Version Control

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Version Control is the practice of managing different versions of a program in development using version control software like Git to allow multiple people to work on and contribute to a program when spread out geographically through a decentralized codebase. By using version control, developers can track changes made by contributors, safely test new versions and features without breaking the current stable version (which is good for software that is receiving additional support past public release) and prevent various issues from arisings during development. These include bugs, accidental deletion of another person’s work, and confusion over changes made to the code by team members. Effective use of version control with Git usually follows this pattern: A programmer downloads a copy of a branch of the code using the pull command, they make and test changes, before staging them and using the push and sync commands to upload them to the codebase. Once the code has been uploaded, team members can view it and decide whether to add the changes to the main branch or not. Overall, version control, both the principle and software, improves the workflow of programmers, by allowing them to easily track changes and decide what will and will not be added to the main branch.