Version Control refers to the methods used to track and manage changes to an application or codebase, usually through a combination of the use of comments and tracking line changes. When developers use high quality commit statements to explain their work, they can more easily collaborate with each other, as well as roll-back changes in the event of a mistake, error, or bug. This ability to roll back code changes is critical, as it can protect an application’s resiliency as well as allow it to recover from any major errors or malicious disruptions that would otherwise be catastrophic, such as an accidental deletion resulting in the permanent loss of data.

One example of a usage of version control could involve the maintenance of a JavaScript library on a website which multiple developers have access to. Before working on that library, a developer would likely use the “git pull” command to ensure they have access to the most up-to-date version of the library. Then, they could add additional data to the JavaScript library and explain their additions using the “git commit” command. They should then test their changes to ensure proper function, after which they can either use a “git revert” to undo the change, or a “git push” to send out the update to the live server.