GIT COMMANDS

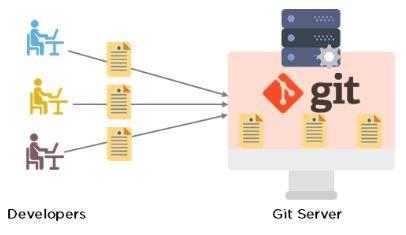
**What is Git?**

Git is a distributed version control system used for tracking changes in computer files. It is generally used for source code management in software development.

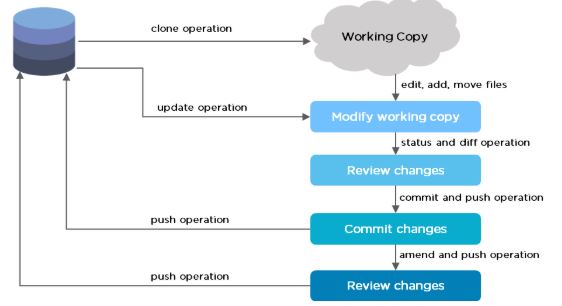
* Git is used to tracking changes in the source code
* It allows multiple developers to work together
* It supports non-linear development through its thousands of parallel branches

**Features of Git?**

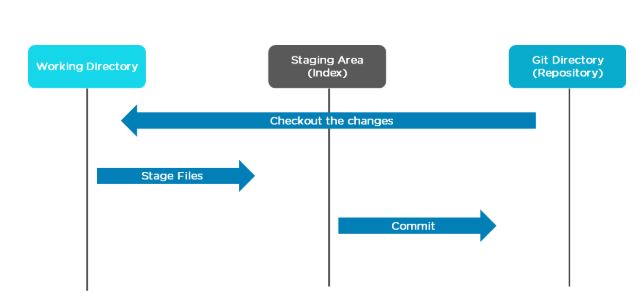
* Tracks history
* Free and open source
* Supports non-linear development
* Creates backups
* Scalable
* Supports collaboration
* Branching is easier
* Distributed development



Git Workflow

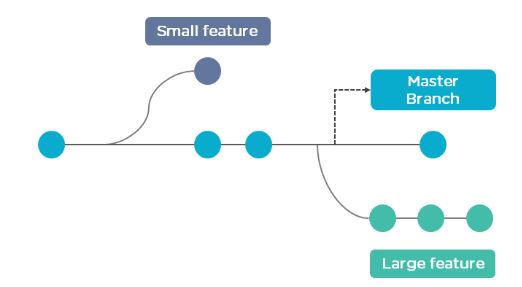


The Git workflow is divided into three states:

* Working directory - Modify files in your working directory
* Staging area (Index) - Stage the files and add snapshots of them to your staging area
* Git directory (Repository) - Perform a commit that stores the snapshots permanently to your Git directory. Checkout any existing version, make changes, stage them and commit.

**Branch in Git**

* Branch in Git is used to keep your changes until they are ready. You can do your work on a branch while the main branch (master) remains stable. After you are done with your work, you can merge it with the main office.



* The above diagram shows there is a master branch. There are two separate branches called “small feature” and “large feature.” Once you are finished working with the two separate branches, you can merge them and create a master branch.

**Commands in Git**

* Create Repositories  
  git init
* Make Changes  
  add  
  commit  
  status
* Parallel Development  
  branch  
  merge  
  rebase
* Sync Repositories  
  push  
  pull  
  add origin