

An introduction to Git: what it is, and how to use it?

Git is an **Open Source Distributed Version Control System**. Now that's a lot of words to define Git.

Let me break it down and explain the wording:

Control System: This basically means that Git is a content tracker. So Git can be used to store content — it is mostly used to store code due to the other features it provides.

Version Control System: The code which is stored in Git keeps changing as more code is added. Also, many developers can add code in parallel. So Version Control System helps in handling this by maintaining a history of what changes have happened. Also, Git provides features like branches and merges, which I will be covering later.

Distributed Version Control System: Git has a remote repository which is stored in a server and a local repository which is stored in the computer of each developer. This means that the code is not just stored in a central server, but the full copy of the code is present in all the developers' computers. Git is a Distributed Version Control System since the code is present in every developer's computer. I will explain the concept of remote and local repositories later in this article.

Why a Version Control System like Git is needed?

Real life projects generally have multiple developers working in parallel. So a version control system like Git is needed to ensure there are no code conflicts between the developers. Additionally, the requirements in such projects change often. So a version control system allows developers to revert and go back to an older version of the code. Finally, sometimes several projects which are being run in parallel involve the same codebase. In such a case, the concept of branching in Git is very important.

LET'S GET STARTED ON USING GIT NOW.

Rather than mentioning all the concepts at once, I will explain the concepts of Git through an example so that it is easier to follow.

How to download Github?

Downloading link : <https://git-scm.com/downloads>

How to install Github?

There is no any difficulty to install this software, simply install it. After installing this software;

First of all, you have to create a folder on Desktop save it as "My Work". & put a file into this folder whatever file you want to save. As "My assignment.txt".

So, you have made this folder as a repository!

Now, you have to right click on this folder & after that, click on "Git Bash Here".

So finally, You have accessed to this Git Terminal. 😊

Now the last but not the least step is;

Put these below command in the Terminal.

git init (**That is initialization**)

git commit -m "My Work" (Commit means, Permanantly save into the git as repo, -m means, message)

git add -A (**-A means, all files**)

git config --global user.name "Dmmy Text"

git config --global user.email "support@dummytext.com"

git remote add origin (**paste here git repo url !**)

git push -u origin master

Go & Refresh your github.

So, You have uploaded your repository folder at Github. Congratulations! :)