What is GIT :

Git is a free open source **distributed version-control system for** tracking changes in source code during software development. It is designed for

coordinating work among programmers ,

To track changes in any set of files.

Its goals include

speed, data integrity, and support for distributed, non-linear workflows.

[Stable release](https://www.google.com/search?sxsrf=ALeKk023J5qgpZqozC58by3e9Ej8g3lEtA:1588589773770&q=git+stable+release&sa=X&ved=2ahUKEwi-6KKJhprpAhVHeX0KHb53DaIQ6BMoADAkegQIDBAC&sxsrf=ALeKk023J5qgpZqozC58by3e9Ej8g3lEtA:1588589773770):  2.26.2 / [20 April 2020](https://www.google.com/search?sxsrf=ALeKk023J5qgpZqozC58by3e9Ej8g3lEtA:1588589773770&q=20+April+2020&stick=H4sIAAAAAAAAAONgVhLQL9E3SjYqz0qxyMqpTMstXsTKa2Sg4FhQlJmjYGRgZAAA7i1a8iQAAAA&sa=X&ved=2ahUKEwi-6KKJhprpAhVHeX0KHb53DaIQmxMoATAkegQIDBAD&sxsrf=ALeKk023J5qgpZqozC58by3e9Ej8g3lEtA:1588589773770); 2 days ago

[Operating system](https://www.google.com/search?sxsrf=ALeKk023J5qgpZqozC58by3e9Ej8g3lEtA:1588589773770&q=git+operating+system&sa=X&ved=2ahUKEwi-6KKJhprpAhVHeX0KHb53DaIQ6BMoADAlegQIDxAC&sxsrf=ALeKk023J5qgpZqozC58by3e9Ej8g3lEtA:1588589773770): [POSIX](https://www.google.com/search?sxsrf=ALeKk023J5qgpZqozC58by3e9Ej8g3lEtA:1588589773770&q=POSIX&stick=H4sIAAAAAAAAAONgVuLQz9U3MC0xyFnEyhrgH-wZAQDZqWsfFAAAAA&sa=X&ved=2ahUKEwi-6KKJhprpAhVHeX0KHb53DaIQmxMoATAlegQIDxAD&sxsrf=ALeKk023J5qgpZqozC58by3e9Ej8g3lEtA:1588589773770) ([Linux](https://www.google.com/search?sxsrf=ALeKk023J5qgpZqozC58by3e9Ej8g3lEtA:1588589773770&q=Linux&stick=H4sIAAAAAAAAAONgVuLUz9U3SCuoqipYxMrqk5lXWgEATgerNhUAAAA&sa=X&ved=2ahUKEwi-6KKJhprpAhVHeX0KHb53DaIQmxMoAjAlegQIDxAE&sxsrf=ALeKk023J5qgpZqozC58by3e9Ej8g3lEtA:1588589773770), [macOS](https://www.google.com/search?sxsrf=ALeKk023J5qgpZqozC58by3e9Ej8g3lEtA:1588589773770&q=macOS&stick=H4sIAAAAAAAAAONgVuLQz9U3MDWtLFrEypqbmOwfDADb5b_yFAAAAA&sa=X&ved=2ahUKEwi-6KKJhprpAhVHeX0KHb53DaIQmxMoAzAlegQIDxAF&sxsrf=ALeKk023J5qgpZqozC58by3e9Ej8g3lEtA:1588589773770), [Solaris](https://www.google.com/search?sxsrf=ALeKk023J5qgpZqozC58by3e9Ej8g3lEtA:1588589773770&q=Solaris&stick=H4sIAAAAAAAAAONgVuLQz9U3SM7IS1vEyh6cn5NYlFkMABylxwIWAAAA&sa=X&ved=2ahUKEwi-6KKJhprpAhVHeX0KHb53DaIQmxMoBDAlegQIDxAG&sxsrf=ALeKk023J5qgpZqozC58by3e9Ej8g3lEtA:1588589773770), [AIX](https://www.google.com/search?sxsrf=ALeKk023J5qgpZqozC58by3e9Ej8g3lEtA:1588589773770&q=AIX&stick=H4sIAAAAAAAAAONgVmLXz9U3KC8vXMTK7OgZAQAdkkffEQAAAA&sa=X&ved=2ahUKEwi-6KKJhprpAhVHeX0KHb53DaIQmxMoBTAlegQIDxAH&sxsrf=ALeKk023J5qgpZqozC58by3e9Ej8g3lEtA:1588589773770)), [Windows](https://www.google.com/search?sxsrf=ALeKk023J5qgpZqozC58by3e9Ej8g3lEtA:1588589773770&q=Windows&stick=H4sIAAAAAAAAAONgVuLQz9U3MCmKt1jEyh6emZeSX14MAFTjqsQWAAAA&sa=X&ved=2ahUKEwi-6KKJhprpAhVHeX0KHb53DaIQmxMoBjAlegQIDxAI&sxsrf=ALeKk023J5qgpZqozC58by3e9Ej8g3lEtA:1588589773770)

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--Example: 100 programmer working on a smart project from same or different places. So GIT will used to coordination work, to track all changes and also for merging all files.

DVCS – every one have local repository. Git maintaining version for you (not automatically, but help your for that)

SCM-source code management

Example: your are working on one project X. currently its version is X1.1 . now as per client request you had add some extra features in it(X1.2). But after some times client said show me (X1.1) becoze it was better.

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For that you use Hard disk or drop box. Here you can store all of if version but very hard maintain which version contain which features(means requires extra file for it) so. This SCM is provided by GiT.

Centralized system: each and every client save their files only on Sever(remote Repository) . But what happen when you wnt to use them when you are outside or there is no internet facility. Or what happen when your sever is down.

So , Git is based on Distributed. Means client have their local repository and server have remote repository so, you can use it at any time or at any place.

GIT is Trunk base Development(Branch facility): your are working on Android project of 4.7 version

5.0 add or merge if it is work well

Different package provide it like GItHUB,git lab,BIgBucket etc.

By default Git is installed in MAC but require to install in Linux and for windows there is git bash

we are going to learn how to install Git Bash on Windows.

**Bash** is a Unix command-line shell. The name is an acronym for the ‘Bourne-Again Shell’. It comes with useful Unix commands like cat, ssh, SCP, etc., which are not usually found on Windows

