Git is a free and **open source** distributed **version control system** designed to handle everything from small to very large projects with speed and efficiency. Git is easy to learn and has a tiny footprint with lightning fast performance .It outclass **SCM tools** like subversion , CVS , Perforce , and Clearcase with features like Cheap local branching , convenient staging areas and multiple workflows.

Git comes with built –in **GUI tools** (git-gui, gitk), but there are several third party tools for users looking for a platform- specific experience. Git is a mature , actively maintained open source project originally developed in 2005 by **Linus Torvalds** , the famous creator of the Linux operating System Kernel. A staggering number of software projects rely on git for version control including commercial projects as well as open source .

Git is designed for distributed development .If you're involved with a project you can clone the projects Git repository , and then work on it as if it was the only copy in existence . then, with a few simple commands , we can also push your changes over to someone else .

Git came into existence because Bitkeeper became chargeable . GitHub uses Git , because it simplifies a project development across many developers .It keeps track of all changes so team members can work on files and easily merge their changes in with the master branch of the project.

BASIC GIT COMMANDS:

git add[file]:

To add file to the staging area

git init[repository name]:

To create a new repository

Git add*:

To add more than one file to the staging area

git status:

To list the files yet to be committed

git log:

To list the version history of current branch

git diff:

To show the differences in file which aren't staged

git push:

This command sends the committed changes of the master branch to your remote repository.

git clone:

This command used to obtain a repository from an existing URL

git commit:

This command records or snapshots the file permanently in the version history

git commit –a:

It commits any files you've added with git add command &also commits files you've changed since then