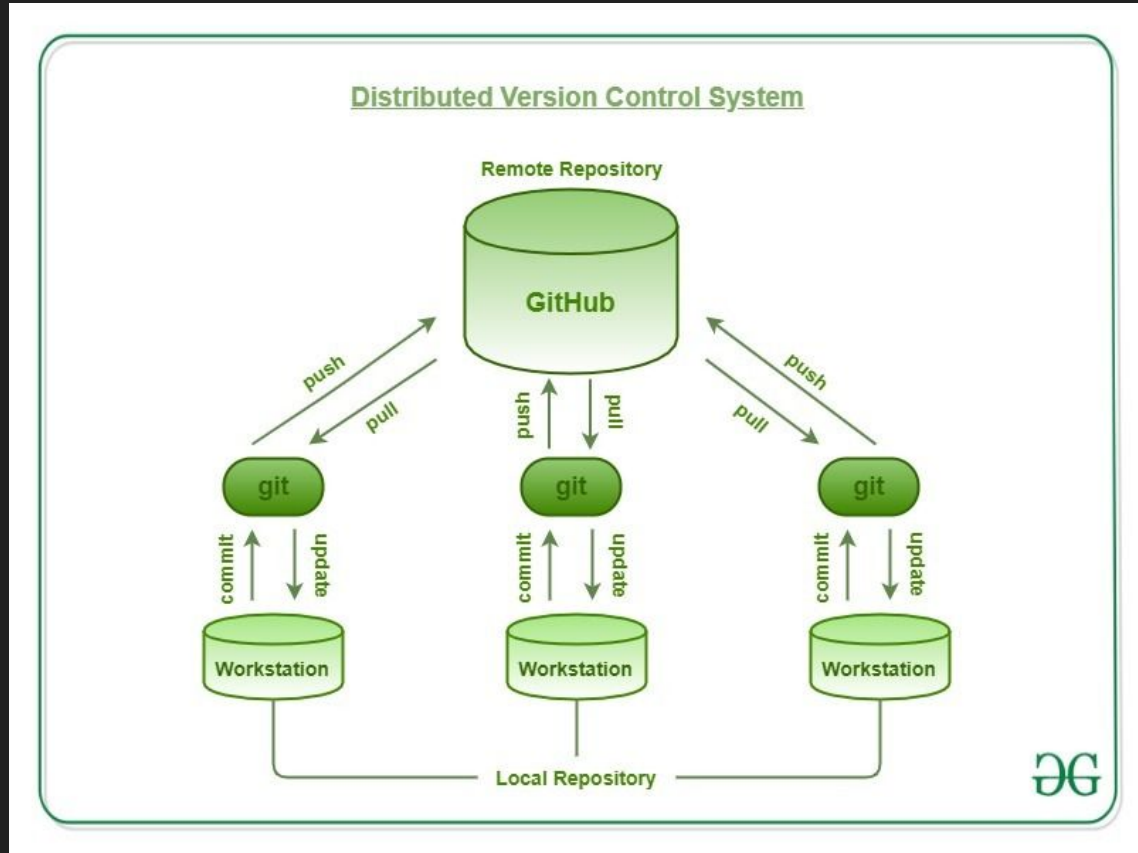
Examples

$ pwd

Git & GitHub

What is Git?

Git is a command line program that handles version control. Version control means every change you make is backed up in a log. So you can always go back in time to view how your code has changed.

What Is Github

Github is a website that a GUI (Graphical User Interface) for GIT. Using Github, you can create what is known as repositories. You will upload your projects and store them in github.

Git Commands

- **git init** - Initializes a new git repo
- **git add** -A - Puts all the files to be staged
- **git commit** - Adds a commit message. A commit message details what was changed
- **git push** - Pushes code that has been committed to the repository. This can be though as "saving" a version of your code.
- **git pull** - Pulls down the last code from the repository to your local computer. Think of this as saving.