Version Control

Version Control: Version control/revision control/source control is a component of software configuration management that manages or controls the changes to documents, computer programs, large web sites, and other collections of information.

Changes are usually identified by a number or letter code, termed the "revision number", "revision level", or simply "revision". For example, an initial set of files is "revision 1". When the first change is made, the resulting set is "revision 2", and so on.

You are probably already doing some type of version control, if you save multiple files, such as code-1.c, code-2.c, etc.

Git: Git is a version control system for tracking changes in computer files and coordinating work on those files among multiple people. It is primarily used for source code management in software development, but it can be used to keep track of changes in any set of files.

Three parts: Major. Minor. Patch

Major- Incompatible API changes.
Minor – Add functionality- compatible
Patch- bug fixing- compatible

API: In computer programming, an **application programming interface** (**API**) is a set of subroutine definitions, protocols, and tools for building application software.

Purpose of API: Just as a graphical user interface makes it easier for people to use programs, application programming interfaces make it easier for developers to use certain technologies in building applications.

Example: POSIX, Windows API and ASPI are examples of different forms of APIs.

Explanation (OS API): An API can specify the interface between an application and the operating system. POSIX, for example, specifies a set of common APIs that aim to enable an application written for a POSIX conformant operating system to be compiled for another POSIX conformant operating system. Linux and Berkeley Software Distribution(BSD; an UNIX OS) are examples of operating systems that implement the POSIX APIs.

Version	Original release date[citation needed]	Latest (patch) version	Release date (of patch)[citation needed]
0.99	2005-07-11	0.99.9n	2005-12-15
1.0	2005-12-21	1.0.13	2006-01-27
1.1	2006-01-08	1.1.6	2006-01-30
1.2	2006-02-12	1.2.6	2006-04-08
1.3	2006-04-18	1.3.3	2006-05-16
1.4	2006-06-10	1.4.4.5	2008-07-16
1.5	2007-02-14	1.5.6.6	2008-12-17
1.6	2008-08-17	1.6.6.3	2010-12-15
1.7	2010-02-13	1.7.12.4	2012-10-17
1.8	2012-10-21	1.8.5.6	2014-12-17
1.9	2014-02-14	1.9.5	2014-12-17
2.0	2014-05-28	2.0.5	2014-12-17
2.1	2014-08-16	2.1.4	2014-12-17
2.2	2014-11-26	2.2.3	2015-09-04
2.3	2015-02-05	2.3.10	2015-09-29
2.4	2015-04-30	2.4.12	2017-05-05
2.5	2015-07-27	2.5.6	2017-05-05
2.6	2015-09-28	2.6.7	2017-05-05