**Git**

Repository

Branches

Staging area

Working directory

Add

Commit

Log

Status

Graph

Checkout

Merge

Reset

Git is a tool used for controlling file version. Git takes a snapshot of state of all files into a commit. In the other word, a commit is a version of files. Each commit is independent, so any change made in one commit will not affect the others. Commits are arranged in an order called a branch. Several branches can be in a single repository and Master branch must be there at least. “Origin/master” is an index pointing to a commit which is known by the last Pull or Clone from Git host.

Origin/master

Branch A

Branch B

A branch is a series of commits of which a pointer point to the previous commit. This allows tracing back file history. Branches can be merged together to combine changes.

**GitHub**

GitHub is a cloud storage hosting Git repositories. GitHub provides tools used for people collaborating on the same work or project. GitHub communicates with a repository in Git.

Pull request

Pull request

Fork

Clone

Fetch

Pull

Remote

Push

Origin

GitHub (Cloud)



Git (Local)