**Git Version Control**

A version control system is a software that tracks changes to a file or set of files over time so that you can recall specific versions later. It also allows you to work together with other programmers or developers. The version control system is a collection of software tools that help a team to manage changes in a source code. It uses a special kind of database to keep track of every modification to the code.

Git is an open-source distributed version control system. It is designed to handle minor to major projects with high speed and efficiency. It is developed to co-ordinate the work among the developers. The version control allows us to track and work together with our team members at the same workspace.

Git is foundation of many services like GitHub and GitLab, but we can use Git without using any other Git services. Git can be used privately and publicly.

Git was created by Linus Torvalds in 2005 to develop Linux Kernel. Git is easy to learn, and has fast performance. It is superior to other SCM tools like Subversion, CVS, Perforce, and ClearCase.

Check out the video below on Git.

**Benefits of using Git**

A version control application allows us to **keep track** of all the changes that we make in the files of our project(s). Every time we make changes in files of an existing project, we can push those changes to a repository.

Other developers are allowed to pull your changes from the repository and continue to work with the updates that you added to the project files.

**Saves Time**

Git is lightning fast technology. Each command takes only a few seconds to execute so we can save a lot of time as compared to login to a GitHub account and find out its features.

**Offline Working**

One of the most important benefits of Git is that it supports offline working. If we are facing internet connectivity issues, it will not affect our work. In Git, we can do almost everything locally. Comparatively, other CVS like SVN is limited and prefer the connection with the central repository.

**Undo Mistakes**

One additional benefit of Git is we can Undo mistakes. Sometimes the undo can be a savior option for us. Git provides the undo option for almost everything.

**Track the Changes**

Git facilitates with some exciting features such as Diff, Log, and Status, which allows us to track changes so we can check the status, compare our files or branches.

* **History Tracking:**
  + Git keeps a detailed history of changes, making it easy to track when, where, and why changes were made.
* **Branching and Merging:**
  + Branching allows for parallel development, and merging brings changes together.
* **Distributed:**
  + Each developer has their own local copy of the repository, reducing the need for a constant internet connection.

Git provides a robust and flexible version control system, enabling efficient collaboration and tracking of changes in software development projects.

Git is a distributed version control system that is widely used for tracking changes in source code during software development.