**GIT:**

Git is a Version control System developed by Linus Torvalds in 2005. It is primarily used for [source code management](https://en.wikipedia.org/wiki/Source_code_management) in [software development](https://en.wikipedia.org/wiki/Software_development), it can also be used to keep track of changes in any set of files. As a [distributed revision control](https://en.wikipedia.org/wiki/Distributed_revision_control) system it is aimed at speed, data integrity, and support for distributed, non-linear workflows.

**STEPS TO INSTALL GIT:**

1. **WINDOWS:**

To install Git on Windows you will need to download the installer from the [Git](http://git-scm.com/downloads) website.

1. Download the most current version for your operating system by double clicking on the package name.
2. Select **Run** to begin the installation.
3. Click **Yes** to continue:
4. Click **Next** to continue.
5. If you need to change the installation folder, click **Browse** and select a new location. To accept the default location click on **Next**.
6. To accept the default components to be installed click **Next**. Otherwise, select the additional components to be installed before clicking the **Next** button.
7. Accept the default Start Menu folder by clicking **Next**, or use **Browse** to select a new folder location.
8. Keep the default line ending conversion by clicking **Next**. To change the default, choose one of the two other choices before clicking **Next**.
9. The program will now begin installing.

10. Click **Finish** to exit the installer.

11. Once you open Git you can select either **Create New**, **Clone Existing** or **Open Existing Repository**. In this example, we create new repository.

1. Enter a directory name or click on **Browse** to navigate to a directory.
2. A blank repository is created:
3. **LINUX:**
   1. sudo apt-get install git
   2. After you [install Git](https://www.linode.com/docs/development/version-control/how-to-install-git-on-mac-and-windows), configure it for first time use using git config.

git config --global user.name examplename

git config --global user.email user@example.com

**COMMANDS OF GIT:**

1 git init Track changes of files

1. git add Add a file to a repository.

git add filename

1. git rm Remove a file from a repository.

git rm filename

1. git mv Move or rename a tracked file, directory.

git mv fileFrom fileTo

1. git commit Commit all staged objects.

git commit -m "message"

1. git pull Download all changes from the remote repo.

git pull repo specifiedrepo

1. git push Publish the changes to the remote repo.

git push repo

**BRANCHING:**

Branches are used for editing files without disturbing the working portions of a project. The main branch is normally named master, it’s customary to name the branch after an issue being fixed or a feature being implemented. Because Git keep tracks of file changes, you can jump from branch to branch without overwriting or interfering with other branches in the repo.

The basic options used with the git branch command are:

Option Description

-r List the remote branches

-a Show both local and remote branches

-m Rename an old branch

-d Delete a branch

-r -d Delete a remote branch

e Remote you specified.

* 1. git branch List all the local and remote branches.

git branch branchname