**Git(global information tracker)**

Git is an distributed version control system designed to track changes in source code during software development.it helps developers collaborate on projects and maintain a history of all changes made to files.

* It is an version control system(vcs) keep tracking of every change in your project files.
* Branching and merging:-allows you to work on new features or fixes in s separate later merge them into main branch.
* Distributed:-every developer has a complete copy of a repository,including its history, making it faster
* It maintains all the modification happening to the specific file

Why we use git

* Allows multiple developers to develop the code simultaneously
* Does not allow over writing each other changes
* Maintain a history of every version like

V1------v2---------------v100 we have to write the reason why we have to change the next version.if we change v2 to v3 we have to write what are the issues we have faced in previous versions like v1 and v2

* Git fast when compared to other one
* Multiple developers can easily collaborate and work on the same project
* It also work as backup of our project code
* Git is an (local file)

**Vcs(version control system)**

1. cvcs:- centralised version control system svn(sub version control system)
2. Dvcs:-distributed version control system

Older version of git is svn(centralized server)

1. It consists of current version data v1---------v2 each and every developer should connect to this server and they need to develop the codes

**Dis advantages of svn:-**

* Server can be accessed through any one and any one can copy the code
* If server is distrroyed every thing will be lost

**Decentralzed or distributed vcs :-**

**Git hub------> server**

**Git ----------->version control system(vcs)**

* Each and every developer need no to connect to the git hub(server)
* Create a repository in git hub(remote)

**Repository ======> folder**

To push code :-

* Create a repository (folder) in git hub
* In git hub we have a option of opting me code -- cloning
* Cloning:- using cloning we can bring our code from remote repository (server- github) to local repository (own laptops)
* Command for cloning (git clone url)

Repository:

* Group of project files to store in single area
* Each project has one repository
* Git hub has many repositorys present